

添付資料 9: ARDS ウェブポータル 運営・維持技術マニュアル



**AGRICULTURAL ROUTINE DATA SYSTEM WEB APPLICATION  
DEVELOPMENT PROJECT**  
(Version 5)

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**FOR**  
**JICA TECHNICAL COOPERATION PROJECT**  
**FOR CAPACITY DEVELOPMENT FOR THE ASDP MONITORING AND**  
**EVALUATION SYSTEM, PHASE II**  
**MINISTRY OF AGRICULTURE, FOOD SECURITY, AND COOPERATIVES**

**March 01, 2019**



## Revision History

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June 11, 2014	Zero	UDSM	All	n/a
November 24, 2014	First	UDSM	3, 4.1, 4.3 – 4.6, 5, 6	Section 3 has been updated, some screen shorts in Section 4.1 have been updated, and Section 4.3 - 4.6, and 5 are new contents. Section 6 have been removed
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December 15, 2016	Version 3	UDSM	3.3	Added section 3.3 on how to check & restore backup
August 28, 2017	Version 4	UDSM	4.5	Revised the whole section based on the new administrative unit features
October 20, 2017	Version 4	UDSM	4.4.1, 5.1.4, 5.2.7	Added sections for how to modify typo in data entry and report, manage data entry settings and revised lookup table section.
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## **1 General Information**

### **1.1 System Overview**

The Agricultural Routine Data System (ARDS) Web Portal was primarily intended to provide functions where ARDS data from the LGMD2/2i database can be uploaded at the portal, viewed, analyzed, and downloaded for further processing. The ARDS Web Portal aims to enable sharing of the ARDS data broadly among all relevant Local Government Authorities (LGAs) and Monitoring & Evaluation Units of Agriculture Sector Leading Ministries (ASLMs). Such that, officers of authorities can easily access and download the data for their specific demands regardless their computer has LGMD2/2i application installed. The application was then upgraded and integrated as the web based data entry module of the ARDS Web Portal.

The ARDS Portal is a web-based application thus accessible through the Internet by a web browser. A user access all functions provided by the portal, including the web based data entry, through friendly and intuitive interactive controls of the graphical user interface.

ARDS Web Portal can be perceived as a platform on several levels. First, the portal's key source of data is the improved web based data entry, which serves as a tool for collecting ARDS data. Second, the ARDS Web Portal database is designed ground-up with flexibility in mind. Data structures such as data elements, forms and user roles can be defined completely freely through the application user interface. These make it possible for the portal to incorporate the improved web based data entry while offering flexibility to accommodate future changes at the portal user interface.

Third, The ARDS Web Portal architecture and functions is broken up into separate modules. Due to the modular design of portal, it can be extended with additional modules. These modules can live side by side with the core modules of ARDS Web Portal. This is a powerful feature as it makes it possible to extend the portal with extra functionality when needed.

The application delivered in this phase is functional system in that it includes the improved web based data entry, report, pivot table, Data Visualizer, Data Analysis, dashboard, News and Content Management System (CMS) and other maintenance tools. Also it includes new features like Archived reports, Static Tables, Task list and ARDS Map. Functions provided by these tools will be discussed later in this document.

## **1.2 Authorized Use Permission**

*This section will provide a warning regarding unauthorized usage of the ARDS Web Portal and making unauthorized copies of data, software, reports, and documents, if applicable.*

## **1.3 Points of Contact**

### **1.3.1 Information**

For additional information, UDSM team of ARDS Web Application Development Project can be contacted through Project coordinator: Dr. Honest Kimaro ([honest\\_c@yahoo.com](mailto:honest_c@yahoo.com)).

## **1.4 Organization of the Manual**

The remaining sections of this manual provide system summary and explanation on how to set up, operate and maintain the ARDS Web Portal. General overview of the system is outlined in section 2 of this document. Section 3 provides an administrator guide on how to install and set up the ARDS Web Portal Server. Section 4 provides a guideline for administrative operation of the portal. System maintenance and troubleshooting guide is discussed in section 5.

## **1.5 Acronyms and Abbreviations**

ARDS	Agricultural Routine Data System
ASLMs	Agricultural Sector Lead Ministries
DF02	Quarterly District Entry Form
DF03	Annual District Entry Form
DIR02	Quarterly District Integrated Report
DIR03	Annual District Integrated Report
DR01	Monthly District Report
DR02	Quarterly District Report
DR03	Annual District Report
GIS	Geographical Information System

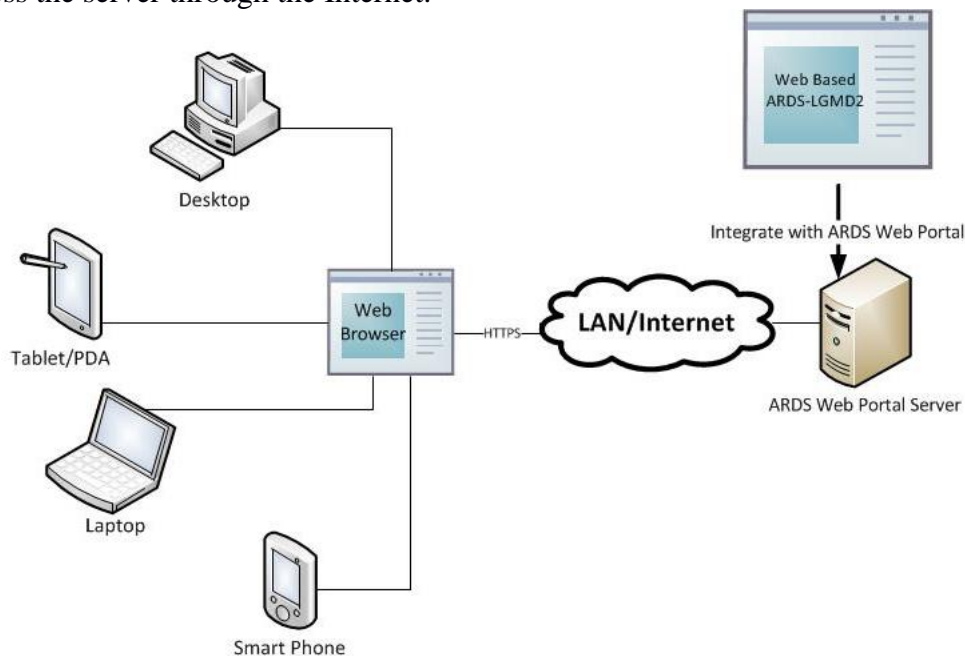
HTTPS	Hypertext Transfer Protocol Secure
JICA	Japan International Cooperation Agency
LAN	Local Area Network
LGA	Local Government Authority
LGMD	Local Government Monitoring Database
M&E	Monitoring and Evaluation
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MSSQL	Microsoft SQL Server
NIR02	Quarterly National Integrated Report
NIR03	Annual National Integrated Report
RIR02	Quarterly Regional Integrated Report
RIR03	Annual Regional Integrated Report
SDS	Software Design Specification
SRS	Software Requirement Specification
TOR	Terms of Reference
TWG	Thematic Working Group
UDSM	University of Dar es Salaam
URL	Universal Resource Locator
VAEO	Village Agricultural Extension Officer(s)
WAEO	Ward Agricultural Extension Officer(s)
WF00	Ward Annual Target Entry Form
WF01	Ward Monthly Entry Form
WF02	Ward Quarterly Entry Form
WF03	Ward Annual Entry Form

## 2 System Summary

This section provides a general overview of the system. It outlines the uses of the system in supporting the activities of the user.

### 2.1 System Configuration

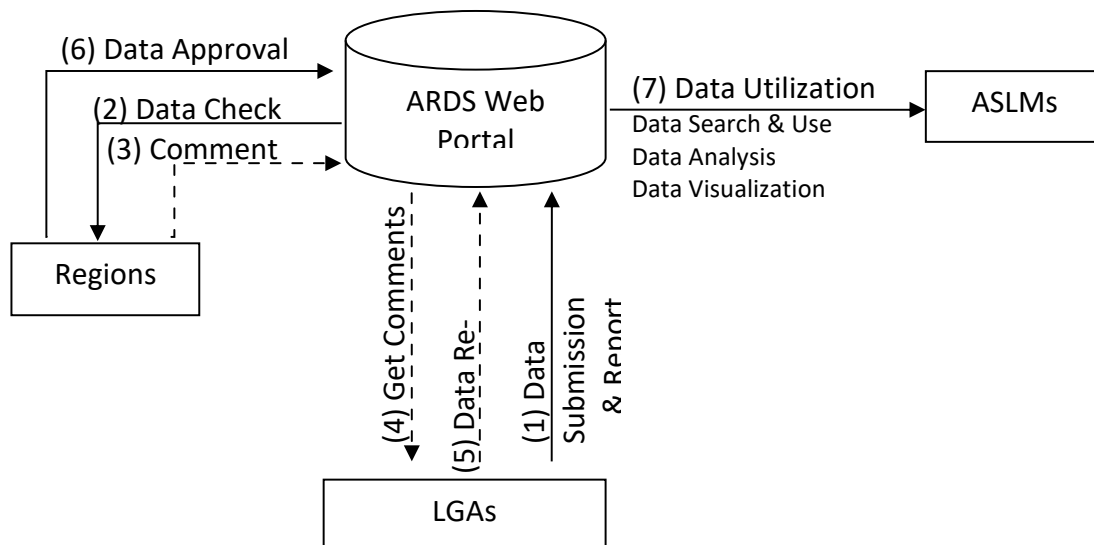
The Diagram below illustrate configuration of the ARDS Web Portal and its integration with the web based data entry. A user can use a desktop, laptop, tablet, Personal Data Assistant (PDA), smart phone or any other device, which is running any web browser except Internet Explorer version 7 and below. The device shall be connected to the ARDS Web Portal Server either through the LAN or the Internet. A user will be required to run a web browser and provide URL of the ARDS Web Portal Server. Currently, the web browser communicates with the server using HTTP but later HTTPS will be used to encrypt data transmitted between user's web browser and the server so as to ensure confidentiality of data, in particular when a user access the server through the Internet.



**Figure 1: ARDS Web Portal Configuration**

### 2.2 Data Flows

Major data flow in the ARDS Web Portal integrated with the web based data entry are as summarized in figure 2 which involves submission of data entry forms and creation of district reports by LGAs, checking of the reports to assess submitted data and provide feedback to LGAs when necessary by regional officers, view feedback and resubmit data correction when necessary by LGAs, approve reports when ready by regional officers as well as data utilization by ASLMs.



**Figure 2: Diagram of Data Flow in the ARDS Web Portal**

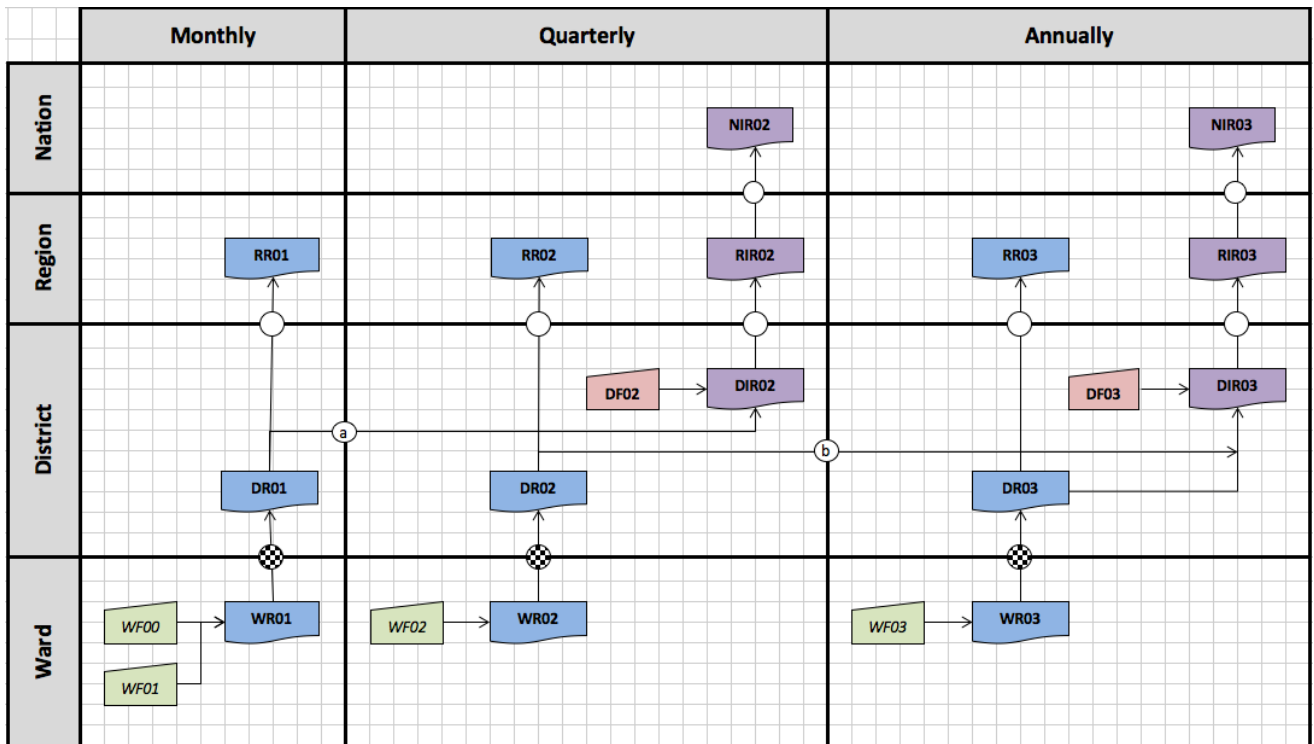
The ARDS data is stored in the central database of the portal so that is accessible and can be manipulated by the system modules. The Modules, which includes the web based data entry, Metadata Search & Browse, Pivot Table, Data Visualize & Charting, GIS Framework, Data Analysis, Report, and Dashboard, enable a user to perform the following on the data:





- Enter ward annual target data.
- Enter prior estimate for estimating missing ward data.
- Enter monthly, quarterly, annually ward agricultural sector data from completed data collection forms (VAEO/WAEO format).
- Obtain monthly, quarterly, annual district aggregate data automatically.
- Enter quarterly, annually district agricultural sector data from completed data collection forms.
- Validate the entered data and check for various errors to enforce data quality.
- Estimate missing ward data.
- Upload the entered data, through the Internet, to the central server as they entered, or save them locally when the Internet connection goes down during data entry, and upload them to the server when connection is back.
- Import and export data and-or metadata for transferring of data between different instances of the system. Import GML data to update changes in the administrative unit's geographical coordinates.
- Print forms/reports with the data or blank forms.
- Report generation
  - Monthly, quarter and annually ward report (WR01, WR02, and WR03)
  - District report for monthly, quarterly and annually (DR01, DR0 and DR03)
  - Region Report for monthly, quarterly and annually (RR01, RR0 and RR03)
  - District, regional, national integrated report for quarter and annual (DIR02, DIR03, RIR02, RIR03, NIR02 and NIR03)
- Post comments from the region about unapproved reports and-or approve report.
- View approval status, comment and edit data (if required) for final approval by the

region.

- Use an offline standalone copy in areas with no connectivity at all; export the entered data as a local file for sending to national headquarters, or another area with the Internet connectivity via a USB Key (or any external storage) or by email, so that can be imported to the central server.
- Metadata search and browse using different properties of content available in the database and in predefined categories.
- Represent and manipulate the data in pivot table based on existing dimensions such as what data, from which locality and of which period.
- Represent the data in various types of charts.
- View the data on top of a map along with thermal indicators of presented data for association of captured geographical locality.
- Create and generate various custom reports.
- Create and manage a dashboard that helps users to get an overview of important trends or performance of particular variables in charts, graphs, summary tables, maps and headlines.
- Download data from the portal to PDF, Excel, CSV, and-or XML. Print out information created by the system.

Besides, users of the ARDS Web Portal can get various news and online support through the news and online help modules respectively. Figure 3 illustrate the web based data entry inputs and outputs in the ARDS Web Portal.



Notes:		Aggregation over area: wards to a district with estimation factors for missing data.
		Aggregation over area: districts to region and regions to national.
		Aggregation over time: 3 months aggregated to a quarter.
		Aggregation over time: 4 quarters aggregated to a year.

**Figure 3: The summary of ARDS Web Portal inputs and outputs**

The Regional Integrated Reports (RIR02 and RIR03) are consolidated from the District Integrated Reports (DIR02 and DIR03). The National Integrated Reports (NIR02 and NIR03) are consolidated from the Regional Integrated Reports.

### 2.3 User Access Levels

Information in the ARDS is confidential. Therefore, when a user opens the portal is required to use name and password to get access to the rest of the features. The portal restricts access privilege based on user roles including administrative and normal users.

The administrative user is a super user and can carry out all activities that are supported by the portal including system maintenance and configuration activities.

The portal restricts normal users based on their information access level. Table 1 shows the current ARDS Web Portal user levels and roles. Any user account shall belong to at least one of the levels identified below and should be assigned to the respective user role(s) in the system.



**Table 1: ARDS Web Portal User Level and User Roles**

<b>User Level and User Roles</b>					
* When user use Web portal in the first time, we requested to input all information about users, such as contact number and e-mail address to prepare contact list.					
	<b>User Level</b>	<b>User Group</b>	<b>List of <u>NOT Available</u> functions</b>	<b>Data accessibility for Data analysis</b>	<b>Remarks</b>
1	Super User	Administrator	None (All functions are available for Administrators)	All	
2	National	TWG	Data entry, Data upload, Data approval, User management, update lookup tables, update administrative unit	All	incl. uploading .zip files from LGA
3	National	Min. Agriculture Staff	Data entry, Data upload, Data approval, User management, update lookup tables, update administrative unit	All	
4	National	Min. Livestock	Data entry, Data upload, Data approval, User management, update lookup tables, update administrative unit	All	
5	National	Min. Industry and Trade	Data entry, Data upload, Data approval, User management, update lookup tables, update administrative unit	All	
6	National	PMO-RALG	Data entry, Data upload, Data approval, User management, update lookup tables, update administrative unit	All	
7	National	Others	Data entry, Data upload, Data approval, User management, update lookup tables, update administrative unit	All	
8	Region	Region	Data entry, User management, update lookup tables, update administrative unit	All	Can see other District/ Region data (can't enter other LGA data)
9	District	District	Data approval, User management, update lookup tables, update administrative unit	Within same Region	Can see other District within same Region and Region level data (not allow to enter other LGA

					data)
10	Others	Others	Data entry, Data upload, Data approval, User management, update lookup tables, update administrative unit	All	For e.g. JICA Expert team members, JICA, other Donors
11	Others	Trainers	User management, update lookup tables, update administrative unit	All	Functions for both District and Region, this is only for training

### 3 Setting Up ARDS Web Portal Server

#### 3.1 Set up in Windows Operating Systems

The following section details how to set up ARDS Web Portal Server in Windows Operating Systems.

##### 3.1.1 Prerequisites

###### 3.1.1.1 Hardware

Below are the recommended hardware standards. Refer the ARDS Software Design Specification for further details.

**Figure 4: Hardware Prerequisites**

Hardware	Recommended Standard
Memory	1. At least 1 GB memory per 1 million captured data records per month or per 1000 concurrent users is necessary. 2. Recommended <b>8 GB</b>
Processor	Quad Core 2 GHz
Hard disk	500 GB
System Type	32 or 64 bit
Operating System (OS)	ARDS Web Portal supports any OS. However, this guideline focuses on Windows Operating Systems.
Network Adapter	Ethernet card or other network specifications.

###### 3.1.1.2 Software

For the ARDS Web Portal server to work, the following technologies must be installed and properly configured. Refer to the ARDS Software Design Specification for further details of software standards.

**JDK 7 (or JRE 7) or higher**  
**Tomcat version 7.0.35 or higher**  
**PostgreSQL 9.2 or higher**

Also, the server requires the following Environment Variables to be set

**\$path** folder is set to **“C:\Program Files\Java\jdk1.6.0\_10\bin”**  
**\$JAVA\_HOME** folder is set to **“C:\Program Files\Java\jdk1.6.0\_10”**

Essentially **JDK** must be installed because **Tomcat** requires Java Platform. Thus, Java Platform shall be installed first.

A computer system has to be able to locate where the Java Platform is found. Therefore, its **path** must be defined in the Environment Variable as will be shown below along with setting up **JAVA\_HOME** folder.

**Tomcat** is independent from **postgreSQL**, thus either of the two may be installed first followed by the other. However, the **war** file requires **Tomcat** so Tomcat has to start. The ARDS requires the database, thus **PostgreSQL** must be installed and data base connection parameters including username and password must be set so that ARDS can access the database. These directives are provided through a file called **Hibernate.properties**. The system will read this file from its location which, of course, has to also be defined in the Environmental Variables of your computer.

### 3.1.2 Install procedure

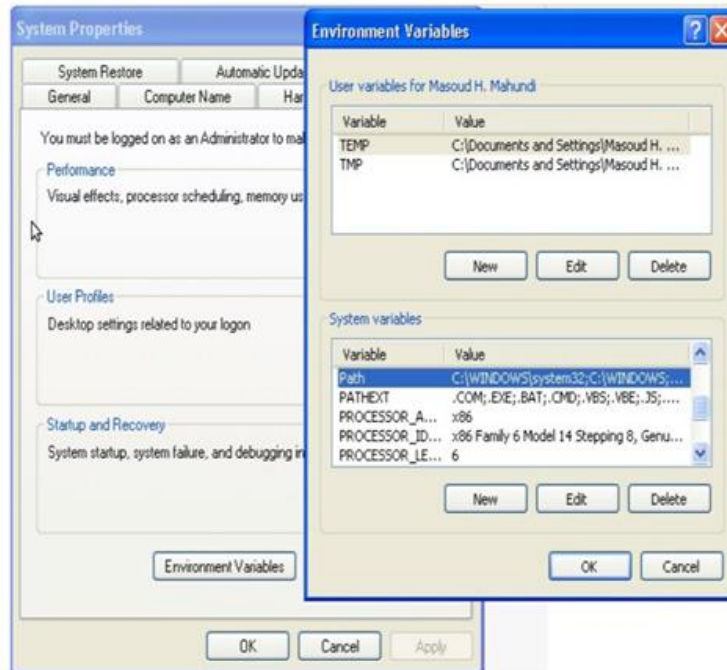
In order to successful set up ARDS Web Portal server you just need to follow the following steps.

#### 3.1.2.1 Step 1: JDK installation

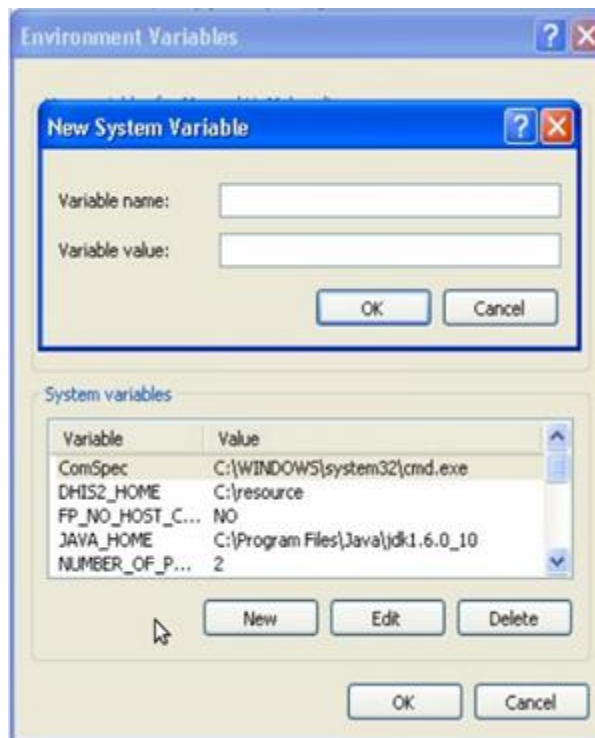
- The latest version of JDK is preferred. You may download the latest version of java platform (JDK) from [www.oracle.com](http://www.oracle.com). In particular, through the following link <http://www.oracle.com/technetwork/java/javase/downloads/index.html>.
- When the download is complete, run the executable file of the JDK and follows the instruction until the installation is complete.

#### 3.1.2.2 Step 2: Set Up Environment Variable

- After the installation of JDK is complete, browse your computer to locate Java bin folder. In Windows operating system, this is often located in the program files within a folder called Java where Java is installed. For example, **C:\Program Files\Java\jdk1.7.0\_45\bin**. Where **jdk1.7.0\_45** depends on the JDK version, for instance JDK version 7 was used in this example.
- Copy the path of the bin folder located above
- Right-click **My Computer** and click **Properties**
- Go to **Advanced Settings** and then select **Environmental variables**.
- On the new window as shown figure 4, Select the variable **Path** and then go to the **Edit** button.
- In the Variable string append a semi colon at the end and paste the path you copied. In this case **C:\Program Files\Java\jdk1.7.0\_45\bin** will be added in the variable string.
- Then click the OK button to finish setting up the path.
- Go to the folder that java is installed as explained above, this time don't go to the bin folder, just one step before it. Copy the path. For the above example, the path is **C:\Program Files\Java\jdk1.7.0\_45**.
- Go to the **Environment Variable** as explained above.
- This time select **new** to create new variable instead of **edit**. Remember, there are **System Variables** (lower section) and **User Variables** (upper section). You shall opt for System Variables for your changes to apply to all users.
- The new window will appear as shown in figure 5.
- On the variable name type **JAVA\_HOME**
- On the variable value past the copied path. For instance, **C:\Program Files\Java\jdk1.7.0\_45** in this example.
- Then click Ok for the New System Variable window and then Ok for the Environment Variable window. And you are done with setting up Environment Variable for Java platform.



**Figure 5: Setting up path for Java**



**Figure 6: Setting Up New System Variable**

### 3.1.2.3 Step 3: Install Tomcat

Binary downloads of the **Tomcat** server are available from <http://tomcat.apache.org/>. This manual assumes you are using the most recent release of Tomcat 7.0.35 or later.

Installing Tomcat on Windows can be done easily using the Windows installer. Its interface and functionality is similar to other wizard based installers with only a few items of interest.

- **Installation as a service:** Tomcat is installed as a Windows service. Using the checkbox on the component page sets the service as "auto" startup, so that Tomcat is

automatically started when Windows starts. For optimal security, the service should be run as a separate user, with reduced permissions (see the Windows Services administration tool and its documentation).

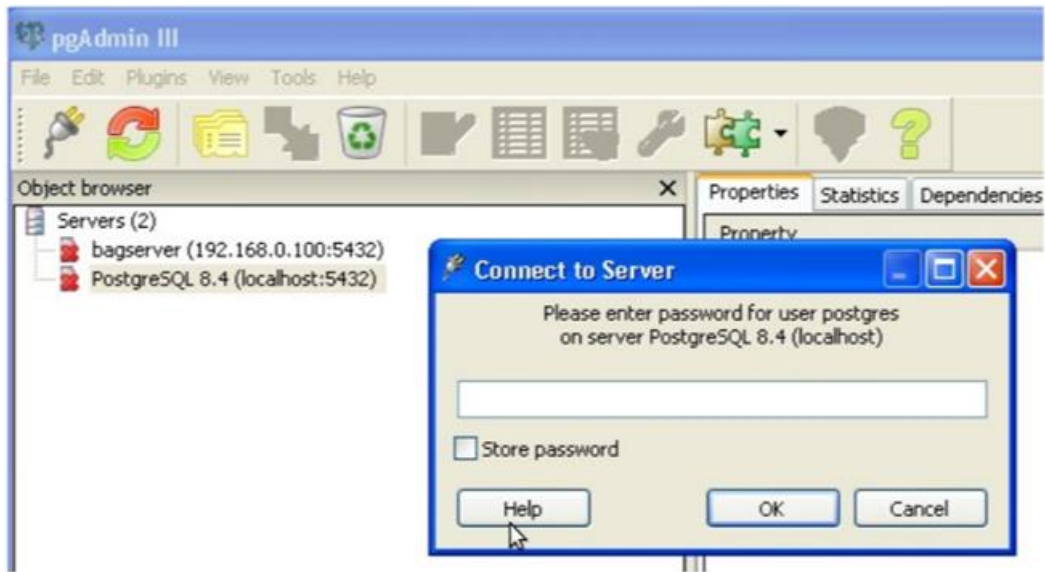
- **Port Number:** In the course of installing Tomcat, you will be required to choose the port to be used by Tomcat. Provide the port number which is not commonly used by other applications, for instance 8180 is used in this guide. Also, you will be prompted to provide username and password for the administrator user.
- **Java location:** The installer will provide a default JRE to use to run the service. The installer uses the registry to determine the base path of a Java 6 or later JRE, including the JRE installed as part of the full JDK. When running on a 64-bit operating system, the installer will first look for a 64-bit JRE and only look for a 32-bit JRE if a 64-bit JRE is not found. It is not mandatory to use the default JRE detected by the installer. Any installed Java platform may be used. You may select to use the one you set up above.
- The installer will create shortcuts allowing starting and configuring Tomcat. It is important to note that the Tomcat administration web application can only be used when Tomcat is running.
- After installing you can see if tomcat is running through the browser with the URL **localhost:8180** or using the **port number** you selected. Otherwise go to **services management** by right clicking **MyComputer** select **manage**, Under **Services and Applications** click **services** and see if Apache service is running.
- Refer to the Windows Service HOW-TO for information on how to manage Tomcat as a Windows service.

#### 3.1.2.4 Step 4: Install PostgreSQL

- Download Windows graphical installer for PostgreSQL which includes the PostgreSQL server and pgAdmin III from <http://www.postgresql.org/download/windows/>. pgAdmin III is a graphical tool for managing and developing your databases.
- To installing PostgreSQL on Windows just follows steps of the Windows installer. You will be prompted to enter the password for PostgreSQL user. Provide the password and finish the installation.

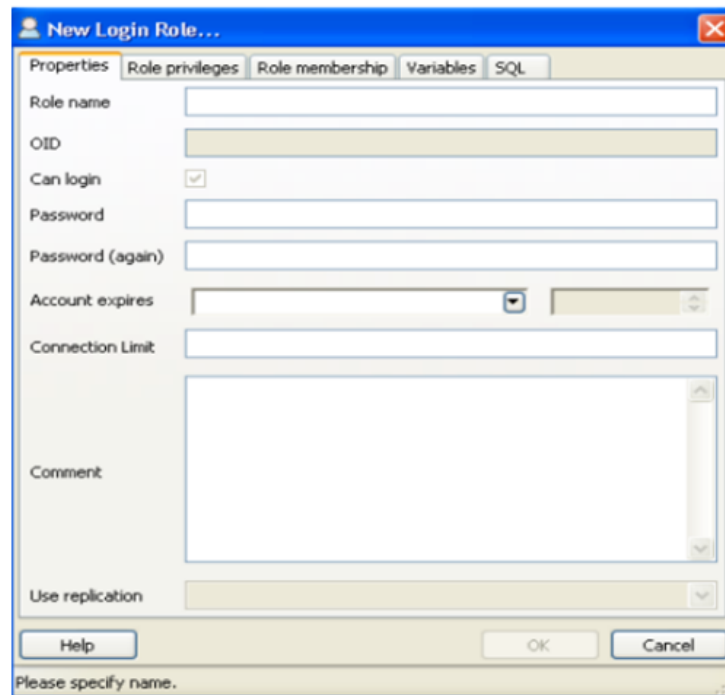
#### 3.1.2.5 Step 5: Create the database and populate it with data restoring function

- After installation of the Windows graphical installer of PostgreSQL explained above you will have the pgAdmin in your programs list.
- Click Start > All Programmes > pgAdmin III.
- Double-click the server appearing in the list. If it is the first time add a new server by clicking File > Add Server.
- Connect to Server Window will appear as shown in the figure below.



**Figure 7: Connect to PostgreSQL Database Server**

- Enter the password you entered during the installation and select OK. The window will appear giving you the chance to define a new database. However, you need to create the login role first, kind of a user account that will access the database.
- Right-click the **Login roles** and click **New Login Role**. In the following window, fill in three fields **Role name** and **Passwords fields** (In this guide a role name is **ards**).



**Figure 8: Create New Login Role**

- Select **All** in the **Role Privileges** tab to grant all **privileges** to the created role.
- Select OK to finish creating the role
- Then right-click the **Database** and click **New Database** and a window will appear prompting you to enter the name of the database and the owner.



- Provide **Name** for your Database and select form the **Owner list**, the login role you created. Leave other options as they are.
- If you have a back-up database (file with an extension.backup) you will need to restore it in the created database. Right-click the database you have created and click **restore**, and then browse for the back-up file in the filename section.



**Figure 9: Restore Database**

- Leave the verbose option checked so that you see the process of importing data to your database.
- Then Click OK to finish restoring the database.

### 3.1.2.6 Step 6: ARDS Connection to the Database

**hibernate.properties** file shown below is used to point the database which the **ards** should use. The file contains the configuration details including the database name, username and password for accessing the database. You will need to edit values of some parameters to have the configuration you have set up.

```
hibernate.properties x
1 hibernate.dialect = org.hibernate.dialect.PostgreSQLDialect
2 hibernate.connection.driver_class = org.postgresql.Driver
3 hibernate.connection.url = jdbc:postgresql:ards
4 hibernate.connection.username = ards
5 hibernate.connection.password = ards
```

**Figure 10: hibernate.properties configuration file**

For PostgreSQL users



- Edit from the **third line**, after the phrase **postgresql:**, append the name of the database you created earlier, for the above file **ards** is the name of the database.
- In the fourth line, write the **username** for accessing your database, for the above file is **ards**.
- In the fifth line write password for the username above, for the above file is **ards**.

For MySQL users

- The Second part is used for users who uses MySQL database. Use harsh sign (#) as shown above to comment the lines and will not be used for configurations.
- Save the **hibernate.properties** file to a folder.

#### 3.1.2.7 Step 7: Set Up DHIS2\_HOME Variable.

- Set this environment variable in your computer to point to where your hibernate.properties file is located.
- Use the normal procedures of defining the new Environment Variables as explained in step 2 when defining JAVA\_HOME. But in this case, add the following values  
**Variable Name:** DHIS2\_HOME  
**Variable Value:** Add the path where your hibernate.properties is found, Eg.  
C:\resource

#### 3.1.2.8 Step 8: Set up ards.war file in the webapps folder

- First rename the **ards.war** to **ROOT.war** file so that when accessing portal through the browser the url do not appear with **ards** folder as parent folder
- Stop Tomcat application through the services management by right clicking MyComputer > manage.
- Under Services and Applications click services and put the latest ards.war file in the webapps folder.
- If defaults setting were used during installation the path to the webapps folder is C:\Program Files\Apache Software Foundation\Tomcat\6.0\webapps
- Then Start Tomcat from the list of services through the services management by right clicking MyComputer > manage.
- Try to access the ARDS through your browser with the following address **localhost:8180** (If you used same port described in step 3).
- You should be able to view the login page of the ARDS Web Portal. If not, make sure that you have correctly followed the steps explained above.

### 3.1.3 Database Auto Backup

#### 3.1.3.1 Step 1: Create a Backup Folder

Go to Server create a Directory called Drive:\PostgresqlBack or give it any descriptive name.

This folder will contain the backup script and other files

#### 3.1.3.2 Step 2: Create a folder to contain binaries

Inside Drive:\PostgresqlBack create folder named **bin** to contain binaries, go to **C:Program Files\PostgreSQL\9.0\bin** copy the following contents to the created **bin** folder in

Drive:\PostgresqlBack

comerr32.dll  
gssapi32.dll

```

k5sprt32.dll
krb_32.dll
libeay32.dll
libiconv2.dll
libpq.dll
Microsoft.VC80.CRT.manifest
msvcm80.dll
msvcpr80.dll
msvcr80.dll
pg_dump.dll
ssleay32.dll
zlib1.dll

```

### 3.1.3.3 Step 3: Create Batch File

Create batch file called any descriptive name, example is postgresqlBackup.bat. The file must be located in PostgresqlBack directory not the bin folder.

Open batch file and copy/paste the following

```

@echo off
for /f "tokens=1-4 delims=/ " %%i in ("%date%") do (
    set dow=%%i
    set month=%%j
    set day=%%k
    set year=%%l
)
set datestr=%month%_%day%_%year%
echo datestr is %datestr%

set BACKUP_FILE=<NameOfTheFile>_%datestr%.backup
echo backup file name is %BACKUP_FILE%
SET PGPASSWORD=<PassWord>
echo on
bin\pg_dump -i -h <HostName> -p 5432 -U <UserName> -F c -b -v -
f %BACKUP_FILE% <DATABASENAME>

```

- Change <NameOfTheFile> to your proposed name. One idea is to use the name of the database (make sure there are no spaces after the word BACKUP\_FILE any spaces will cause this setting not to work.). Setting is the first part of the file name then followed by the date the file was created with the extension “.backup”
- Change the <PassWord > setting above to the correct password for the backup users (make sure there is no spaces after the word PGPASSWORD any spaces will cause this setting not to work).
- Change <HostName> either to ip address or dns name of the server hosting Postgresql.
- Change <UserName> to backup user make sure this user has access to database for backup purposes
- Change <DATABASENAME> to the database name being backed up.
- Save the File

#### 3.1.3.4 Step 4: Schedule a Task Using MS Task Scheduler

Using MS Task Scheduler schedule a task to run that batch file,

Once you have chosen the security context the Task in going to run in, it is advised to change the directory security where the backup is run and the files are stored, as a high level user name and password are stored in plain text.

#### 3.1.4 Rollback or Un-install procedure

To Rollback follow the steps below.

**NOTE:** You should un-install/remove/delete a program, Environment Variable and-or file only if it was explicitly installed for ARDS Web Portal server setup. This is to avoid affecting other programs that might have been using some of the programs or configurations that were also used in the ARDS Web Portal.

- Make sure you have the recent backup of the database if you want to keep the current **data** and **system configuration**.
- Remove (delete) the **ROOT.war** file from the webapps folder
- Delete the DHIS2\_HOME Environment Variable
- Delete hibernate.properties file from its location.
- Un-install PostgreSQL from the programs using normal Windows program un-installation procedures.
- Un-install Tomcat from the programs using normal Windows program un-installation procedures.
- Delete the JAVA\_HOME Environment Variable and remove the java path which was added in step 2.
- Un-install JDK from the programs using normal Windows program un-installation procedures.

## 3.2 Set up in Linux Operating Systems

### 3.2.1 Prerequisite

For the ARDS to work there few technologies which have to be installed in your system. In this installation guide Ubuntu 12.04 distribution of Linux is used as the installation machine.

#### 3.2.1.1 Hardware

Recommended hardware standards are the same as the one explained in the setup of ARDS Web Portal server in Windows Operating System. Refer the ARDS Software Design Specification for further details.

#### 3.2.1.2 Software

For the ARDS Web Portal server to work, the following technologies must be installed and properly configured. Refer to the ARDS Software Design Specification for further details of software standards.

**JDK 7 (or JRE 7) or higher**  
**Tomcat version 7.0.35 or higher as a Java servlets container**  
**PostgreSQL 9.2 or higher which is the database we use.**

Essentially **JDK** must be installed because **Tomcat** requires Java Platform. Thus, Java Platform shall be installed first.

After securing these technologies, then you are ready to go on with the installation of your system. It is better to understand the linkages/dependencies of the technologies and files involved in the installation. We install Java because Tomcat wants it for it to be effective. So, Java is important to start with in the installation.

However, a computer system has to be set to know where the Java is found. In this case, we define its path in the Environmental Variables and also creating the JAVA\_HOME in the same. Tomcat is independent, as well as postgresSQL. They can, therefore be installed anytime; the war file of course, depends on the presence of Tomcat so Tomcat has to start. The ARDS is supposed to use the database in our case PostgreSQL. It has, therefore, to be set which DBMS to use, which database and what is the username and password to access the database. The directive is provided through a file called Hibernate.properties. The system will read this file from its location which, of course, has to also be defined in the Environmental Variables of your computer.

### 3.2.2 Install Procedure

In order to successful set up ARDS Web Portal server in Ubuntu Operating System you just need to follow the following steps.

#### Note:

1. *During the course of installation, the word **invoke** is used to mean run a command in the terminal.*
2. *Assumption is made that you have already installed Ubuntu 12.04 operating system or higher in your machine.*

### 3.2.3 Step 1:JDK Installation

Installing using **apt-get**

1. Using keyboard press short-cut **ctrl+alt+T** to open up a terminal, then follow the following series of commands and invoke one after another in the terminal.
2. First, Update the package index: `sudo apt-get update`
3. Then, check if Java is not already installed: `java -version`
4. If it returns “the program java can be found in the following packages”, java hasn't been installed yet, so execute the following command: `sudo apt-get install default-jdk`
5. The, let's set **JAVA\_HOME** environmental variable:
6. Using the terminal again invoke the following commands to trace the path of the installed **JDK** version: `sudo update-alternatives --config java`
7. Which will output something like this in the terminal: `/usr/lib/jvm/java-6-openjdk-i386/jre/bin/java`
8. Then open using gedit the **bash.bashrc** file located in `/etc/` folder by invoking the following commands: `sudo gedit /etc/bash.bashrc`
9. Then go to the end of the file and past the following lines of text:

```
export JAVA_HOME="/usr/lib/jvm/java-6-openjdk-i386/jre/"
export JAVA_OPTS="-Xmx7500m -Xms4000m -XX:MaxPermSize=500m
```

**Note:** the first line is for globally setting java environment variable the next line is for setting java options.

10. Save and close the file, then got to the terminal again type `echo $JAVA_HOME` the output should resemble path set in the **bash.bashrc** file.

### 3.2.4 Step 2: Installing PostgreSQL

1. To install PostgreSQL version 9.2, we first run the following commands to add Ubuntu package repository to your system.  
`sudo apt-get install python-software-properties`  
`sudo add-apt-repository ppa:pitti/postgresql`  
`sudo apt-get update`

2. Now install PostgreSQL by invoking: `sudo apt-get install postgresql-9.2`
3. While still in the terminal Switch the postgres user by invoking: `sudo su postgres`
4. Create a non-privileged user called ards by invoking: `createuser -SDRP ards`
5. Enter a secure password at the prompt.
6. Create a database by invoking `createdb -O ards ardsportal`.
7. Return to your session by invoking `exit`
8. You now have a PostgreSQL user called dhis and a database called ardsportal.

### 3.2.5 Step 3: Set the database configuration

As stated earlier the database connection information is provided to ARDS through a configuration file called `hibernate.properties`. Create this file and save it in a convenient location for my case it is in `/home/leonard/config` (ie. `/home/yourusername/config`) folder.

A file corresponding to the above setup has these properties:

```
hibernate.dialect = org.hibernate.dialect.PostgreSQLDialect
hibernate.connection.driver_class = org.postgresql.Driver
hibernate.connection.url = jdbc:postgresql:ardsportal
hibernate.connection.username = ards
hibernate.connection.password = xxxx
hibernate.hbm2ddl.auto = update
```

Note: A common mistake is to have an empty space after the last property value. Make sure there is no empty space at the end of any line. Also, remember that this file contains the clear text password for your ardsportal database so needs to be protected from unauthorized access. To do this invoke `chmod 0600 hibernate.properties` which ensures that only the ards user which owns the file is allowed to read or write to it.

Now let's go back again to open `bash.bashrc` file (refer to step 1 on how to set `JAVA_HOME`), at the end of the file add the following line if you use the same folder location.

```
export DHIS2_HOME='/home/yourusername/config'
```

### 3.2.6 Step 4: Installing apache tomcat

1. To download tomcat from their site, copy the link for the tar.gz package under the "Core" section and begin the download.
2. You will get a link that originates from one of Apache's many mirrors, making the command look mostly like this (although coming from a different site).

```
wget http://mirror.atlanticmetro.net/apache/tomcat/tomcat-7/v7.0.29/bin/apache-tomcat-7.0.29.tar.gz
```

3. After the download completes, untar the file: `tar xvzf apache-tomcat-7.0.29.tar.gz`
4. Finish up the Tomcat installation on the VPS by moving the files to a convenient directory.

```
sudo mv apache-tomcat-7.0.29 ~/usr/local/tomcat
```

### 3.2.7 Step 5: Installing war file

1. Copy the `ards.war` file in the `usr/local/tomcat/webapps`. Here is the command:

```
sudo cp ards.war /usr/local/tomcat/webapps/
```

2. Then Start tomcat server

```
sudo /etc/init.d/tomcat stop
sudo /etc/init.d/tomcat start
```

### 3.3 Check and Restore Backup of ARDS Web Portal Database

#### 3.3.1 Basic Terminal operation using linux (Ubuntu) command

1. ls "list files"
2. cd "Move/navigate to folder"
3. mkdir folder\_name "Make folder(Directory)"
4. chmod rwx file/folder "Change directory permission which can be either read(r),Write(w),excute(x) ie rwx"
5. nano file\_name "Create/Edit file and write on that file"
6. rm file "Delete file or folder"
7. mv source\_file/folder destination\_file/folder "This moves file or folder from source to destination"
8. Booting Tomcat in ards.run the following linux command  
Start server: `sh /usr/local/tomcat/bin/startup.sh`  
Stop server: `sh /usr/local/tomcat/bin/shutdown.sh`
9. Boot tomcat and view the process. Use the following command

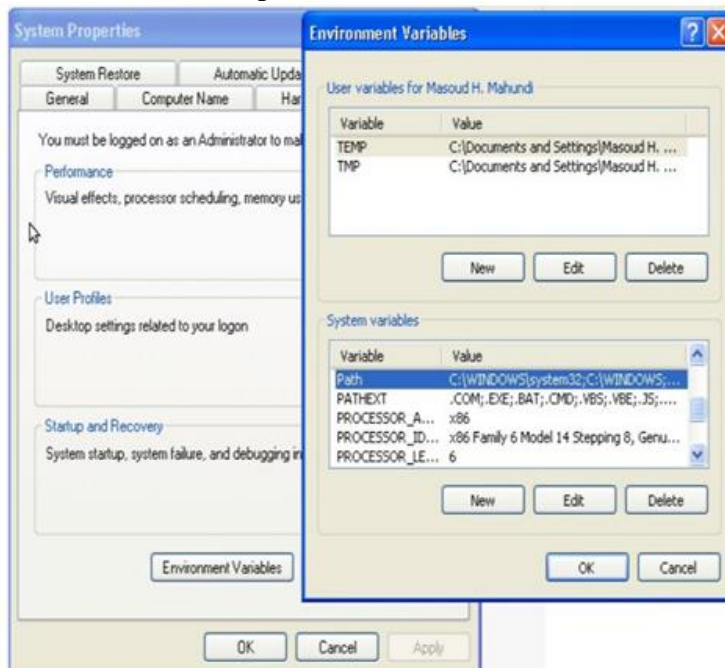
Start server: `sh /usr/local/tomcat/bin/startup.sh && tail -f ../logs/catalina.out`

10. Checking logs when tomcat goes down, issue the following command

View logs: `tail -f /usr/local/tomcat/logs/catalina.out`

#### 3.3.2 Check/Run/Restore Backup

1. How to check backup data in AR



DS Web Portal?

Navigate to folder that contains backups which is located in  
`cd /home/ards/daily_backups && ls`

## 2. How to run database backup?

- To set automatic backup run the command  
*sh /home/ards/development/shell/backupArds.sh*
- To run database backup manually (on demand), run this command while in home directory  
*\$ pg\_dump --host localhost --port 5432 --username postgres --format custom--blobs --verbose --file "path\_to\_output\_backup" dbname*

Where postgres is the user role assigned to database

Where dbname is the database name

## 3. How to restore database backup?

To restore database in ards please run the following command,

```
$pg_restore --host localhost --port 5432 --username postgres --dbname hris2 --verbose "path_to_backup"
```

Where postgres is the user role assigned to database

Where dbname is the database name

## 3.4 Scripts Configuration

### 3.4.1 Report Generation Script Setup

- Make sure python is installed in the system (most linux system comes with python pre installed)
- After copying all files related to estimation and report creation install the following dependencies:
  - Install pip *sudo apt install python-pip*
  - Install requests *pip install requests*
- Change the file configuration on *onDemandEstimation.py* and *nightlyEstimation.p*
  - username = username*
  - password = password*
  - server = server url*
  - archive\_location = location to save the archived reports*

### 3.4.2 Static table configuration and usage on server

#### 1. Prerequisites

Make sure you have install the following

- Node 8.2+
- Git

#### 2. How to get started with installation

Clone the app and install all necessary plugins and library., below are code for that:-

```
$ git clone https://github.com/hisptz/ards-static-table.git  
$ cd ards-static-table  
$git checkout develop  
$git checkout feature/old-version
```



```
$git checkout dev
$ npm i
```

### 3. Configuration of folder path for archive report folder

To configure of folder path for archive report folder, inside codes for static folder edit config/config.js.

Structure of contents of this file is :-

```
const config = {
  reportFolderPath: 'file://< path to archive reports folder >',
  pathToExcelFile: 'out-put-file/',
  startPeriod: 2016,
  startOfNewFormat: '2017July'
}
```

#### Example of configuration for app:

```
const config = {
  reportFolderPath: 'file:///usr/local/tomcat-ards/home/apps/archive/',
  pathToExcelFile: 'out-put-file/',
  startPeriod: 2016,
  startOfNewFormat: '2017July'
}
```

### Static table Generation script usage

#### 1. Short-cut scripts for report creations

##### 1. To clear values for all static table based on report creation status

```
``bash
$ cd <path to ards-static-table app>
$ sh run-auto-clear-static-table.sh
...

```

#### Example

```
``bash
$ cd /usr/local/tomcat-ards/home/files/apps/ards-static-table
$ sh run-auto-clear-static-table.sh
...

```

##### 2. To generate all static tables for current financial year

```
``bash
$ cd <path to ards-static-table app>
$ git reset --hard
$ git checkout dev
$ node index.js <server-address> <username:password>
```



...

**Example :**

```
```bash
$ cd /usr/local/tomcat-ards/home/files/apps/ards-static-table
$ git reset --hard
$ git checkout dev
$ node index.js https://play.dhis2.org/2.28 admin:district
```

...

3. To generate all static table for specific financial year

```
```bash
$ cd <path to ards-static-table app>
$ git reset --hard
$ git checkout dev
$ node index.js <server-address> <username:password> <specific-
financial-year>
```

...

**Example :**

```
```bash
$ cd /usr/local/tomcat-ards/home/files/apps/ards-static-table
$ git reset --hard
$ git checkout dev
$ node index.js https://play.dhis2.org/2.28 admin:district 2017July
```

### 3.4.3 Archived Report Configuration

#### Prerequisites

Make sure you have install the following

Node 8.0+

Git

2. How to get started with installation

Clone the app and install all necessary plugins and library., below are code for that:-

```
$ git clone https://github.com/hisptz/ards-organisationunit-archiving-script.git
$ cd ards-organisationunit-archiving-script
$ npm i
```

Change archiving server address and credentials at line 11 of **server.js**

```
$ sudo nano server.js
```

Start script by running a node server

```
$ screen -S standard-report-archive-script-session
```

```
$ sudo node server.js
```



## 4 ARDS Web Portal Administrative Operations

This section provides a guide on how to perform administrative ARDS Web Portal operations. A guide on how to perform other basic operations is provided in the ARDS User Manual.

### 4.1 Starting ARDS Web Portal

To know that the ARDS Web Portal server set up is complete and the server is up and accessible you must use another computer, which is connected to the server through LAN or Internet and follow the following steps:

- Start All Programs Google Chrome (Or any other browser except Internet Explorer 7 and below)
- Enter URL for the ARDS Web Portal Server. For instance, [www.ards.kilimo.go.tz](https://www.ards.kilimo.go.tz).

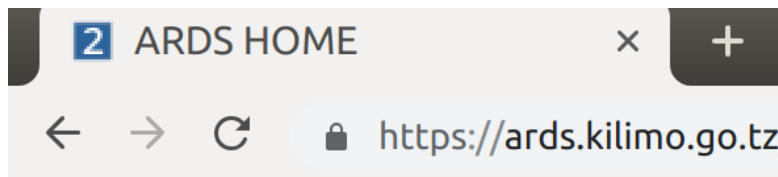


Figure 11: Entering URL to the Web Browser

- Then Press ENTER. The following login screen shall open

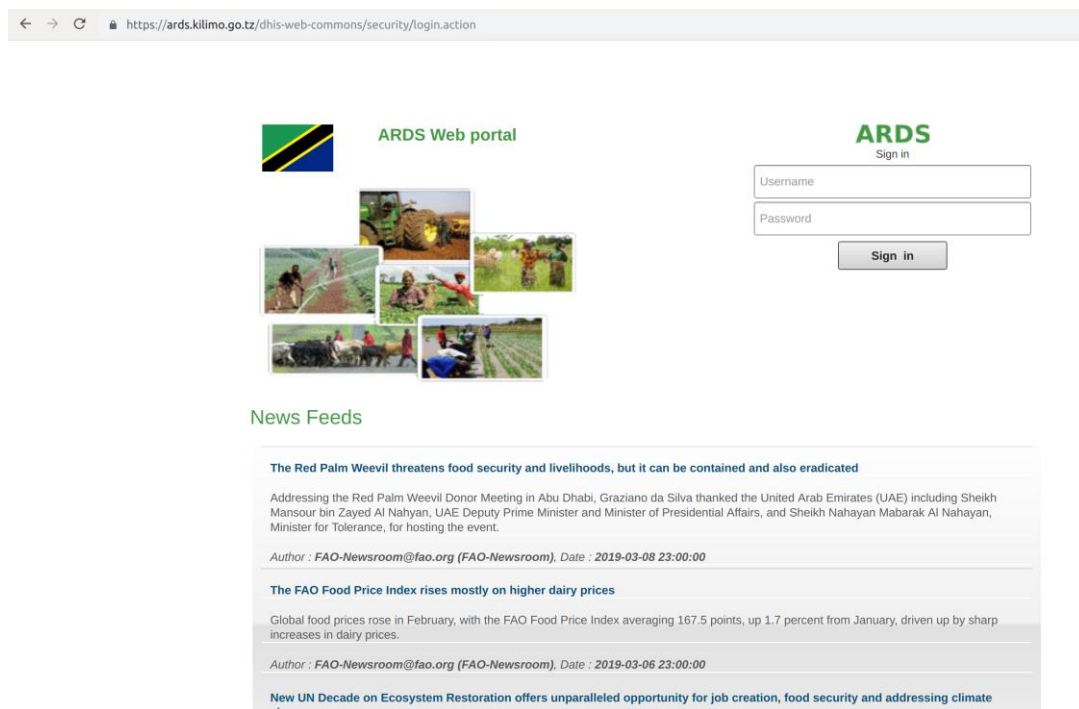


Figure 12: Login Screen

- Type the name of your administrator account and password correctly and click “Sign in”. The default page (Home page) shall open.
- On your first login as an administrator you must update your account information and change the password by following similar steps discussed in the ARDS user manual. Also, must disable any other existing accounts for security purposes. How to view and disable existing account is discussed in the next section of this technical manual.

## 4.2 Managing Users

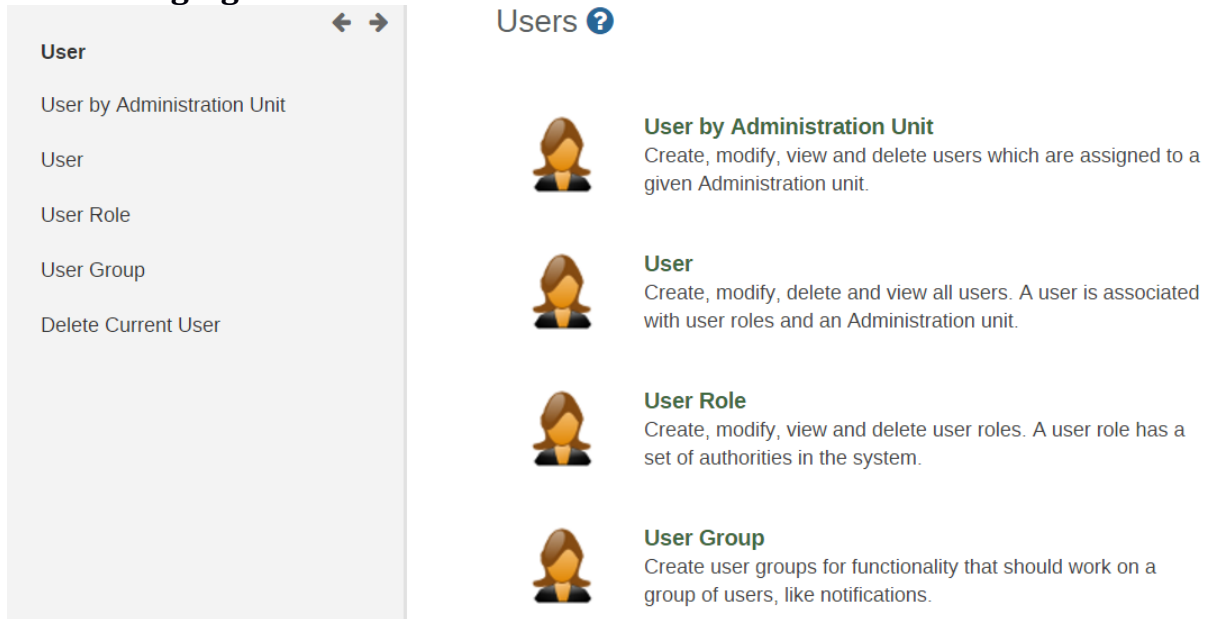


Figure 13: GUI for Managing Users

### 4.2.1 View Users

To create or find a user begin with clicking on the ‘user’ module displayed in the dropdown menu of the Maintenance module located on the main menu bar on the top part of the displayed screen after login.

1. Select User
2. User names already registered will appear as a list as seen in the screen shot below.

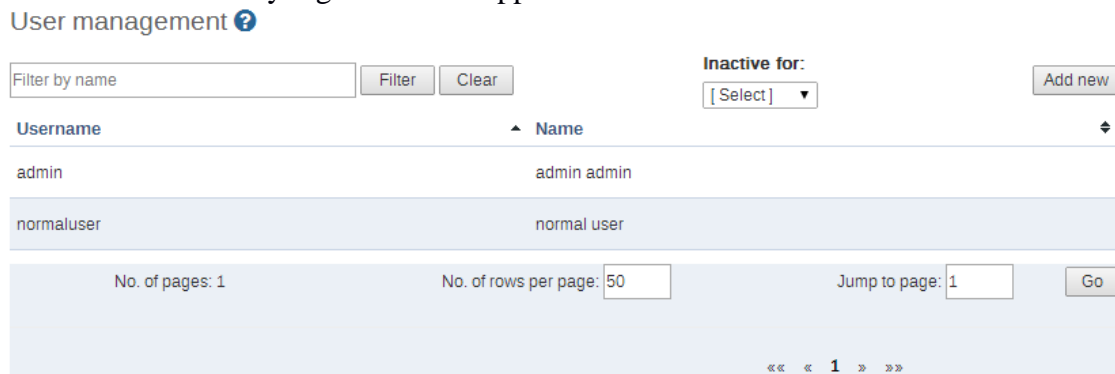
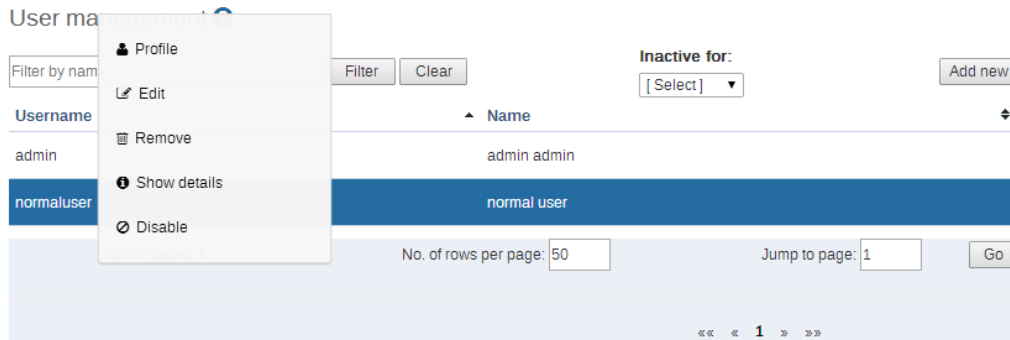


Figure 14: Displaying List of Users

3. You can search for specific user names in the user list by entering the name in the ‘filter by user name’ field as shown above.
4. You can disable, remove, edit or view details of the existing user by left click on the user in the list.



**Figure 15: Popup Menu for Managing Existing User**

#### 4.2.2 Define a new role

1. As part of creating a user name you are required to define the user role if the required user roles are not defined yet. Do so by clicking on the ‘user role’ appearing on the left side of the displayed screen. This will lead you to the Role Management page where you will have to click on Add new to create a new role.
2. The following screen will open and here in the first text box you need to give Name of the Role such as Super User, Admin User, etc. The second text box called ‘Description’ gives more information about the type of User Role that is being created for e.g. State Admin User.

The screenshot shows the 'Create a New User Role' form. It has a 'Details' section with 'Name \*' and 'Description' text boxes. Below are two sections: 'Entry Forms' and 'Authorities'. Each section has a list of 'Available' items and a 'Selected' list. The 'Entry Forms' list includes items like 'Ward Monthly Entry Form', 'Annual Integrated Report', etc. The 'Authorities' list includes 'ALL', 'Accept data at lower levels', 'Search Activity Plan', etc. Navigation buttons (>, <, >>, <<) are between the lists. At the bottom are 'Add' and 'Cancel' buttons.

**Figure 16: Create a New User Role**

3. Next you will specify the particular form(s) that are to be made available to the particular role. You will also need to specify the type of ‘authority’ to be given to the particular user. For each of the options namely forms and Authorities user can select multiple options from the scroll down menu provided against each field. A user can choose multiple options either by moving them one-by-one.

4. In order for particular users to be able to enter data, you must add them to both an entry form as well as administrative unit level. You can also select multiple forms individually by pressing the Ctrl key on the keyboard and clicking on individual forms.
5. Finally, when you have entered the required fields click on Save which is located on the lower part of the displayed screen. The desired user role and related authorization will be saved to the database, and can then be assigned to a particular user.

### 4.2.3 Add New User

To add new users, go to the User options under the Maintenance module. To add a new user, just follow these steps:

1. Click on the Add New button.
2. Enter New User details like User name, Password, Confirm password, Surname, First name and Email in new user's option tabs.
3. Assign user to available role(s) and Administrative Unit(s).
4. You must select at least one administrative unit from the left tree (below the available user roles) to assign Data capture and maintenance Administration units to the user. For example, select Arusha Mjini for a District user at Arusha Mjini.
5. You may also select administrative unit level from the right tree to assign Data output and analysis Administration units to the user i.e. what the user can view.  
*Note: Selecting an Administration Unit provides access to all units in the sub-hierarchy*
6. Click on Add button for confirmation of new user details.
7. The recently created new user can be seen in main' User management Screen

### 4.2.4 Manage Existing User

You can edit (like password, surname, etc.), disable or delete the details of the existing users by selecting corresponding User's Edit, Disable or Remove Button.

- Go to the User options under the Maintenance module
- Left click on the specific user in the list
- You can disable, remove, edit or view details of the existing user by clicking on the respective menu
- To edit, click on edit and continue entering user details in the same way as in 4.2.3
- Click on Save button after editing all details of a particular selected user

If you want to delete the user click on "Remove" and you will be asked to confirm, once you confirm the user will be completely removed from the system. Otherwise, if you want to deactivate the user temporarily, click on "Disable" and confirm then the user will not be able to use the system until is enabled again. To enable you click on the specific user from the list and select "Enable".

### 4.2.5 User by administrative unit

The "User by administrative unit" function allows you see which users have been assigned to a particular administrative unit (AU) or add user to the selected AU. Simply select the AU from the tree on the left, and a list of users that have been assigned to this particular administrative unit will be displayed or you can click on the Add new button at the top left to add a new user to the selected AU.

*Note: The selected AU in this context is Data capture and maintenance Administration units of the user.*

## 4.2.6 User Group

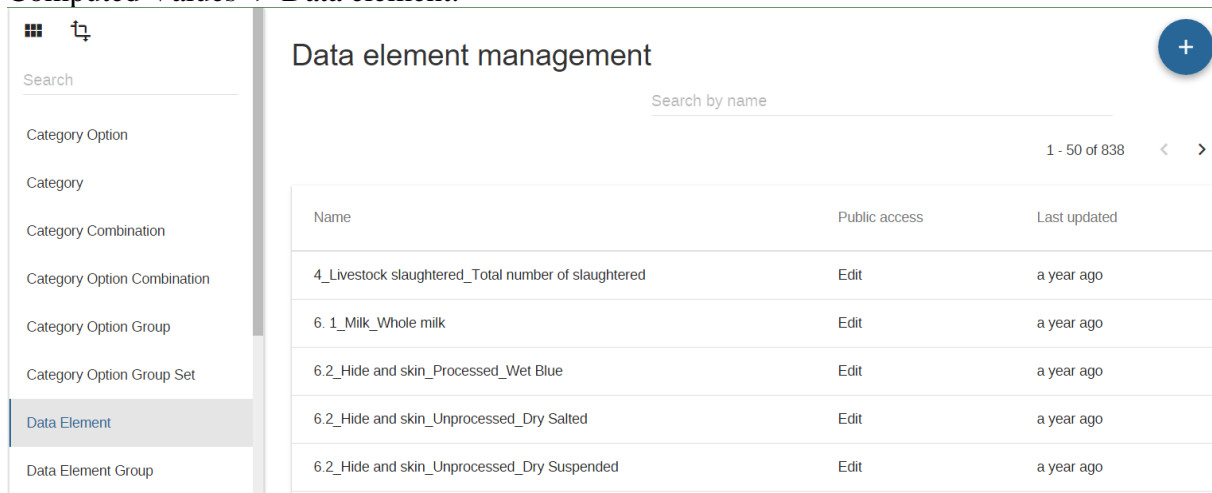
The User Group function allows you see and edit available user groups as well as adding a new user group and assigning user/groups to a user group. Simply select the User Group from the left, and a list of available user groups will be displayed. Click on a group in the list to edit or add user(s)/group(s) to the selected group. Also, you can click on the Add new button at the top left to add a new user group then enter the group name, select user(s)/group(s) to assign to the group and click Add button to create the group.

## 4.3 Managing Data Elements and Computed Values

### 4.3.1 Data Elements

Data elements define what is actually recorded in system, e.g. number Animals moved to other areas from the district. The actual creation and definition of the data elements themselves are based on the data in the ARDS data collection and reporting tools i.e. VAEO/WAEO and report formats.

To access the data element maintenance module, choose Maintenance -> Data elements and Computed Values -> Data element.



The screenshot displays the 'Data element management' interface. On the left is a sidebar with a search bar and a list of categories: Category Option, Category, Category Combination, Category Option Combination, Category Option Group, Category Option Group Set, Data Element (highlighted), and Data Element Group. The main area features a search bar labeled 'Search by name' and a table of data elements. The table has three columns: Name, Public access, and Last updated. The table contains five rows of data elements, each with an 'Edit' link in the 'Public access' column and a timestamp 'a year ago' in the 'Last updated' column.

Name	Public access	Last updated
4_Livestock slaughtered_Total number of slaughtered	Edit	a year ago
6_1_Milk_Whole milk	Edit	a year ago
6.2_Hide and skin_Processed_Wet Blue	Edit	a year ago
6.2_Hide and skin_Unprocessed_Dry Salted	Edit	a year ago
6.2_Hide and skin_Unprocessed_Dry Suspended	Edit	a year ago

**Figure 17: Data Element Management Screen**

The 'Search by name' will allow you to filter a range of data elements if you know either the full name of the data element, or just a part of it. Type the name into the search field and any matching data elements are displayed below. In default mode, this field will display all the data elements in the application and sort the data elements into alphabetical order.

To add a new data element, click add new button i.e. the + icon at the top right. You can modify or delete data elements already present in the database by right click on the selected data element in the list and select Edit or Delete respectively. You can view details of a data element by left click on the selected data element or right click then select show detail.

There are various options available to allow the user to modify data elements already present in the database or add new data element. Each of the options is as shown and described below:

# Data Element

Name

Amount of Bales/ Bundles Produced (Tonnes) (iii)

---

Short name

Amount of Bales/ Bundles Produced (Tonnes) (iii)

---

Code

---

Description

---

Form name

---

Domain Type

Tracker

---

Value Type

Positive or Zero Integer

---

Aggregation operator

Sum

---

Store zero data values

URL

---

Category Combination

default

---

Option set

---

Option set for comments

---

Legend set

---

Figure 18: Example of Edit/ Create New Data Element Screen



- Name: Define the precise name of the data element in this field. Each data element must have a unique name.
- Short name: Typically, an abbreviation of the full data element name. This attribute is often used in reports to display the name of the data element, where there is limited space available.
- Code: If data elements are assigned a code. The code can be entered in this field.
- Description: Allows a full textual description of the data element to be entered. The user should be as precise as possible, and include full information on how the data element is measured and what its meaning is.
- Form name: Defines whether a given data element is for which form
- Domain type: Defines whether a data element is an aggregate or Tracker type of data element.
- Value type: Defines the type of data this data element will be used to record. Currently there are several options as shown below:

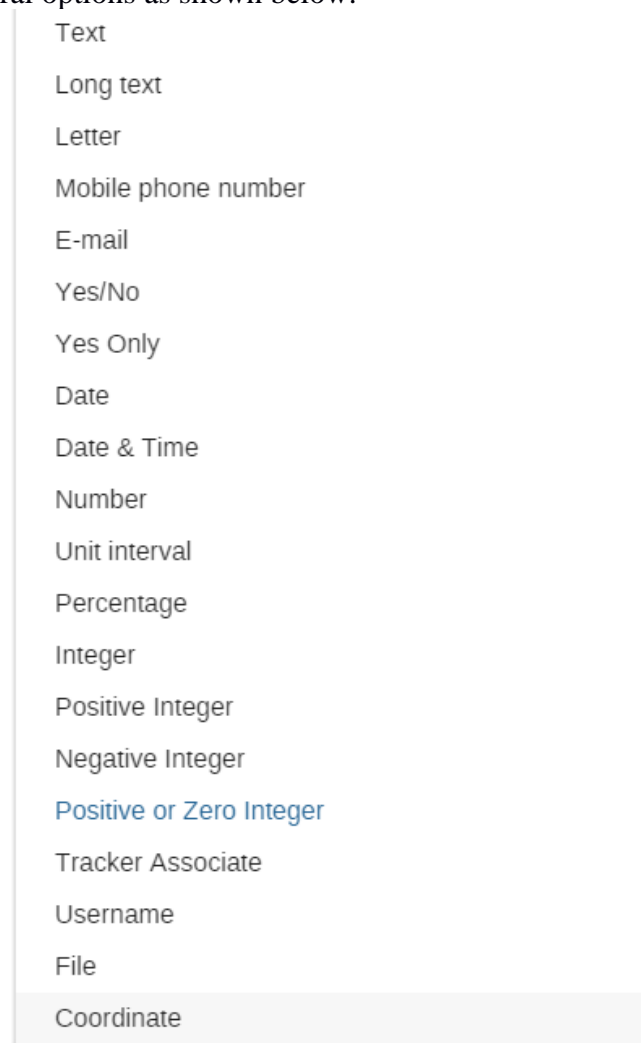


Figure 19: List of Value Type Options

- Number type: In order to increase the robustness of data entry, ARDS Web Portal supports several different number types. During data entry, users will be restricted to enter the defined number types only. Each of the available options is described below.
  - Number: This number type supports any real value with a single decimal point, an optional negative sign, and no thousand separators.
  - Integer: Any whole number (positive and negative), including zero.

- Positive integer: Any whole number greater than (but not including) zero.
- Negative integer: Any whole number less than (but not including) zero.
- Positive or Zero Integer: Any whole number greater than (including) zero.
- Aggregation operator: Defines the default aggregation operation that will be used on this data element. Most data elements should have the "SUM" option set. This includes all data elements which should be added together. Other data elements will be set to use the "AVERAGE" operator, when values along the time dimension should not be added together, but rather averaged. Sum Some data elements such as those which store cumulative values will use LAST. Currently there are several options as shown below:

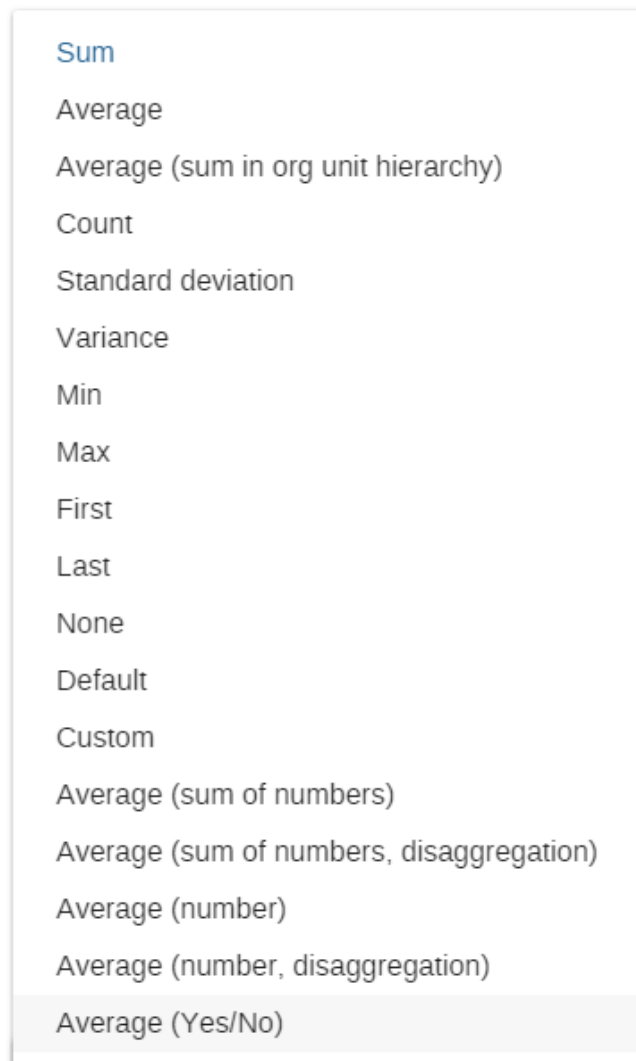


Figure 20: List of Aggregation Operator Options

- Store zero data value: Set to keep zero value in the database or not. As per the current setting all data element has been set not to store zeros in the database.
- URL: A URL having an in-depth description of the data element can be entered in the 'URL' field. This could be for instance, a link to a metadata repository or registry that contains detailed technical information about the definition and measurement of the data element.
- Category combination: Defines which category combination the data element should have.

- **Aggregation levels:** The Aggregation Levels option allows the data element to be aggregated at one or more levels. Aggregation levels table displays available aggregation levels on the left and selected levels on the right. The desired aggregation level is then selected by double clicking the on the level from the list of available aggregation level on the left. By default, the aggregation will start at the lowest assigned administrative unit.

Aggregation levels

Search available/selected items

District  
National  
Regional  
Ward

→  
←

ASSIGN ALL 4 →
← REMOVE ALL

Estimation

SAVE
CANCEL

**Figure 21: Select Aggregation Levels and Estimation Option Section**

- **Estimation:** This define whether the data element should be estimated or not and if should be estimated it defines the estimation rule to be used. So far there are several estimation options as shown in the following figure:

<No value>

Avarage

Privious Data

2 stage prior estimate

Prior Estimate

No Estimation

Based on Targerts

**Figure 22: List of Estimation Rule Options**

- After making the required changes, click ‘Save’ to institute them. The ‘Cancel’ button aborts all changes made.

#### 4.3.2 Data Element Group

Data element groups provide a mechanism for classifying related data elements into a common theme. For instance, three data elements "Eneo la malisho ya mifugo", "Eneo la

mashamba yaliyotumika kwa malisho", and "Eneo la linalotumika" might be grouped together into a data element group "Eneo la malisho (Grazing land)".

To access the data element group maintenance page, click Maintenance -> Data elements and Computed Values -> Data Element Group.

Similar to the "Data element" maintenance page, data elements groups can be searched with by entering a search string in the "search by name" field.

To add a new data element group, click add new button i.e. the + icon at the top right, and the following screen will be displayed.

Name

---

Short name

---

Code

---

Data elements

Search available/selected items

4\_Livestock slaughtered\_Total number of slaughtered

6.1\_Milk\_Whole milk

6.2\_Hide and skin\_Processed\_Wet Blue

6.2\_Hide and skin\_Unprocessed\_Dry Salted

6.2\_Hide and skin\_Unprocessed\_Dry Suspended

7.1\_Aina\_za\_kilimo\_Vuli

7.1\_Area cultivated by v/w and means of cultivation (Short rain: vuli)\_Total\_are

7.2\_Aina\_za\_kilimo\_Masika

7.2\_Area cultivated by v/w and means of cultivation (Masika)\_Total\_area

Aina ya kiatilifu/kiua dudu

Aina ya mashine/vifaa

ASSIGN ALL 838 →

← REMOVE ALL

SAVE CANCEL

**Figure 23: Create New Data Element Group**

Fill in the "Name" field and then select all data elements that should belong to the group from the left panel. Click the "ASSIGN ALL..." button to add all the available data elements to the data element group. You can double click on a specific data element from the list on the left to add only the selected data element or you hold CTRL key then select click on the data elements to select multiple and click on the arrow between the left and right panel to add the selected data elements. Click the "REMOVE ALL" button to remove all data elements from the group that have been selected in the right panel. Finally, click the "SAVE" button to save changes, or the "Cancel" button to discard any changes.

### 4.3.3 Data Element Category

Data element categories can be used to disaggregate data elements into individual atomic components. Data element categories are typically a concept, such as Aina za mazao (crop type). Data elements such as "Eneo lililolimwa (Cultivated Area)" can be broken into smaller component parts to determine, for instance, "Eneo lililolimwa mpunga", "Eneo lililolimwa mahindi", and etc.

To access the data element category maintenance page, click Maintenance -> Data elements and Computed Values -> Category.

## Data element category management



Search by name

51 - 100 of 158

< >

Name	Public access	Last updated
Hali ya Eneo la Umwagiliaji		a year ago
Hali ya Mashine		a year ago
Hide and Skin	Edit	a year ago
Huduma za ugani	Edit	a year ago
Iadidi wa kisasa	Edit	a year ago

**Figure 24: Data Element Category Management Screen**

Effective use of data element categories greatly simplifies the process of setting up the ARDS Web Portal, as the data element categories can be reused to disaggregate many different data elements. Otherwise, each of the data elements would need to be created separately. Judicious use of data element categories allows for subsequent advanced analysis.

Data element categories are composed of category options. Category options must be defined when a data element category is created for the first time. Subsequent changes to the data element category, i.e. adding or deleting new category options, are not allowed once the data element category has been created.

It is critical that the proper categories and category options are defined in the initial definition step, as further changes to the category and its options will not be possible.

To access the data element category option maintenance module, press "Maintenance -> Data Elements and Computed Values -> Category Option". The following screen will be displayed:

## Data element category option management



Search by name

351 - 400 of 607

< >

Name	Public access	Last updated
Mazao		a year ago
Maziwa ya Ng'ombe wa asili		a year ago
Maziwa ya ng'ombe wa kisasa (lita)		a year ago

**Figure 25: Data Element Category Option Management**

Similar to the other data element maintains modules, data element categories options and data element categories can be filtered by typing the name of the data element category option or the category respectively (or a portion of it) into the "Search by name" field.

To add a new data element category option, press the + icon at the top right of the data element category option management screen which will then display the following screen.



## Category Option

Name

---

Short name

---

Code

---

Start date

---

End date

---

SAVE

CANCEL

### **Figure 26: Create New Data Element Category Option**

Type the details accordingly, for example Maize for the types of crops and click add.

To add a new data element category, press the "Add new" button which will then display the following screen

To add a new data element category, go to Maintenance -> Data elements and Computed Values -> Category then press the + icon at the top right and the following screen will appear.

Name

---

Code

---

Data dimension type

---

Data Dimension

Category options

Search available/selected items

---

1st Degree

2nd Degree

30G19

Abnormal ordour

Acaricides generic five

Acaricides generic four

Acaricides generic one

Acaricides generic three

Acaricides generic two

Acaricides

Actual Figure

→

←

↑

↓

ASSIGN ALL 607 →

← REMOVE ALL

SAVE

CANCEL

**Figure 27: Create New Data Element Category**

Type the name of the new data element category in the "Name" field in the "Details" region. Category options can be added by typing the name of the category option in the "Search available/selected items" field, select the category option from the left and press the "forward arrow" button between the right and left panel. Category options can be reordered using the "Move Up" and "Move Down" buttons. Categories options can be deleted by selecting the data element category option from the right and press the "Back arrow" button. Once all data element categories options have been added to the data element category, press the "SAVE" button to save all changes or the "Cancel" button to discard any changes. Also, you can add and remove category options by double clicking on the particular category option.

All data element category options must be added and defined properly in this step. Subsequent alterations to the data element category (other than reordering of the category options themselves) are not possible.

#### 4.3.4 Data Element Category Combination

Data element category combinations allow multiple data element categories to be combined into a related set. By combining different categories into a data element category combination and assigning the combinations to data elements, the appropriate disaggregation levels can be applied efficiently and quickly to a large number of data elements.

To access the data element category combination maintenance module, select "Maintenance->Data element and Computed Values-> Category combinations". As with the other maintenance modules, you can filter the listed category combinations by entering the name (or portion thereof) of the category combination. Also, you can Edit, Delete the data category combination.

To add a new category combination, click the + icon button at the top right. The following dialogue will be displayed.

## Category Combination

Name \_\_\_\_\_

Code \_\_\_\_\_

Data dimension type \_\_\_\_\_

Skip category total in reports

Categories

Search available/selected items

Administrative units

Aina ya kilimo

Aina ya mashine za umeme

Aina ya mazao

Aina ya mbegu za alizeti

Aina ya mbegu za Maharage

Aina ya mbegu za mahindi

Aina ya mbegu za Mpunga

Aina ya mbegu za ngano

Aina ya mifugo mingine

Aina ya Mmomonyoko wa ardhi

→

←

↑

↓

ASSIGN ALL 158 →

← REMOVE ALL

SAVE CANCEL

**Figure 28: Create new data element category combination**

Type the name of the category combination in the "Name" field, and then select the desired categories from the left panel. Press the "Move right" button to add the selected categories to the category combination. Press "Move left" to remove any categories that should not be part of the category combination.

Categories can only be added to a category combination at this step. Categories can be removed from category combinations later by editing the category combination, however, it is not allowed to add additional categories once the combination has been created. Ensure that the category combination and its respective categories are final before you create the category combination and assign it to a data element.

### 4.3.5 Meta-data group editor

The meta-data group editor provides advanced functionality to the administrator to allow multiple data elements or computed values to be added or removed from a group. It is also possible to create new data element or computed values groups, rename existing groups, and delete groups entirely. To access the meta-data group editor, go to "Maintenance -> Data elements and Computed Values -> Meta-data group editor (right side icon at the top of the left panel)".

☰ ☒

Search \_\_\_\_\_

Category Option

Category

Category Combination

Manage items in group

Please select an object type

\_\_\_\_\_



### Figure 29: Meta-Data Group Editor -Second Icon at the Top of Left Panel

In the meta-data group editor screen, you can select a view to manage items in group or to manage groups for item by clicking on the respective button at the top.

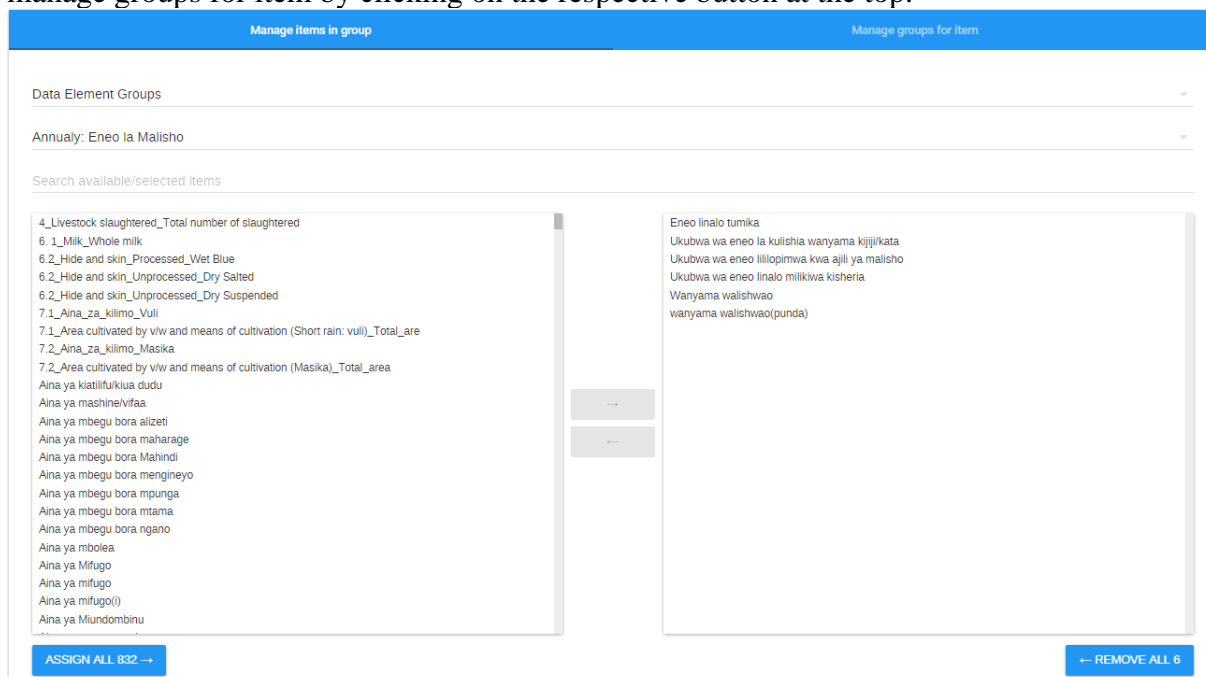
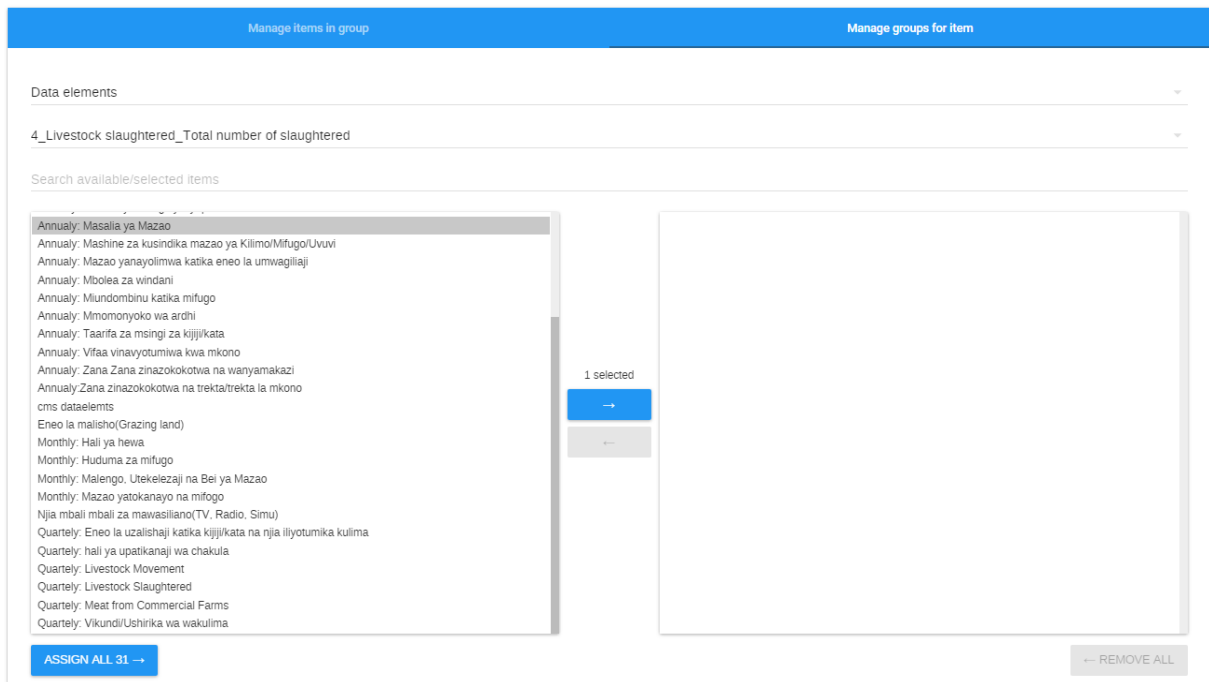


Figure 30: Meta-Data Group Editor – Manage Items in Group

If you select to manage items in group then select data element group in the drop down or computed value group if you are looking for computed value, then select the group you are looking for from the next dropdown list. Available data elements that can be added to the group you selected are listed alphabetically in the leftmost panel and selected data element that are members of the group are listed on the right panel. To remove an existing data element from the group, double click the name of the data element in the right panel or click to select them then press the "Move left" arrow. To add data elements to the group, select them from the leftmost panel, and click the "Move right" arrow or double click on the particular data element from the left panel. Press the "Update data element group member" button to save your changes.

If you select to manage groups for item you follow the same procedure as explained above. However, this time you select the data element or computed value and get the list of available groups on the left panel and assigned groups on the right panel.



**Figure 31: Meta-Data Group Editor – Manage Groups for Item**

#### 4.3.6 Data element group sets

Data element group sets allow multiple data element groups to be categorized into a set. Data element group sets are used during analysis and reporting to combine similar data element groups into a common theme.

To access the data element group set maintenance module, choose "Maintenance -> Data elements and Computed Values -> Data Element Group Set".

Similar to the other data element maintenance modules, new data element group sets can be added by pressing the + icon button at the top right. Other operations include Edit, Translate, Delete and Information, similar to the other modules in this section.

Existing data element group set members can be edited by left click the particular group set and click the "Edit" button of the desired data element group set as seen below.

## Data Element Group Set

Name

---

Code

---

Description

Compulsory

Data Dimension

Data Element Groups

Search available/selected items

Added crops

Annually: Eneo la Malisho

Annually: Huduma ya TV na Radio

Annually: Idadi ya mashine/vifaa vya kilimo. ufugaji na uvuvi

Annually: Idadi ya mifugo

Annually: Kilimo cha mkataba na makubaliano ya soko

Annually: Mafunzo ya wakulima kupitia shamba darasa

Annually: Malisho ya mifugo yaliyopandwa na kuendelezwa

Annually: Masalia ya Mazao

Annually: Mashine za kusindika mazao ya Kilimo/Mifugo/Uvuvi

Annually: Mazao yanayolimwa katika eneo la umwagiliaji

Annually: Mholeo za mifugani

→

←

↑

↓

**ASSIGN ALL 31 →** **← REMOVE ALL**

**SAVE** **CANCEL**

**Figure 32: Update Data Element Group Set**

Available data element groups are displayed in the left panel. They can be moved into the selected data element group set by pressing the "Move right" arrow or double clicking on each. Data element groups that are currently members of the data element group set are displayed in the right hand panel. They can be removed from the data element group set by clicking the desired data element group and pressing the "Move left" arrow.

### 4.3.7 Computed Values

Computed Values are composed of multiple data elements, and typically consist of a numerator and denominator. Computed Values are never entered in ARDS, but are derived from combinations of data elements and factors. Computed Values are used to calculate coverage rates, incidence and other values are a result of data element values that have been entered into the system.

To access the Computed Value maintains page, press Maintenance -> Data Element and Computed Values -> Computed Value from the main ARDS menu. Similar to data elements, you can add, delete, modify and view extra information about the Computed Values in the system.

Computed Values can be filtered by entering the name or a part of the Computed Value name in the "Search by name" field. Similar to data elements, Computed Values can be added by pressing the + icon button at the top right. Other operations available from this menu as you right click on the particular computed value are as follows.

- Existing Computed Values can be edited.
- Delete an existing Computed Value.
- Get detailed information about this Computed Value.
- Clone and share the selected computed value

To add a new Computed Value, click the + icon button at the top right. The following screen is displayed.

## Computed value

Name 

---

Short name 

---

Code 

---

Description 

---

Annualized

Decimals in data output 

---

Computed value Type 

---

Legend set 

---

URL 

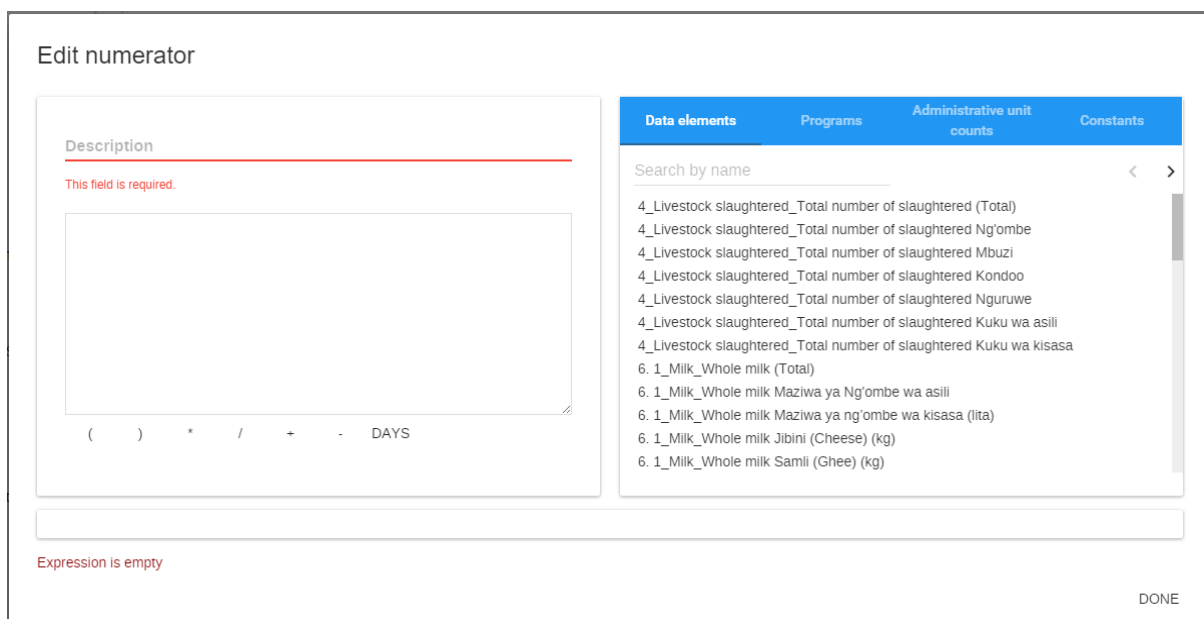
---

**Figure 33: Create New Computed Value**

Each of the fields marked with an asterisk are compulsory. A description of each field is provided below.

- Name: The full name of the Computed Value, such as "Incidence of confirmed cows disease cases per 1000 population"
- Short name: An abbreviated name of the Computed Value. The short name must be less than or equal to 25 characters, including spaces.

- **Code:** In many countries, Computed Values are often assigned a particular code. This code can be entered here.
- **Description:** A brief, informative description of the Computed Value and how it is calculated can be entered here.
- **Annualized:** Determines whether or not an annualization factor is applied during the calculation of the Computed Value. Typically, annualized Computed Value's numerator is multiplied by a factor of 12, and the denominator is for instance a yearly population figure. This allows for monthly coverage values to be calculated with yearly population figures.
- **Decimal in data output:** Determine the number of decimal places that will be displayed in the output.
- **Computed value type:** This field will determine a factor that will automatically be applied during the calculation of the Computed Value. Possible choices are determined by the Computed Value Types (described below). For instance, a "Percent" Computed Value will automatically be multiplied by a factor of 100 when exported to the data mart, so that it will display as a percentage.
- **URL:** Can be used as a link to a Computed Value registry, where a full metadata description of the Computed Value can be made available.
- **Edit numerator and edit denominator:** To define the numerator and denominator, simply press the respective button, and the following dialogue will be displayed.



**Figure 34: Edit Numerator Screen**

Essentially, a Computed Value is a formula that can be composed of multiple data elements, constant factors, and mathematical operators. In order to define a new Computed Value proceeds with the following steps.

1. Enter at least the required fields (Name and short name) from the Computed Value maintenance screen.
2. Next, press "Edit numerator" from the main Computed Value maintenance screen. This will provide a dialog where you can define the actual formula of the Computed Value's numerator.

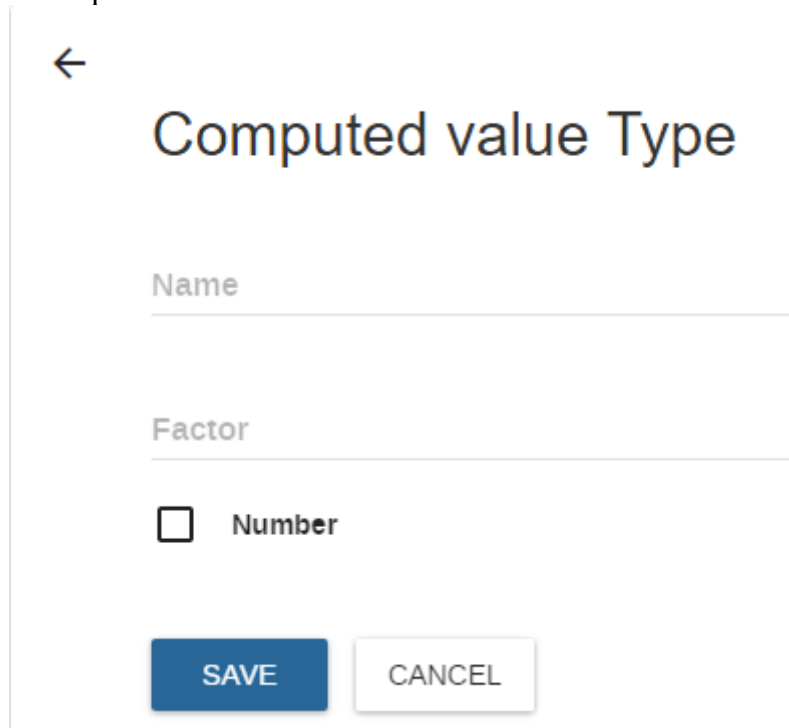
3. A description of the numerator/denominator must be provided in the "Description field". This should provide a clear description of
4. Define the formula of the Computed Value by selecting the data elements that should compose the numerator from the "Data elements" field. Simply select the data element, and double click it. It will now appear in the formula. Your formula must be mathematically valid, including the proper use of parentheses when necessary. You can double click on each of the mathematical operator buttons below the Computed Value formula definition to add them to your formula.
5. Click the Save button to save all changes to the numerator. Click cancel to discard any changes that you have made.
6. Follow the same procedure in order to define the denominator.

#### 4.3.8 Computed Value types

Computed Value types simply define a factor that will be applied during aggregation. Computed Value values that are calculated during a data mart export or report table generation process will appear properly formatted, and will therefore not require an additional multiplier (e.g. 100 in the case of percent) for the values to appear correctly formatted.

The Computed Value type maintenance panel has all of the same functions (Add new, Edit, Clone, Share, Delete, and Information) as the Computed Value maintenance section.

There are only two fields that need to be filled-in to create a Computed Value type, Name and Factor, as seen below. Name refers to the Computed Value type (e.g. Per cent, per thousand, per ten thousand, etc). The factor is the numeric factor that will be applied during the calculation of the Computed Value.



←

## Computed value Type

Name

Factor

Number

SAVE CANCEL

**Figure 35: Create new Computed Value type**

#### 4.3.9 Computed Value groups

Computed Value group function essentially the same as data element groups. Multiple Computed Values can be assigned to a group for easy filtering and analysis. To assign Computed Values to groups, press Maintenance->Data elements and Computed Values-

>Computed Value groups. See the section on Data element groups for detailed instructions of how to use this module. You can manage groups for a computed value or manage computed values in group using group editor as explained in the Meta-data group editor section.

#### **4.3.10 Computed Value group sets**

Similar to data element group sets, Computed Value group sets serve to create combined groups of similar Computed Values. Computed Value group sets are used during analysis of data to combine similar themes of Computed Values.

To access this module choose Maintenance->Data elements and Computed Values->Computed Value group sets from the main menu.

Supply a name for the Computed Value group set, and then move the desired members from the "Available Computed Value Groups" to the "Group members". Click "SAVE" to save your changes and "Cancel" to discard any changes. See the section on Data element group sets for further instructions.

### **4.4 Managing Forms**

Entry forms and reports in ARDS Web Portal are organized through the use of forms. A form is a collection of data elements grouped together for data collection and reporting. Essentially, form in the ARDS Web Portal are forms that mimic the original VAEO/WAEO format (WF00, WF01, WF02 and WF03) as well as ARDS-LGMD2 reports such as District/Region Monthly Report (DR01/RR01), District/Region Quarterly Report (DR02/RR02), District/Region Annual Report (DR03/RR03), Quarterly Integrated Report (DIR02/RIR02/NIR02) and Annual Integrated Report (DIR03/RIR03/NIR02). In the ARDS Web Portal the terms form, entry form and report are regarded as data sets in the system and may be used interchangeably, which depends on the activity to be performed by the user of the system. In this section, the term form will be used.

A Form also has a frequency that controls the data reporting frequency, which can be daily, weekly, monthly, quarterly, six-monthly, or yearly. The ARDS Web Portal in particular has frequencies of monthly, quarterly, and annual. Both which data elements to include in the Form and the frequency is set in the Add/Edit Form window, together with a name, short name, and code. In order to use a form to report data for a specific administrative unit you must assign the administrative unit to the form, and this mechanism controls which administrative units that can use which forms.

The form management function allows you to create new forms and manage existing ones. The dialog can be reached by choosing Maintenance->Entry Forms -> Entry Form. A sample dialog is displayed below. Each of the functions is described below.

## Entry form management ?

Search by name









1 - 13 of 13 < >

Name	Public access	Last updated	
Annual Integrated Report (DIR03/RIR03/NIR03)	Public view/edit	10 days ago	⋮
District Annual Entry Form (DF03)	Public view/edit	2 months ago	⋮
District Quarterly Entry Form (DF02)	Public view/edit	2 months ago	⋮
District/Region Annual Report (DR03/RR03)	Public view/edit	a month ago	⋮
District/Region Monthly Report (DR01/RR01)	Public view/edit	a month ago	⋮
District/Region Quarterly Report (DR02/RR02)	Public view/edit	2 months ago	⋮

**Figure 36: A dialog to View and Change and Add Forms**

- You can add a new form by clicking on the blue plus icon at the bottom left for the form management screen. When pressing this icon, you can create a new form. You need to provide a name, short name and frequency. The "Code" attribute is optional. Data elements can be added to the "Selected data element" list by selecting them individually. And pressing the button. Computed Values can also be added to Forms and will be available to be placed in custom forms when they need to be shown along with data elements on the same form. Once you are done Press "Save" to add the new form.
- By clicking on the three dots icon in front of the specific form in the list, you can perform the following functions as shown in the figure below.

District/Region Monthly Report (DR01/RR01)	Public view/edit	a month ago	⋮
District/Region Quarterly Report (DR02/RR02)	Public view/edit	2 months ago	⋮
Prior Estimates for Missing Data Estimation Entry Form	Public view/edit	2 months ago	⋮
Quarterly Integrated Report (DIR02/RIR02/NIR02)	Public view/edit		⋮
WF00-WF01 Cross cutting Target Non-estimation Data elements	Public view/edit		⋮
Ward Annual Entry Form (WF03)	Public view/edit		⋮
Ward Annual Target Entry Form (WF00)	Public view/edit		⋮
Ward Monthly Entry Form (WF01)	Public view/edit		⋮
Ward Quarterly Entry Form (WF02)	Public view/edit	a month ago	⋮

-  Edit
-  Sharing settings
-  Delete
-  Show details
-  Edit compulsory data elements
-  Manage sections
-  Design data entry form
-  Get PDF for data entry

**Figure 37: View and Edit Existing Forms**



- Edit form: This will allow you to edit existing forms, for instance when you need to add or remove data elements and Computed Values to a given form. This function will allow you to assign individual administrative units to a form. Only administrative units, which have been assigned to a form, will be allowed to enter data into the form.
- Edit compulsory data elements: This dialog will allow you to add or remove data elements which are compulsory.
- Delete: Completely removes a form from the system.
- Show details: Display some informative information about the form, including the number of data elements, the frequency, and which data entry form has been assigned to the form.
- Design Forms: When the layout of the form changes, name or description tests need to change or you want to design the layout of a new form that have been added then your last option is to use a design form. This takes more time, but gives you full flexibility in terms of the design. ARDS Web Portal uses a built-in HTML editor for the form designer and you can either design the form in the UI or paste in your HTML directly (using the Source window in the editor). One of the big advantages of forms is that they can be created to mimic existing paper aggregation forms. A complete reference for use of the editor can be found here:

#### 4.4.1 How to Modify Typos in the Entry Forms and Reports

To modify typos on the names of columns and rows or description used in the entry forms or report you need to redesign the existing form. To do so follow this step:

1. Go to Maintenance
2. Select Entry Forms
3. Browse to view the form (Entry Form or Report) you want to correct the typos
4. Click on the three dots icon found in front of your form name in the list and select the Design data entry form.
5. The Entry Form or Report you want to correct will open on the left.
6. Use the ARDS Web Portal built-in HTML editor for the form designer, scroll the form to locate the text you want to correct then modify it accordingly.
7. When you are done scroll down until the end of the screen and click on “Save” to keep the changes or “Cancel” to reject the changes.
8. You may need to clear cache to reflect changes you made on the entry form or report.

District Annual Entry Form (DF03) data entry form

The screenshot displays the ARDS Web Portal form designer interface. On the left, a source code editor shows JavaScript code for checking locking conditions and date formatting. On the right, a 'Filter elements' panel lists 144 data elements, including categories like 'Extension officers for fishery', 'DF02 7-Remarks at crops', and 'DF03 11 Name of Business at Meat and Meat product'. Below the list, it shows 'Totals: 0', 'Computed Values: 88', and 'Flags: 115'. There is also a checkbox for 'Insert grey (disabled) fields'.

```

<div><script>
//checking locking using end of financial year
if (dhis2.de.dhis2.de.dhis2.de.systemSettingForDataEntry &&
dhis2.de.systemSettingForDataEntry.shouldLockEntryFormBasedOnEndOffinancialYear) {
dhis2.de.resetLockingForm();
checkingForLockingDataEntryFormBasedOnPeriodSelected();
} else {
// checking locking based on report creations
dhis2.de.resetLockingForm();
if (dhis2.de.dhis2.de.dhis2.de.systemSettingForDataEntry &&
dhis2.de.systemSettingForDataEntry.shouldLockEntryFormBasedOnReportCreation) {
checkingForLockingDataEntryFormBasedOnReportCreation();
}
}

function getFormattedDate(date) {
date = new Date(date);
var month = date.getMonth() + 1;
var newDate = date.getFullYear() + "-" + ((month > 9) ? month : '0' + month) + '-01';
return new Date(newDate)
}

function getEndOffinancialYearDate(date) {
date = new Date(date);
var year;
if (date.getMonth() + 1 >= 7) {
year = date.getFullYear() + 1;
}
}

```

**Figure 38: Making Changes in the Form Design**

1) Iwapo kitu kinacho ulizwa hakipo kwenye kijiji/kata yako, andika "0"(Sifuri)

2) Iwapo kitu kinacho ulizwa kwenye kijiji/kata yako andika makadirio kwa takwimu /idadi.

3) Vinginevyo acha kisanduku wazi

4) Tumia vipimo vya kitaifa kwa kila jedwali vinapo hitajika

5) Soma kwa makini maelezo katika kila jedwali kabla ya kuanza kujaza.

1. Utangulizi, Taarifa za Msingi za Kijiji/ Kata

Form display style  
Normal

SAVE CANCEL DELETE

**Figure 39: Saving the Form**

#### 4.5 Managing Administrative Units

Administrative units are organized in the administrative hierarchy. The administrative hierarchy defines the administration structure of the ARDS instance, such as how the agriculture facilities, administrative areas and other geographical areas are arranged with respect to each other. It is essentially the "where" dimension of ARDS, similar to how periods represent the "when" or time dimension. ARDS is structured so that the administrative unit hierarchy is a geographical hierarchy, and the GIS module depends on this. Non-geographical hierarchies are discouraged, and would better to be represented through the use of administrative unit groups. This dimension to the data is defined as a hierarchy with one root unit (e.g. country) and any number of levels and nodes below. Each node in this hierarchy is called an administrative unit in ARDS.

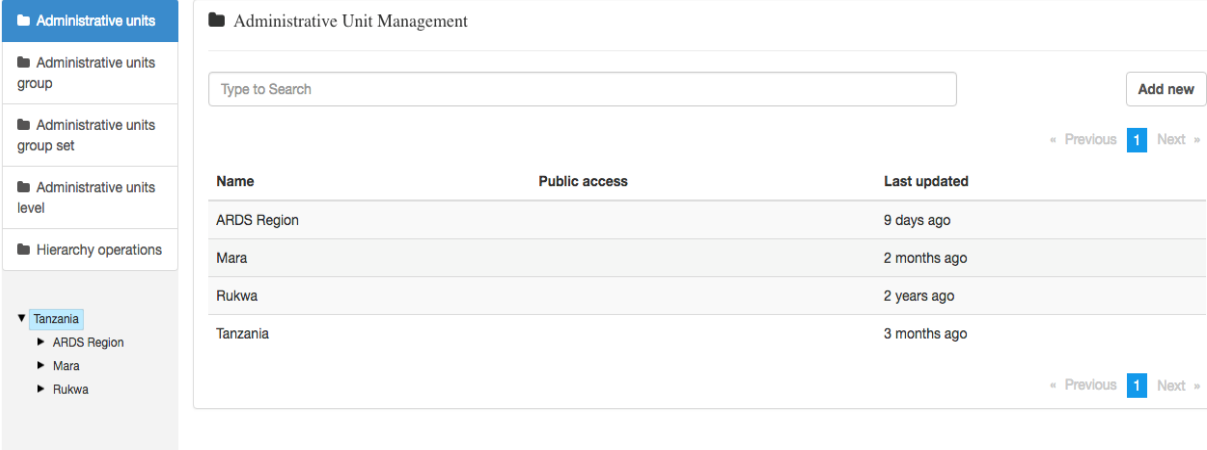
The design of this hierarchy will determine the geographical units of analysis available to the users as data is collected and aggregated in this structure. There can only be one administrative hierarchy at the same time so its structure needs careful consideration.

Additional hierarchies (e.g. parallel administrative boundaries to the agriculture sector) can be modeled using administrative groups and group sets, but the administrative hierarchy is the main vehicle for data aggregation on the geographical dimension.

The hierarchy is built up of parent-child relations. For instance, a country might have twenty regions, and each region again might have a number of districts as their children. Normally the agriculture facilities (from which data is typically collected) will be located at the lowest level, but they can also be located at higher levels, e.g. national or regional, so skewed administrative trees are supported (e.g. a leaf node can be positioned at level 2 while most other leaf nodes are at level 5).

Note that it is quite easy to make changes to the upper levels of the hierarchy at a later stage, the only problem is changing administrative units that collect data (the leaf nodes), e.g. splitting or merging Districts or Wards. Aggregation up the hierarchy is done based on the current hierarchy at any time and will always reflect the most recent changes to the administrative structure.

To access Administrative Units Management module, choose Maintenance->Administrative Units from the main menu.



**Figure 40: Administrative Units Management**

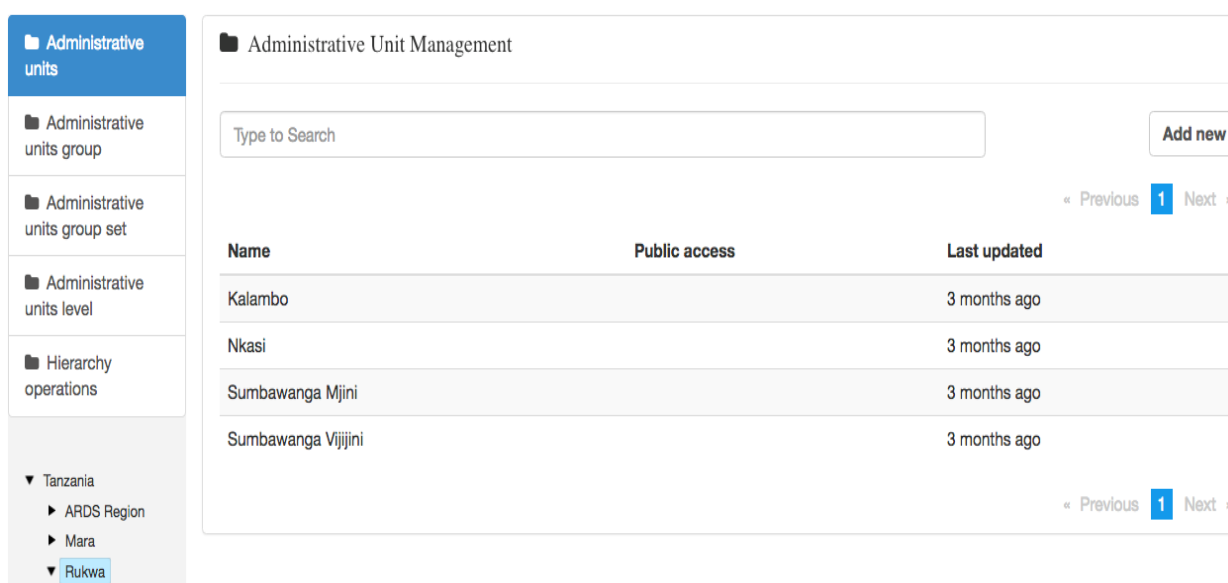
**4.5.1 Administrative units**

This is where you can create administrative units and build up the hierarchy. Administrative units are added one by one as either root unit or a child of a selected unit. The left side menu represents the current administrative hierarchy and if you select a unit you will see its children listed in the main list of administrative units in the middle of the screen.

- When an administrative unit is selected in the left side menu you can also add new child units to it.
- To locate an administrative unit in the hierarchy you can either navigate through the tree by expanding the branches (click on the arrow symbol), or search for it.
- In search, search for the administrative unit name and will only show exact matches (case-insensitive).
- To add a new administrative unit first, select its parent and then click on the Add new button in the top right corner of the list of administrative units.
- To add new root administrative units, make sure no administrative unit is selected in the menu and click on "Add new".

**Please note the following:**

- To add a new administrative unit (ward, district or region) make sure you first select its parent and then click on the Add new, otherwise you will be adding a new root administrative unit apart from Tanzania. For example, to add a ward make sure you select its district.
- If you are adding a new root administrative unit apart from Tanzania, make sure no administration unit is selected.
- It is highly recommended that administrative unit changes should only be done at the beginning of the new financial year i.e. after report creation is completed for the previous year and before the beginning of data entry in the new financial year otherwise it may affect quarterly and annual report aggregation as they will be done as per the latest administrative unit hierarchy.



**Figure 41: Administrative Unit Management Screen**

#### 4.5.2 Editing and Adding New Administrative Units

To add new administrative unit, follow procedures outlined in section 4.5.1 and fill in the required information as shown below (same information as when editing an administrative unit). To edit the properties of an existing administrative unit:

- First select its parent (if any) in the left side menu, then
- Locate the administrative unit in the listed administrative units, and
- Finally click on the administrative units that you want to modify and select "Edit"

**Edit Administrative Unit** ?

**Details**

Name \* Arusha

Short name \* Arusha

Description

Code

Opening date \*

Registers data Yes

Comment

URL

**Contact information**

Contact person

Address

E-mail

Phone number

**Data sets**

Available data sets

Add Remove

Data sets

- Annual Integrated Report
- District Annual Report
- District Monthly Report
- District Quarterly Report
- Quarterly Intergrated Report

**Administrative unit groups**

Save Cancel

**Figure 42: Edit Administrative Unit Dialogue**

The following properties can be defined in the Edit (or Add new) window:

- Name: Define the precise name of the administrative unit in this field. Each administrative unit must have a unique name.
- Short name: Typically, an abbreviation of the full name. This attribute is often used in reports to display the name of the administrative units, where there is limited space available.
- Code: In many countries, administrative units are assigned a code. This code can be entered in this field.
- Opening date: Used to control which administrative units that were existing at a point in time, e.g. when analyzing historical data. This attribute is required. The default date for opening of administrative units is 1900-01-01, but can be set to any date (even dates which occur in the future).

- Opening date and Closing date: This are used to specify when the administrative unit started to be used and when stopped to be used.
- Comment: Any additional information that you would like to add can be put here.
- Coordinates (Latitude and Longitude): This field is used to create the maps in the GIS module. Paste in the coordinates of the administrative units in this field, either a polygon (for administrative units that represent an administrative boundary) or a point (for agriculture facilities). Without this information, the GIS module will not work. It might be more efficient to import these coordinates later as a batch job for all administrative units using the import module. See the GIS chapter for more details.
- URL: You can use this field to insert a URL link to an external web site that has additional information about this specific administrative unit.
- Contact information: A contact person, address, email, and phone number can be entered in these fields. This information can be vital for facilitating follow-up.
- Person in Charge: This information can be vital for identifying who oversee a particular administrative area. The value entered here is displayed in the submission and creation status report as a person in charge of a particular administrative unit.
- Entry Form Assignment: Forms can be assigned to administrative units here. See the chapter on "Forms" for more detailed information on assigning forms to administrative units.
- Administrative unit groups: Assignments to administrative unit's group sets can be assigned through the individual drop-down boxes which appear for each group set.

### 4.5.3 Administrative Unit Level

Here you specify a contextual name for each level in the hierarchy, e.g. "Country", "Region", "District", and these names will be used all over the application where levels are referred to. This page will take some time to load if the administrative unit hierarchy is very big.

#### Administrative unit level management

---

Name	<input type="text" value="National"/>	Offline levels	<input type="text" value=""/>
Name	<input type="text" value="Regional"/>	Offline levels	<input type="text" value=""/>
Name	<input type="text" value="District"/>	Offline levels	<input type="text" value=""/>
Name	<input type="text" value="Ward"/>	Offline levels	<input type="text" value=""/>

**Figure 43: Administrative Unit Level Management**

### 4.5.4 Hierarchy Operations

Here you can move administrative units around in the hierarchy by changing the parent of a selected administrative unit. This process is done in three steps:

1. Select the administrative units you want to move (in the hierarchy in the left side menu)

2. Select the new parent administrative unit (by using the hierarchy in the right-side menu).  
If no parent is selected, then the administrative unit will be moved up to root level (top of the hierarchy).
3. Click on the "Move" button to apply your changes to the hierarchy.  
Your changes will be immediately reflected in the left side menu hierarchy.

**Hierarchy operations**

▼ Tanzania

- ▼ ARDS Region
  - ▶ Animal District
  - ▶ Fish District
- ▶ Mara
- ▼ Rukwa
  - ▶ Kalambo
  - ▶ Nkasi
  - ▶ Sumbawanga Mjini
  - ▼ Sumbawanga Vijijini
    - Ikozi
    - Ilemba**
    - Kaengesa
    - Kalambanzite
    - Kalumbaleza
    - Kanda
    - Kaoze
    - Kapenta
    - Kasanzama
    - Kilangawana
    - Kipeta
    - Laela
    - Lusaka
    - Lvanoailile

▼ Tanzania

- ▶ ARDS Region
- ▶ Mara
- ▶ Rukwa

**Move**

Select administrative unit(s) to move from the left

**New parent**

Select new parent for administrative unit(s) from the right tree

[Move 1 administrative unit](#)

**Figure 44: Administrative Unit Hierarchy Operation**

#### 4.5.5 Administrative Unit Groups

This function will allow you to add new and manage existing Administrative unit groups and their memberships.

- It can be accessed by choosing Maintenance -> Administrative units -> Administrative unit group from the main menu.
- To add a new administrative unit group clicks on the "Add new" button in the top right corner of the list of groups.

To editing administrative unit groups, right click on the administrative unit group that you want to modify and select edit. The following properties can be defined in the Edit (or Create new) window:

- Name: Provide a precise name for the administrative unit group.

- Administrative unit tree selection: This is where you assign administrative units to the group. The tree supports multiple selection so select all the administrative units that you want to add and click on "Save". Click on "Cancel" to undo your changes and return to the list of administrative unit groups. Use the "Select at level" button and dropdown if you want to select all administrative units at a specific level in the hierarchy (e.g. all districts).

Name

Short name

Code

Symbol

1 Administrative unit to select

- ▼ Tanzania
  - ▶ ARDS Region
  - ▶ Mara
  - ▶ Rukwa

For administrative units within Tanzania

Administrative unit level

Administrative unit group

**Figure 45: Edit Administrative Unit Group dialogue**

#### 4.5.6 Administrative Unit Group Sets

Group sets can be understood as a flexible tool to add more categorization to administrative units. Any number of group sets can be added, but as a default start all databases will have the two group sets "Type" and "Ownership". Using these group sets will simplify how reporting is done, and facilitate analysis through the use of tools such as Excel PivotTables.

While a group set like "Type" describes a measure dimension, the actual categories are represented by the groups and the categorization of an administrative unit through the administrative unit's group memberships. This can be understood as a parallel hierarchy of administrative units with the group set as the root ("Type"), the groups at level 2 (e.g. agriculture facilities), and the actual administrative units at level 3. The group set can as such provide additional information and dimensionality to the data analysis as data is easily filtered, organized, or aggregated by groups within a group set.

For this aggregation to work without any duplication in the data some rules are necessary. A group set is always exclusive, which means that an administrative unit cannot be member of more than one group in a group set. Therefore, when creating new administrative units, you will only be allowed to select a single administrative unit group membership for each group set. Furthermore, it is possible to define whether a group set is compulsory or not, which will affect the completeness of the data when analyzing data using group sets. Compulsory means that ALL administrative units must be member of a group in that group set.



We recommend that you approach the administrative unit grouping in the following sequence (and one group set at a time):

1. Define a new group set, such as "Location".
2. Add new groups (such as "Urban", "Rural" and "Peri-urban"). Once all groups have been defined, return to the administrative unit group set and assign each of the desired groups to the group set.
3. Go back to each group, one by one, go to edit mode and assign the administrative units that should be member of the group. Should you follow this route, you can place multiple administrative units at a time in a group. However, you must be careful not to place the same administrative unit in two groups which itself is a member of an administrative unit group set. This will result in a data integrity violation. If you have administrative unit groups, which are not exclusive, they should not be members of a group.
4. A better way to ensure that you do not mistakenly assign an administrative unit to multiple members of a group set is you can use the edit feature of each administrative unit to assign memberships to each group set. You will only be able to assign a single administrative unit at a time however.

It is important to keep in mind when using the "administrative unit group" set function, that unless great care is taken, administrative units can be assigned to multiple groups of a group set. This can be checked through the "Data Integrity" module, which will report which administrative units are not members of a compulsory administrative unit group set, and which administrative units have been assigned to more than one member of a group set.

To editing administrative unit group sets, right click on the "Edit" button next to the name of the administrative unit group set that you want to modify. The following properties can be defined in the Edit (or Create new) window:

- Name: Provide a precise name for the group set.
- Description: Describe the phenomena the group set is measuring/capturing.
- Compulsory: Indicate whether ALL administrative units need to be member of a group in this group set or not.
- Available groups/Selected groups: Here you assign groups to your group set by using the arrow buttons to move highlighted groups between the two lists (/selected). If no groups appear in the list, then you must go to administrative unit groups and create new groups there first. Note that assigning groups that will violate the exclusive rule on group sets is not possible, e.g. adding a group that already has assigned an administrative unit that again is already member of a group that has already been selected by this group set, will not be possible since one administrative units will end up with two group memberships in the same group set. To avoid such situations, we recommend first adding groups to group sets, and then administrative units to groups.

🔒 This object will be created with public edit and view rights

**Name**

**Code**

**Description**

Compulsory  
 Data Dimension  
 Include subhierarchy in analytics

**Administrative unit groups**

Rural  
Urban

Assign ALL
Remove ALL

Save
Cancel

**Figure 46: Edit Administrative Unit Group Set dialogue**

#### 4.5.7 ARDS Administrative Hierarchy

The current ARDS administrative hierarchy consists of four levels in which National (Tanzania) is the parent with regions as its children. Regional has districts as its children, while wards are children of districts.

#### National, Regional, District, Ward

The following are the changes that may occur in administrative units, their effect to the administrative hierarchy and the recommended way to apply the changes. Details of how to apply the changes in the system is provided in their respective section:

##### 4.5.7.1 Splitting of an administrative unit

An existing administrative unit may split into more than one. For example, when Shinyanga region is split into Shinyanga and Simiyu region. In order to apply these changes in the system, it is recommended that you do the following:

- Create a new administrative unit and shift the children of the existing administrative unit to the new one as their parent.
- The existing administrative unit will remain the same but will consist of only the children that were originally assigned to it and their parent has not been changed.
- If the name of the existing administrative unit has also changed then rename it accordingly.

##### 4.5.7.2 Merging of administrative units

This may occur when two or more administrative units have been merged to one existing administrative unit or to a new one.

- If they merge to the existing one you are recommended to change the parents of all children of the administrative unit(s), which have been merged and assign them the new parent accordingly.
- If they merge to a new administrative unit with a different name you are supposed create the new administrative unit, assign it the appropriate parent, and then change the parents of all children of the administrative unit(s), which have been merged and assign them the new parent accordingly. Once all children have been shifted, you can remove unrequired administrative unit.

#### 4.5.7.3 *Establishment of a new administrative unit*

A new administrative unit may occur due to the scenario explained section 4.5.2.1 or when a new administrative level has been added in the hierarchy (e.g. village). In later case, it is recommended that you do the following:

- Add the administrative unit level (such us village from the example above) to the ARDS administrational hierarchy accordingly.
- Add the new administrative unit to their respective parents. For example, if you have added village as children of wards and Kiluvya is a village in Kisarawe ward. You should then create a new village called Kiluvya and assign it to Kisarawe as its parent.

#### **4.5.8 View Administrative Unit Usage**

For users managing the administrative units, it is important to know which administrative unit contains data. Administrative Unit Maintenance feature of the ARDS Web Portal provides a feature to show which administrative unit contains data.

To see if the particular Administrative Unit contains data follow these simple steps:

1. Choose Maintenance->Administrative Units from the main menu.
2. Select the parent of the administrative unit you want to check and it will appear in the list at the center panel.
3. Click on the particular administrative unit to view its details. The details will be displayed on the right side as shown below.
4. Click on the “View Summary of Data in Counts Associated with Administrative Units” to show or hide count of data values associated by the selected administrative unit.

✕

Attribute	Value
Id	KlqH2pEx4qg
Display Name	Bunda Mjini
Short Name	Bunda Mjini
Level	3
Created at	a year ago
Last updated at	3 months ago
External Access	false
Children administrative units	4
Auto-growing tables	75
Entry forms/ Reports	8
Users	3

View summary of Data in counts Associated with Administrative Units

Name	Uid	Counts(Auto-growing data)	Counts(Aggregate data)
Bunda Mjini	KlqH2pEx4qg	2111	654
Balili	wardNwld341	3449	21242
Bunda Mjini.	wardNwld342	3347	17840
Bunda	wardNwld343	726	6084

**Figure 47: Edit Administrative Unit Group Set dialogue**

#### 4.5.9 Delete Administrative Unit

When an administrative user creates an administrative unit, it may happen that the administrative unit is created in error, thus the user may need to delete to ensure database remain consistent and avoid confusing users. Administrative Unit Maintenance feature of the ARDS Web Portal provides a feature to delete an administrative unit and all its related data and/or settings.

Please note the following:

- This can be a very dangerous function, and should be for administrators only and should always observe carefully all warnings provided.
- Only administrative units that are “empty” should be deleted. An administrative unit is “empty” if it does not have any data entry forms associated to it or in its children, grandchildren, etc.
- In case a request to delete is committed then a cascade delete will be performed, whereby the children, grandchildren, etc. of the administrative unit will also be deleted.
- Before deleting view the administrative unit usage and if used observe careful extent of the data associated to it before you decide to delete even though it contains data.

To delete an Administrative Unit, follow these simple steps:

1. Choose Maintenance->Administrative Units from the main menu.
2. Select the parent of the administrative unit you want to check and it will appear in the list at the center panel.
3. Right click on the particular administrative unit and select “Delete”.



**Figure 48: Selecting an Administrative Unit to Delete**

4. If it contains data, the details of its usage will be displayed on the right side with a warning as shown below.

Attribute	Value
Id	KlqH2pEx4qg
Display Name	Bunda Mjini
Short Name	Bunda Mjini
Level	3
Created at	a year ago
Last updated at	3 months ago
External Access	false
Children administrative units	4
Auto-growing tables	75
Entry forms/ Reports	8
Users	3

View summary of Data in counts Associated with Administrative Units

**⚠ All Data is going to be deleted, Are sure you want to proceed!?**

**Delete** **Cancel**

**Figure 49: Administrative Unit Usage Details and Warning Displayed Before Deleting**

5. Click on “Delete” if you have satisfied yourself and you want to continue deleting the administrative unit. Otherwise, click cancel to keep it.

## 4.6 Content Management System (CMS)

A Content Management System is a computer application that allows publishing, editing & modifying content, organizing, deleting as well as maintenance from a central interface. The ARDS Web Portal has been developed with flexibility and customization being highly considered. Therefore, the portal consists of the CMS module that provides a central point for administrative user to manage contents of the portal, in particular home, additional (article) pages and broadcast messages. Other modules of the ARDS Web Portal have inbuilt customization ability features.

The CMS module is visible and accessible only by administrative user through Maintenance - > CMS or top right “CMS” menu in the center panel of the home page.

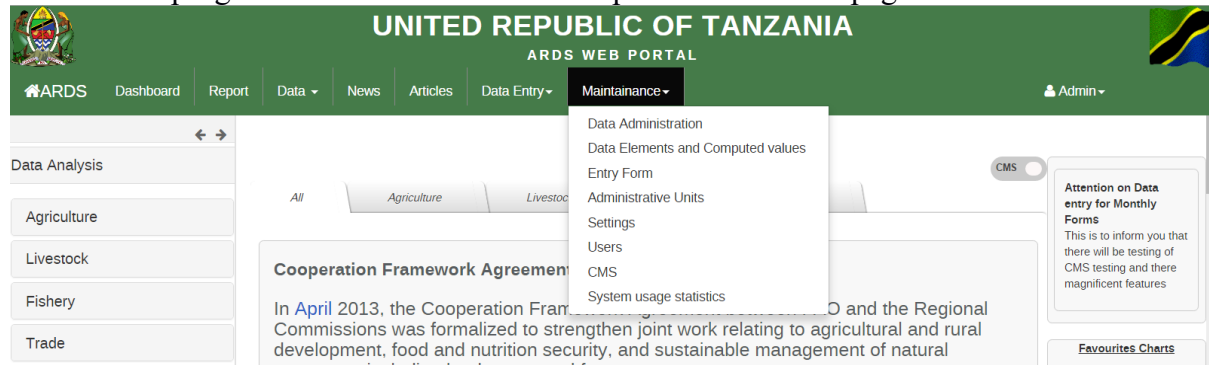


Figure 50: The CMS Module Access Menus

Once you click on any of the two CMS menu the home page will switch into an editable mode (CMS Mode) as shown in the following screenshot. You can then make use of the CMS features to manage the content of the portal.

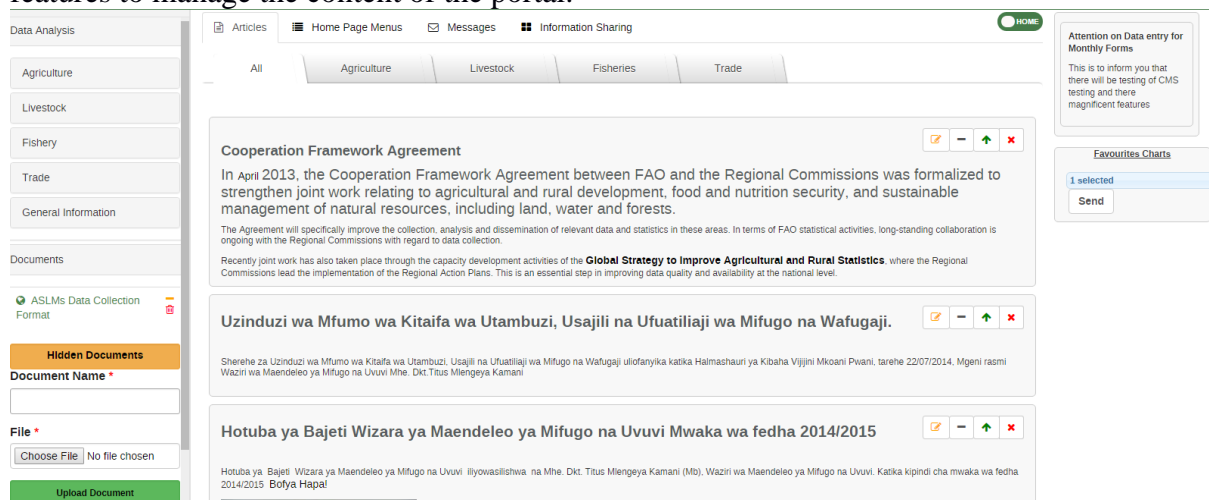


Figure 51: The Home Page in a CMS Mode

The following are features of the CMS module along with the general procedures on how they can be performed by the administrative user. In this context “Hide” means the content will not be visible in the home page but will remain in the database for later use, while “unhide” revert the process. “Delete” means complete removal of the content from the database and will no longer be visible in the portal.

### 4.6.1 Managing Documents

Add, Delete, Hide/Unhide Documents: Go to the Document panel in the left panel of the portal.

- You can delete or hide existing document by selecting an appropriate icon located in front of the document name as shown below.
- To add a new document, type the document name in the text box and go to choose file to locate and upload the document file.
- To show or delete the hidden documents go to “Hidden Documents”. Hidden documents will be listed. Select an appropriate icon located in front of the document name to delete or unhide the document.

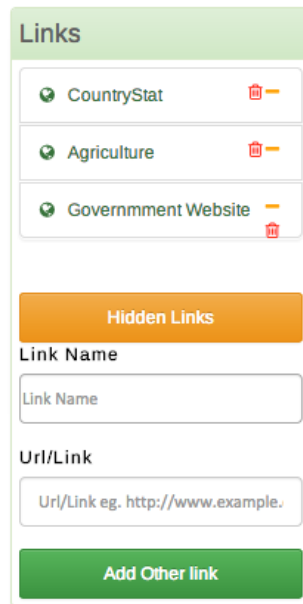
**Figure 52: Documents Panel**

#### 4.6.2 Managing Links

Add, Delete, Hide/Unhide Links: Go to the Links panel in the left panel of the portal.

- You can delete or hide existing link by selecting an appropriate icon located in front of the link name as shown below.
- To add a new link, write the link name and it’s URL in the respective text boxes and go to “Add Other Link”.
- To show or delete the hidden links go to “Hidden links”. Hidden links will be listed. Select an appropriate icon located in front of the link name to delete or unhide the link.



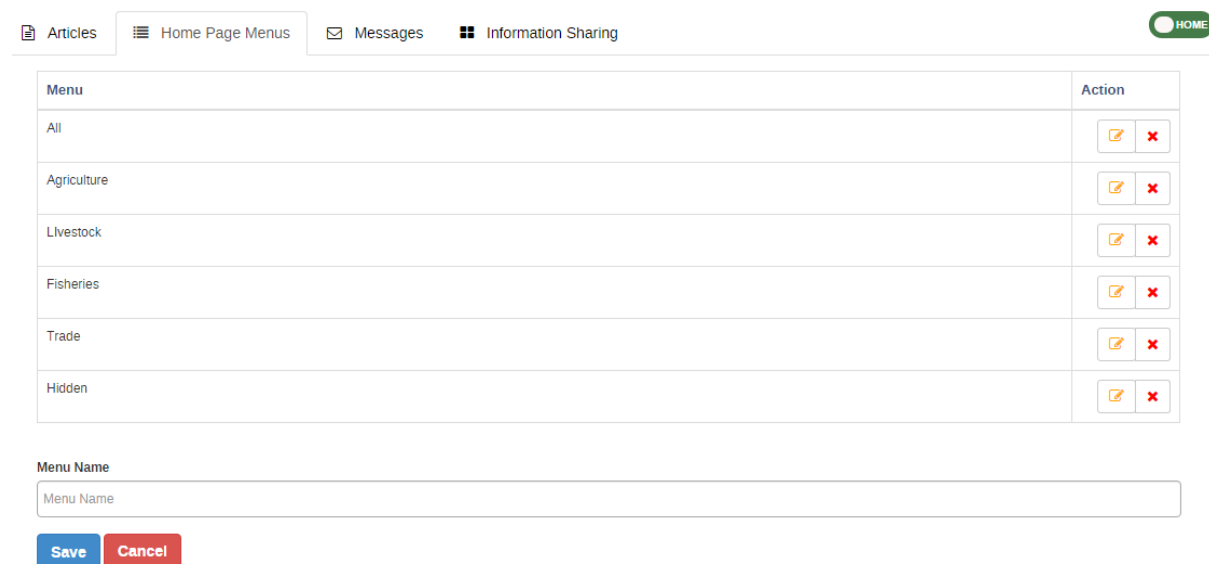


**Figure 53: Links Panel**

### 4.6.3 Managing Category of Home Page News

Add, Delete, Edit category menu of the home page news: If you want to change categories of the contents which appears at the center panel of the home page (news managed by administrative user) go to “Home Page Menus”.

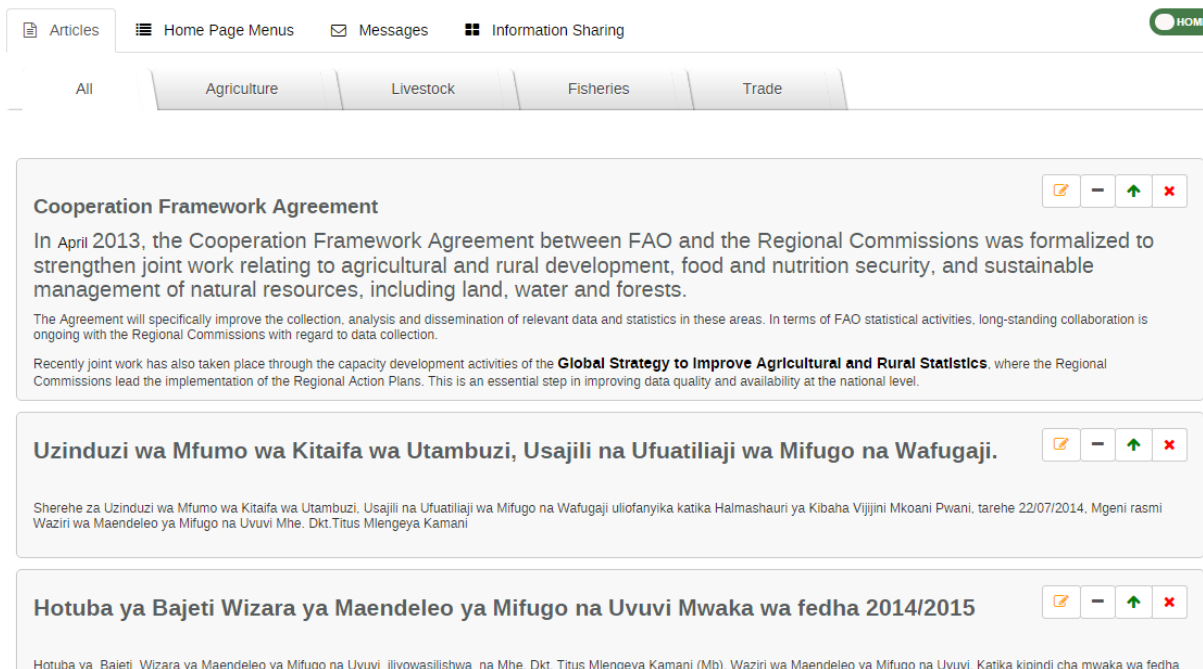
- To add a new category writes the name of the category (should be short and descriptive) and click “Save”
- To Edit or Delete an existing category select appropriate action in front of the particular category name



**Figure 54: Managing Categories of Contents in the Center Panel of the Home Page**

### 4.6.4 Managing Home Page News

Add, Delete, Edit, Hide/Unhide, and Sort (reorder) home page news: If you want to change the contents, which appears at the center panel of the home page (news managed by administrative user) go to “Articles”.



**Figure 55: Managing Contents in the Center Panel of the Home Page**

- To delete, edit, hide or sort an existing content go to the particular content panel in the list the select appropriate action from the top left menu of the specific panel. If you hover the cursor on the icon it will display the name of the action.
- If you select to edit the content will open in HTML editor as shown below where you can use GUI or choose to use HTML source code to edit the content. Once you are done with editing go to edit item then the content will be updated. You may choose the cancel changes if you do no longer want to apply the changes.
- To add a new content, go to select the menu category (Agriculture, Livestock, Fisheries and etc.) then click “Add New” menu at the top left of the center panel. This will open the same but blank HTML editor as the one used for editing then you can write or paste and edit the contents from external sources. Once you are done with the formatting then go to “Add Item” to add the contents or “Cancel” to remove the changes.

Editing Content To Home



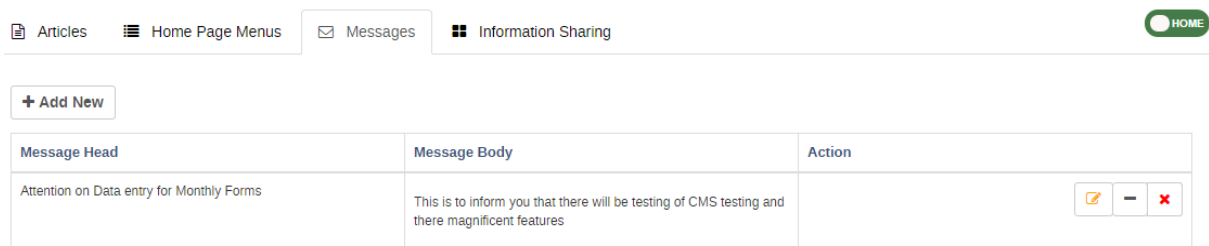
**Figure 56: Editing Existing Contents in the Center Panel of the Home Page**

- To view the hidden contents, go to the top right of the particular content panel and then you will see a “+” icon button (show) instead of “-” icon button (hide) then click the “+” button to unhide the contents.

#### 4.6.5 Managing Broadcast Message

Create, Delete and Show/Hide broadcast messages: To manage the broadcast messages to be displayed in the message panel of the home page go to “Messages” and the screen for managing broadcast messages will appear as shown below.

**Note:** Broad cast messages shall not exceed 150 characters and only a maximum of two messages can be added and will be broadcasted/displayed in the data entry such that any data entry user can easily see and read when login. Also, the message is broadcasted/displayed at the top right of the home page so that all users other than data entry users can see.

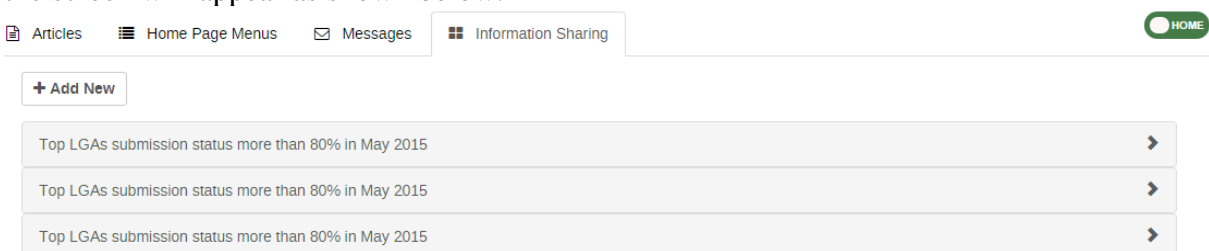


**Figure 57: Managing Broadcast Message**

- To create and send a new broadcast message click Messages at the top most menu in the center panel then select Add New from the top left. A new black HTML editor, similar to the one in managing home page news, will open then follow same procedures to add and edit the contents of the message. Once you are done go to “Add Message” to add the page or Cancel to revert the changes.
- To delete, hide and edit an existing message select appropriate action menu located on the left side of the particular message.
- Once you select “Edit” the message will be opened in the HTML editor as for the editing of the contents in the center panel of the home page. Follow same process to apply your changes on the message.
- To view the hidden message, go to the left side of the particular message panel and then you will see a “+” icon button (show) instead of “-” icon button (hide) then click the “+” button to unhide the message.

#### 4.6.6 Managing Additional Pages

Add, Delete and Edit a new page (article) for sharing information: logically, each article is an additional web page created and managed by a user for the purpose of sharing a specific information in more details. To manage this kind of articles, go to “Information Sharing” and the screen will appear as shown below.



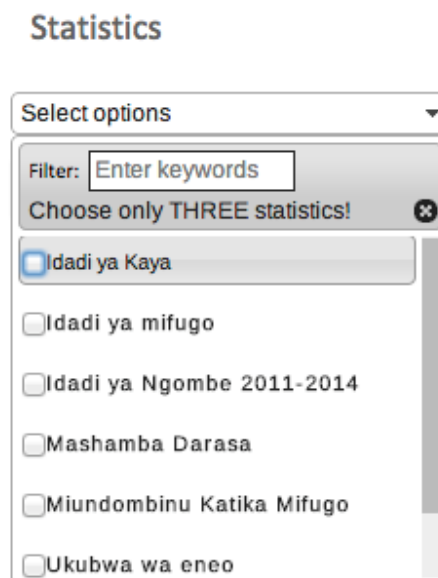
**Figure 58: Managing Additional Pages**

- To add new articles, select Information Sharing from the top menu then go to “Add New” menu in the top left of the center panel. A new black HTML editor, similar to the one in managing home page news, will open then follow same procedures to add and edit the contents. Once you are done go to “Add Information” to add the page or Cancel to revert the changes.
- To edit or delete existing article select the particular article. Once the article is open select the appropriate action from the menus located below the article.
- Once you select “Edit” the article will be opened in the HTML editor as for the editing of the contents in the center panel of the home page. Follow same process to apply your changes.

#### 4.6.7 Changing Statistics that Appear on the Home Page

Change/Select statistics of interest to appear on the home page: The ARDS Home page contains a panel to display top three statistics of most interest depending on the data need in a specific period. These statistics are selected charts, which are created and saved as favorite in the Data visualizer module.

- To change the charts to be displayed in this Statistics go to “Statistics” panel located on the right.
- Click on the “Select Options” and the list of all available saved favorite charts will appear.
- Select only three favorites and click send then the selected favorite charts will appear in the statistics in the home page.



**Figure 59: Selecting Charts of interest for the Statistics in the Home Page**

#### 4.7 Synchronization

In ARDS, the LGMD2i typically involved a distributed application, where the same application was running in different administrative unit (district, regional, and national). Therefore, the data needed to be synchronized through the Internet in order to have a consolidated database at the national level. However, some of these physical locations did not have stable Internet connectivity, and hence they worked offline. For this, it was important to be able to export and import data from a location, which was working offline to national level

or to another location where it needed to be imported. The Web Based Data Entry uses the online synchronization strategy (online/offline mode), which is more viable in areas with unstable Internet connectivity.

Besides, the Web Based Data Entry also provides robust import-export functionality to support areas with unstable Internet connectivity. It allows transferring of data between computers for different purpose.

*“For instance, a user at Arusha Vijijini district was entering data, unfortunately he becomes disconnected from the Internet for a long time until he finishes entering data, he may decide to export the data and take it to a nearby computer (or district such Arusha Mjini), which has the Internet connection and import the data to the server. Also, if it seems more convenient, a user may send the exported file to the national headquarter technical team to be imported to the server”*

This feature helps overcome the dependency on the Internet to some degree, as data updates can be transferred via USB key where there is no connectivity, or through email where there is limited Internet connectivity.

Also, the standalone offline copy can be installed in areas with no Internet connectivity, such that the system is accessed offline and data are always entered offline and uploaded to the server through import-export feature. The standalone copy can be configured to automatically synchronize with the central server in areas with limited connectivity. However, online/offline mode is highly recommended over standalone copy in areas with limited connectivity. It only need to:

- Login when there is connectivity,
- Continues entering data offline and,
- Upload offline data when connectivity is back.

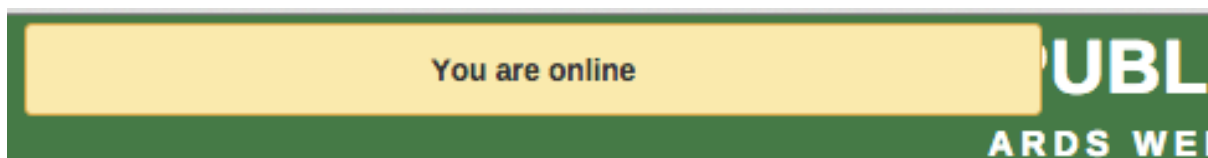
#### **4.7.1 Online/offline data entry**

When a user is entering data while online the values are saved immediately:

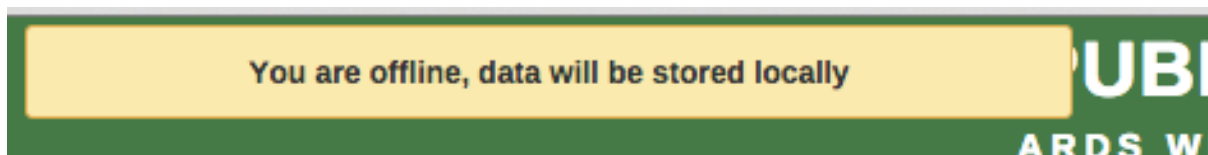
- Do not require any save/finished/Sync button click.
- A green field indicates that the value has been saved in the system (on the server if the Internet connection is stable or offline when disconnected).
- On a slow connection, it might take some time before the values are saved (yellow fields will be changing to green as they are saved successful).
- The data entry module will function even if during data entry the Internet connectivity is not stable.
- In order to utilize this functionality, a user must login to the server while the Internet is functional.

If during data entry, the Internet link becomes unstable, data can still be entered into the data entry form,

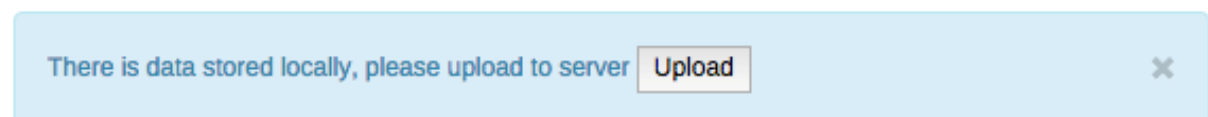
- Data are saved to the local computer, and then uploaded to the server once the Internet connectivity has been restored.
- This means that the on-line deployment strategy will be more viable in areas with unstable Internet connectivity.
- When the server can be reached through the Internet, a message is displayed at the top of the data entry screen telling that a user is working online.



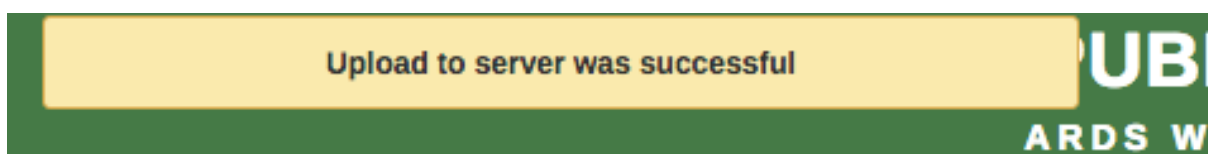
- Any Internet disconnection will be detected by the application, and a user will be informed that s/he is offline and data will be stored locally.



- A user can proceed with data entry as normal.
- Once the application detects that the server is back online. A user will be informed that there is data stored locally, please upload to the server. A user should always click Upload.



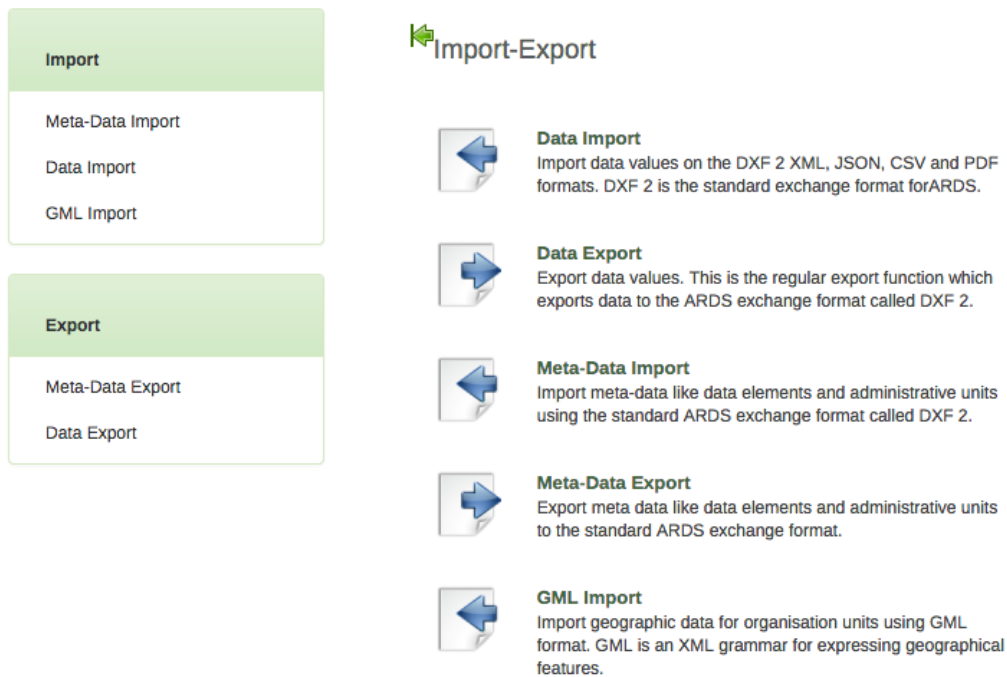
- Once the data has successfully synchronized with the server, a user will receive a confirmation message.



More detail about how this work during data entry can be found in the data entry section of the ARDS user manual.

#### **4.7.2 Import-export**

To access the main Import-Export module, go to Data Entry menu in the Web Based Data Entry or in the ARDS Portal and select “Import Export”. A number of import export services are available, Data import and export can be done by normal users (e.g. district users) and is described in detail in respective sections below as well as in the ARDS user manual. Metadata, event import and export, GML import and more advanced data import options can only be done by administrative user and are described in detail in respective sections below.

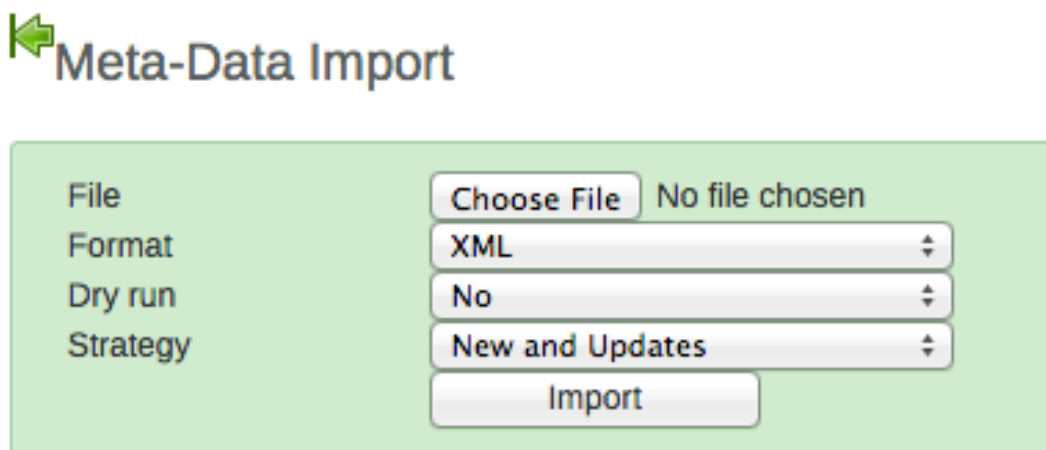


**Figure 60: Import – Export module**

#### 4.7.2.1 Meta-data import

Meta-data objects can be easily imported by accessing ARDS-LGMD2 → Import Export → Meta-Data import.

- Select the file to import by pressing "Choose File" and choose the file from your local file system.
- When importing XML and JSON files, the system will automatically detect which type of objects which should be imported. When importing CSV metadata, you will need to specify the object type. Consult the corresponding section in this manual on "CSV Metadata import" for more specific information on how the CSV file should be created.



**Figure 61: Meta-Data import screen**

There are two separate options for importing data.

- **Dry run:** This is similar to the old preview option, it will do a dry run import, and give you information about any errors.
- **Strategy:** There are three options here, "New and Updates", "New only", and "Update only". New and updates tells the importer to expect both new meta-data, and updates



to existing ones. New only will only accept fresh meta-data, usually you would use this on an empty database. Updates only will only allow the meta-data to match meta-data that is already there (same identifiers, new name etc.).

**Note:** It is highly recommended to always use the Dry run option when importing data to make sure you keep control over any changes to your meta-data and databases being out of synch on data elements or administrative unit names.

Dry run will enable you to have a look at how many new, updates, and ignored meta-data there will be. To enable dry run after you have selected your file, set dry run to true, and then click the import button. You will see a short summary of what was contained in your import file. To see further details, please click on the "Display import summary" link.

#### 4.7.2.2 Data import

To import data in XML format, simply choose "Import Export" from Data Entry menu in the Web Based Data Entry interface or in the ARDS Web Portal, and then follow the following steps:

- Select the file to import by pressing "Choose File" and choose the file from your local file system.
- When importing XML and JSON files, the system will automatically detect which format of the file should be imported. When importing CSV data, you will need to specify the format. Consult the corresponding section in this manual on "CSV Metadata import" for more specific information on how the CSV file should be created.

There are two separate options for importing data.

- **Dry run:** This gives a preview option. It will do a dry run import, and give you information about any errors.
  - **Note:** It is recommended always using the Dry run option when importing data to make sure you keep control over any changes to your data.
- **Strategy:** There are three options here, "New and Updates", "New only", and "Update only".
  - New and updates tells the importer to expect both new data, and updates to existing ones.
  - New only will only accept fresh data, usually you would use this on an empty database.
  - Updates only will only allow the data to match data that is already there (same identifiers, new name etc.).

#### 4.7.2.3 GML import

The GML import function can be used to import data prepared in the Geography Markup Language (GML). GML can be used to update the coordinates (both polygons and points). Once you have prepared your GML file based on standard way of importing coordinates, you can load the file with this function.

- You cannot import an administrative unit hierarchy with GML. Therefore, you should create the administrative unit hierarchy separately, and then use GML to update the coordinates once the hierarchy has been created.
- Currently, it is only possible to import GML data by matching on the name of the administrative unit itself. Therefore, if you have administrative units with the same name in your administrative unit hierarchy (e.g. two wards with exactly the same name), you will need to distinguish them before importing GML. Otherwise, both administrative units may be updated with the same set of coordinates.

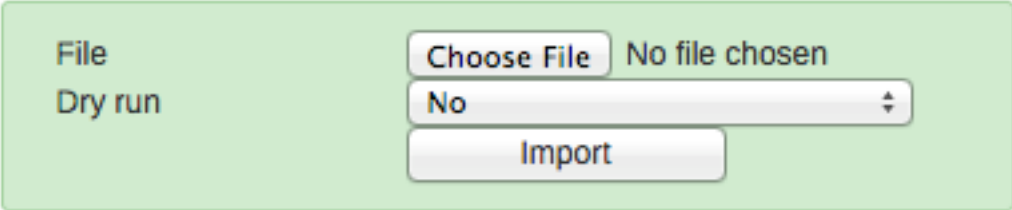


To import GML data simply:

- Login as administrative user,
- Select "Import Export" from the Data Entry menu in the ARDS Web Portal,
- Select GML import
- Select the file to import by pressing "Choose File" and choose the file from your local file system.

## GML Import

Note: Only import of GML data for existing administrative units is supported.



File  Choose File No file chosen

Dry run  No

Import

**Figure 62: GML import screen**

There is one separate option for importing GML data.

- **Dry run:** This gives a preview option. It will do a dry run import, and give you information about any errors. It is recommended always using the Dry run option when importing GML data to make sure you keep control over the changes.

#### 4.7.2.4 Meta-data export

Meta-data is "data about data". In the context of ARDS Web Portal, meta-data consists of definitions of data elements, indicators, the structure and names contained in the administrative hierarchy, and other options.

Click on the "Meta-data export" link from the main "Data export" screen in order to access this. Just select the features, format (XML or JSON), and the compression (zipped, gzipped or uncompressed) that you want and click "Export". This metadata file can then be transmitted just like a data file, except it will contain information on the definitions of the various features, as opposed to the values of the data themselves.

## ← Meta-Data Export

<input checked="" type="checkbox"/> Attribute	<input checked="" type="checkbox"/> Category	<input checked="" type="checkbox"/> Category Combo
<input checked="" type="checkbox"/> Category Option	<input checked="" type="checkbox"/> Category Option Combo	<input checked="" type="checkbox"/> Category Option Group
<input checked="" type="checkbox"/> Category Option Group Set	<input checked="" type="checkbox"/> Chart	<input checked="" type="checkbox"/> Constant
<input checked="" type="checkbox"/> Dashboard	<input checked="" type="checkbox"/> Dashboard Item	<input checked="" type="checkbox"/> Data Approval Level
<input checked="" type="checkbox"/> Data Element	<input checked="" type="checkbox"/> Data Element Group	<input checked="" type="checkbox"/> Data Element Group Set
<input checked="" type="checkbox"/> Entry Form	<input checked="" type="checkbox"/> Document	<input checked="" type="checkbox"/> Event Chart
<input checked="" type="checkbox"/> Event Report	<input checked="" type="checkbox"/> Computed Values	<input checked="" type="checkbox"/> Computed Values Group
<input checked="" type="checkbox"/> Computed Values Group Set	<input checked="" type="checkbox"/> Computed Values Type	<input checked="" type="checkbox"/> Map
<input checked="" type="checkbox"/> Map Layer	<input checked="" type="checkbox"/> Map Legend	<input checked="" type="checkbox"/> Map Legend Set
<input checked="" type="checkbox"/> Map View	<input checked="" type="checkbox"/> Meta Data Filter	<input checked="" type="checkbox"/> Option
<input checked="" type="checkbox"/> Lookup Table	<input checked="" type="checkbox"/> Administrative Unit	<input checked="" type="checkbox"/> Administrative Unit Group
<input checked="" type="checkbox"/> Administrative Unit Group Set	<input checked="" type="checkbox"/> Administrative Unit Level	<input checked="" type="checkbox"/> Program
<input checked="" type="checkbox"/> Program Stage	<input checked="" type="checkbox"/> Program Stage Section	<input checked="" type="checkbox"/> Program Validation
<input checked="" type="checkbox"/> Relationship Type	<input checked="" type="checkbox"/> Report	<input checked="" type="checkbox"/> Report Table
<input checked="" type="checkbox"/> Section	<input checked="" type="checkbox"/> Sql View	<input checked="" type="checkbox"/> Tracked Entity
<input checked="" type="checkbox"/> Tracked Entity Attribute	<input checked="" type="checkbox"/> Tracked Entity Attribute Group	<input checked="" type="checkbox"/> User
<input checked="" type="checkbox"/> User Credentials	<input checked="" type="checkbox"/> User Group	<input checked="" type="checkbox"/> User Role
<input checked="" type="checkbox"/> Validation Criteria	<input checked="" type="checkbox"/> Validation Rule	<input checked="" type="checkbox"/> Validation Rule Group

Select all    Select none

XML    ⌵

Zipped    ⌵

Export

**Figure 63: Meta-Data export screen**

Simply choose the objects, which you would like to export, and click "Export".

### 4.7.2.5 Data export

To export raw data from the system, choose "Import Export" from Data Entry menu in the Web Based Data Entry or in the ARDS Portal, and then follow the following steps:

- Click on Data Export,
- Select the administrative unit(s),
- Select Entry Form(s) and-or Report(s) for which data export should be selected,
- Select the start and end date for which data export should be selected,
- Once you have specified all options as required, press "Export as XML".

You can also select which types of identifiers which will be exported by pressing "More options" and then selecting either UID, Code, or Name for data elements, administrative units and category options. Also, you can go to more option when you would like to export the data as JSON or CSV.

## Data Export ?

**Administrative unit**

- Tanzania
  - Arusha
  - Dar es salaam
  - Dodoma
  - Geita
  - Iringa
  - Kagera
  - Katavi
  - Kigoma
  - Kilimanjaro
  - Lindi
  - Manyara
  - Mara

**Available data sets**

Filter  Filter Clear

- Annual Integrated Report
- District Annually Entry Form
- District Annually Report
- District Quarterly Entry Form
- Monthly District Report
- Prior Estimates for Missing Data Estimation
- Quarterly District Report
- Quertly Intergrated Report
- Ward Annual Entry Form
- Ward Annually Target Entry Form
- Ward Monthly Entry Form
- Ward Quartely Entry Form

>  
<  
>>  
<<

**Selected data sets**

**Options**

Start date	2015-02-03
End date	2015-02-03

[More options](#)

Export as XML Export as JSON Export as CSV

**Standalone offline copy Figure 64: Data export screen**

### 4.7.2.6 Importing CSV data

ARDS Web Portal supports import of data in the CSV (Comma Separated Values) format. This can be used to import exchange file produced by the portal itself. It also comes in handy when you want to import data from a third-party system as CSV is widely supported in applications and is easy to produce manually.

To import a CSV data file, navigate to the Data Import item. Select CSV as a format and click Import. The following section describes the CSV format used in ARDS Web Portal. The first row is assumed to be a header row and will be ignored during import.

**Table 2: CSV Data format of ARDS Web Portal**

Column	Required	Description
Data element	Yes	Refers to ID by default, can also be name and code based on selected id scheme
Period	Yes	In ISO format
Org unit	Yes	Refers to ID by default, can also be name and code based on selected id scheme
Category option combo	No	Refers to ID
Attribute option combo	No	Refers to ID (from version 2.16)
Value	No	Data value
Stored by	No	Refers to username of user who entered the value
Last updated	No	Date in ISO format
Comment	No	Free text comment
Follow up	No	true or false

The following is an example CSV file that can be imported into ARDS Web Portal. It can be imported either as plain text file or as compressed ZIP file archive.

```
"dataelement","period","orgunit","categoryoptioncombo","attributeoptioncombo","value","storedby","timestamp","comment","followup"
"DUSpd8Jg3M7","201202","gP6hn503KUX","Pr1t0C1RF0s",,"7","bombali","2010-04-17",,"false"
"DUSpd8Jg3M7","201202","gP6hn503KUX","V6L425pT3A0",,"10","bombali","2010-04-17",,"false"
"DUSpd8Jg3M7","201202","OjTS752GbZE","V6L425pT3A0",,"9","bombali","2010-04-06",,"false"
```

#### 4.7.2.7 Importing CSV meta-data

ARDS Web Portal supports import of meta-data in the CSV format. Columns that are not required can be omitted in the CSV file, but the order will be affected. If you would like to specify columns which appear late in the order but not specify columns which appear early in the order you can include empty columns ("") for them.

To import CV meta-data go to import-export module and select CSV Meta-Data Import form the left side menu. You must select the object type which your CSV file contains. You can only upload one type of objects at the time. Upload your file and click update. The following object types are supported:

- Data elements
- Data element groups
- Category options
- Category option groups
- Administrative units
- Administrative unit groups
- Validation rules
- Option sets

The formats for the currently supported object types for CSV import are listed below.

**Table 3: Data Element CVS Format**

Column	Required	Value (default first)	Description
Name	Yes		Name. Max 230 char. Unique.
UID	No	UID	Stable identifier. Max 11 char. Will be generated by system if not specified.
Code	No		Stable code. Max 50 char.
Short name	No	50 first char of name	Will fall back to first 50 characters of name if unspecified. Max 50 char. Unique.
Description	No		Free text description.
Form name	No		Max 230 char.
Domain type	No	aggregate   tracker	Domain type for data element, can be aggregate or tracker. Max 16 char.
Value type	No	int   string   bool   trueOnly   date   unitInterval	Value type. Max 16 char.
Number type	No	int   posint   negInt   number   zeroPositiveInt	Only relevant if type is int. Max 16 char.
Text type	No	text   longText	Only relevant if type is string. Max 16 char.
Aggregation operator	No	sum   average   count   stddev   variance	Operator indicating how to aggregate data in the time dimension. Max 16 char.
Category combination UID	No	UID	UID of category combination. Will default to default category combination if not specified.
Url	No		URL to data element resource. Max 255 char.
Zero is significant	No	false   true	Indicates whether zero values will be stored for this data element.
Option set	No	UID	UID of option set to use for data.
Comment option set	No	UID	UID of option set to use for comments.

**Table 4: Administrative Unit CSV Format**

Column	Required	Value (default first)	Description
Name	Yes		Name. Max 230 characters. Unique.
UID	No	UID	Stable identifier. Max 11 char. Will be generated by system if not specified.
Code	No		Stable code. Max 50 char.
Parent UID	No	UID	UID of parent organisation unit.
Short name	No	50 first char of name	Will fall back to first 50 characters of name if unspecified. Max 50 characters. Unique.
Description	No		Free text description.
UUID	No		UUID. Max 36 char.
Opening date	No	1970-01-01	Opening date of organisation unit in YYYY-MM-DD format.
Closed date	No		Closed date of organisation unit in YYYY-MM-DD format, skip if currently open.
Comment	No		Free text comment for organisation unit.
Feature type	No		Can be Point, Polygon, MultiPolygon. Max 50 char.
Coordinates	No		Coordinates used for geospatial analysis in Geo JSON format.
URL	No		URL to organisation unit resource. Max 255 char.
Contact person	No		Contact person for organisation unit. Max 255 char.
Address	No		Address for organisation unit. Max 255 char.
Email	No		Email for organisation unit. Max 150 char.
Phone number	No		Phone number for organisation unit. Max 150 char.

**Table 5: Validation Rule CSV Format**

Column	Required	Value (default first)	Description
Name	Yes		Name. Max 230 characters. Unique.
UID	No	UID	Stable identifier. Max 11 char. Will be generated by system if not specified.
Code	No		Stable code. Max 50
Description	No		Free text description.
Instruction	No		Free text instruction.
Importance	No	medium   high   low	
Rule type	No	validation   surveillance	
Operator	No	equal_to   not_equal_to   greater_than   greater_than_or_equal_to   less_than   less_than_or_equal_to   compulsory_pair	
Period type	No	Monthly   Daily   Weekly   Quarterly   SixMonthly   Yearly	
Left side expression	Yes		Mathematical formula based on data element and option combo UIDs.
Left side expression description	Yes		Free text.
Left side null if blank	No	false   true	Boolean.
Right side expression	Yes		Mathematical formula based on data element and option combo UIDs.
Right side expression description	Yes		Free text.
Right side null if blank	No	false   true	Boolean.

**Table 6: Option Set (Look Up) CSV Format**

Column	Required	Value (default first)	Description
Name	Yes		Name. Max 230 characters. Unique. The option set values should be repeated for each option.
UID	No	UID	Stable identifier. Max 11 char. Will be generated by system if not specified.
Code	No		Stable code. Max 50 char.
Option	Yes		Option. Free text. The option set values should be repeated for each option.

**Table 7: Data Element Group, Category Option, Category Option Group, and Administrative Unit Group CSV Forma**

Column	Required	Value (default first)	Description
Name	Yes		Name. Max 230 characters. Unique.
UID	No	UID	Stable identifier. Max 11 char. Will be generated by system if not specified.
Code	No		Stable code. Max 50 char.

An example of a CSV file for data elements can be seen below. The first row will always be ignored. Notice how you can skip columns and rely on default values or simply leave columns blank:

```
name,uid,code,shortname,description,formname,domain, type, numbertype, texttype, aggregationoperator, categorycombo, url, zero
"Women participated in skill development training",,"D0001","Women participated development training"
"Women participated in community organizations",,"D0002","Women participated community organizations"
```

A minimal example for importing administrative units with a parent unit looks like this:

```
name,uid,code,parent
"West province",,"WESTP","ImspTQPwCqd"
"East province",,"EASTP","ImspTQPwCqd"
```

The format for option sets (Look Up) is special. One record represents an option, and the three first values representing the option set should be repeated for each option (record):

```
name,uid,code,option
"Color",,"Blue"
"Color",,"Green"
"Gender",,"Female"
"Gender",,"Male"
```

### 4.7.3 Standalone copy

This feature helps overcome the dependency on the Internet, as data updates can be transferred via USB key (or other external storage) through export and imported to the server through a computer connected to the Internet as introduced earlier in section 4.7. To set up standalone copy:

- Requires installing an offline instance of the system to a computer in the location where there is no Internet connectivity.
- Installation of the local copy follows same steps as installing the server (see section 3 of this manual).
- Make use of import-export functionality as described in the previous section 4.7.2 to synchronize data to the central server.

**Note:** Set up of the standalone offline copy should be done by administrative user (technical personnel), other users will then continue working with the offline copy and use import-export to sync with the server.

Also, in areas with limited connectivity, administrative user can configure the standalone copy to synchronize with the central server at a specified time. Simply follow the following steps in the standalone copy of the ARDS Web Portal after the installation is completed:

- Login as an administrative user
- Go to Maintenance
- Select Settings
- Select Synchronization
- Fill in the required information
  - URL, username and password of the central server
- Test the setting and save if the test is successfully

The image shows a web interface for configuring data synchronization. On the left, a sidebar titled 'System settings' lists various categories: General, Appearance, Access, Approval, Calendar, and Synchronization (which is highlighted). The main content area is titled 'Data Synchronization' and features three input fields: 'Remote server URL (https:// recommended)', 'Remote server username', and 'Remote server password' (with a 'Hidden' indicator). At the bottom of the main area are two buttons: 'Save' and 'Test settings'.

**Figure 65: Setting Up Data Synchronization to Central Server**

Data synchronization processes in a standalone copy can be scheduled as regular tasks in the data administration module. Run at a pre-determined time (always at midnight based on the server time). To do so:

- Go to Maintenance
- Select Data Administration
- Select Scheduling
- Click stop if scheduling is active
- Select Set Data Synchronization Strategy to “Enabled”
- Click start to the activate scheduling.

Scheduling section illustrates scheduling management.

*Note: If the problem is limited connectivity, consider using online/offline mode first. Standalone offline copy is suitable when the Internet connection is a serious problem or no Internet connection at all.*

## 4.8 Aggregation

Aggregation allows a user to control the process of converting collected data into aggregated and write them to the resource and analytic tables. This process improves performance of the system by speeding up response to the user when requesting a report or performing analysis on the data.

**Note:** In order to see any new data submitted to the server, aggregation process should run between the time data was submitted and before a user view the reports.

Aggregation process can be scheduled to run periodically at a certain time, or a user may choose to run it when s/he want to view report immediately after the data was entered. However, the process might take a long time and heavily utilize the resources of the server, so make sure such processes is started at a feasible time in production environments.

*Note: On demand aggregation process perform three activities when run: First, it automatically estimates all missing ward data of the ward that has not submitted data for districts that requested to create district report(s) as explained in the Data Estimation section. Second, it aggregate data over area and over time. Third, it archives all created reports. The scheduled aggregation does the same process.*

### 4.8.1 Scheduled aggregation



Aggregation processes is scheduled as regular tasks in the settings. Run at a pre-determined time (always at midnight based on the server time). Administrative user can disable (stop) or start scheduling. To do so:

- Go to Maintenance
- Select Settings
- Select Scheduling
- Click stop if scheduling is active
- Select all task strategy to run “All daily”
- Click start to the activate scheduling.

The scheduling section illustrates scheduling management.

### 4.8.2 On demand aggregation

If a user completed data entry and requested to create district report(s) and would like to view the changes in the reports immediately, should run on demand aggregation. Follow the following simple steps.

- Go to Report from the main menu
- Select Aggregation
- Click on start aggregation
- The steps above will schedule aggregation to run after a minute, which will aggregate only data for the districts which have requested to create district report(s) to make them ready for report. If there is no any request to create district report has been made then aggregation will skip and thus will not do any estimation and archiving.



**Figure 66: On demand aggregation management screen**

## 5 Maintenance

### 5.1 Change System Settings

#### 5.1.1 Changing General Setting of the Portal

To change general settings of the ARDS Web Portal, go to Maintenance drop down menu and select settings then select General and the following general settings screen will appear.

**General Settings**

Maximum number of analytics records

Unlimited

Infrastructure Computed values

Add crops indicator

Infrastructural data elements

Eneo la malisho(Grazing land)

Infrastructural period type

Max offline Administrative unit levels

Ward

Data analysis std dev factor

2

Phone number area code

Enable multi-Administrative units forms

Put analytics in maintenance mode

**Figure 67: Change General System Settings**

- **Maximum number of analytic record:** This setting allows administrator to limit number of analytic records to be kept in the system.
- **Infrastructural Computed Values:** This setting defines a computed value group where the member computed values should describe data about the infrastructure of administrative units. This infrastructural data can currently be viewed in the GIS module in the facility information sheet.
- **Infrastructural data elements:** This setting defines a data element group where the member data elements should describe data about the infrastructure of administrative units. This infrastructural data can currently be viewed in the GIS module in the facility information sheet.
- **Infrastructural period type:** Sets the frequency for which the data elements in the infrastructural data elements group are captured. This will typically be yearly. When viewing the infrastructural data, you will be able to select the time period of the data source.
- **Max offline Administrative unit levels:** The number of administrative unit levels to cache offline for data entry purposes can be controlled per administrative unit level. This is useful for global system implementations, e.g. where you have global users

which do not need to do offline data entry and do not want to wait for a very large number of org units to be cached.

- Data analysis std dev factor: Sets the number of standard deviations for use in the outlier analysis performed on the captured data in the data entry module. The default value is 2; a high value will catch less outlier values than a low value.
- Phone number area code: To keep phone are code
- Enable multi-Administrative unit’s forms: To allow having a form with multiple administrative unit. For example, prior estimate form which is for a district but having multiple ward data.
- Put analytics in maintenance mode: This implies that all requests will simply return 503 service unavailable, and is useful in the cases where you need to perform maintenance on a live server, such as rebuilding analytics indexes.

### 5.1.2 Server Settings

To change server settings of the ARDS Web Portal, go to Maintenance drop down menu and select settings then select server and the following server settings screen will appear.

Server Settings

Cache strategy

Cache until 6 AM tomorrow

Number of database server CPUs

Automatic (detect based on a web server)

Server base URL

**Figure 68: Changing Server Settings**

- Cache Strategy: This setting allows an administrator to specify cache strategy to be either daily or for two weeks. It is recommended to be daily so as to increase performance of the system when visualizing data, while reducing a risk of viewing obsolete data, which may result when cache is set for two weeks.
- Number of database server CPUs: This setting allows administrator to specify number of CPU to be dedicated for the system based on the number of CPU available in the Server.

### 5.1.3 Changing Appearance

To change appearance settings of the ARDS Web Portal go to Maintenance drop down menu and select settings then select System Appearance Settings and the following screen will appear.

Appearance Settings

Start page

ARDS HOME

Help page link

./dhis-web-commons-about/help.action

Require authority to add to view object lists

Show Administrative unit hierarchy During Data Estimation

**Figure 69: Changing System Appearance Settings**

- Start page: Sets page / module which the new user will be redirected to after logging in. For example, Data Entry is recommended for district users and the dashboard module is the recommended start module for most of the data users. The user is able to change this page later through User Settings under the right most menu in the main menu.
- Help page link: Sets the application title to the left on the top menu.
- Require authority to add to view object lists: To restrict user to view object lists
- Also, you can select to show administrative unit hierarchy During Data Estimation

### 5.1.4 Data Entry

To change Data Entry settings of the ARDS Web Portal, go to Maintenance drop down menu and select settings then select Data Entry and the following data entry settings screen will appear.

---

DataEntry Settings

Type of Financial Year for Data Entry

FinancialJuly ▼

Look up Table Sorting Order

Ascending ▼

Differential forms with multiple sub-units from the rest in form selection(show 'Sub administration units' text)

Data entry form filter variable

Lock data entry forms after the related reports are created

Turn on estimation process

Allow data entry future period

Lock data entry forms after the fiscal year end

1 Month After ▼

Lock report creation after the fiscal year end

1 Month After ▼

WF00 submission status for Report Creation

90 ▼

WF01 submission status for Report Creation

90 ▼

## Figure 70: Changing Data Entry Settings

### 5.1.4.1 Setting type of financial year for data entry

In this setting, as administrative user you will be able to set the type of financial year used in the system. Depending on the need you can set financial year to start in April, July, October or set the periods to follow the calendar year.

### 5.1.4.2 Setting look up table sorting order

In this setting, as administrative user you will be able to set lookup table options to appear in ascending or descending order in the respective data entry forms.

### 5.1.4.3 Setting On or off the Estimation process

In this setting, as administrative user you will be able to set estimation process on or off. In the phase V development the Estimation is turned off.

### 5.1.4.4 Setting data entry form locking options

After selecting a form for data entry, the form may open but locked such that a user cannot make any changes of the data or it may appear active which allows you to continue entering data. The form may be locked because the related report(s) have been created or the respective fiscal year has ended. Depending on the need of the ministry, as administrative user you can manage these locking options through these data entry settings

- **Lock data entry forms after the related reports are created:** If lock data entry forms after the related reports are created is enabled and the report is already created a user cannot edit the corresponding entry forms, for example if District Annual Report of Arusha Mjini for the period of July 2014 – June 2015 is created, a user cannot edit Ward Annual Entry Form of any ward of Arusha Mjini for July 2014 - June 2015.
- **Lock data entry form after the fiscal year end:** If lock data entry forms after the fiscal year end option is enabled and the period specified has passed then a user cannot edit any corresponding entry form. This option may be set to lock data entry form immediate after the fiscal year has passed or after a specific number of month(s) passed.

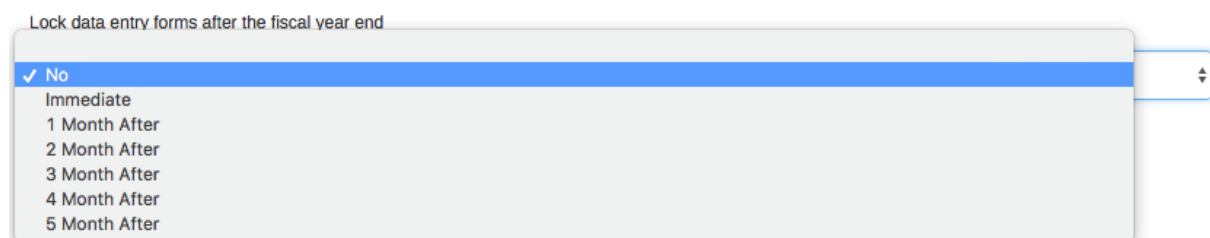


Figure 71: Lock Data Entry Forms After the Fiscal Year End Options

## 5.1.5 Calendar Settings

To change calendar settings of the ARDS Web Portal, go to Maintenance drop down menu and select settings then select Calendar and the following settings screen will appear. You can change the calendar type and date format using this feature as shown below.

Calendar Settings

Calendar

ISO 8601

Date format

1981-03-31

**Figure 72: Changing Calendar and Date Settings**

### 5.1.6 Data Import Settings

To change data import settings of the ARDS Web Portal, go to Maintenance drop down menu and select settings then select Data Import and the following settings screen will appear. You can change the data import settings as shown below.

DataImport Settings

Require periods to match period type of Entry Form

Require category option combos to match category combo of data element

Require Administrative units to match assignment of Entry Form

Require attribute option combos to match category combo of Entry Form

Require category option combo specified

Require attribute option combo specified

**Figure 73: Changing Data Import Settings**

### 5.1.7 Synchronization Settings

To change data synchronization settings of the standalone ARDS Web Portal instance, go to Maintenance drop down menu and select settings then select Synchronization and you can set URL, username and password for the remote server to which the standalone instance should synchronize with as explained in the synchronization section.

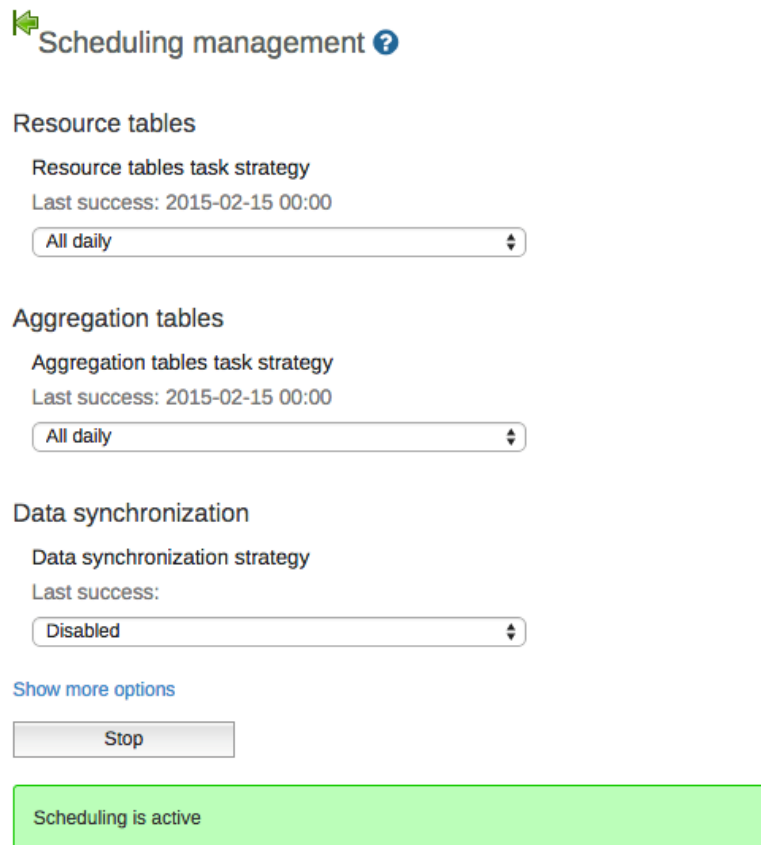
### 5.1.8 Scheduling

Resource tables, aggregation tables tasks and data synchronization strategy can be automatically scheduled to run on regular intervals.

- Data Estimation: However, Resource and Aggregation Tables Task is currently preceded by the estimation task whereas data of all districts with wards that have not submitted the form(s) their missing ward data are estimated.
- Resource and Aggregation Tables Task Strategy: This setting defines how the system generates and provides aggregated data to the output tools. All output tools like reports, charts and maps will read aggregate data from pre-built data tables in the database. This strategy provides the best performance and inflicts less load on the application since data retrieval only implies reading from one or a few database tables using a simple query. This strategy requires that those resource and aggregation tables be populated with the relevant data before the reports are requested. This can preferably be done using nightly scheduled jobs or manually through the aggregation user

interface in the report module. A potential downside is that users will have to wait to the next day to view their reports after uploading the data to the portal database or should run it manually.

- **Report Archiving:** After Resource and Aggregation Tables Task is completed archiving task check all request to create district report and create the district reports as well as the integrated reports which are ready to be created. The report archiving process help a user to be able to retrieve the report at any time with its original administrative unit even if there was administrative unit change. The system creates district reports (DR01, DR02 and DR03) if during archive process it find the user request(s) to create the district report(s). The system automatically creates DIR if respective DF is marked as complete by the user and respective district reports are created. i.e. DIR02 requires that 3 DR01s (single quarter) be created and the respective DF02 be completed. And DIR03 requires that 4 DR02s (single fiscal year) and 1 DR03 be created and the respective DF03 be completed. The system automatically creates and archive RIR and NIR when all respective district integrated reports (DIRs) are created.



**Figure 74: Scheduling Management Dialogue**











- **Data synchronization strategy:** This setting defines how a standalone copy of ARDS Web Portal can synchronize with the central server as described in its corresponding section (standalone copy).

## 5.2 Data Administration

Data administration module provides various services for administrative user to manage/maintain the database as shown in the figure below.

Data Administration
Data Integrity
Maintenance
Resource Table
Administrative Unit Merge
Duplicate Data Elimination
Data Statistics
Constant
Lookup Table
Cache Statistics
Scheduling



**Data Administration**





















 <b>Data Integrity</b> Run data integrity checks and unveil anomalies and problems in the meta data setup.	 <b>Maintenance</b> Perform maintenance tasks such as pruning of data values and periods and clearing of database resource tables.
 <b>Resource Table</b> Generate resource database tables for the administrative unit hierarchy and group set structure among others.	 <b>Administrative Unit Merge</b> Merge two organisation units and their data values. Data is merged depending on existence and date of last modification.
 <b>Duplicate Data Elimination</b> Eliminate data registered for duplicate data elements. Useful when data has been entered for identical data elements.	 <b>Data Statistics</b> Browse the number of objects in the database, like data elements, indicators, data sets and data values.
 <b>Constant</b> Create constants which can be included in expressions of indicator and validation rules.	 <b>Lookup Table</b> Create option sets which can be included in data elements and produce drop-down lists in data entry forms.
 <b>Cache Statistics</b> Monitor and clear the system database cache status. Provides information on object and query caches.	 <b>Scheduling</b> Manage scheduled tasks such as data mart exports, where you can set period types, aggregation level and frequency.

**Figure 75: Data administration module**

### 5.2.1 Data integrity

ARDS Web Portal can perform a wide range of data integrity checks on the data contained in the database. Identifying and correcting data integrity issues is extremely important for ensuring that the data used for analysis purposes is valid. Each of the data integrity checks that are performed by the system will be described, along with general procedures that can be performed to resolve these issues.

 **Data integrity checks performed** 

- Data elements without a data set 
- Data elements without groups 
- Data elements violating exclusive group sets 
- Data elements in data set but not in form or sections 
- Data elements assigned to data sets with different period types 
- Data sets not assigned to administrative units 
- Sections with invalid category combinations 
- Indicators with identical formulas 
- Indicators without groups 
- Invalid indicator numerators 
- Invalid indicator denominators 
- Indicators violating exclusive group sets 
- Administrative units with cyclic references 
- Orphaned administrative units 
- Administrative units without groups 
- Administrative units violating exclusive group sets 
- Administrative unit groups without group sets 
- Validation rules without groups 
- Invalid validation rule left side expressions 
- Invalid validation rule right side expressions 

**Figure 76: Data Integrity Checks Performed**

- **Data elements without a form:** Each data element must be assigned to a form. Values for data elements will not be able to be entered/reported in the system if a data element is not assigned to a form. Choose Maintenance->Entry Form-> Entry Form -> click on the form and select Edit then add the "orphaned" data element to the selected form.
- **Data elements without groups:** Some Data Elements have been allocated to several Data Element Groups. This is currently not allowed, because it will result in duplication of linked data records in the Pivot Source record sets that `feed` the pivot



tables. Go to Maintenance -> Data Element Groups to review each Data Element identified and remove the incorrect Group allocations.

- Data elements violating exclusive group sets: Some data elements have been allocated to several data element groups that are members of the same data element group set. All group sets in ARDS Web Portal are defined as exclusive, which means that a data element can only be allocated to one data element group within that group set. Go to Maintenance -> Data elements and Computed Values ->Data element groups to review each data element identified in the integrity check. Either remove the data element from all groups except the one that it should be allocated to, or see if one of the groups should be placed in a different group set.
- Data elements assigned to Forms with different period types: Data Elements should not be assigned to two separate Forms whose period types differ. The recommended approach would be to create two separate data elements (for instance a monthly and yearly data element) and assign these to respective forms.
- Forms not assigned to administrative units: All Forms should be assigned to at least one administrative unit.
- Computed Values with identical formulas: Although this rule will not affect data quality, it generally does not make sense to have two Computed Values with the exact same definition. Review the identified Computed Values and their formulas and delete or modify any Computed Value that appears to be the duplicate.
- Computed Values without groups: All Data Elements and Computed Values must be assigned to at least one group, so these Computed Values need to be allocated to their correct Data Element and Computed Value Group. Go to Maintenance -> Computed Value Groups, and allocate each of the `Orphaned` Computed Values to its correct group.
- Invalid Computed Value numerators: Violations of this rule may be caused by an incorrect reference to a deleted or modified data element. Review the Computed Value and make corrections to the numerator definition.
- Invalid Computed Value denominators: Violations of this rule may be caused by an incorrect reference to a deleted or modified data element. Review the Computed Value and make corrections to the denominator definition.
- Computed Values violating exclusive group sets: Some Computed Values have been allocated to several Computed Value groups that are members of the same Computed Value group set. All group sets in ARDS Web Portal are defined as exclusive, which means that a Computed Value can only be allocated to one Computed Value group within that group set. Go to Maintenance -> Data elements and Computed Values ->Computed Value groups to review each Computed Value identified in the integrity check. Either remove the Computed Value from all groups except the one that it should be allocated to, or see if one of the groups should be placed in a different group set.
- Administrative units with cyclic references: Administrative units cannot be both parent and children of each other, directly nor indirectly.
- Orphaned administrative units: All administrative units must exist within the administrative unit hierarchy. Go to administrative->Hierarchy Operations and move the offending administrative unit into the proper position in the hierarchy.
- Administrative units without groups: All administrative units must be allocated to at least one group. The problem might either be that you have not defined any `compulsory` Administrative Group Set at all, or that there are violations of the `compulsory` rule for some Administrative Units. NOTE: If you have defined no `compulsory` Administrative Unit Group Sets, then you must first define them by

going to Maintenance -> administrative units->administrative unit group sets and define at least one `compulsory` Group Set (the group set `Administrative Unit Type` are nearly universally relevant). If you have the relevant group sets, go to Maintenance ->Administrative Unit Groups to review each Administrative Unit identified and add the relevant Group allocation.

- Administrative units violating compulsory group sets: These administrative units have not been assigned to the any administrative unit group within one of the compulsory administrative unit group sets. When a group set is defined as `compulsory`, it means that an administrative unit must be allocated to at least one administrative unit group within that group set. For instance, all administrative units must belong to one of the groups in the `Administrative Unit Type` group set. It might belong to any other `type` group - but it must belong to exactly one of them. Go to Maintenance -> administrative unit->administrative unit groups to review each administrative unit identified in the integrity check. Allocate all administrative units to exactly one group.
- Administrative units violating exclusive group sets: Some administrative units have been allocated to several administrative unit groups that are members of the same administrative unit group set. All group sets in ARDS Web Portal are defined as exclusive, which means that an administrative unit can only be allocated to one administrative unit group within that Group Set. For instance, one administrative unit cannot normally belong to the both the 'Hospital' and 'Clinic' groups, but rather to only to one of them. Go to Maintenance -> administrative unit->administrative unit groups to review each administrative unit identified in the integrity check. Remove the administrative unit from all groups except the one that it should be allocated to.
- Administrative unit groups without group sets: The administrative unit groups listed here have not been allocated to a group set. Go to Maintenance->administrative unit->administrative unit group sets and allocate the administrative unit group to the appropriate group set.
- Validation rules without groups: All validation rules must be assigned to a group. Go to Services->Data quality->Validation rule group and assign the offending validation rule to a group.
- Invalid validation rule left side expressions: An error exists in the left-side validation rule definition. Go to Services->Data quality->Validation rule and click the "Edit" icon on the offending rule. Press "Edit left side" and make the corrections that are required.
- Invalid validation rule right side expressions: An error exists in the left-side validation rule definition. Go to Services->Data quality->Validation rule and click the "Edit" icon on the offending rule. Press "Edit right side" and make the corrections that are required.

### 5.2.2 Maintenance

The data maintenance module has five options, each described below.

- Clear aggregation (aggregated data values): The aggregation is where ARDS portal stores aggregated data produced during the export to aggregation process. This function clears the database table, which contains aggregated data element values.
- Clear aggregation (aggregated computed values): The aggregation is where ARDS portal stores aggregated data produced during the export to aggregation process. This function clears the database table, which contains aggregated computed values.
- Clear zero values: This function removes zero data values from the database. Values registered for data elements with aggregation operator average is not removed, as such values will be significant when aggregating the data, contrary to values registered for

data elements with aggregation operator sum. Reducing the number of data values will improve system performance.

- Clear entry forms completeness: This function removes aggregated entry form completeness values. This data is produced and used by report tables.
- Prune periods: This function removes all periods, which have no registered data values. Reducing the number of periods will improve system performance.

### 5.2.3 Resource Table

Resource Tables are supporting tables that are used during analysis of data. One would typically join the contents of these tables with the data value table when doing queries from third-party applications like Microsoft Excel. Simply select the tables that should be regenerated and press "Generate tables". Regeneration of the resource tables should only be done once all data integrity issues are resolved.

- Administrative unit structure: This table should be regenerated any time there have been any changes made to the administrative unit hierarchy. This table provides information about the administrative unit hierarchy. It has one row for each administrative unit, one column for each administrative unit level and the administrative unit identifiers for all parents in the lineage as values.
- Exclusive administrative unit group set structure normalized: This table provides information about the administrative units, which are member of the administrative unit group sets.
- Data element group set structure: This table provides information about which data elements are members of which data element group sets. The table has one row for each data element, one column for each data element group set and the names of the data element group as values.
- Computed values group set structure: This table provides information about which computed values are members of which computed values group sets. The table has one row for each computed value, one column for each computed value group set and the names of the computed value group as values.
- Administrative unit group set structure: This table provides information about which administrative units are members of which administrative unit group sets. The table has one row for each administrative unit, one column for each administrative unit group set and the names of the administrative unit groups as values.
- Category structure: This table provides information about which data elements are members of which categories. The table has one row for each data element, one column for each category and the names of the category options as values.
- Data element category option combo name: This table should be regenerated any time there have been changes made to the category combination names. It contains readable names for the various combinations of categories.

### 5.2.4 Duplicate data elimination

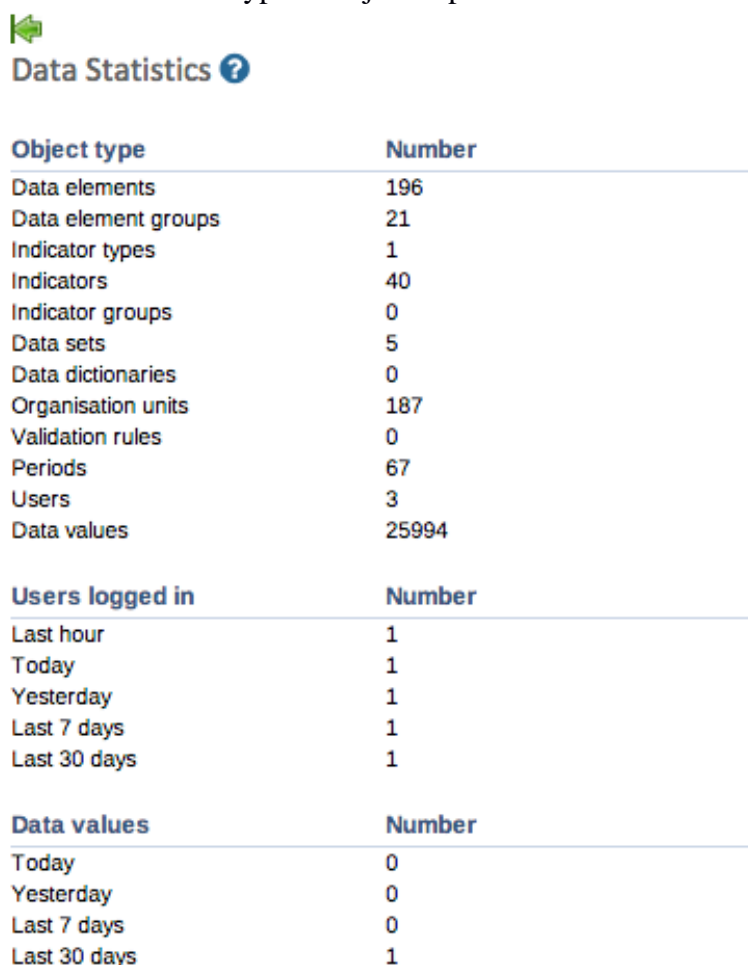
This function is useful when data has been entered mistakenly for two data elements that represent the same phenomena.

Start by selecting the data element to eliminate from the list and click confirm. Then select the data element to keep and click confirm again. Finally, verify the selection and click merge.

In the situation where data exists for the data element to eliminate and not for the one to keep, the data will be moved to the one to keep. When data exists for both data elements, the data, which was updated last will be used. When data exists only for the one to keep, no action will be taken. The data element to eliminate will eventually be deleted, except when it is a multidimensional data element and has other data registered.

### 5.2.5 Data statistics

The data statistics module provides an overview of the number of objects stored in the ARDS database. The total number of each type of object is presented in a table.



Object type	Number
Data elements	196
Data element groups	21
Indicator types	1
Indicators	40
Indicator groups	0
Data sets	5
Data dictionaries	0
Organisation units	187
Validation rules	0
Periods	67
Users	3
Data values	25994

Users logged in	Number
Last hour	1
Today	1
Yesterday	1
Last 7 days	1
Last 30 days	1

Data values	Number
Today	0
Yesterday	0
Last 7 days	0
Last 30 days	1

Figure 77: Data Statistics Summary

### 5.2.6 Constant

Constants are static values, which can be made available to users for use in data elements and computed values. Some computed values, such as "number of animal in livestock unit" depend on factors (constants), which usually do not change over time. Simply press "Add" and provide a name in the "Name" field and define its value in the "Value" field. Press "Add". The constant will now be available to users for use in their expressions.


### 5.2.7 Lookup table

Lookup Table is option group that can be associated with data elements in the add/update data element interface for name-based data elements. You can define any kind of lookup table, for instance an option group called "Aina ya Mifugo" where "Ng'ombe", "Mbuzi", "Kondoo", "Nguruwe" and "Kuku" would be the options. This lookup table can later be associated with any number of data elements. When doing data entry in name-based records, those options will then appear in the form as drop-down lists with auto-completion support.


#### 5.2.7.1 Accessing the Lookup tables

To access lookup tables:

1. Login as administrative user
2. Go to Maintenance Menu from the main menus
3. Select Data Administration from the dropdown list
4. Select **Lookup Table** from the list on the left or at the center
5. Lookup Table Management page will be displayed, listing all available lookup tables

Lookup table management 

Search by name 1 - 50 of 50 < >

Name	Public access	Last updated	
Aina ya Mifugo	Public view/edit	a year ago	⋮
Aina ya mmomonyoko	Public view/edit	2 years ago	⋮
Aina ya samaki vuliwa	Public view/edit	7 months ago	⋮
Aina ya ugonjwa/hali	Public view/edit	7 months ago	⋮
Aina za mazao ya ngozi	Public view/edit	7 months ago	⋮
Aina za mbegu bora alizeti [Ward annual entry form (Table 6.3)]	Public view/edit	2 years ago	⋮ 
Aina za mbegu bora maharage [Ward annual entry form (Table 6.3)]	Public view/edit	2 years ago	⋮

**Figure 78: Lookup table management screen**

#### 5.2.7.2 Create New, Edit or Remove a Lookup table

You can add new, edit or remove an existing lookup table **but this will require data entry form design to be updated accordingly, hence not recommended**. Consult the corresponding section (Managing Forms) on this manual to know how to add new, edit or remove a data element in the data entry form, in order to apply the changes of a lookup table.

##### 5.2.7.2.1 Create a New Lookup table

To Add a new lookup table, follow this step:

1. Click on the blue plus icon at the bottom right of the lookup table management screen.
2. Enter primary detail (name, code and value type) for the lookup table as illustrated in the example below.
3. Click “Save” to save the new lookup table

PRIMARY DETAILS

OPTIONS

This object will be created with public edit and view rights

Name (\*)  
Mazao ya biashara

Code  
Mazao ya biashara

Value type (\*)  
Text

SAVE CANCEL

**Figure 79: Adding a new lookup table**

- Once the new lookup table is saved it will open lookup option management screen as shown in the following figure.

PRIMARY DETAILS

OPTIONS

SORT BY NAME SORT BY CODE/VALUE SORT MANUALLY

Name	Code
------	------

**Figure 80: Lookup table options management screen**

- Click on the blue plus icon at the bottom right to add a new option for the lookup table and will option management screen as shown in the following figure

Lookup table ?

Options

Code

Miti ya mbao

Add option

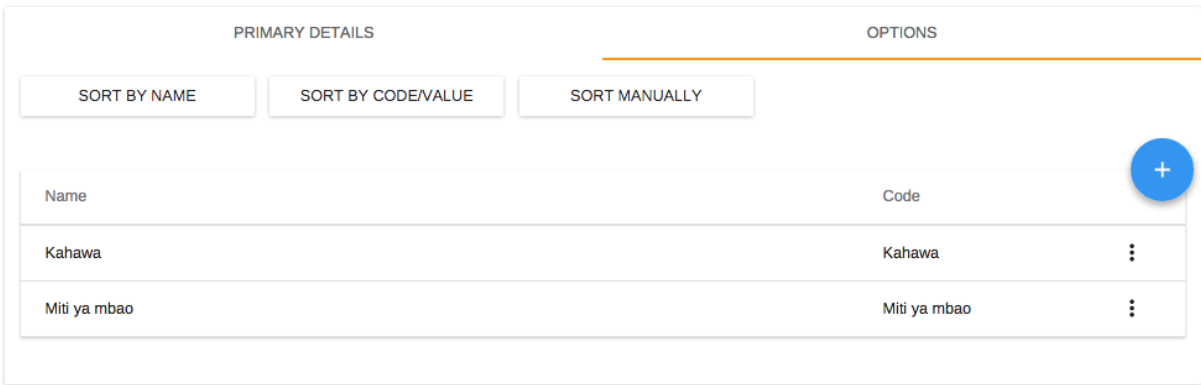
Name (\*)  
Kahawa


Code (\*)  
Kahawa

SAVE CANCEL

**Figure 81: Adding a new option for the created lookup table**

- Click "Save" to save the new option for the lookup table.



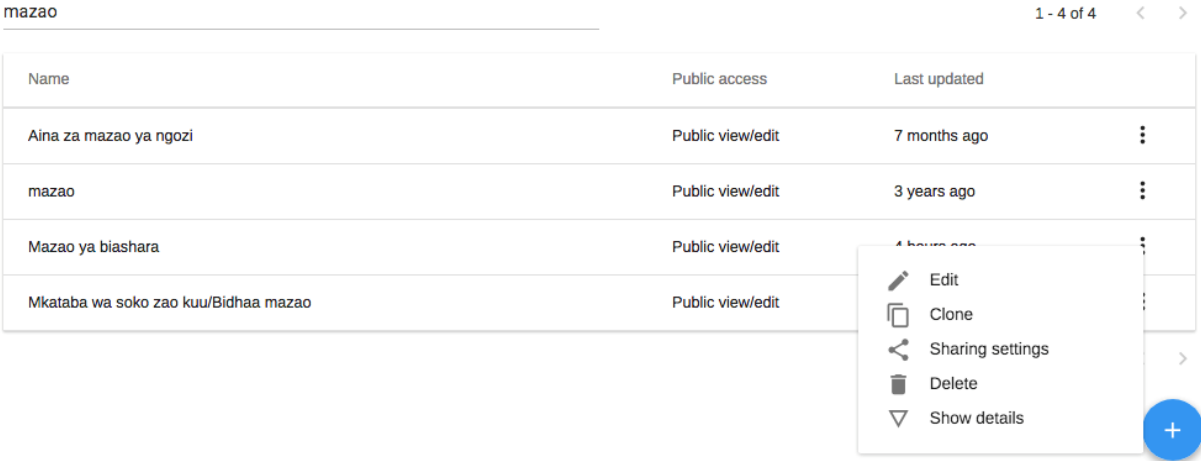
PRIMARY DETAILS		OPTIONS
<div style="display: flex; justify-content: space-around;"> <span>SORT BY NAME</span> <span>SORT BY CODE/VALUE</span> <span>SORT MANUALLY</span> </div>		
Name	Code	
Kahawa	Kahawa	⋮
Miti ya mbao	Miti ya mbao	⋮

**Figure 82: List of options added for the created lookup table**

### 5.2.7.2.2 Edit or Remove an Existing Lookup table






To edit or remove an existing lookup table follow this step:

1. Go to the lookup management screen and search for the name of the lookup table
2. In front of the lookup table in the list click on the three dots icon and a pop up menu will appear as shown below.
3. If you want to remove the look up table, select “Delete” and confirm.
4. If you want to edit the lookup table i.e. to change the name, value type or manage its options, click on “Edit” and continue entering the details in similar way as explained in section 5.2.7.2.1.



mazao 1 - 4 of 4 < >

Name	Public access	Last updated
Aina za mazao ya ngozi	Public view/edit	7 months ago
mazao	Public view/edit	3 years ago
Mazao ya biashara	Public view/edit	4 hours ago
Mkataba wa soko zao kuu/Bidhaa mazao	Public view/edit	

-  Edit
-  Clone
-  Sharing settings
-  Delete
-  Show details

**Figure 83: Managing existing lookup table**

### 5.2.7.3 Create New, Edit, Remove or Sort Options of a Lookup table

You can add new, edit, remove or sort options of the existing lookup table **without a need for a data entry form design to be updated**. This is the recommended practice as it may happen a bit more often than a need to add or update a lookup table itself.

To add, edit, remove or sort options of the existing lookup table follow this step:

1. Identify the lookup table to which the option you want to add or update exist
2. Go to the lookup management screen locate the lookup table or search for the name of the lookup table if you already know it.








- In front of the lookup table in the list click on the three dots icon and a pop up menu will appear as shown in the figure below.

Lookup table management 

aina ya 1 - 4 of 4 < >

Name	Public access	Last updated
Aina ya Mifugo	Public view/edit	2022-08-22 10:00:00
Aina ya mmomonyoko	Public view/edit	2022-08-22 10:00:00
Aina ya samaki vuliwa	Public view/edit	2022-08-22 10:00:00
Aina ya ugonjwa/hali	Public view/edit	2022-08-22 10:00:00


-  Edit
-  Clone
-  Sharing settings
-  Delete
-  Show details

1 - 4 of 4 < >

**Figure 84: Edit existing lookup table to update its options**

- Click on edit the lookup table
- Click on the “Options” to manage its options

Lookup table 

PRIMARY DETAILS		OPTIONS
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid #ccc; padding: 2px 5px; margin-right: 5px;">SORT BY NAME</div> <div style="border: 1px solid #ccc; padding: 2px 5px; margin-right: 5px;">SORT BY CODE/VALUE</div> <div style="border: 1px solid #ccc; padding: 2px 5px;">SORT MANUALLY</div> </div>		
Name	Code	
Kuku	Kuku	⋮
Kondoo	Kondoo	⋮
Mbuzi	Mbuzi	⋮
Ng'ombe	Ng'ombe	⋮

**Figure 85: List of available options of the selected lookup table**

- You can now manage the option by adding a new option, editing, removing or sorting existing options
  - If you want to add a new option for the selected lookup table, click on the blue plus icon, enter the name and code for the option then save.
  - If you want to edit an existing option for the selected lookup table, click on the three dots icon, which are in front of the option in the list and a pop up menu will appear then select “Edit”, change the name for the option then save.
  - If you want to remove an existing option for the selected lookup table, click on the three dots icon, which are in front of the option in the list and a pop up menu will appear then select “Delete” and confirm.
  - If you want to sort the options, click on the three dots icon, which are in front of the option in the list and a pop up menu will appear then select “Edit”. You can select “SORT BY NAME”, “SORT BY CODENAME” to sort



automatically or “SORT MANUALLY” to sort manually through drag and drop.



**Figure 86: Editing an existing option of the selected lookup table**

Please note that any changes applied to a lookup table or options of a lookup table will be seen in the corresponding dropdown list in the data entry form after a day i.e. after the resource table is regenerated overnight.

### **5.2.8 Cache statistics**

This option is for system administrators only to use. The cache statistics shows the status of the application level cache. The application level cache refers to the objects and query results that the application is caching in order to speed up performance. If the database has been modified directly the application cache needs to be cleared for it to take effect.

添付資料 10: M&E 作業部会活動計画 (2015/16、2016/17、2017/18 年度)

United Republic of Tanzania  
Agricultural Sector Lead Ministries

Agricultural Sector Development Programme  
Monitoring & Evaluation  
Thematic Working Group

FY 2015/16

Action Plan  
for **ARDS** Improvement  
(Draft)

January 2016

ASDP M&E Thematic Working Group

## **1. Introduction**

Agriculture Sector Development Programme (ASDP) supports the operationalization of Agricultural Sector Development Strategy (ASDS<sup>1</sup>) which is a key element of the National Strategy for Growth and Reduction of Poverty (NSGRP or MKUKUTA). ASDP (phase 1) had been implemented between 2006/07 and 2013/14<sup>2</sup> by the Government of Tanzania in collaboration with Development Partners (DPs). At present, ASDP (phase 2) is in the last stage of finalization waiting for the formal approval of the government.

A consolidated M&E Thematic Working Group (Hereinafter called M&E TWG) was established in November 2006 with the aim to establish an effective and feasible M&E system for ASDP and to track its progress. Since then, the M&E TWG has formulated the ASDP M&E Framework and Guidelines and tried to prepare annual ASDP Performance Reports which show the progress of ASDP in light of the short-listed indicators. Since 2008, the M&E TWG has also worked on improvement of Agricultural Routine Data System (ARDS) with which village / ward / district level data are consolidated and transferred to ASLMs through regions. The ARDS national roll-out has completed in March last year (2015), and since then ARDS is in principle of full operation across the country. Still, there have been observed many challenges on the ground of ARDS operation, either at LGA or Regional level, and M&E TWG needs to address them to achieve steady and effective data collection.

With this Action Plan, the M&E TWG aims at dealing with the observed challenges and improving the operation of ARDS so that the collection of agricultural data will become regular and broad through effective utilization of data for planning and policy formulation.

## **2. Objectives of the M&E TWG FY 2015/16**

The objectives of this Action Plan are for the M&E TWG to achieve following in FY 2015/16.

- To improve the ARDS operation by addressing both technical and administrative challenges.
- To strengthen the capacity of the national, regional and local authorities concerning the ARDS operation.
- To strengthen the capacity of the national, regional and local authorities concerning the data utilization.

## **3. Tasks**

### **3.1. To compile challenges encountered by ARDS users**

- To prepare a structured form for compiling ARDS challenges.
- To record and accumulate challenges reported by LGAs in the structured form.

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<sup>1</sup> As of January 2016, ASDS2 is in the final stage of authorization.

<sup>2</sup> ASDP(phase 1) has been extended three years from its original ending year 2012/13 to 2015/16.

- To implement the ARDS Issue-Analysis Survey to collect information of the ARDS operation on the ground (LGA officers and extension officers).

### **3.2. To identify causes of the challenges compiled in Task 3.1**

- To analyze the recorded/ accumulated challenges.
- To analyze the challenges collected by the Issue-Analysis Survey
- To resort to outside technical expertise to the extent possible for discerning causes of the challenges into technical and/or non-technical.
- To prepare a report on the causes of the challenges.
- To report the challenges and causes to the higher authorities.

### **3.3. To address the technical challenges**

- To let outside technical expertise fix, modify and improve the system to mitigate the technical challenges.
- To let outside technical expertise train the M&E TWG members to the extent practical so that the members will be capable to address the challenges by themselves.
- (after the training above) to strengthen the members' capacity of addressing technical challenges by trying to solve them by members' own effort in consultation with the outside expertise.

### **3.4. To address the non-technical challenges**

- To formulate a plan for addressing non-technical challenges of the ARDS operation.
- To implement the plan, including the technical backstopping below for the ARDS operation.
- To perform ARDS Technical Backstopping for the following purposes
  - To refresh the LGAs' ARDS operators (DS, DME or other officers).
  - To train LGAs' new ARDS operators (new DS, DME or other officers).
  - To refresh the RS's ARDS users (RAA, RLA or other officers).
  - To train RS's new ARDS users (new RAA, RLA or other officers).
  - To re-invigorate ARDS operation across the country.

### **3.5. To implement regular monitoring of the ARDS operation**

- To carry out regular (once a month) submission status observation (To prepare a summary of submission rates, circulate it to all TWG members assigned to specific regions, make them send it to the designated region (and LGAs), and press LGAs to operate ARDS properly).
- To carry out routine monitoring of the ARDS workings (network connection, accessibility to the Web Portal, etc.).

- To take necessary actions when the ARDS workings and operation present any difficulties or anomalies.
- To improve the monitoring and supervision of the center and region on the LGAs' ARDS operation.

### **3.6. To strengthen regular reporting of the ARDS operation to higher authorities at the national, regional and local levels**

- To promote regular reporting of following to higher authorities at the national, regional and LGA levels.
  - Status of ARDS data submission.
  - Status of agricultural sector by summarizing ARDS data.
  - Status of particular agricultural sub-sectors (e.g. maize production, agricultural machine and equipment, famers' training, etc.) by summarizing ARDS data.
- To prepare a report format, if necessary, and distribute to LGAs for use.

### **3.7. To review ARDS related documents and management information**

- To review and improve the following documents as necessary.
  - ASDP M&E Framework and Guideline
  - ARDS Operation Guide
  - VAEO/WAEO Format
  - VAEO/WAEO Training Guide
  - Integrated Data Collection Format
  - LGA Training Guide
  - ARDS Web Portal Operation Manual
- To review and update following information.
  - ARDS user registration information (User names, password, etc.)
  - Names of Ward, LGA and Region
  - Contents of the lookup tables
  - Contents of ARDS news and articles
  - ARDS GIS information

### **3.8. To improve ARDS further**

- To improve the application of ARDS to make it more user-friendly and upgrade functionalities.
- To strengthen the M&E TWG, in particular the Technical Team in the ARDS management.
- To prepare ARDS management guide
- To provide an in-house training on ARDS for new members of the ASDP M&E TWG if necessary.

- To promote and campaign the usefulness and benefits of ARDS among stakeholders.

### **3.9. To promote ARDS data utilization**

- To conduct trainings for the M&E TWG members on how to analyze and use data collected by ARDS.
- To try to utilize the ARDS data for CountrySTAT.
- To inquire and study the data type and data demand of agricultural sub-sectors so that ARDS data can be further utilized for those sub-sectors.
- To try to the extent possible to make use of ARDS data in reviews such as Joint Sector Review (JSR) and Public Expenditure Review (PER).
- To sensitize data use for Planning and implementation at local and national levels

### **3.10. To coordinate with other agricultural data system for sector-wide M&E**

- To compare data types and characteristics between ARDS and other data system such as Agricultural Annual Sample Survey, MAFAP<sup>3</sup>, and National Sample Census of Agriculture so that better consistency and efficiency among data systems can be achieved.
- To collaborate with other ministries/agencies and DPs to improve methodology for capturing agricultural basic information with specific consideration to the implementation of the Agricultural Statistics Strategic Plan (ASSP).
- To collaborate with ASLMs' departments which will be using ARDS in order to enhance data utilization in general and improve sector-wide M&E.

### **3.11. To disseminate information related to ARDS to all stakeholders**

- To prepare a newsletter which explains operation and improvement of ARDS and distribute it to stakeholders.
- To make presentations of ARDS in agriculture sector stakeholder meetings.
- To make use of the ARDS Web Portal by uploading latest data and news.

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<sup>3</sup> MAFAP = FAO's program for Monitoring and Analyzing Food and Agriculture Policies

#### **4. Members of the M&E Thematic Working Group**

In FY 2015/16, a new ministry, Ministry of Agriculture, Livestock and Fisheries (MALF) has been formed by merging the previous two ministries, Ministry of Agriculture, Food Security and Cooperatives and Ministry of Livestock and Fisheries. Still, under this new MALF, the M&E Thematic Working Group (TWG) continues to be composed of M&E specialists, statisticians, and ICT specialists of the ASLMs, NBS and representatives of DPs.

- **Chairperson**

Ms. Janet Simkanga, Director of Policy and Planning, MALF (Agriculture)

Ms. Catherine Joseph, Director of Policy and Planning, MALF (Livestock)

- **Secretariat**

Mr. Elias Masunga, Head of M&E Unit, DPP, MALF (Agriculture)

Ms. Irene Lucas, DPP, MALF (Agriculture)

Ms. Happy Pascal, DPP, MALF (Agriculture)

- **MALF**

Mr. Oswald Ruboha, Assistant Director M&E and Statistics, DPP, MALF (Agriculture)

Mr. Malemi Nyanda, Head of Statistics Unit, DPP, MALF (Agriculture)

Mr. Robert Chacha, DPP, MALF (Agriculture)

Mr. Jumanne K. Msuya, DPP, MALF (Agriculture)

Dr. Jofrey Oleke, DPP, MALF (Agriculture)

Mr. Phillip Shayo, IT specialist, IT Section, MALF (Agriculture)

Mr. Kejo, IT specialist, IT Section, MALF (Agriculture)

Mr. Oberth M. Mwakalindile, Statistics Unit, DPP, MALF (Agriculture)

Mr. Benjamin Kalekezi, Statistics Unit, DPP, MALF (Agriculture)

Dr. Sophia Mlote, DPP, MALF (Livestock)

Mr. Abel Antony, DPP, MALF (Livestock)

Mr. Raphael Sendalo, IT specialist, DPP, MALF (Livestock)

Ms. Pricilla Joseph, IT specialist, DPP, MALF (Livestock)

Ms. Leocadia K Mkira, DPP, MALF (Livestock)

Mr. Steven Michael, DPP, MALF (Livestock)

Mr. Da Silva Mlau, DPP, MALF (Livestock)

- **MIT**

Mr. Genya C. Genya, DCM, MIT

Mr. John Chassama, DCM, MIT

Ms. Elizabeth Msengi, Assistant Director, DPP, MIT

- **PO-RALG**

Mr. Samuel Mdachi, DSC

Ms. Yasinta Tabu, DICT

- **NBS**

Mr. Festo Mwemutsi, Agricultural Statistics

- **JICA-RADAG (M&E)**

Mr. Retsu Hagiwara, Team Leader

Dr. Fuminori Arai, Deputy Team Leader

Mr. Hakan Yuksel, Administrative Data Management

Mr. Toshiaki Suzuki, Administrative Data Management





The United Republic of Tanzania  
Agriculture Sector Lead Ministries (ASLMs)

Tanzania

Capacity Development Project for Data Collection,  
Analysis and Data-based Reporting under ASDP

(ARDS Project)

Work Plan

(2nd Project Year)

December 2016

Japan International Cooperation Agency

Contractor: International Development Centre of Japan  
Oriental Consultants Global Ltd.



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## 1. Outline of the Project

### 1.1 Background

In Tanzania, national development and poverty reduction have been guided by the three poverty reduction strategy documents since 2000. For contribution from the agricultural sector, the Agricultural Sector Development Strategy One and Two (ASDS 1 and 2) were formulated in 2001 and 2015, respectively. Subsequently, the Agricultural Sector Development Programme One (ASDP 1) started in July 2006, and ASDP 2 now under final stage for implementation to materialize the vision of ASDS 1 and 2. Both ASDP 1 and 2 have adopted a sector-wide approach with the former framed upon a basket fund supported by the Government of Tanzania (GOT) and Development Partners (DPs), while the latter to be of a broader consortium of various modes of supports. The three Agricultural Sector Lead Ministries (ASLMs) consisting of Ministry of Agriculture Livestock and Fisheries (MALF)<sup>1</sup>, Ministry of Industry and Trade (MIT) and President's Office – Regional Administration and Local Government (PO-RALG)<sup>2</sup> have mandate to implement ASDP. Also, Local Government Authorities have a major role in ASDP as they execute and implement agricultural development activities through their own District Agricultural Development Plan (DADP).

In order to track the progress of the ASDP and evaluate its effects, a monitoring and evaluation (M&E) system is essential. The M&E of the ASDP can be broadly divided into two aspects: i) physical and financial progress pertaining to the use of public fund by LGAs and ASLMs, and ii) the overall performance of agricultural sector. As for the performance of agricultural sector, the National Sample Census of Agricultural (NSCA), the Annual Agricultural Sample Survey (AASS) and the Agricultural Routine Data System (ARDS) are the primary sources of agricultural data and information. The ARDS is to collect agricultural sector information monthly from grass roots (village level) to district level, and then to ASLMs through regions every quarter. However, when the ASDP started in 2006, the ARDS was not of proper function. For example, ASLMs could not receive the monthly reports regularly from LGAs, and the standard reporting formats and flows were not clearly defined.

In order to develop an effective M&E framework for the ASDP, in particular ARDS, the M&E Thematic Working Group (M&E TWG) was established in December 2006 with the officers of ASLMs specializing in M&E, statistics and information management. The TWG developed the ASDP M&E Framework which was approved by the Committee of ASLMs Directors in August 2007. In parallel to the establishment of the M&E TWG, a series of JICA's technical assistant projects were implemented. First the Project for Capacity Development for the ASDP M&E System was implemented from March 2008 till June 2011 for 3 years. Through the activities in the pilot LGAs (Morogoro and Dodoma regions), various improvements of ARDS that includes introductions of (i) VAEO/WAEO Format, (ii) Format for Integrated Data Collection, (iii) the software, LGMD2, (iv) training guides and the related human resource development were accomplished. Subsequently, the second phase of the project was launched in August 2011 for the period of 4 years as the Project for Capacity Development for the ASDP M&E System Phase 2. Through the Project, ARDS was rolled out nationwide to all the LGAs and the data collection software was improved into ARDS Web Portal

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<sup>1</sup> The two ministries, Ministry of Agriculture, Food Security and Cooperatives and Ministry of Livestock and Fisheries Development were merged in 2016 to this ministry after the 2015 president election.

<sup>2</sup> Previously this ministry was under the jurisdiction of the Prime Minister's Office. But after the 2015 president election, it was moved to under the President's Office.

that is a web-based system for data input as well as data utilization.

Since ARDS continues to be an important data collection system under ASDP 2 which is now at the final stage of its formulation, smooth operation and management of ARDS is indispensable for strengthening agricultural statistics in Tanzania. Based on the achievement of Phase 1 and Phase 2 projects, another technical assistant project was launched in November 2015. This current on-going project aims at establishing the stable operation and management of ARDS, improving the data quality, promoting the data utilization as well as to harmonizing ARDS with other agricultural statistics. In particular, the project aspires to achieve the following.

- To start using ARDS at both District and Central levels,
- To establish the central monitoring of ARDS operation through an application which makes the timely and effective monitoring possible,
- To extend the standardized operation of ARDS among all levels of stakeholders.

## 1.2 Outline of the Project

### (1) Project title:

Project for Capacity Development on Data Collection, Analysis and Data-based Reporting under ASDP

### (2) Purpose of the Project

The Project aims to enhance utilization of data collected through ARDS, thereby contributing to enhancing policy dialogue in the agricultural sector through the improved agricultural statistics including ARDS.

### (3) Project purpose, indicators and outputs

Project purpose, indicators and outputs of this Project is summarized in table 1.4.

Table 1.1: Project purpose, indicators and outputs

<b>(Project) Purpose</b>	<b>Objectively Verifiable Indicator (OVI)</b>
Utilization of data collected through ARDS is enhanced at central and local level	1. Number of agricultural reports and plans prepared centrally under ASDP by using ARDS data (e.g. ASP/PER, JSR) 2. Number of DADPs prepared by using the ARDS data (90%) 3. Number of agricultural reports prepared by using ARDS data by LGAs.
<b>Overall Goals</b>	<b>OVI</b>
Policy dialogue in agricultural sector is enhanced through the improved agricultural statistics including ARDS.	Number of policy discussion based on the agricultural statistics
<b>Output</b>	
1: Agricultural data are properly collected and submitted through the operation of ARDS 2: Agricultural data submitted through ARDS are accessed and shared among the users. 3: Harmonization of ARDS with other agricultural statistics promoted	

### (4) Project Sites

Project target: Tanzania main land (168 LGAs)

Office: Ministry of Agriculture, Livestock and Fisheries (Dar-as-salaam)

### (5) Counterparts

ASDP M&E Thematic Working Group consists of officers from ASLMs : (Ministry of Agriculture, Livestock and Fisheries, Ministry of Industry and Trade, President Office-Regional Administration and Local Governments

### (6) Beneficiary

The target group of beneficiary is consisting of various stakeholders. The main beneficiaries are summarized in the table below Table 1.6.

Table 1.2: Project beneficiaries

<b>Beneficiary</b>	<b>Expected numbers</b>
Members of ASDP M&E Thematic Working Group	20
Regional Agricultural Advisers (Regional Administration Secretariat)	5 x 25 Regions
Agricultural Officers in LGAs	5 (Appx) x 168 LGAs (or more if number of operating LGAs increased)
Agricultural Extension Officers (Ward/ Villages)	(Appx. 8,000)

## 2. Basic Principles

### 2.1 Basic Principles for implementing the Project

In this project, the project team adopts following three principles as basic approaches

- (1) The project strengthens data collection activities in Year1 and 2 of the Project, and put more efforts on utilization of data in Year 3 and 4.
- (2) The Project will put effort to coordinate with other initiatives of reforming Agricultural statistics, and to contribute to the agricultural statistics area.
- (3) The project will implement the activities through Tanzanian ownership and initiatives.



### 3. Work Plan

#### 【1】 Preparation of the Work Plan (Year 2)

After reviewing achievement and challenges in Project Year 1, the Project Team will prepare a draft Work Plan for the second project year (WP2). The plan includes action plan and work schedules. The draft table of contents is shown in the box below.

The Draft WP2 will be discussed with Monitoring and Evaluation Thematic Working Group and comments by the TWG will be reflected in the final WP2

<p>Work Plan 2 (WP2), Table of Contents</p> <ol style="list-style-type: none"> <li>1 Background of the Project</li> <li>2 Basic approach of implementation</li> <li>3 Work Plan of the Project               <ol style="list-style-type: none"> <li>3.1 Activity Flow</li> <li>3.2 Details of Activities</li> </ol> </li> <li>4 Assignment Schedule</li> <li>5 Other necessary activities of the Project</li> </ol> <p>Appendix PDM, Plan of Operation, Annual Action Plan of Thematic Working Group</p>
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#### 【2】 Promotion of ARDS Data collection/ submission

##### 1) Monitoring Data Submission

###### ■ Working with M&E Thematic Working Group

The ASDP Monitoring and Evaluation Thematic Working Group (M&E TWG) consisting of members from Agricultural Sector Lead Ministries (ASLMs) is a main counterpart of the Project. This TWG has been established in order to monitor and evaluate progress and results of ASDP. TWG's role includes promoting activities such as data collection, managing data submission, enhancing access/ use of data, and coordination with other data/ statistical system. M&E TWG holds regular meetings to discuss ASDP related matters including ARDS. The Project team usually participates in the meeting where various issues are to be discussed, approved in reaction to ARDS monitoring activities and training. Therefore, participating in regular and ad hoc meetings is considered as one of the Project activities in order to enhance smooth and adequate operation of the Project under clear ownership and leadership of the Government of Tanzania.

###### ■ Monitoring of ARDS submission status

Technical Team established by the M&E TWG is responsible for monitoring submission status of ARDS from LGAs. During first year of the Project, main ARDS routines including monitoring of submission status has been taken by either the secretariat of TWG or Technical Team consisting of a few members of the TWG. The Technical Team circulates ARDS data submission status produced by the system to all officer-in-charge of each Region to follow-up and monitor submission rate. Table 2.4 shows current procedure of ARDS submission rate monitoring.

Table 3.1 : Current procedure of ARDS submission rate

Item	Action
Periodical Monitoring	<p>Secretariat or Technical Team will produce submission status report of each month and notify officers in charge of following up Regions through e-mail. The officers in Regions will contact officers in LGAs. If necessary, the officers in charge of Regions in ASLMs will contact DAICO or ARDS operators in LGAs.</p> <ul style="list-style-type: none"> <li>• 3<sup>rd</sup> day of each month: Reminder of ARDS data submission/ input ARDS</li> <li>• 22<sup>nd</sup> Day of each month: circulation of submission status report</li> <li>• 30<sup>th</sup> of each month: further reminder</li> </ul>
Middle Term Monitoring	<p>After monitoring above, following measures will be taken for the Regions/ LGAs which does not provide data without reasons.</p> <ul style="list-style-type: none"> <li>• Notification of bad performers (name of LGA and officers in charge) in an e-mail for taking attention.</li> </ul>

Source : Project Completion Report Edited by the Project Team

During the first year of the Project, the TWG has agreed to make monitoring sheet in cloud system to share information and status. To strengthen monitoring function to promote submission from LGAs, officers in charge of Regions who are the members of TWG examine the situation of LGAs submission status and they will enter information to the monitoring sheet. Some officers may have thought the use of monitoring sheet unnecessary as it was an ‘additional’ tedious work. Thus the use of the monitoring sheet was not accepted by all members. But this sheet is indeed useful because it facilitate the users to understand the situation and challenges that each LGA faces. Therefore, the Project will further encourage the use of the monitoring sheet with CPs.

## 2) Supports to M&E Thematic Working Group for ARDS smooth operation

Providing supports for effective ARDS operation for various levels of stakeholder is main task of M&E TWG. Therefore, M&E TWG provides technical support (backstopping) to related offices of Regional Administration and LGAs. Following the activities of the Project Year 1, the Project will engage in establishing efficient institution and plan and implementation of backstop trainings in addition to strengthen monitoring of ARDS.

### ■ Plan and Implementation of training (backstopping)

Currently two kinds of training for LGAs are planned. The programmes in detail will be decided through discussion with the counterparts.

#### ① Short training for improving the use of ARDS Web Portal (Post migration training)

After system migration from old ARDS to improved ARDS Web Portal (ARDS Web Portal ver. 2), the users at field level, i.e. DMEO and DS will see minor changes in operation of ARDS. It may cause confusion among users since they are not very informed of the improved features of ARDS Web Portal.

The Project proposes to conduct a training for Districts officers after migration. Also, this training will be useful as follow-up of the first training conducted in May, 2016 for DME/ DS and DAICO. Tentative outline of the training is provided as Table 2.5.

Table 3.2 : Outline of training for DMEO and DS

Objective	Training for LGA operators
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Period	January 2016 (3 days)
Participant	District M&E officer (DMEO), District Statistician (DS), RS
Programme	Presentation of ARDS improvement Estimation and Setting Parameters Reporting Functions

## ② Training for ARDS operators in LGAs

In the First year, the Project conducted a 3-day training for operators of ARDS of all LGAs. The operators, usually DMEO and/or DS of agriculture or livestock sector, had received intensive training which contributed jump-up of submission rate. In the second year, the project proposes to conduct training for all LGAs in a similar manner but stress more on analysis and usage of data as well as notification of system improvement.

Table 3.3 : Outline of training for ARDS operators in LGAs

Objective	Training for ARDS operators in LGAs
Period	May to June 2017 (3 days)
Participant	Two officers from LGAs: DS and DMEO
Programme	Briefing of operation for new officers ARDS reporting and data handling Analysis Improved ARDS

Table 2.7 presents outline of the training programme. In the second training, it focuses on operation of improved ARDS Web Portal, use of standard report, and possibly usage of analysis functions to promote more utilization of ARDS.

Table 3.4 : Draft Programme of ARDS training for operators

	Day1	Day 2	Day 3	Day4
AM	Orientation Data Collection	Improvement of ARDS Web Portal improvement	Report creation	Question and answer, discussion
PM	Operation of ARDS	Estimate functions	Analysis	Wrap-up and the way forward

### ■ Institutional improvement

As described above, the operation of ARDS in central ministries will be carried out by M&E Thematic working group. This implementation setting is efficient in coordinating and communicating with cross-ministerial issues, and it is even so for this project in planning and pilot implementation. On the other hand, supervision, guidance, and maintenance and operation of database system require daily routine. Therefore more focus should be put on establishing controlling organization to maintain smooth operations. TWG considers the way to make operation routine, and the Project team will support it.

### 3) To Review current status of data collection methodology by VAEO/WAEO and promote the adoption of the designated methodology

Following the first project year's activity, the Project will review data collection methodology and identify issues that need to be addressed. During first backstop training in the first year, a lot of requests were raised by LGAs on data formats, so the project team together with the TWG will examine this request if any changes of data format are necessary. Also, Directorate of Fisheries also moved to collect information through ARDS.

These requests are considered when the Project's next ARDS upgrading.

Furthermore, one request in the feedback from the first backstop training was to address needs of WAEO/VAEO in respective LGAs. This is important as the capacity of WAEO/VAEO directly related to the quality of data, however since training from LGAs to WAEO/VAEO are stated as the responsibility of LGAs, the Project could only technically support these training for LGAs and TWG.

- 4) To upgrade and revise ARDS Web Portal, VAEO/WAEO format and related guidance based on the feedback from the operators

Based on feedback from WAEO and VAEO, the Project will review data collection format in villages and wards. When LGAs and Regions actually start using such data, it is expected that frequent requests on small changes will be raised by various levels of users. The Project team together with members of TWG will discuss about how to address such requests. In case of increasing data and indicators, careful assessment will be rendered in the aspects of feasibility of collecting such data, their readiness for use, effects on submission rate, and needs to change system.

**【3】 Agricultural data submitted through ARDS are accessed and shared among the users**

- 1) To revise/ improve training materials on data processing and analysis with ARDS Web Portal

The Project will review data analysis and processing method by LGAs. In its first year, it focused on data collection and submission, so sessions on data analysis and processing was minimal. In the Second year of the Project it will cover data analysis and processing as well. To review materials, it is important to compile opinions and comments from LGAs using opportunities of backstopping training.

- 2) To provide training (including TOT) to officers on the central ministries on data processing analysis, reporting writing and presentation by utilizing ARDS Web Portal

While ARDS collects various kinds of data, it is necessary to support to establishing capacity to analyze, use and prepare report of such data. ARDS has a function to produce standard reports. However, one needs more understanding of how to assemble and present data to inform decision makers more effectively. In order to enhance capacity of analysis of data, the Project will conduct Training of Trainers (TOT) to the members of M&E TWG of central ministries.

- 3) To provide training to officers of regions and LGAs on data processing and analysis by utilizing ARDS Web Portal

After TOT mentioned 2), the project provide training on data processing and analysis to LGA officers in backstopping training (Please see **【2】** 2).

- 4) To conduct periodical monitoring on the access to and downloading data from ARDS Web Portal

ARDS Web Portal has a function of monitoring access records and data download history. The Project Team will support monitoring and analysis of access to ARDS Web Portal by M&E TWG.

- 5) To upgrade the data utilization interface of ARDS Web portal based on the feedback from the users

M&E TWG carries out day-to-day maintenance and configuration of ARDS Web Portal, and the Project Team will support M&E TWG to accomplish such tasks. In case system update of ARDS Web Portal is necessary, the Project will contract-out to a local developer, and M&E TWG and Project Team will cooperatively supervise their work. Preliminary plan of the next upgrading is as follows.

<p>Improvement of ARDS Web Portal (Second Year)</p> <p>Reflecting the First year of improvement, below are the tentative scope of work of development.</p> <ol style="list-style-type: none"> <li>1. Additions of regional and national report <ol style="list-style-type: none"> <li>① Development of report format with aggregation of selected indicators in district monthly report to region and national level</li> <li>② Reporting of list of non-submitting districts</li> </ol> </li> <li>2. Addition of report creation status <ol style="list-style-type: none"> <li>① Development of report creation status by kinds of reports and period</li> <li>② Development of District Report Creation function for all district which did not create reports for some specific period</li> </ol> </li> <li>3. The submission status screen improvement <ol style="list-style-type: none"> <li>① Development of Submission Status Reports by Hierarchy levels</li> <li>② Development of configurable settings which ARDS automatically saves the submission rate including date created</li> </ol> </li> <li>4. Improvement of data entry <ol style="list-style-type: none"> <li>① Development of the modified/ added/ deleted tables</li> </ol> </li> <li>5. Redevelopment of Pivot Table</li> <li>6. Documentation</li> </ol>
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6) To set up clear mechanism of ARDS reports sharing and put it in place at central and local level for better information sharing within the organization

The project will help the government to use of ARDS data by establishing system to circulate reports produced by ARDS. Especially, it is important for management level of various levels of the Government, namely central, regional and local levels, to be notified agricultural situation. Especially it is important to construct a system to share a report with management and leaders in LGAs.

7) To conduct sensitization meeting to ASLMs and other stakeholders

Project Team will conduct ARDS promotion activities (such as seminars) to ASLMs or other sectors. The below is the proposal of ARDS promotion activities, and Project Team will implement these promotional activities after consultation with C/Ps.

① Newsletter

Newsletter targeting stakeholders and management of ASLMs will be regularly issued to inform update on ARDS activities. Even short newsletters will be useful to reporting on the situations among operators to know what is happening in in other districts, and to get understandings of higher levels of authorities. The Project Team expects that their interests on ARDS can be enhanced by newsletters.

② Publication

While newsletters are prepared to activate communication among operators in Central Ministries, Regions and LGAs, periodical reports will focus on issues and challenges of ARDS among stakeholders. The report will be submitted to higher levels to present achievement and necessary support for higher management of ASLMs.

Ministry of Agriculture, Livestock and Fisheries has annual publications such as ‘Annual Data Book’ using administrative data. The production of report has been stopped because of financial problem. However ARDS could provide data to this publication. The Project may support publication of reports provided by the Government.

### ③ Exhibition

Nane-nane festival is an event which promotes agriculture in the whole of Tanzania, and every year exhibitions by public and private of each district are carried out and general citizens also attend. Furthermore, Saba-saba is the exhibition held in Dar es Salaam. Utilizing these events as an opportunity, the Project Team will disseminate information to potentially interested stakeholders in agricultural statistics or data utilization, and also to the leadership of government officials. Project Team considers these promotional activities increase expectation and data access in the future.

## 【4】 Promoting Consistency with Other Agricultural Statistics

### 1) Attending agricultural statistics coordination meetings

The Project Team may attend periodical or ad-hoc meetings or surveys with M&E TWG to discuss collaboration among other agricultural monitoring systems such as annual sample survey, or other studies. Especially in FY 2016/17, National Sample Census of Agriculture (NSCA) will be carried out. Thus, Project Team will collect information by attending related meetings on planning, and discuss how ARDS should respond to these surveys with M&E Working Group.

### 2) Coordination of ARDS data collection

Based on information and analysis on other agricultural data system, the Project Team will review ARDS data collection (target items, collection method) improvement with M&E Working Group, in case necessary.

### 3) Information collection on sector monitoring such as agricultural sector review

In addition to above, in case sector monitoring such as agricultural sector review by ASLMs is carried out under ASDP2, Project Team will facilitate in collecting and analyzing related information and support M&E TWG on sector monitoring within the scope ARDS.

## 【5】 Preparation of Completion Report (Year 2)

When the second-year contract terminates, the Project Team will prepare a Project Completion Report on the progress of project activities and outputs. The report will be submitted to Director of Policy Planning (MAFC) and JICA Tanzania Office. The outline of the report is provided in the box below.

Completion Report, Table of Contents

Chapter 1. Background

- 1.1 Background and Project Purpose
- 1.2 Project duration and work process
- 1.3 Implementation Organization

Chapter 2. Progress of Activities

- 2.1 Progress of Activities
- 2.2 Achievements
- 2.3 Risks and Mitigation Measures
- 2.4 Factors affect Project Implementation

Chapter 3. Delay and Problems

- 3.1 Delay and Problems
- 3.2 Reason and Response

Chapter 4. Modification of the Project Implementation Plan

- 4.1 Change in PDM
- 4.2 Change in Plan of Operation
- 4.3 Other Changes in Detail Plans

Chapter 5. Preparation of GOT towards After Completion of the Project

Appendix 1. Project Outputs

#### 4. Activity schedule of the Project

Activity schedule is shown in flow chart in Figure 4.1 below.

Year	Month	Work in Tanzania			Reports and Outputs
		1: Agricultural data are properly collected and submitted through the operation of ARDS	2: Agricultural data submitted through ARDS are	3: Harmonization of ARDS with other agricultural statistics promoted	
2016	10	【 1】 Preparation of Work Plan (Year 2)			Wprk Plan
	11	【 2】 Promotion of data collection and submission through ARDS 1) Monitoring Data Submission 2) Provide Support to smooth operation of M&E Thematic Working Group 3) Review of current status of data collection methodology by VAEO/WAEO and promote the adoption of the designated methodology 4) Upgrade and revision of ARDS Web Portal, formats and guidance based on the feed back from the operators	【 3】 Promotion of access and sharing among users 1) Revise/improve training materials on data processing and analysis with ARDS Web Portal 2) Providing training (including TOT) to officers on the central ministries on data processing analysis, report writing and presentation by utilizing ARDS web Portal 3) Provide training to officers of Regions and LGAs on data processing and analysis by utilizing ARDS Web Portal 4) Conduct periodical monitoring on the access to and downloading data from ARDS Web Portal 5) Upgrade the data utilization interface of ARDS Web Portal based on the feed back from users 6) To set up clear mechanism of ARDS report sharing and put it in place at central and local level for better information sharing within the organization 7)To conduct sensitization meeting to ASLMs and other stakeholders	【 4】 Promoting Consistency with other Agricultural Statistics 1) Attending agricultural statistics coordination meetings 2) Coordination of ARDS data collection 3) Information collection on sector monitoring such as agricultural sector review	
12					
1					
2					
3					
2017	4	【 5】 Completion Report (Year2)			Completion Report
	5				
	6				
	7				
	8				
9					

Figure 4.1: Work Flow



## 5. Other necessary activities of the Project

### 5.1 Sub-contracting

The Project plans to subcontract following tasks to a competent subcontractor in the second year of the Project.

- Improvement of ARDS Web Portal (Ver 3)
- Training of Trainers (TOT) for Data Utilization

### 5.2 Procurement

Procurement plan during the second year of the Project is as follows. PCs and printers will be provided to new LGAs who have created before 2015, but operational from Financial Year 2016/17.

Table 5.1 : Equipment to be procured

Year 2	Equipment	Quantity	Specifics
1	Server	1	Renewal of ARDS server
2	PC	5	Laptop computer (can browse ARDS smoothly)
3	Printer	5	A4 paper
4	Stabilizer	5	For a PC and a printer.

In addition, Motorcycles for new LGAs will be procured by JICA Office.

### 5.3 Others

#### 1) Reports

Reports to be prepared and submitted are as follows.

Table 5.2 : Deliverables

Year	Report	Submitting Period	Volume
Year 2	Workplan (Japanese) (Year 2)	Within 10 days after commencement	5 (Japanese)
	Work Plan (Year 2)	Within Two Month after commencement	5 (English)
	Monitoring Sheet (Ver.3 )	Within 6 months after commencement	5 (English)
	Project Completion Report (Year 2) (with Monitoring Sheet Ver. 4)	On completion of activities	5 (English) 10 (Japanese) 3 (CD-ROM)

#### 2) Products from Technical Cooperation

- (1) Revised ARDS documents and forms
- (2) Manual, Training guide and training materials

#### 3) Other

- (1) Collected Information/ Document

Other collected information and data should be provided in the form of a list and CD-ROM

- (2) Monthly Report

6. Assignment Schedule of the Project Members

Assignment Schedule of the Project Members

\Yr+Month Name\	2016			2017							
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Hagiwara	10/15 ██████████ (42)	11/25 ██████████ (42)		1/7 ██████████ (78)		3/25 ██████████ (78)				6/2 ██████████ (90)	8/31 ██████████ (90)
Arai		11/9 ██████████ (37)	12/25 ██████████ (37)			3/21 ██████████ (85)		6/13 ██████████ (85)			
Hakan		11/14 ██████████ (35)	12/18 ██████████ (35)				4/9 ██████████ (55)	6/2 ██████████ (55)			
Suzuki	10/15 ██████████ (44)		11/27 ██████████ (44)		2/7 ██████████ (71)				5/27 ██████████ (85)		8/20 ██████████ (85)
Kamikura						██████████ (30)	Easter Holiday		██████████ (30)		
Sakayori	10/15 ██████████ (65)		12/18 ██████████ (65)	1/10 ██████████ (45)	2/23 ██████████ (45)				██████████ (46)	7/22 ██████████ (40)	8/31 ██████████ (40)

United Republic of Tanzania  
Agricultural Sector Lead Ministries

Agricultural Sector Development Programme  
Monitoring & Evaluation  
Thematic Working Group

FY 2017/18

Action Plan  
**for ARDS Improvement**  
(Draft)

July 2017

ASDP M&E Thematic Working Group

## **1. Introduction**

Agriculture Sector Development Programme (ASDP) supports the operationalization of Agricultural Sector Development Strategy (ASDS<sup>1</sup>) which is a key element of the National Strategy for Growth and Reduction of Poverty (NSGRP or MKUKUTA). ASDP (phase 1) had been implemented between 2006/07 and 2013/14<sup>2</sup> by the Government of Tanzania in collaboration with Development Partners (DPs). At present, ASDP (phase 2) has been just started in 2017/18.

A consolidated M&E Thematic Working Group (M&E TWG) was established in November 2006 with the aim to establish an effective and feasible M&E system for ASDP and to track its progress. Since then, the M&E TWG has formulated the ASDP M&E Framework and Guidelines and tried to prepare annual ASDP Performance Reports which show the progress of ASDP in light of the short-listed indicators. Since 2008, the M&E TWG has also worked on improvement of Agricultural Routine Data System (ARDS) with which village/ ward/ district level data are consolidated and transferred to ASLMs through Regions. The ARDS national roll-out has completed in March, 2015, and since then ARDS is in principle of full operation across the country. Still, there have been observed many challenges on the ground, either at LGA or Regional level, and M&E TWG needs to address them to achieve steady and effective data collection.

With this Action Plan, the M&E TWG aims at dealing with the observed challenges and improving the operation of ARDS so that the collection of agricultural data will become regular and broad through effective utilization of data for planning and policy formulation as well as ASDP monitoring.

## **2. Objectives of the M&E TWG FY 2017/18**

The objectives of this Action Plan are for the M&E TWG to achieve following in FY 2017/18.

- To improve effectiveness of ARDS operation
- To strengthen the capacity of the national, regional and local authorities concerning the ARDS operation.
- To strengthen the capacity of the national, regional and local authorities concerning the data utilization.

## **3. Tasks**

### **3.1. To implement effective monitoring of ARDS operation**

- To monitor ARDS operation and to find technical and administrative ARDS challenges.

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<sup>1</sup> As of July 2016, ASDS2 is to start from Financial Year 2017/18 .

<sup>2</sup> ASDP(phase 1) has been extended three years from its original ending year 2012/13 to 2015/16.

- To record and accumulate challenges reported by LGAs in the structured form.

### **3.2. To analyze challenges related to ARDS**

- To analyze the recorded/ accumulated challenges.
- To prepare a report on the causes of the challenges.
- To report the challenges and causes to the higher authorities.

### **3.3. To address ARDS challenges**

- To formulate a plan for addressing challenges of the ARDS operation.
- To implement the plan, including the technical backstopping below for the ARDS operation.
- To perform ARDS Technical Backstopping for the following purposes
  - To provide training to new ARDS operators (new DS, DME or other officers).
  - To train LGAs' ARDS operators on improved feature of ARDS (DS, DME or other officers).
  - To train LGA's ARDS operators on providing training for WAEO and VAEO for quality data collection
  - To train LGA's ARDS supervisors and administrators(DAICO, DLFO and DED)
  - To refresh the RS's ARDS users (RAA, RLA or other officers).
  - To re-invigorate ARDS operation across the country.

### **3.4. To strengthen regular monitoring of the ARDS operation**

- To review operational procedures to improve routine work in ARDS process.
- To carry out regular submission status observation (To prepare a summary of submission rates, circulate it to all TWG members assigned to specific regions, make them send it to the designated region (and LGAs), and press LGAs to operate ARDS properly).
- To carry out routine monitoring of the ARDS workings (network connection, accessibility to the Web Portal, etc.).
- To take necessary actions when the ARDS workings and operation present any difficulties or anomalies.
- To improve the monitoring and supervision of the center and region on the LGAs' ARDS operation.
- To maintain monitoring sheet to collect information and find problems immediately after they occur.

### **3.5. To strengthen regular reporting of the ARDS operation to higher authorities at the national, regional and local levels**

- To promote regular reporting of following information to higher authorities at the national, regional and LGA levels.

- Status of ARDS data submission.
- Status of agricultural sector by summarizing ARDS data.
- Status of particular agricultural sub-sectors (e.g. maize production, agricultural machine and equipment, famers' training, etc.) by summarizing ARDS data.
- To prepare a report format, if necessary, and distribute to LGAs for use.

### **3.6. To review ARDS related documents and management information**

- To review and improve the following documents as necessary.
  - ASDP M&E Framework and Guideline
  - ARDS Operation Guide
  - VAEO/WAEO Format
  - VAEO/WAEO Training Guide
  - Integrated Data Collection Format
  - LGA Training Guide
  - ARDS Web Portal Operation Manual
- To provide necessary additional guidelines if necessary
  - ARDS Web Portal User Guidance
  - Any guidances related to improve submission/ quality/ utilisation of ARDS
- To review and update following information
  - ARDS user registration information (User names, password, etc.)
  - Names of Ward, LGA and Region
  - Contents of the lookup tables
  - Contents of ARDS news and articles
  - ARDS GIS information
- To develop following documents
  - ASDP2 Monitoring and Evaluation Guideline
  - ASDP2 Monitoring and Evaluation Framework (if necessary)

### **3.7. To improve ARDS application further**

- To improve the application of ARDS, ARDS Web Portal, to make it more user-friendly and upgrade functions.
- To strengthen the M&E TWG, in particular the Technical Team in the ARDS application development management.
- To provide an in-house training on ARDS for new members of the ASDP M&E TWG if necessary.
- To promote and campaign the usefulness and benefits of ARDS among stakeholders.

### **3.8. To promote ARDS data utilization**

- To conduct trainings for the M&E TWG members on how to analyze and use data collected by ARDS.

- To provide training for users and potential users in technical departments of ASLMs
- To inquire and study the data type and data demand of agricultural sub-sectors so that ARDS data can be further utilized for those sub-sectors.
- To try to the extent possible to make use of ARDS data in reviews such as Joint Sector Review (JSR) and Public Expenditure Review (PER).
- To sensitize data use for planning and implementation at local and national levels

### **3.9. To coordinate with other agricultural data system for sector-wide M&E**

- To compare data types and characteristics between ARDS and other data system such as Agricultural Annual Sample Survey, MAFAP<sup>3</sup>, National Sample Census of Agriculture, and Small Area Estimates so that better consistency and efficiency among data systems can be achieved.
- To collaborate with other ministries/ agencies and DPs to improve methodology for capturing agricultural basic information with specific consideration to the implementation of the Agricultural Statistics Strategic Plan (ASSP).
- To collaborate with ASLMs' departments which will be using ARDS in order to enhance data utilization in general and improve sector-wide M&E. This includes harmonisation with current routine data collection systems such as GDP data collection by NBS/MALF, data collection for Basic Data booklet by MALF(both Crop and Livestock).
- 
- To consult with NBS and other stakeholders on how to study the harmonization of ARDS with other agricultural statistics systems, especially with AASS.

### **3.10. To disseminate information related to ARDS to all stakeholders**

- To prepare a brochure/ newsletter which explains operation and improvement of ARDS and distribute it to stakeholders.
- To make presentations of ARDS in agriculture sector stakeholder meetings.
- To make use of the ARDS Web Portal by uploading latest data and news.

### **3.11. To prepare the succession plan of activities under project**

- To prepare comprehensive plan to succeed project outcome and activities which will be end by October 2019.
- To comprehensive budget estimates for FY2019/20.

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<sup>3</sup> MAFAP = FAO's program for Monitoring and Analyzing Food and Agriculture Policies

#### **4. Members of the M&E Thematic Working Group**

M&E Thematic Working Group is composed of M&E specialists, statisticians and ICT specialists of ASLMs, NBS and representatives of DPs.

- **Chairperson**

Ms. Catherine Joseph, Director of Policy and Planning, MALF (Livestock)

- **Secretariat**

Ms. Janet Simkanga, Director of Policy and Planning, MALF (Agriculture)

Mr. Jumanne K. Musuya, Head of M&E Unit, DPP, MALF (Agriculture)

Dr. Jofrey Oleke DPP, MALF (Agriculture)

Ms. Irene Lucas, DPP, MALF (Agriculture)

Ms. Happy Pascal, DPP, MALF (Agriculture)

- **MALF**

Mr. Oswald Ruboha, Assistant Director M&E and Statistics, DPP, MALF (Agriculture)

Mr. Malemi Nyanda, Head of Statistics Unit, DPP, MALF (Agriculture)

Mr. Robert Chacha, DPP, MALF (Agriculture)

Mr. Phillip Shayo, IT specialist, IT Section, MALF (Agriculture)

Mr. Kejo, IT specialist, IT Section, MALF (Agriculture)

Mr. Obeth M. Mwakalindile, Statistics Unit, DPP, MALF (Agriculture)

Mr. Benjamin Kalekezi, Statistics Unit, DPP, MALF (Agriculture)

Dr. Sophia Mlote, DPP, MALF (Livestock)

Mr. Abel Antony, DPP, MALF (Livestock)

Mr. Raphael Sendalo, Head, IT Section, DPP, MALF (Livestock)

Ms. Pricilla Joseph, IT Section, DPP, MALF (Livestock)

Ms. Leocadia K Mkira, DPP, MALF (Livestock)

Mr. Steven Michael, DPP, MALF (Livestock)

Mr. Da Silva Mlau, DPP, MALF (Livestock)

- **MIT**

Ms. Elizabeth Msengi, Assistant Director, DPP, MITI

Mr. Genya C. Genya, DCM, MITI

Mr. John Chassama, DCM, MITI

- **PO-RALG**

Mr. Samuel Mdachi, DSC

Ms. Yasinta Tabu, DICT

- **NBS**

Mr. Titus Mwisomba, Agriculture Statistics

Mr. Festo Mwemutsi, Agricultural Statistics

- **JICA-RADAG (M&E)**

Mr. Retsu Hagiwara, Team Leader

Dr. Fuminori Arai, Deputy Team Leader

Mr. Hakan Yuksel, Administrative Data Management

Mr. Toshiaki Suzuki, Administrative Data Management

Mr. Kenji Kamikura, Agricultural Statistics



### 5. Time frame of the Action Plan

The time frame of the Action Plan is shown in Figure 1 below.

Figure 1 Time frame of the Action Plan for the ARDS Improvement in FY 2016/17

Work Schedule for the Improvement of ARDS

No	Task	2017						2018					
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
3.1	To implement effective monitoring of ARDS	█	█	█	█	█	█	█	█	█	█	█	█
3.2	To analyze challenges related to ARDS	█	█	█	█	█	█	█	█	█	█	█	█
3.3	To address ARDS challenges * Technical backstopping	█	█	█	█	█	█	█	█	█	█	█	█
3.4	To implement regular monitoring of the ARDS operation	█	█	█	█	█	█	█	█	█	█	█	█
3.5	To strengthen regular reporting of the ARDS operation to higher authorities at the national, regional and local levels	█	█	█	█	█	█	█	█	█	█	█	█
3.6	To review ARDS related documents and management information	█	█	█	█	█	█	█	█	█	█	█	█
3.7	To improve ARDS further * System upgrading (outside expertise)	█	█	█	█	█	█	█	█	█	█	█	█
3.8	To promote ARDS data utilization	█	█	█	█	█	█	█	█	█	█	█	█
3.9	To coordinate with other agricultural data system for sector-wide M&E	█	█	█	█	█	█	█	█	█	█	█	█
3.10	To disseminate information related to ARDS to all stakeholders	█	█	█	█	█	█	█	█	█	█	█	█

Work Schedule for the Improvement of ARDS

No	Task	2017						2018					
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
3.1	To implement effective monitoring of ARDS	█	█	█	█	█	█	█	█	█	█	█	█
3.2	To analyze challenges related to ARDS	█	█	█	█	█	█	█	█	█	█	█	█
3.3	To address ARDS challenges * Technical backstopping	█	█	█	█	█	█	█	█	█	█	█	█
3.4	To implement regular monitoring of the ARDS operation	█	█	█	█	█	█	█	█	█	█	█	█
3.5	To strengthen regular reporting of the ARDS operation to higher authorities at the national, regional and local levels	█	█	█	█	█	█	█	█	█	█	█	█
3.6	To review ARDS related documents and management information	█	█	█	█	█	█	█	█	█	█	█	█
3.7	To improve ARDS further * System upgrading (outside expertise)	█	█	█	█	█	█	█	█	█	█	█	█
3.8	To promote ARDS data utilization	█	█	█	█	█	█	█	█	█	█	█	█
3.9	To coordinate with other agricultural data system for sector-wide M&E	█	█	█	█	█	█	█	█	█	█	█	█
3.10	To disseminate information related to ARDS to all stakeholders	█	█	█	█	█	█	█	█	█	█	█	█
3.11	To prepare the succession plan of activities under project												

添付資料 11: M&E 作業部会向け研修教材

# **Maintenance Manual**

## **Simple Version**

**Ver 1.2**

**October, 2019**

**JICA Project Team**

# **Background**

## What- Purpose

This brief shows the most important procedures in operation and maintenance of ARDS Web Portal. Please refer to Maintenance Manual (UDSM 2019) for details of other functions in operation and maintenance.

## For Who- Audience

This reference is mainly for technicians (administrators-Admin) who take care of day-to-day management of ARDS Web Portal. Admin should have knowledge of how to operate ARDS Web Portal earlier to handling maintenance tasks. Also, this manual is useful for Technical Team and M&E TWG members as reference document.

## How to use

Admin need to confirm carefully the procedures of each maintenance task, following the illustration and instruction provided in each slide.

# **Contents**

- 1. User Addition**
- 2. Password Reset**
- 3. Manual Report Creation**
- 4. CMS**
- 5. Access Log Check**
- 6. Change Person in Charge**
- 7. Fiscal Year End Lock**
- 8. All Report Creation**
- 9. Administrative Unit Creation**
- 10. Administrative Unit Deletion**
- 11. Modification of Dropdown List**
- 12. Max and Min Value Setting**

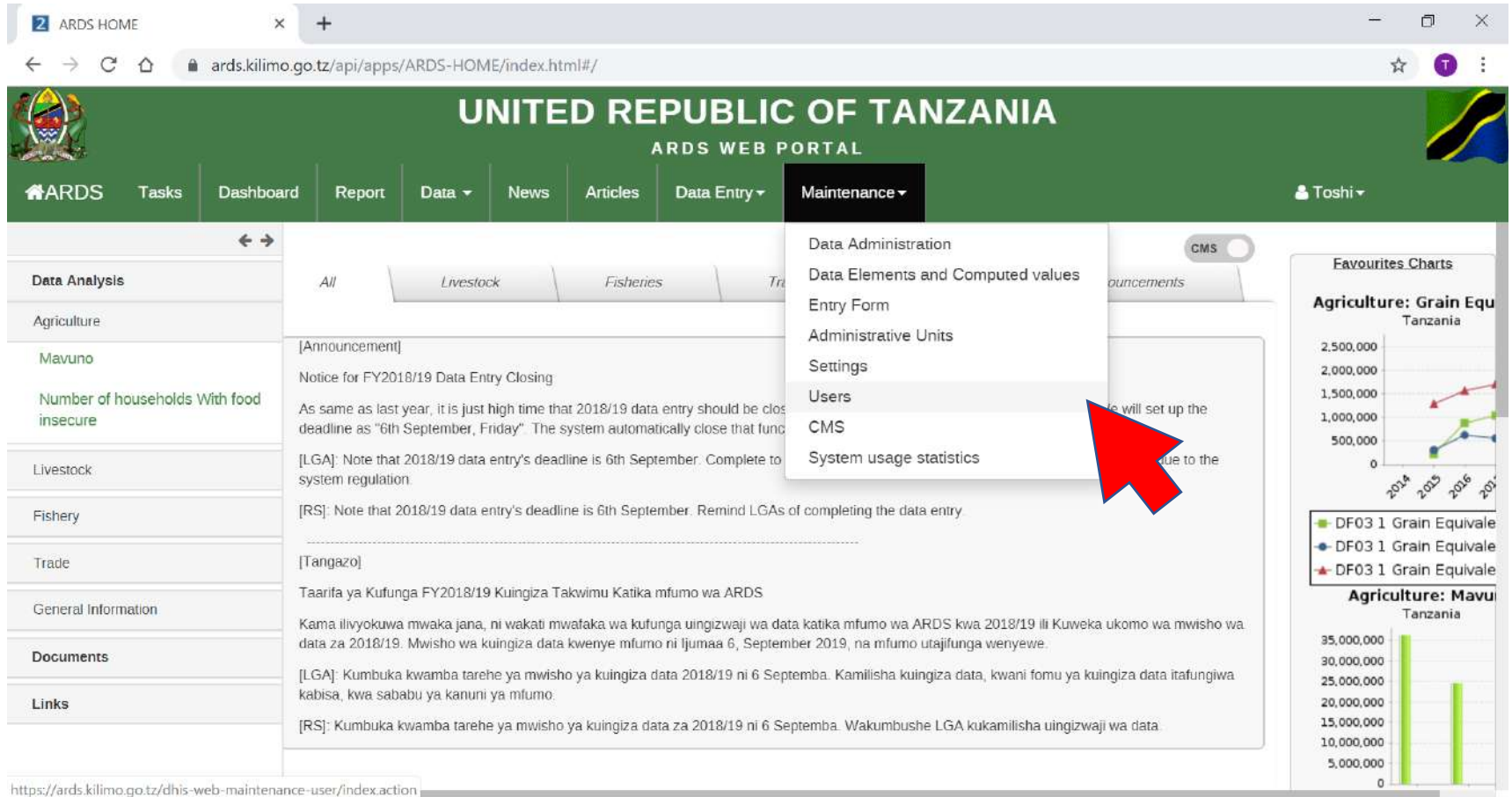
# **1. User Addition**

If required, Admin can create new users and register him/her. The procedures are in the following slides.

- (1) Create 'new'
- (2) Register details of a new user
- (3) Assign roles
- (4) Assign organisation units

# 1. User Addition(1) Create user

## 1.1.1 Go "Maintenance" and then select Users



The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Maintenance' menu is open, displaying options: 'Data Administration', 'Data Elements and Computed values', 'Entry Form', 'Administrative Units', 'Settings', 'Users', 'CMS', and 'System usage statistics'. A red arrow points to the 'Users' option. The main content area displays a list of announcements, including 'Notice for FY2018/19 Data Entry Closing' and 'Note that 2018/19 data entry's deadline is 6th September'. The right sidebar contains two charts: 'Agriculture: Grain Equ Tanzania' and 'Agriculture: Mavu Tanzania'.

**United Republic of Tanzania ARDS Web Portal**

**Maintenance Menu:**

- Data Administration
- Data Elements and Computed values
- Entry Form
- Administrative Units
- Settings
- Users**
- CMS
- System usage statistics

**Announcements:**

- [Announcement] Notice for FY2018/19 Data Entry Closing
- [LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to system regulation.
- [RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.
- [Tangazo] Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS
- [LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.
- [RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

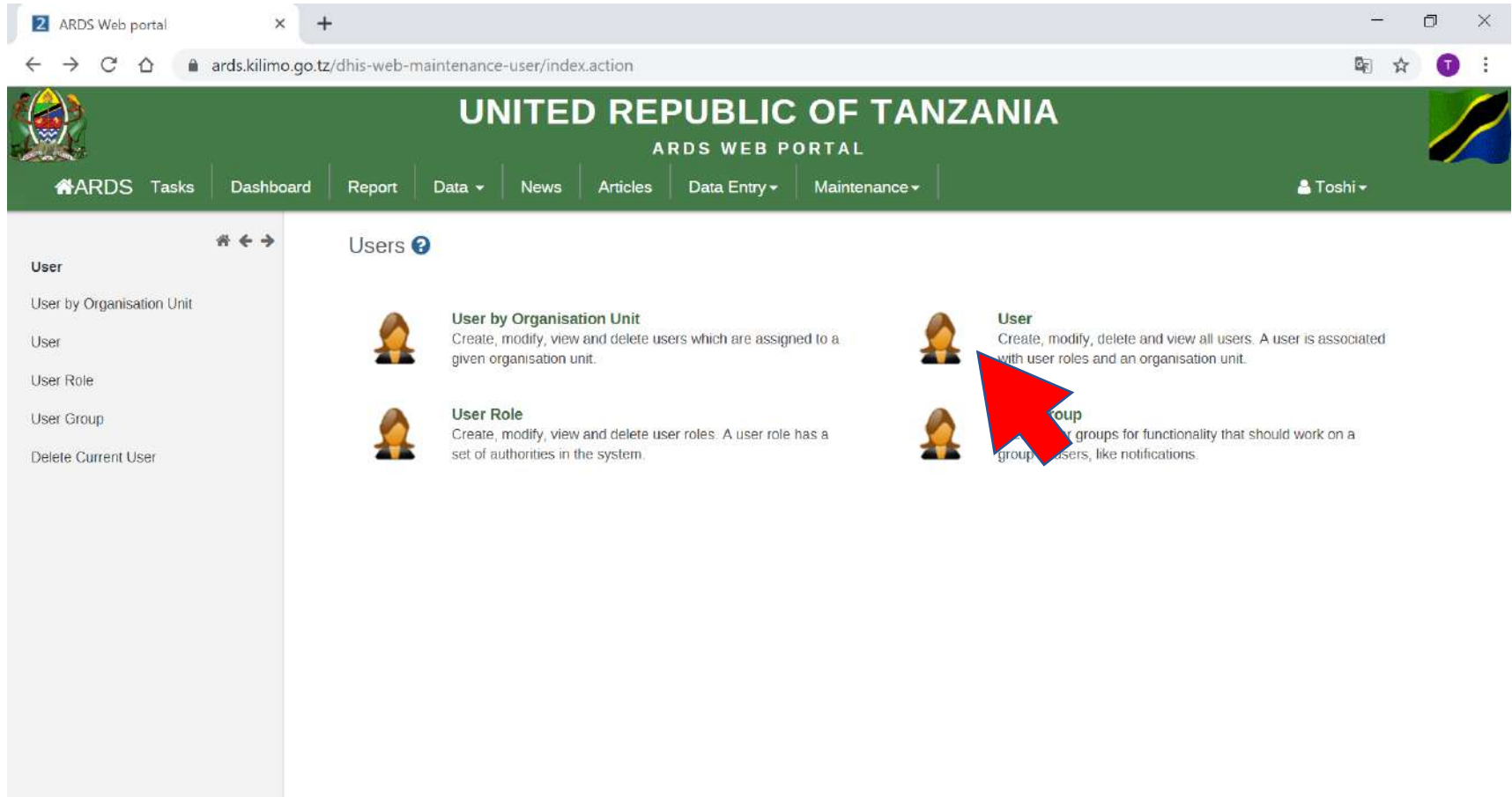
**Charts:**

- Agriculture: Grain Equ Tanzania** (Line chart showing trends from 2014 to 2017)
- Agriculture: Mavu Tanzania** (Bar chart showing values from 2014 to 2017)

URL: <https://ards.kilimo.go.tz/dhis-web-maintenance-user/index.action>

# 1. User Addition (1) Create user

## 1.1.2. Click User



The screenshot shows the ARDS Web portal interface. The browser address bar displays the URL `ards.kilimo.go.tz/dhis-web-maintenance-user/index.action`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right corner.

The main content area is titled "Users" and contains four options, each with a person icon and a brief description:

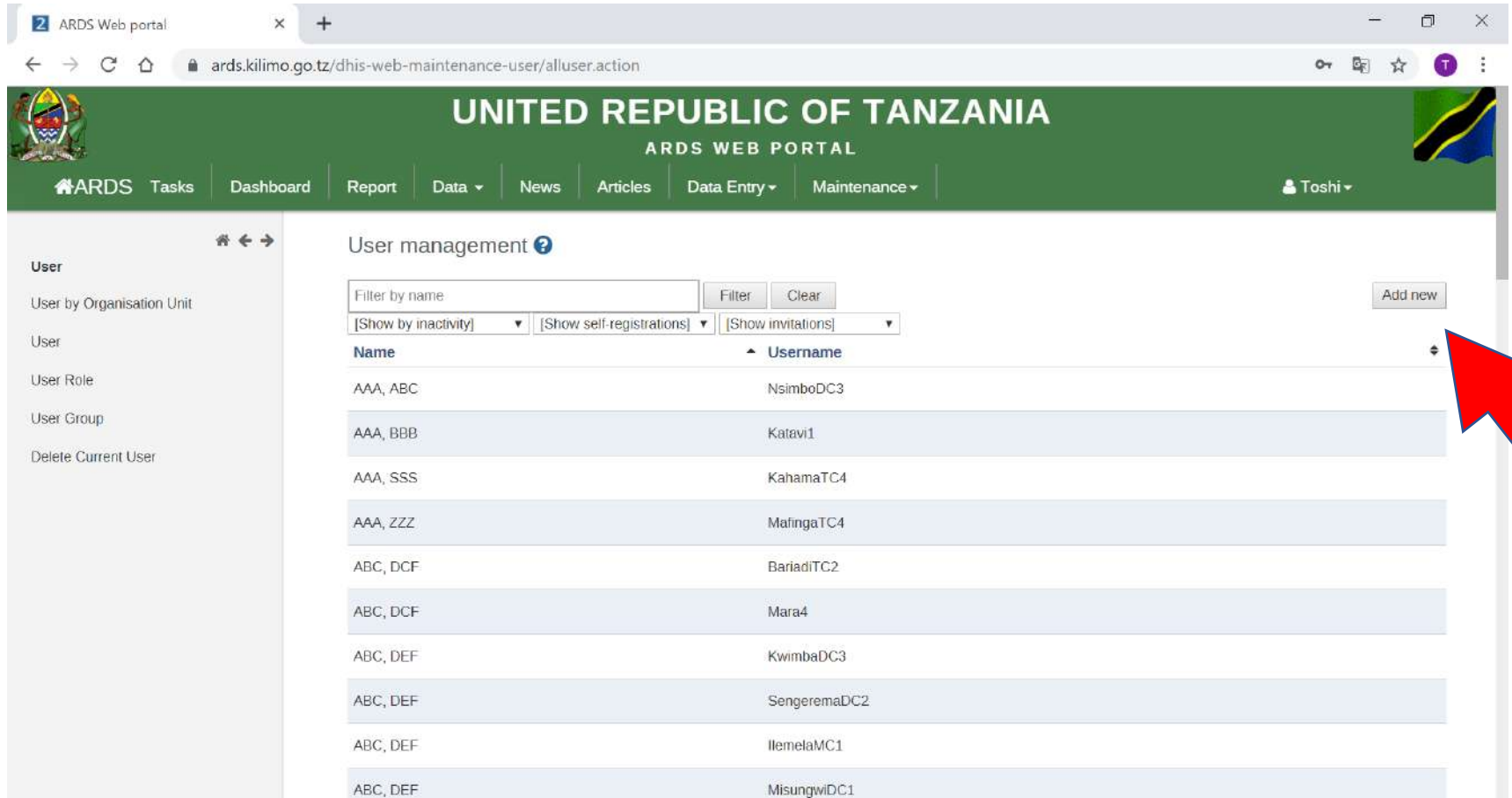
- User by Organisation Unit**: Create, modify, view and delete users which are assigned to a given organisation unit.
- User**: Create, modify, delete and view all users. A user is associated with user roles and an organisation unit. (A red arrow points to this option.)
- User Role**: Create, modify, view and delete user roles. A user role has a set of authorities in the system.
- User Group**: Create, modify, view and delete user groups for functionality that should work on a group of users, like notifications.

A left-hand sidebar menu is visible, listing the following options: "User", "User by Organisation Unit", "User", "User Role", "User Group", and "Delete Current User".



# 1. User Addition (1) Create User

## 1.1.3. Click Add new



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu includes 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user profile 'Toshi' is visible in the top right.

The main content area is titled 'User management' and features a table of users. A red arrow points to the 'Add new' button in the top right corner of the user management section.

Name	Username
AAA, ABC	NsimboDC3
AAA, BBB	Katavi1
AAA, SSS	KahamaTC4
AAA, ZZZ	MafingaTC4
ABC, DCF	BariadiTC2
ABC, DCF	Mara4
ABC, DEF	KwimbaDC3
ABC, DEF	SengeremaDC2
ABC, DEF	IlemelaMC1
ABC, DEF	MisungwiDC1

# 1. User Addition(2) Registration

1.2 Registering new user: Input Username, Password, Retype Password, Surname and First name, and then scroll down

ARDS Web portal

ards.kilimo.go.tz/dhis-web-maintenance-user/showAddUserForm.action

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Details

Username \* AAA

External authentication only (OpenID or LDAP)

Password \*  Password must contain at least one special character

Retype password \*

Surname \* AAA

First name \* ARDS

E-mail

OpenID

LDAP identifier

Mobile phone number

Interface language English

Database language [Use database locale / no translation]

Available roles Selected roles

Note: Password must contain at least one special character (e.g. @, \*, + etc.), one upper case, and one lower case, and in total more than 8 letters. Admin can give default password and ask the new user to change password immediately.

# 1. User Addition (3) Assign Role

1.3.1 Assigning Roles: New user needs to have assigned role. In order to set roles from existing roles' menu, please select role (e.g. national (TWG) or Region, District) from left side box by clicking ">". Scroll down after selection.

ARDS Web portal

ards.kilimo.go.tz/dhis-web-maintenance-user/showAddUserForm.action

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

LDAP identifier

Mobile phone number

Interface language English

Database language [Use database locale / no translation]

Available roles

Selected roles \*

Search

District  
External User  
National(Min. Agriculture Staff)  
National(Min. Livestock)  
National(Others)  
National(PMO-RALG)  
Nationals(Min. Industry and Trade)  
National (Special Case)  
National(TWG)  
Others  
Others(Trainers)  
Region  
Superuser

Selecting an organisation unit provides access to all units in the sub-hierarchy

Data capture and maintenance organisation units

Data output and analytic organisation units

Tanzania

Tanzania

# 1. User Addition (3) Assign Role

## 1.3.2 User roles

User role is assigned to each user following the rules below.

User Role Name	Assigned User	Authorization
Superuser	Administrator	Administrative role written in "Maintenance Manual" in addition to authorization for National (TWG)
National (TWG)	TWG users	Access to Data Entry / Report / Pivot / Map
National (other)	ASLMs users	Access to Report / Pivot / Map
Region	Region User	Report Approval for its region in addition to role for National (other)
District	District User	Access to Data Entry/Report/ Pivot/ Map

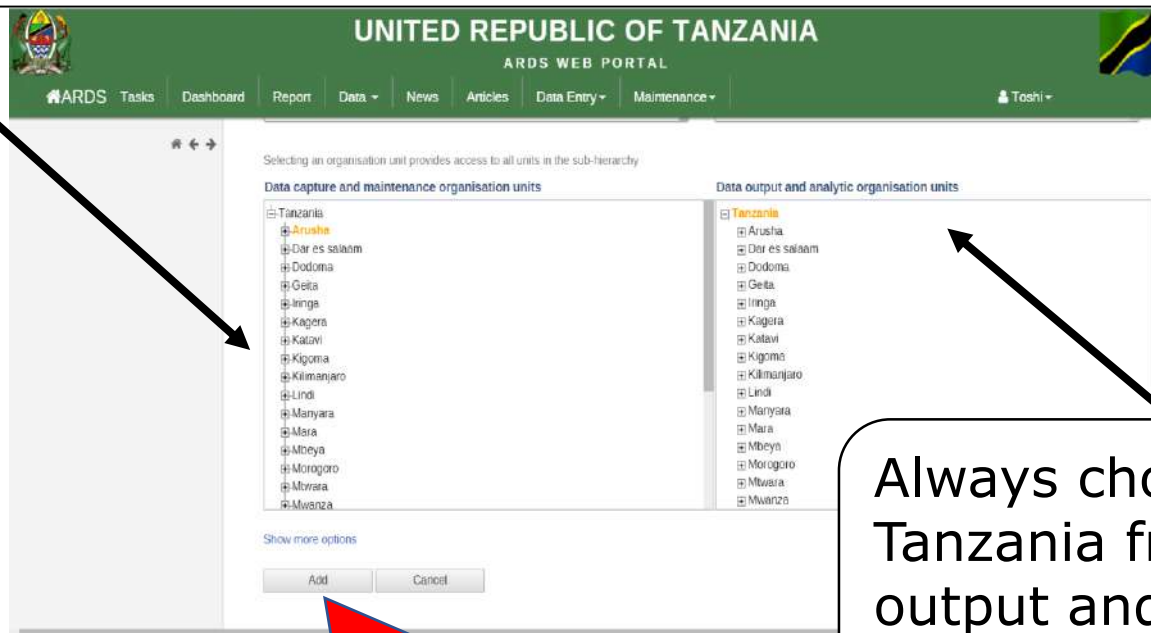
Each Ministry has 25 users already. So it is possible to allocate these users to new user until it exhaust.

Other user can be registered under National (Other)

# 1. User Addition(4)Assign Org

1.4.1 Assigning Organisation units: new users need to have organization rule according to the roles.

Always choose Tanzania for users in national level, and choose respective Region or District for corresponding district and region level users from left hand side, "Data capture and maintenance organisation units".



Always choose Tanzania from "Data output and analytic organisation units".

Then finally click Add

# 1. User Addition(4)Assign Org

## 1.4.2 Role of Organisation units to each function

“Data capture and maintenance organisation units” affects below

- For district users, which district’s data they can input in the data entry.
- For district users, which district’s reports they can create/uncreate or comments.
- For region users, which region’s reports they can approve/disapprove or comment.
- For region and district users, which region’s or district’s tasks are shown on Task List.

“Data output and analytic organisation units” affected below

- The top administrative unit level shown on Pivot Table and Standard Report for each user will be configured.

# 1. User Addition(5)User Edit

## 1.5.1 Filter user name

Input user name you want to edit

The screenshot shows the ARDS Web portal interface for user management. The page title is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The main content area is "User management". A search box contains the text "suzuki" and is highlighted with a red arrow pointing to a "Filter" button. A table lists users with columns for Name and ID. A red arrow points to the "Filter" button, and a callout box labeled "Filter" is positioned next to it.

Name	ID
AAA, ABC	3
AAA, ABC	chingaloDc
AAA, BBB	Katavi1
AAA, SSS	KahamaTC4
AAA, ZZZ	MafingaTC4
ABC, DCF	BariadiTC2
ABC, DCF	Mara4
ABC, DEF	KwimbaDC3
ABC, DEF	SengeremaDC2
ABC, DEF	IlemelaMC1

# 1. User Addition(5)User Edit

## 1.5.2 Edit user

Click the corresponding user name and then choose "Edit".  
If you want to remove the user, select "Remove".

The screenshot displays the ARDS Web Portal interface for user management. The page header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The main navigation bar contains links for ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The user management section is active, showing a search bar with 'suzuki' and a dropdown menu with options: Profile, Edit, Assign search org units, Remove, Replicate, Show details, and Disable. A red arrow points to the 'Edit' option. The search results table lists users with columns for Name and Username. The user 'Suzuki, Toshi' is highlighted in blue. The page footer shows pagination information: 'No. of pages: 1', 'No. of rows per page: 50', and 'Jump to page: 1'.

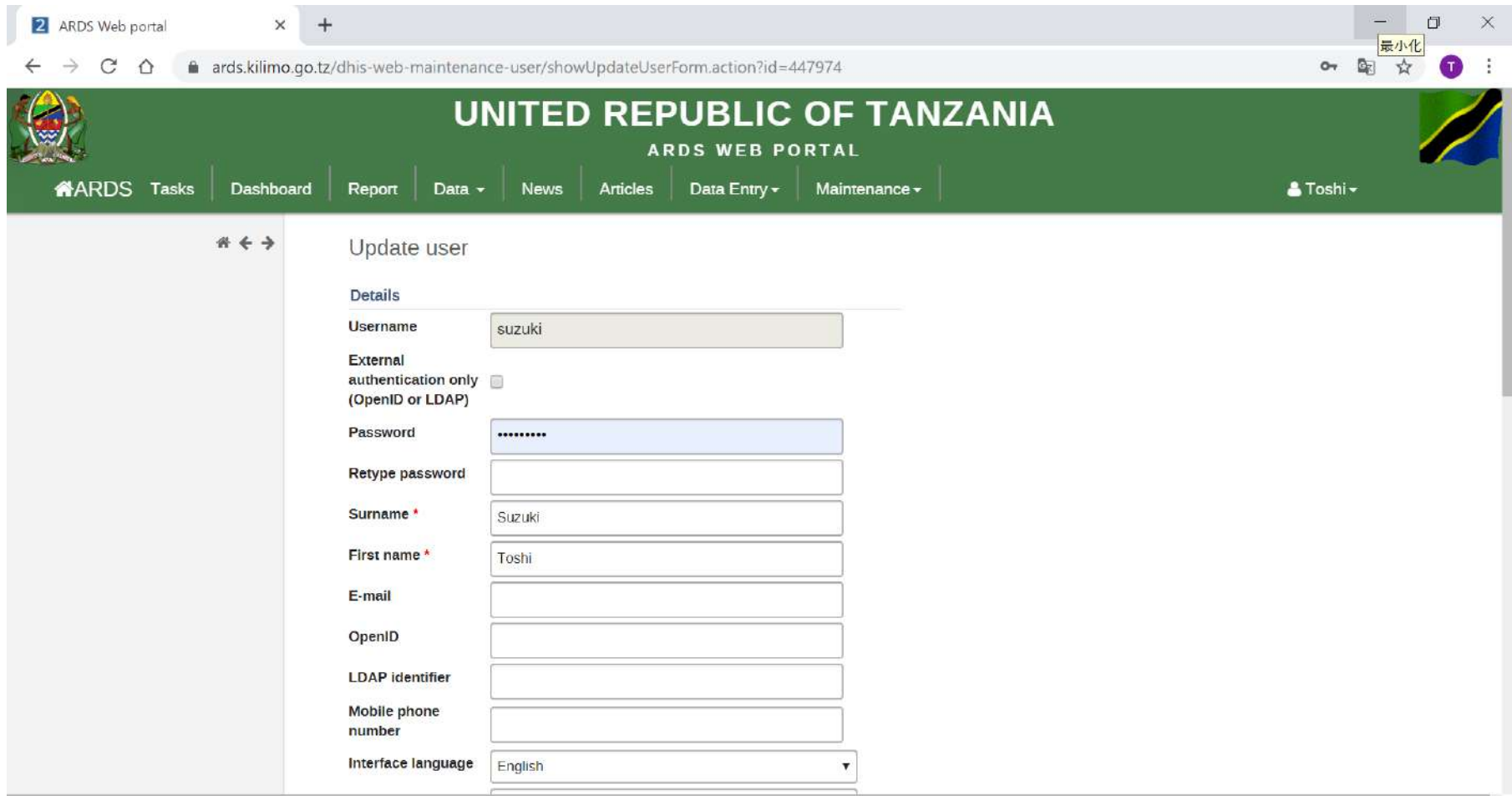
Name	Username
suzuki, AMD	suzukiAMD
suzuki, ARR	suzukiARR
Suzuki, Changaa	bird
suzuki, PO	suzukiPO
suzuki, toshi	suzukiTWG
<b>Suzuki, Toshi</b>	<b>suzuki</b>
Suzuki, Toshi	vincentmnde2
Suzuki, Toshiaki	suzuki_dis



# 1. User Addition(5)User Edit

## 1.5.3 Registration and Assigning Role

This screen is the same as (2) Registration and (3) Assign Role. Please refer them for the procedure following this.



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/dhis-web-maintenance-user/showUpdateUserForm.action?id=447974`. The page header is green and features the United Republic of Tanzania coat of arms, the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL", and a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile "Toshi" is visible in the top right. The main content area is titled "Update user" and contains a "Details" section with the following fields:

Field	Value
Username	suzuki
External authentication only (OpenID or LDAP)	<input type="checkbox"/>
Password	.....
Retype password	
Surname *	Suzuki
First name *	Toshi
E-mail	
OpenID	
LDAP identifier	
Mobile phone number	
Interface language	English

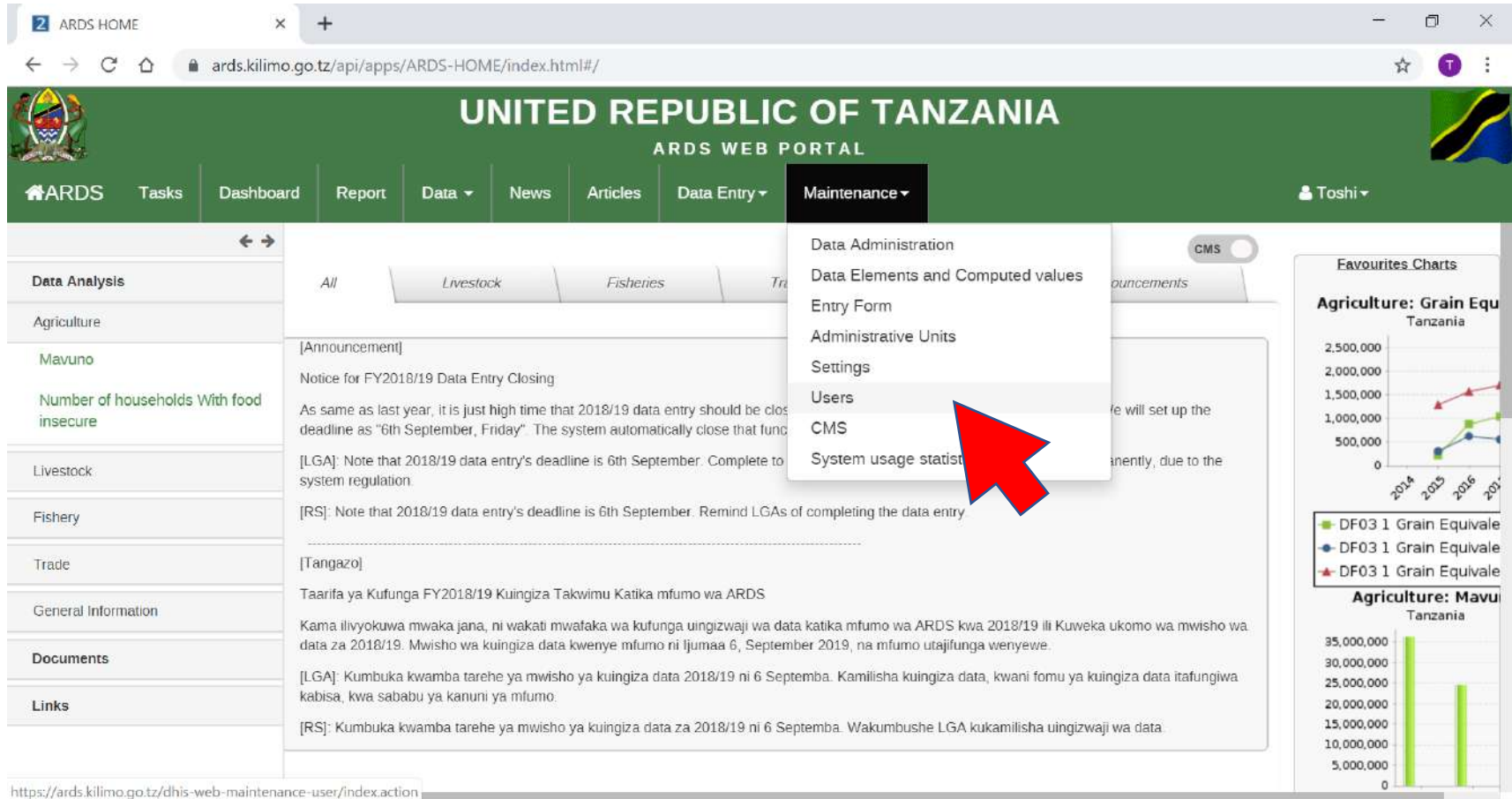
## **2. Password Reset**

If required, Admin can reset password for him/her. The procedures are in the following slides.

- (1) Create 'new'
- (2) Register details of a new user
- (3) Assign roles
- (4) Assign organisation units

# 2. Password Reset(1)Go Menu

## 2.1.1 Go Maintenance - Users



The screenshot displays the ARDS Web Portal interface. The top navigation bar includes the following menu items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The Maintenance dropdown menu is open, showing the following options: Data Administration, Data Elements and Computed values, Entry Form, Administrative Units, Settings, Users, CMS, and System usage statistics. A red arrow points to the 'Users' option. The main content area shows a list of announcements and reports, including a notice for FY2018/19 Data Entry Closing and a reminder for the 2018/19 data entry deadline. On the right side, there are two charts: 'Agriculture: Grain Equivalence Tanzania' and 'Agriculture: Mavuu Tanzania'.

**United Republic of Tanzania**  
ARDS WEB PORTAL

Navigation: ARDS | Tasks | Dashboard | Report | Data | News | Articles | Data Entry | **Maintenance** | Toshi

**Maintenance Menu:**

- Data Administration
- Data Elements and Computed values
- Entry Form
- Administrative Units
- Settings
- Users**
- CMS
- System usage statistics

**Announcements:**

- [Announcement] Notice for FY2018/19 Data Entry Closing  
As same as last year, it is just high time that 2018/19 data entry should be closed as deadline as "6th September, Friday". The system automatically close that function on 6th September, Friday.
- [LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to avoid system regulation.
- [RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.
- [Tangazo] Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS  
Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.
- [LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.
- [RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

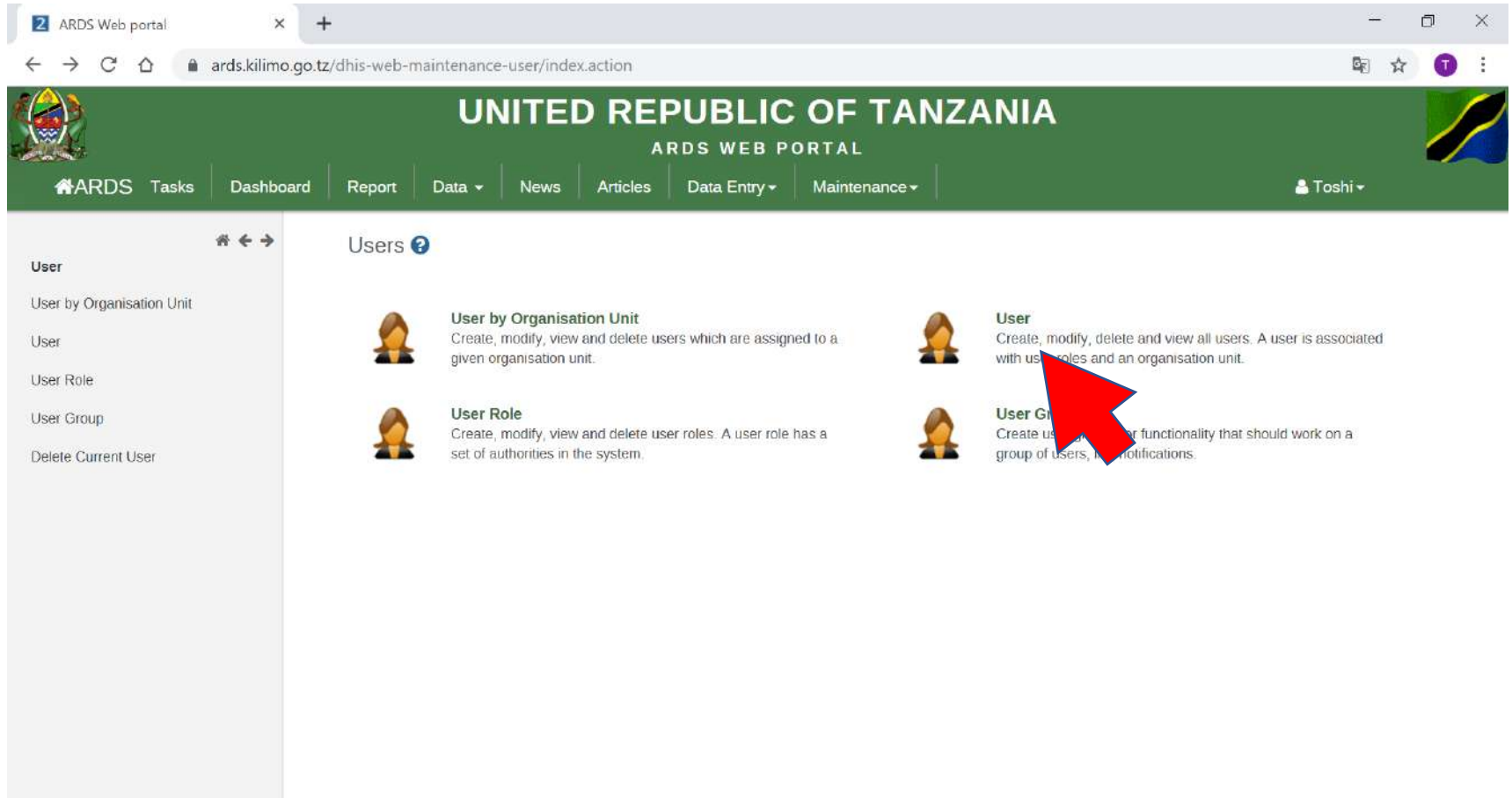
**Charts:**

- Agriculture: Grain Equivalence Tanzania**  
Line chart showing Grain Equivalence (TSE) from 2014 to 2017. Legend: DF03 1 Grain Equivalence (Green square), DF03 1 Grain Equivalence (Blue circle), DF03 1 Grain Equivalence (Red triangle).
- Agriculture: Mavuu Tanzania**  
Bar chart showing Mavuu (TSE) for 2014 and 2015. Legend: DF03 1 Grain Equivalence (Green square).

URL: <https://ards.kilimo.go.tz/dhis-web-maintenance-user/index.action>

# 2. Password Reset(1)Go Menu

## 2.1.2 Click User



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/dhis-web-maintenance-user/index.action`. The page header is green and features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The main content area is titled "Users" and contains four menu items, each with a person icon:

- User by Organisation Unit**: Create, modify, view and delete users which are assigned to a given organisation unit.
- User Role**: Create, modify, view and delete user roles. A user role has a set of authorities in the system.
- User**: Create, modify, delete and view all users. A user is associated with user roles and an organisation unit. **(A red arrow points to this item.)**
- User Group**: Create user groups for functionality that should work on a group of users, for notifications.

A left sidebar menu is visible, listing the following options: "User", "User by Organisation Unit", "User", "User Role", "User Group", and "Delete Current User".

# 2. Password Reset(2)Search User

## 2.2.1 Type username and then press "Filter".

ARDS Web portal

ards.kilimo.go.tz/dhis-web-maintenance-user/alluser.action?key=suzuki&curKey=

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

User management

suzuki Filter Clear Add new

[Show by inactivity] [Show self-registrations] [Show invitations]

Name	Username
suzuki, AMD	suzukiAMD
suzuki, ARR	suzukiARR
Suzuki, Changaa	bird
suzuki, PO	suzukiPO
suzuki, toshi	suzukiTWG
Suzuki, Toshi	suzuki
Suzuki, Toshi	vincentminde2
Suzuki, Toshiaki	suzuki_dis

No. of pages: 1 No. of rows per page: 50 Jump to page: 1 Go

# 2. Password Reset(2)Search User

2.2.2 Click the corresponding user and then Edit.

ARDS Web portal

ards.kilimo.go.tz/dhis-web-maintenance-user/alluser.action?key=suzuki&curKey=

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

User management

suzuki [Filter] [Show by inactivity] [Show self-registrations] Add new

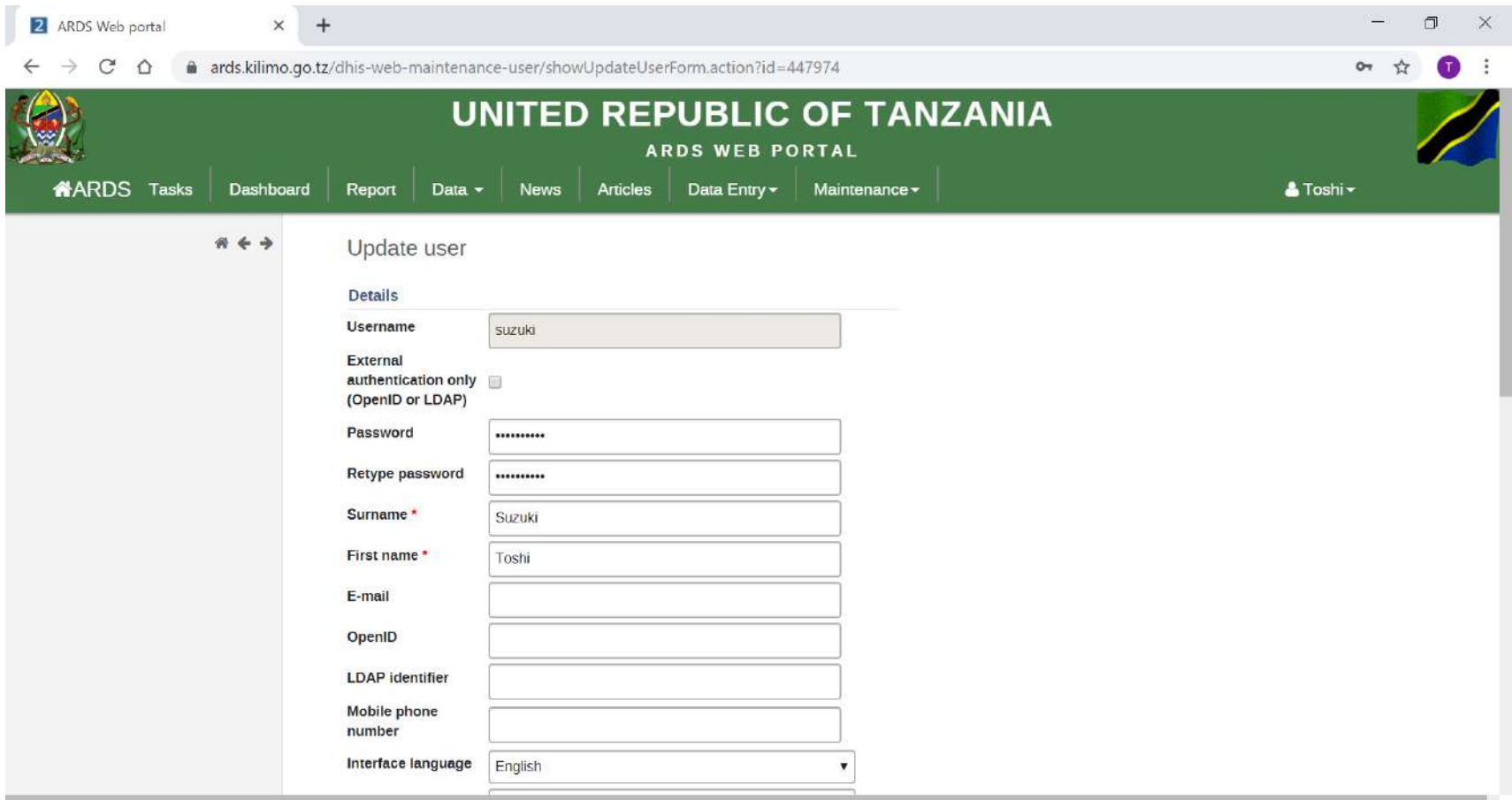
Name	
suzuki, AMD	
suzuki, ARR	
Suzuki, Changaa	
suzuki, PO	
suzuki, toshi	
<b>Suzuki, Toshi</b>	<b>suzuki</b>
Suzuki, Toshi	vincentminde2
Suzuki, Toshiaki	suzuki_dis

No. of pages: 1 No. of rows per page: 50 Jump to page: 1 Go

# 2. Password Reset(3)Reset

2.3.1 Please input and Retype password.

Password must have at least 8 characters, one upper case, and one special characters, The press Save after scrolling down.



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/dhis-web-maintenance-user/showUpdateUserForm.action?id=447974`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user's name "Toshi" is displayed in the top right corner. The main content area is titled "Update user" and contains a "Details" section with the following fields:

- Username:
- External authentication only (OpenID or LDAP):
- Password:
- Retype password:
- Surname \*:
- First name \*:
- E-mail:
- OpenID:
- LDAP identifier:
- Mobile phone number:
- Interface language:

### **3. Manual Report Creation**

**Standard Report will be created in the next day of the report creation scheduled date by the night batch. However, the administrators can create standards report manually immediately after the creation is scheduled.**



# 3. Manual Report Creation

## 3.2 Click Report

The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', a search icon, and a browser address bar with the URL 'ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html#/'. The main header features the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. Below this is a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile 'Toshi' is visible in the top right. A sidebar on the left contains 'Documents' and 'Links'. The main content area shows a 'Report' menu with sub-items: All, Livestock, Fisheries, Trade, Agriculture, and Announcements. A red arrow points to the 'Report' menu item. Below the menu, there is a news announcement titled '[Announcement] Notice for FY2018/19 Data Entry Closing'. The announcement text includes: 'As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data). [LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation. [RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry. [Tangazo] Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumaa 6, September 2019, na mfumo utajifunga wenyewe. [LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo. [RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.' On the right side, there are two charts: 'Favourites Charts Agriculture: Grain Equ Tanzania' and 'Agriculture: Mavu Tanzania'. The first chart is a line graph showing data for 2014, 2015, 2016, and 2017. The second chart is a bar graph showing data for 2014 and 2016. The URL at the bottom of the page is 'https://ards.kilimo.go.tz/api/apps/standardreport/index.html#/'.

ARDS HOME

ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html#/

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance

Toshi

Documents

Links

All Livestock Fisheries Trade Agriculture Announcements

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data)

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

Favourites Charts

Agriculture: Grain Equ Tanzania

2,500,000  
2,000,000  
1,500,000  
1,000,000  
500,000  
0

2014 2015 2016 2017

DF03 1 Grain Equivale  
DF03 1 Grain Equivale  
DF03 1 Grain Equivale

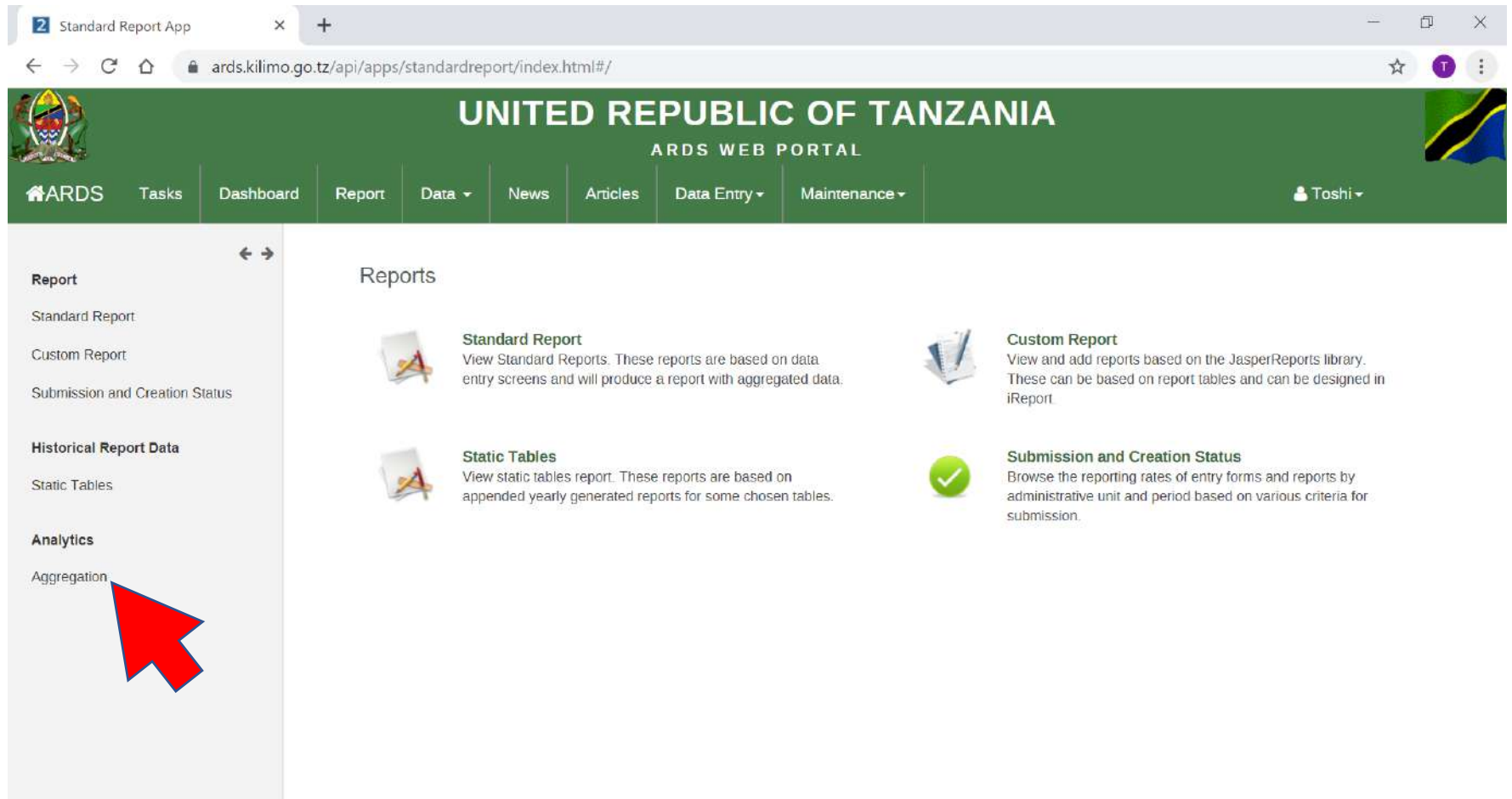
Agriculture: Mavu Tanzania

35,000,000  
30,000,000  
25,000,000  
20,000,000  
15,000,000  
10,000,000  
5,000,000  
0

https://ards.kilimo.go.tz/api/apps/standardreport/index.html#/

# 3. Manual Report Creation

## 3.2 Click Aggregation



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right corner.

The main content area is titled "Reports" and contains three report types:

- Standard Report**: View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.
- Static Tables**: View static tables report. These reports are based on appended yearly generated reports for some chosen tables.
- Submission and Creation Status**: Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

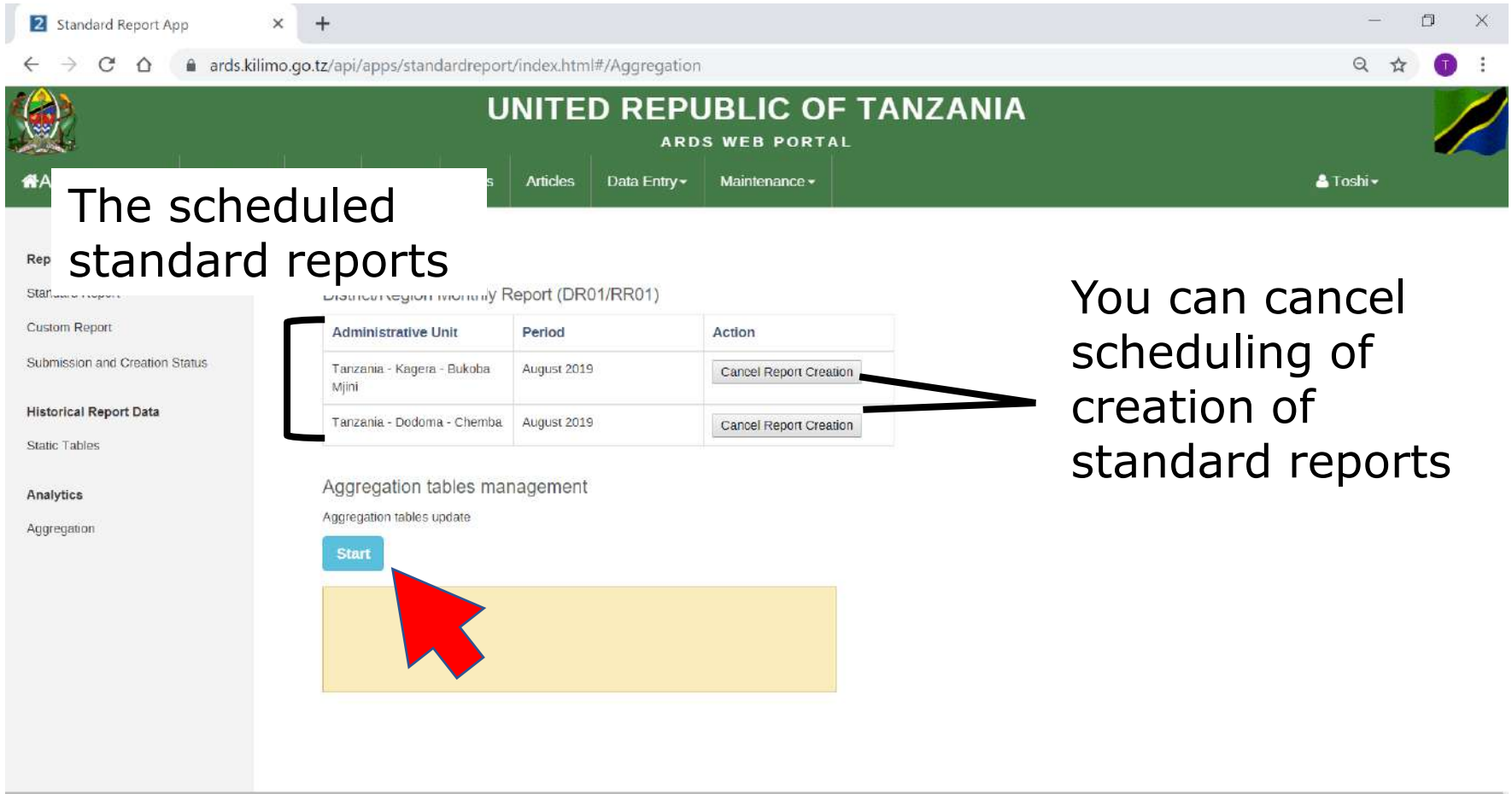
The left sidebar menu is expanded, showing the following items:

- Report
  - Standard Report
  - Custom Report
  - Submission and Creation Status
- Historical Report Data
  - Static Tables
- Analytics
  - Aggregation

A red mouse cursor is pointing to the "Aggregation" menu item.

# 3. Manual Report Creation

## 3.3 Click Start



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The user 'Toshi' is logged in. The main content area is titled 'District/region monthly Report (DR01/RR01)' and contains a table with the following data:

Administrative Unit	Period	Action
Tanzania - Kagera - Bukoba Mjini	August 2019	Cancel Report Creation
Tanzania - Dodoma - Chemba	August 2019	Cancel Report Creation

Below the table, there is a section for 'Aggregation tables management' with a sub-section 'Aggregation tables update' and a blue 'Start' button. A red mouse cursor is pointing at the 'Start' button. A black arrow points from the 'Cancel Report Creation' buttons in the table to the text on the right.

The scheduled standard reports

You can cancel scheduling of creation of standard reports

## **4. CMS**

CMS is a tool to upload documents to be downloaded from ARDS Web Portal and to messages and information shown on screens.

# 4. CMS(1)Enable

- ① To enable CMS, slide the button surrounded by the red box below until it shows "Home". To turn off CMS, return it back to "CMS".

The screenshot displays the ARDS Web Portal for the United Republic of Tanzania. The page features a green header with the national emblem and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". A navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A user profile "Toshi" is visible in the top right. A sidebar on the left lists "Data Analysis" categories: Agriculture, Livestock, Fishery, Trade, and General Information. The main content area shows an announcement regarding the closing of data entry for FY2018/19. A "CMS" toggle switch is circled in red, currently set to "Home". On the right, there are two charts: "Agriculture: Grain Equivalent Tanzania" (line chart) and "Agriculture: Mavuno Tanzania" (bar chart).

Year	DF03 1 Grain Equivalent Pota	DF03 1 Grain Equivalent Sorghum	DF03 1 Grain Equivalent paddy
2014	~500,000	~500,000	~1,500,000
2015	~700,000	~600,000	~1,800,000
2016	~1,000,000	~800,000	~2,000,000
2017	~1,200,000	~1,000,000	~2,200,000
2018	~1,500,000	~1,200,000	~2,500,000

Year	Mavuno Gwara (lablab bean)	Mataraji ya mavuno lablab be
2016	~35,000,000	~25,000,000
2017	~25,000,000	~15,000,000
2018	~10,000,000	~5,000,000

# 4. CMS(1)Enable

“Articles” field is to input texts to be shown in Article. Article is All, Livestock, Fisheries, etc. shown, under here

“Home Page Menu” is to configure kinds of article.

“Messages” is to set texts to be shown in Data Entry Form

“Information sharing” is to edit information shown in “Articles” shown in green area.

The screenshot shows the ARDS CMS web portal for the United Republic of Tanzania. The interface includes a top navigation bar with the ARDS logo and menu items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile for 'Toshi' is visible in the top right. Below the navigation bar, there are tabs for 'Articles', 'Home Page Menu', 'Messages', and 'Information Sharing'. The 'Articles' tab is active, showing a list of articles with filters for 'All', 'Livestock', 'Fisheries', 'Trade', 'Agriculture', and 'Announcements'. A 'HOME' button is also present. On the left side, there is a 'Data Analysis' sidebar with categories like Agriculture, Livestock, Fishery, and Trade. A 'Documents' section is also visible. The main content area displays an announcement titled 'Notice for FY2018/19 Data Entry Closing'. Two red circles highlight icons for editing and deleting the existing text. On the right side, there is a notification box stating 'Successfully finished: undoing and recreating reports (but you can continue entering data)'. At the bottom, there is a 'Select Chart' dropdown menu.

“Documents” is to upload documents to be downloaded from ARDS Web Portal

This is to edit the existing text

This is to delete the existing text



# 4. CMS(2)Articles

## ① “Press” Add New

The screenshot displays the ARDS CMS web portal interface. The browser address bar shows the URL: `ards.kilimo.go.tz/api/apps/ARDS-CMS/index.html#/articles/all`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". A navigation menu includes "ARDs", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user "Toshi" is logged in.

The main content area is titled "Articles" and includes a "HOME" button. Below the title, there are tabs for "All", "Livestock", "Fisheries", "Trade", "Agriculture", and "Announcements". A "+ Add New" button is visible.

The article content area contains the following text:

[Announcement]  
Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation.

[RS]: Note that 2018/19 data entry's deadline is 8th September. Remind LGAs of completing the data entry.

[Tangazo]  
Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili Kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.

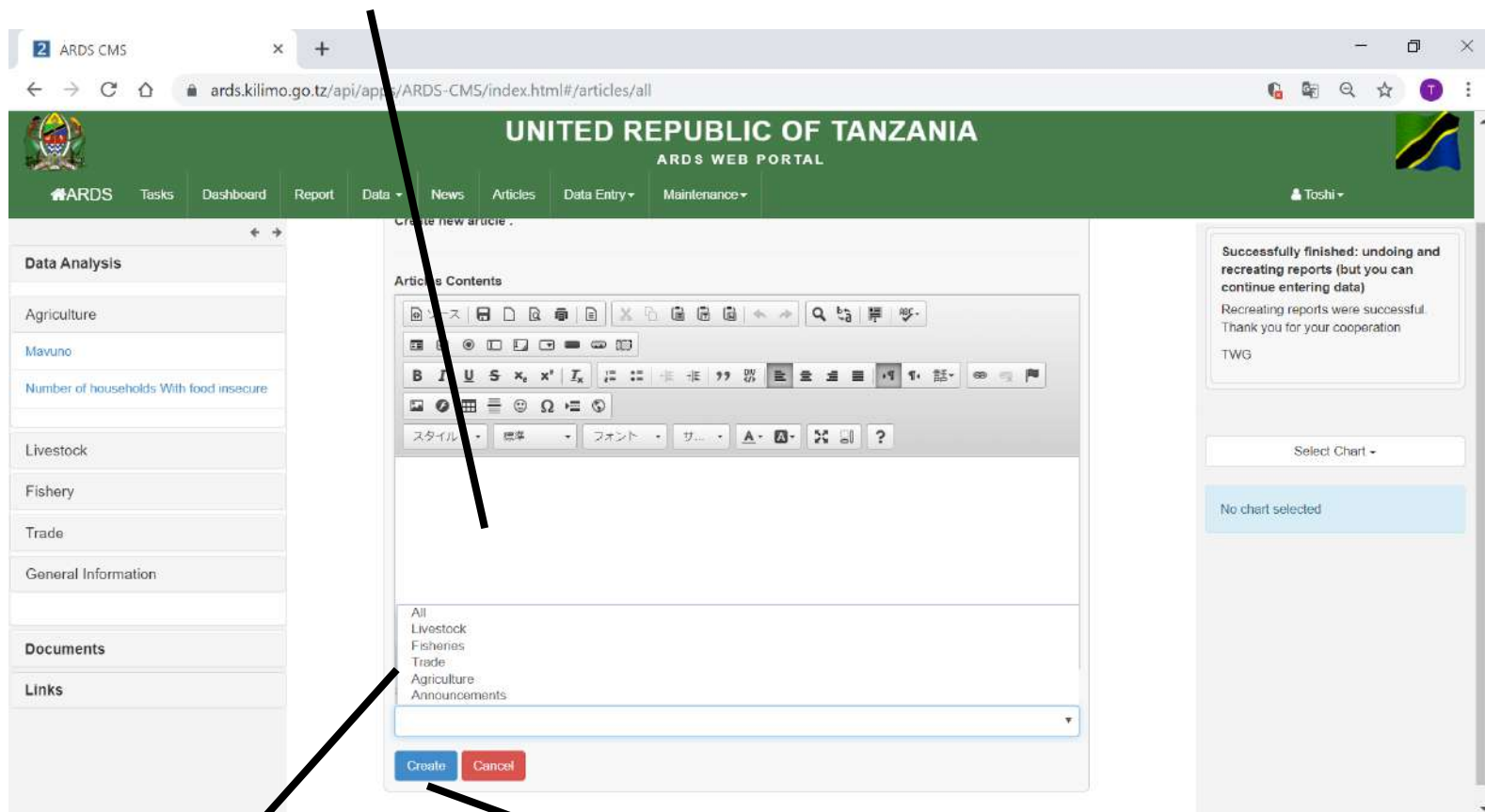
[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

On the right side, a notification box states: "Successfully finished: undoing and recreating reports (but you can continue entering data). Recreating reports were successful. Thank you for your cooperation. TWG". Below the notification is a "Select Chart" dropdown menu, which currently shows "No chart selected".

# 4. CMS(2)Articles

- ② Fill in texts to be shown. Use Article Contents for the design of the text.



The screenshot displays the ARDS CMS interface for creating a new article. The page header includes the United Republic of Tanzania logo and the ARDS Web Portal navigation menu. The main content area is titled 'Create new article' and features a rich text editor for 'Articles Contents'. A dropdown menu below the editor allows selecting the article category from options: All, Livestock, Fisheries, Trade, Agriculture, and Announcements. A 'Create' button is located at the bottom of the form. A notification box on the right side of the page displays the message: 'Successfully finished: undoing and recreating reports (but you can continue entering data). Recreating reports were successful. Thank you for your cooperation. TWG'. Below the notification is a 'Select Chart' dropdown menu showing 'No chart selected'.

- ③ Choose where to show the text created

- ④ Press Create

- ⑤ Confirm it is shown in "Article"



# 4. CMS (3) Messages

① Press "Messages"

ARDs CMS

ards.kilimo.go.tz/api/apps/ARDS-CMS/index.html#/articles/all

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDs Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Articles Home Page Menu **Messages** Information Sharing

All Livestock Fisheries Trade Agriculture Announcements

+ Add New

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation.

[RS]: Note that 2018/19 data entry's deadline is 8th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwfaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

Successfully finished: undoing and recreating reports (but you can continue entering data)

Recreating reports were successful.  
Thank you for your cooperation  
TWG

Select Chart -



No chart selected

# 4. CMS(3) Messages

② Press "Add New" to create

The image displays two screenshots of the ARDS CMS interface. The main screenshot shows the 'Messages' page with a table of messages and an 'Add New' button. A secondary screenshot shows the 'Data Entry' page with a success message and a form.

**Messages Table:**

Message Head	Message Body	Actions
Successfully finished: undoing and recreating reports (but you can continue entering data)	Recreating reports were successful. Thank you for your cooperation TWG	 

**Data Entry Page:**

Successfully finished: undoing and recreating reports (but you can continue entering data):  
Recreating reports were successful. Thank you for your cooperation

TWG

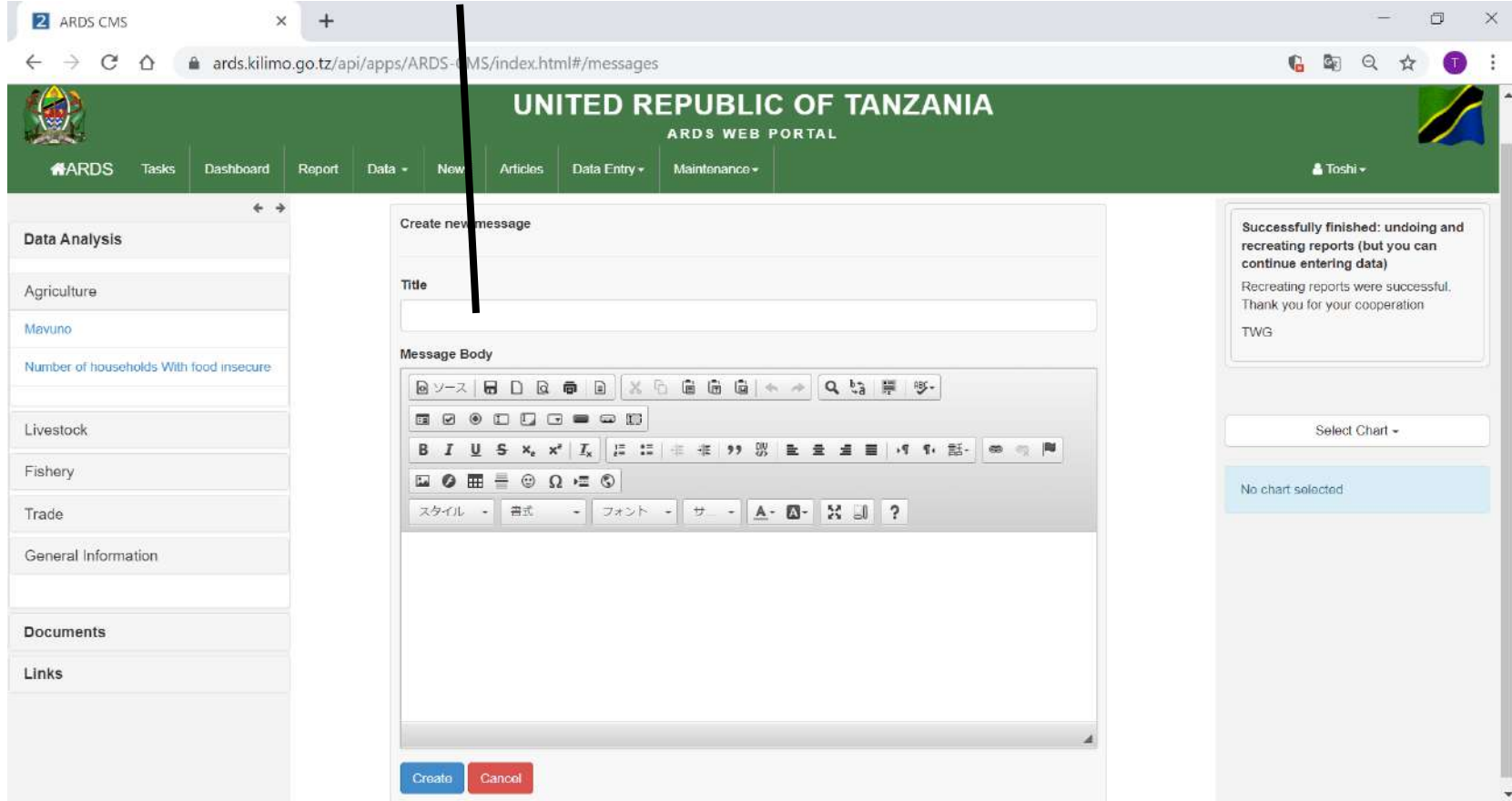
Administrative Line: [Input Field]  
Forms: [Please Select]  
Period: [Please Select] [Previous year] [Next year]

This is to edit the existing message

This is to remove the existing message

# 4. CMS(3)Messages

- ③ Fill in title and message body to be shown. Use tools for the design of the text.



The screenshot displays the ARDS CMS interface. The browser address bar shows the URL: `ards.kilimo.go.tz/api/apps/ARDS-CMS/index.html#/messages`. The page header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile for "Toshi" is visible in the top right. The main content area is titled "Create new message" and contains a "Title" text input field, a "Message Body" rich text editor with a toolbar, and "Create" and "Cancel" buttons. A vertical line points from the "Create" button to the instruction "④ Press Create". To the right, a confirmation message box states: "Successfully finished: undoing and recreating reports (but you can continue entering data). Recreating reports were successful. Thank you for your cooperation. TWG". Below this message is a "Select Chart" dropdown menu and a "No chart selected" message. A vertical line points from the confirmation message to the instruction "⑤ Confirm the text is shown in 'Data Entry'".

④ Press Create

⑤ Confirm the text is shown in "Data Entry"

# 4. CMS(4)Upload Documents

① Click "Documents"

The screenshot displays the ARDS CMS web portal interface. The browser address bar shows the URL: `ards.kilimo.go.tz/api/apps/ARDS-CMS/index.html#/articles/all`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right corner.

The main content area is divided into several sections:

- Data Analysis:** Includes "Agriculture", "Mavuno", and "Number of households With food insecure".
- Livestock**
- Fishery**
- Trade**
- General Information**
- Documents** (highlighted with a red circle)
- Links**

The central content area displays an article titled "[Announcement] Notice for FY2018/19 Data Entry Closing". The article text includes:

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation.

[RS]: Note that 2018/19 data entry's deadline is 8th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili Kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

The right sidebar contains a notification: "Successfully finished: undoing and recreating reports (but you can continue entering data). Recreating reports were successful. Thank you for your cooperation. TWG". Below the notification is a "Select Chart" dropdown menu showing "No chart selected".

# 4. CMS(4)Upload Documents

② Fill in Document Names shown

The screenshot displays the ARDS CMS web portal interface. The header includes the United Republic of Tanzania logo and navigation menus for ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The main content area shows a list of documents on the left sidebar and a detailed view of a document titled "[Announcement] Notice for FY2018/19 Data Entry Closing". The document content includes a notice about the data entry deadline and instructions for LGA and RS users. A sidebar on the right contains a success message: "Successfully finished: undoing and recreating reports (but you can continue entering data). Recreating reports were successful. Thank you for your cooperation. TWG".

③ Select a file to be uploaded and "Upload"

④ Confirm document can be downloaded after turned off CMS

## **5. Access Log Check**

Access Log provides how many users accessed each page or report, or downloaded files. This chapter shows how to check Access Log.



# 5. Access Log Check

## 1 Go Maintenance – System usage Statics

The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Maintenance' menu is open, showing options: Data Administration, Data Elements and Computed values, Entry Form, Administrative Units, Settings, Users, CMS, and System usage statistics. The main content area displays an announcement regarding the closing of data entry for FY2018/19, with a deadline of 6th September. The right sidebar features two charts: 'Agriculture: Grain Equivalent Tanzania' (line chart) and 'Agriculture: Mavuno Tanzania' (bar chart). The URL at the bottom is <https://ards.kilimo.go.tz/dhis-web-reporting/generateHtmlReport.action?uid=vDl5hipAW8w&>

Year	DF03 1 Grain Equivalent Potatoes	DF03 1 Grain Equivalent Sorghum	DF03 1 Grain Equivalent Paddy
2014	~500,000	~500,000	~1,500,000
2015	~1,000,000	~500,000	~1,500,000
2016	~1,500,000	~500,000	~1,500,000
2017	~1,500,000	~500,000	~1,500,000
2018	~1,500,000	~500,000	~2,500,000

Year	Mavuno Gwara (lablab bean)
2016	~35,000,000
2017	~25,000,000
2018	~5,000,000

# 5. Access Log Check

2 Select Page visit", "Report download", or "data download"

3 Select Period

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and navigation menus. The main content area displays a report generation form with a dropdown menu for 'Report name' (selected: Page visit), radio buttons for 'Yearly', 'Quarterly', and 'Monthly' (selected: Yearly), and a date range of 'July 2019- June 2020'. The 'Report Generating Date' is 2019-09-24. Below the form, the text reads 'System usage statistics for Page visit July 2019- June 2020'. A table with columns 'Page Name', 'Link', 'Number of Visits', and 'PageType' is displayed. The table contains four rows of data. Above the table are buttons for 'Print', 'Copy', 'Excel', 'CSV', and 'PDF'. A search bar is also present.

Page Name	Link	Number of Visits	PageType
Annual Integrated Report (DIR03/RIRO3)	<a href="https://ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/">https://ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html/#/</a>	1	Page
Annual Integrated Report (DIR03/RIRO3)	<a href="https://ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/">https://ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html/#/</a>	1	Page
Annual Integrated Report (DIR03/RIRO3) Creation	<a href="https://ards.kilimo.go.tz/api/apps/Submission-and-Creation-status/index.html#/">https://ards.kilimo.go.tz/api/apps/Submission-and-Creation-status/index.html/#/</a>	90	Page
Annual Integrated Report (DIR03/RIRO3) Creation	<a href="https://ards.kilimo.go.tz/api/apps/Submission-and-Creation-status/index.html#/">https://ards.kilimo.go.tz/api/apps/Submission-and-Creation-status/index.html/#/</a>	2917	Page

3 Select appropriate action (print or download)



## **6. Change Person in Charge**

Person in Charge can be shown in “Submission and Creation Status” if it is configured and selected as shown in “User Manual”. In this chapter, how to configure “Person in Charge” will be explained.

# **6. Change Person in Charge**

- 1 Confirm which person in charge of region has been changed.

# 6. Change Person in Charge

## 2 Choose Maintenance – Administrative Units

The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The main navigation bar includes 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Maintenance' menu is expanded, showing options: 'Data Administration', 'Data Elements and Computed values', 'Entry Form', 'Administrative Units', 'Settings', 'Users', 'CMS', and 'System usage statistics'. The 'Administrative Units' option is highlighted. The page content displays several announcements regarding data entry deadlines for FY2018/19. On the right, there are two charts: 'Agriculture: Grain Equ Tanzania' (line chart) and 'Agriculture: Mavu Tanzania' (bar chart).

**United Republic of Tanzania**  
ARDS WEB PORTAL

Navigation: ARDS | Tasks | Dashboard | Report | Data | News | Articles | Data Entry | **Maintenance** | Toshi

**Maintenance Menu:**

- Data Administration
- Data Elements and Computed values
- Entry Form
- Administrative Units**
- Settings
- Users
- CMS
- System usage statistics

**Announcements:**

- [Announcement] Notice for FY2018/19 Data Entry Closing: As same as last year, it is just high time that 2018/19 data entry should be closed as "6th September, Friday". The system automatically close that function.
- [LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to system regulation.
- [RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.
- [Tangazo] Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS: Kama ilivyokuwa mwaka jana, ni wakati mwanafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumatano 6, Septemba 2019, na mfumo utajifunga wenyewe.
- [LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data italungwa kabisa, kwa sababu ya kanuni ya mfumo.
- [RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

**Charts:**

- Agriculture: Grain Equ Tanzania** (Line Chart): Shows data for DF03 1 Grain Equivalence from 2014 to 2017. Values range from approximately 500,000 to 2,000,000.
- Agriculture: Mavu Tanzania** (Bar Chart): Shows data for DF03 1 Grain Equivalence for 2014 and 2015. Values are approximately 35,000,000 and 25,000,000 respectively.

URL: <https://ards.kilimo.go.tz/api/apps/Adminstrative-Unit-App/index.html/#/>

# 6. Change Person in Charge

- 3 Choose one level higher administrative unit than you want choose from the left pane.  
Then right click the administrative unit and choose Edit.

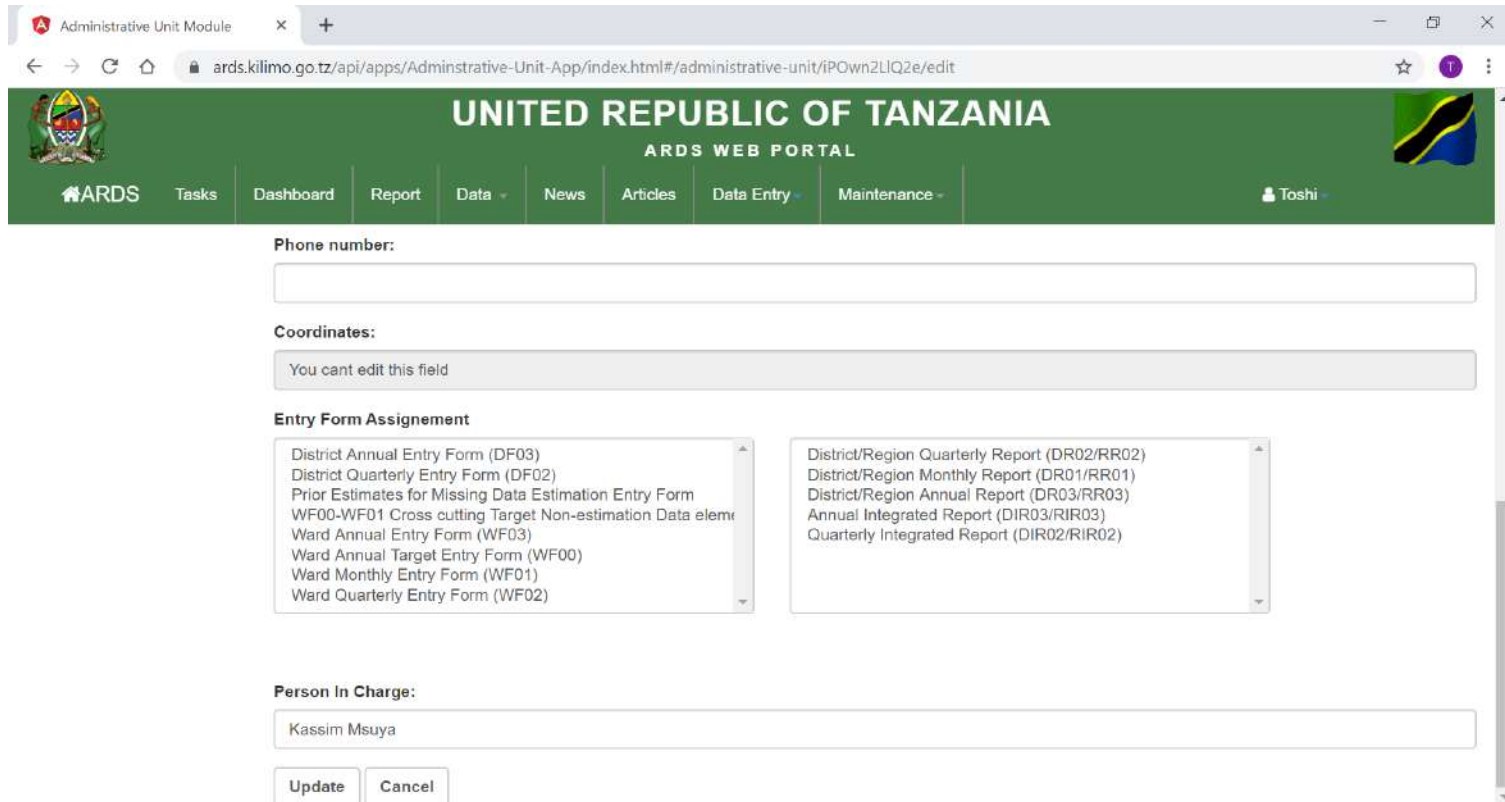
The screenshot displays the ARDS Web Portal interface for Administrative Unit Management. The page title is "Administrative Unit Management". A search bar is present at the top of the main content area. Below the search bar, there is a table listing administrative units. A context menu is open over the "Arusha" unit, showing options: View, Edit, and Delete. The "Edit" option is highlighted. To the right of the table, a details pane shows the attributes and values for the selected unit.

Name	Public access	Last updated
Arusha		8 months ago
Dar es salaam		months ago
Dodoma		months ago
Geita		8 months ago
Iringa		8 months ago
Kagera		8 months ago
Katavi		8 months ago
Kigoma		8 months ago

Attribute	Value
Id	iPOwn2LIQ2e
Display Name	Arusha
Short Name	Arusha
Level	2
Created at	5 years ago
Last updated at	8 months ago
External Access	false
Children administrative units	7
Entry forms/ Reports	5
Users	4

# 6. Change Person in Charge

- 4 Modify "Person in Charge" accordingly. Then Update.  
Then right click the administrative unit and choose Edit.



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/Administrative-Unit-App/index.html#/administrative-unit/iPOwn2LIQ2e/edit`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". The navigation menu includes "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user's name "Toshi" is visible in the top right corner.

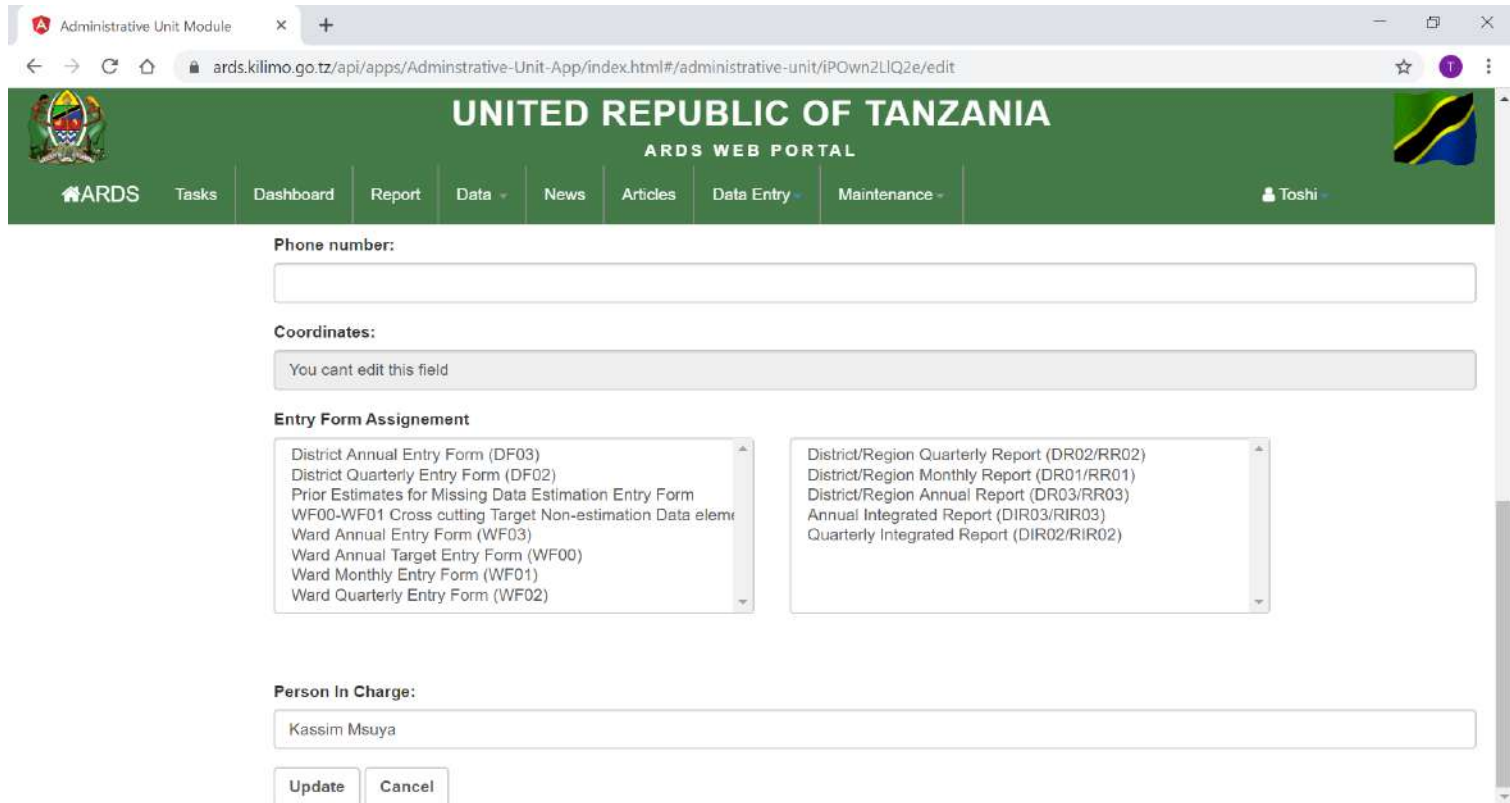
The main content area contains the following fields:

- Phone number:** An empty text input field.
- Coordinates:** A greyed-out text input field with the message "You cant edit this field".
- Entry Form Assignment:** Two dropdown menus. The left menu is open, showing a list of forms: District Annual Entry Form (DF03), District Quarterly Entry Form (DF02), Prior Estimates for Missing Data Estimation Entry Form, WF00-WF01 Cross cutting Target Non-estimation Data elem, Ward Annual Entry Form (WF03), Ward Annual Target Entry Form (WF00), Ward Monthly Entry Form (WF01), and Ward Quarterly Entry Form (WF02). The right menu is closed.
- Person In Charge:** A text input field containing the name "Kassim Msuya".

At the bottom of the form, there are two buttons: "Update" and "Cancel".

# 6. Change Person in Charge

5 You should repeat 3-4 and input the same person name for a region and all the districts under the region, since the districts are covered by the person in charge of the region.



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/Administrative-Unit-App/index.html#/administrative-unit/iPOwn2LIQ2e/edit`. The page header is green and features the United Republic of Tanzania coat of arms on the left, the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL" in the center, and the Tanzanian flag on the right. A navigation menu below the header includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A user profile for "Toshi" is visible in the top right.

The main content area contains the following form fields:

- Phone number:** An empty text input field.
- Coordinates:** A greyed-out text input field containing the text "You cant edit this field".
- Entry Form Assignment:** Two side-by-side dropdown menus. The left menu lists various forms such as "District Annual Entry Form (DF03)", "District Quarterly Entry Form (DF02)", "Prior Estimates for Missing Data Estimation Entry Form", "WF00-WF01 Cross cutting Target Non-estimation Data elem", "Ward Annual Entry Form (WF03)", "Ward Annual Target Entry Form (WF00)", "Ward Monthly Entry Form (WF01)", and "Ward Quarterly Entry Form (WF02)". The right menu lists reports such as "District/Region Quarterly Report (DR02/RR02)", "District/Region Monthly Report (DR01/RR01)", "District/Region Annual Report (DR03/RR03)", "Annual Integrated Report (DIR03/RIR03)", and "Quarterly Integrated Report (DIR02/RIR02)".
- Person In Charge:** A text input field containing the name "Kassim Msuya".

At the bottom of the form are two buttons: "Update" and "Cancel".

## **7. Fiscal Year End Lock**

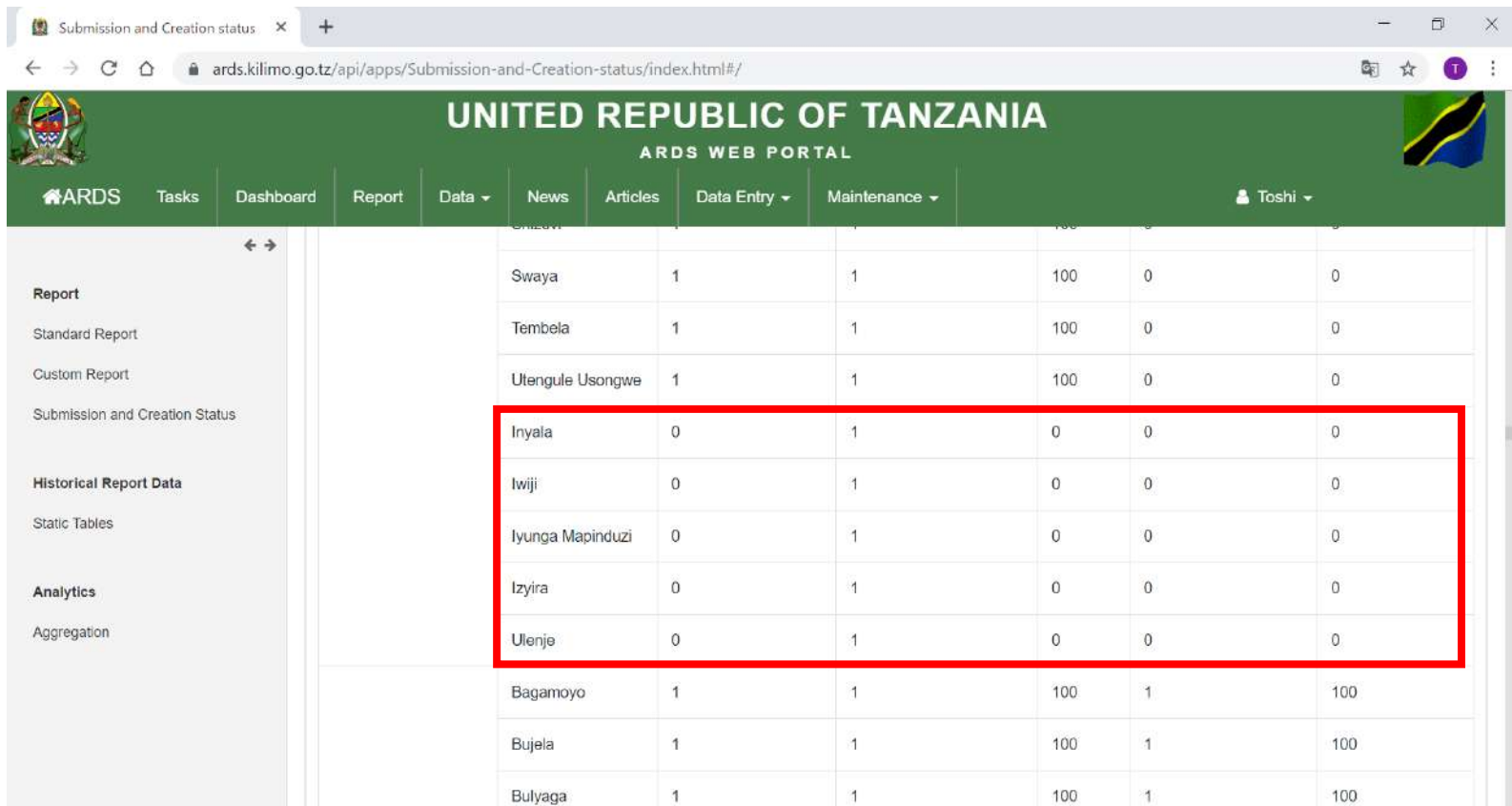
At the end of a fiscal year, you need to confirm, whether for the fiscal year

- WF01/WF02/WF03 submissions are enough or not.
- All DF02/03 are submitted or not.
- All DIR/RIR/NIR02/03 are created or not.
- Static Report is created or not

After all of these are confirmed, you should lock the data entry and report creation for the fiscal year. After the lock, administrator should create the new administrative units and the data entry for the administrative unit and report creation for new fiscal year should be started.

# 7. Fiscal Year End Lock(1) Status Check

- ① In Submission and Creation screen, check submission rate of WF01/02/03 for all periods within the fiscal year. If the submission is not **acceptable level**, push LGA officers to submit the data through person in charge of region.



The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

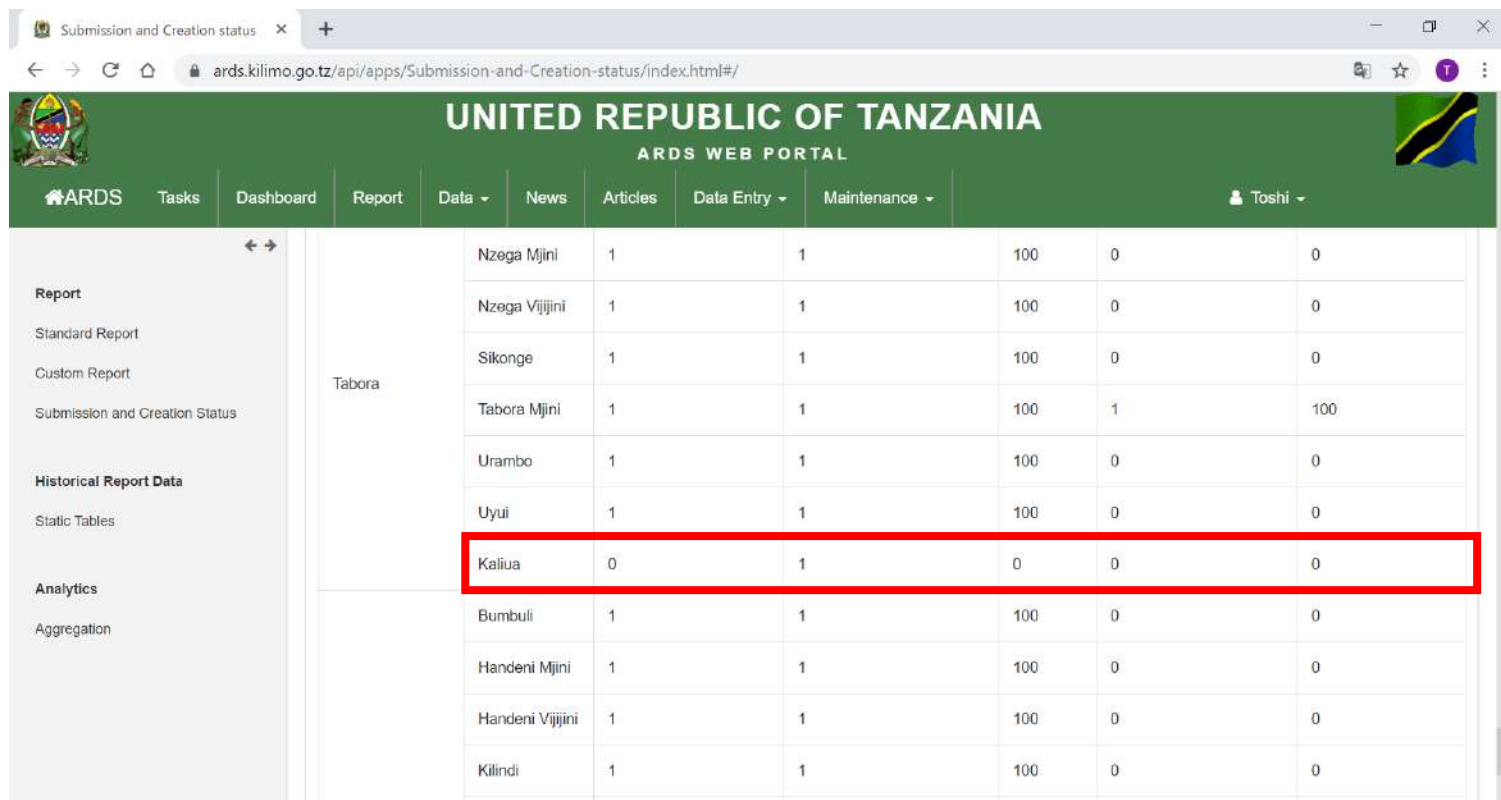
The main content area shows a table with the following data:

Region	Column 1	Column 2	Column 3	Column 4	Column 5
Swaya	1	1	100	0	0
Tembela	1	1	100	0	0
Ulungu Usongwe	1	1	100	0	0
Inyala	0	1	0	0	0
Iwiji	0	1	0	0	0
Iyunga Mapinduzi	0	1	0	0	0
Izyira	0	1	0	0	0
Ulenje	0	1	0	0	0
Bagamoyo	1	1	100	1	100
Bujela	1	1	100	1	100
Bulyaga	1	1	100	1	100



# 7. Fiscal Year End Lock(1) Status Check

- ② In Submission and Creation screen, check submission rate of DF02/03 for all periods within the fiscal year.  
July-Sept, Oct-Dec, Jan-Mar, Apr-Jun for DF02 the FY for DF03  
Push LGA officers to **submit the all data** through person in charge of region.



The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The page displays a table of submission rates for various regions. The Kaliua row is highlighted with a red box, indicating a submission rate of 0 for DF02 and 0 for DF03.

Region	DF02	DF03	DF02/03	DF02/03	DF02/03
Nzega Mjini	1	1	100	0	0
Nzega Vijijini	1	1	100	0	0
Sikonge	1	1	100	0	0
Tabora Mjini	1	1	100	1	100
Urambo	1	1	100	0	0
Uyui	1	1	100	0	0
<b>Kaliua</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
Bumbuli	1	1	100	0	0
Handeni Mjini	1	1	100	0	0
Handeni Vijijini	1	1	100	0	0
Kilindi	1	1	100	0	0

# 7. Fiscal Year End Lock(1) Status Check

- ③ In Submission and Creation screen, check report creation status of DIR/RIR/NIR02/03 for all periods within the fiscal year. July-Sept, Oct-Dec, Jan-Mar, Apr-Jun for xxx02 the FY for xxx03 Push LGA officers to **create the all reports** through person in charge of region.

The screenshot shows the ARDS Web Portal interface. The main content area displays a table of report creation status for various regions. The 'Bariadi Mjini' row is highlighted with a red box, indicating its status.

Region	Report Name	Count	Percentage	Other Metrics
Simiyu	Ushetu	1	1	100 0 0 0 0
	Bariadi Vijijini	1	1	100 0 0 0 0
	Busega	1	1	100 0 0 0 0
	Itilima	1	1	100 0 0 0 0
	Maswa	1	1	100 0 0 0 0
	Meatu	1	1	100 0 0 1 100
Singida	Bariadi Mjini	0	1	0 0 0 0 0
	Ikungi	1	1	100 0 0 1 100
	Iramba	1	1	100 0 0 1 100
	Itigi	1	1	100 0 0 1 100
	Manyoni	1	1	100 0 0 1 100

# 7. Fiscal Year End Lock(1) Status Check

- ① In Static Report, please check whether the value for the fiscal year is inserted or not. Check all reports. In addition, please roughly compare the value with those in reports to check potential bugs.

The screenshot shows an Excel spreadsheet titled "Maize.xlsx" with the following data:

Region	District	Data	2016 July - 2017 July	2017 July - 2018 June
Arusha	Arusha Mjini	Harvested Ar	18.0	995.0
		Production (t)	68.4	2,850.0
		Productivity	3.8	2.9
Arusha Vijijiri	Arusha Vijijiri	Harvested Ar	12,141.5	11,158.5
		Production (t)	64,331.9	120,608.6
		Productivity	5.3	10.8
Karatu	Karatu	Harvested Ar	18,466.0	19,423.9
		Production (t)	35,357.0	41,885.0
		Productivity	1.9	2.2
Longido	Longido	Harvested Ar	355.0	977.0
		Production (t)	384.0	260.0
		Productivity	1.1	0.3
Meru	Meru	Harvested Ar	26,426.6	31,209.0
		Production (t)	61,438.0	55,275.7
		Productivity	2.3	1.8
Monduli	Monduli	Harvested Ar	17.0	11,700.0
		Production (t)		
		Productivity		

# 7. Fiscal Year End Lock(2)Closure

② Even if person in charge of region push LGA officers to submit DF02/03 and to create DIR/RIR/NIR02/03, Technical Team should judge closure of the fiscal year at some point and you need to to them by yourself.

- Submission of DF02/03-

Check 9.2 screen and list up Districts which have not submitted DF02/03 for some period.

Go the DF02/03 screen for the district for the periods, and then submit them.

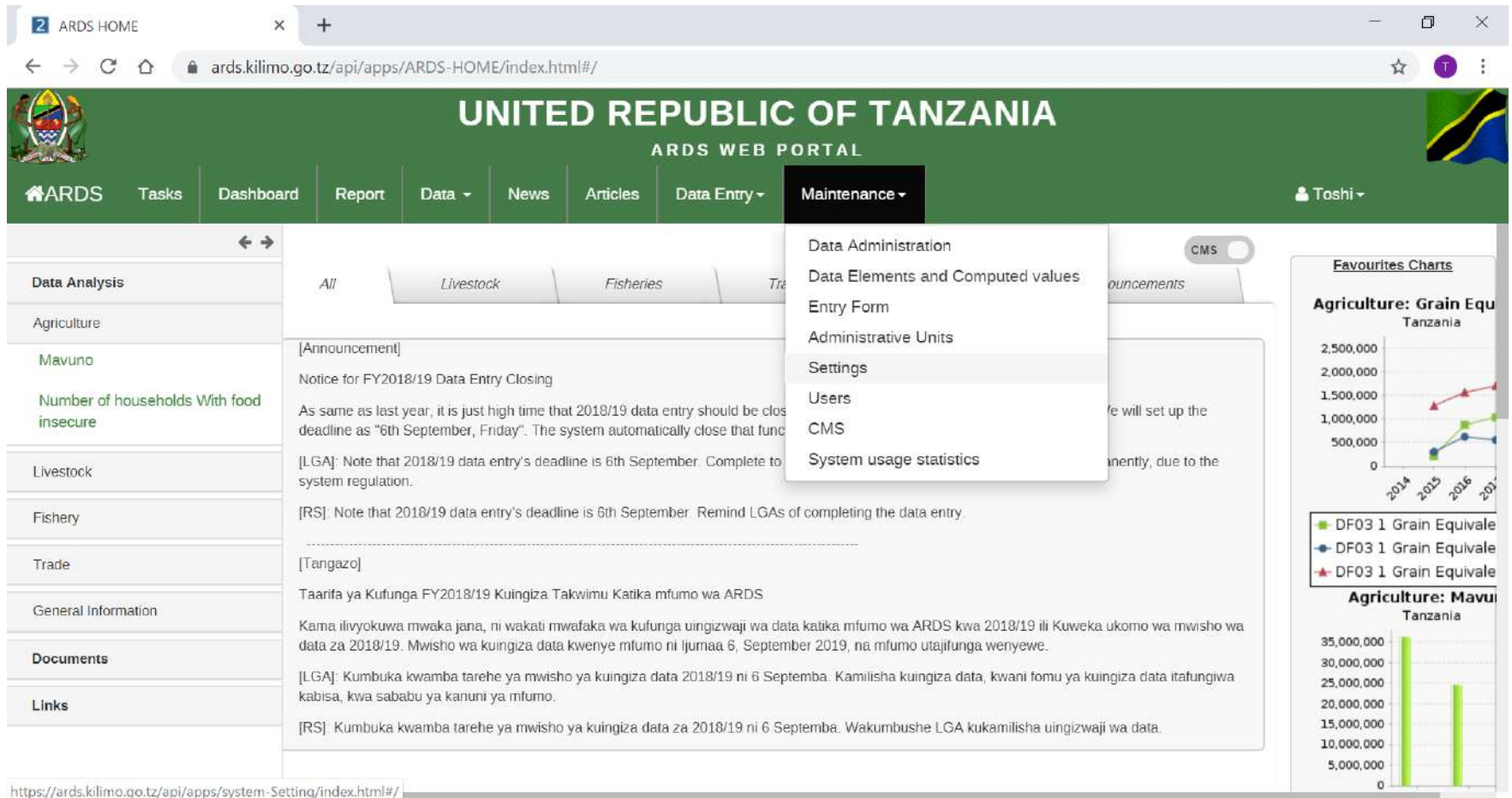
- Creation of DIR/RIR/NIR02/03

Check 9.3 screen and list up Districts which have not created DIR/RIR/NIR02/03 for some period.

Go the DIR02/03 screen for the district for the periods, and then create them. The next day, confirm DIR/RIR/NIR02/03 and static tables are created.

# 7. Fiscal Year End Lock(3)Lock

## ① Go Maintenance - Setting



The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The main navigation bar includes ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The Maintenance menu is open, showing options: Data Administration, Data Elements and Computed values, Entry Form, Administrative Units, Settings (highlighted), Users, CMS, and System usage statistics. The main content area displays an announcement regarding the FY2018/19 Data Entry Closing deadline of 6th September, 2019. The right sidebar contains two charts: 'Agriculture: Grain Equivalence Tanzania' (line chart) and 'Agriculture: Mavuno Tanzania' (bar chart).

**United Republic of Tanzania**  
ARDS WEB PORTAL

Navigation: ARDS | Tasks | Dashboard | Report | Data | News | Articles | Data Entry | **Maintenance** | Toshi

**Maintenance Menu:**

- Data Administration
- Data Elements and Computed values
- Entry Form
- Administrative Units
- Settings**
- Users
- CMS
- System usage statistics

**Announcement:**

[Announcement]  
Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed as deadline as "6th September, Friday". The system automatically close that function.

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to system regulation.

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani tomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

**Favourites Charts**

**Agriculture: Grain Equivalence Tanzania**

Year	DF03 1 Grain Equivalence	DF03 1 Grain Equivalence	DF03 1 Grain Equivalence
2014	~500,000	~500,000	~1,500,000
2015	~1,000,000	~1,000,000	~1,800,000
2016	~1,500,000	~1,500,000	~2,000,000
2017	~2,000,000	~2,000,000	~2,200,000


**Agriculture: Mavuno Tanzania**

Year	Mavuno
2014	~35,000,000
2015	~25,000,000

URL: <https://ards.kilimo.go.tz/api/apps/system-Setting/index.html#/>

# 7. Fiscal Year End Lock(3)Lock

## ② Click Data Entry in the Left Pane



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL: [ards.kilimo.go.tz/api/apps/system-Setting/index.html#/General](https://ards.kilimo.go.tz/api/apps/system-Setting/index.html#/General). The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right corner. The left sidebar contains a list of settings categories: "General", "Server", "Appearance", "DataEntry", "Calendar", "DataImport", and "Synchronization". The "DataEntry" category is currently selected and highlighted. The main content area shows the "General Settings" for the "DataEntry" section, with several dropdown menus for configuration: "Maximum number of analytics records" (Unlimited), "Infrastructure Computed values" (Add crops indicator), "Infrastructural data elements" (WF00 2 Matunda), "Infrastructural period type" (Financial-July), "Max offline Administrative unit levels" (Ward), and "Data analysis std dev factor".

# 7. Fiscal Year End Lock(3)Lock

③ Please change “Lock data entry forms after the fiscal year end” and “Lock report creation after the fiscal year end” to enable lock, for example, if you want to lock the last fiscal year on September 1, you should choose “Immediate”, “1 Month After”, or “2 Month After”.



The screenshot displays the 'System Settings' page for the ARDS Web Portal. The page is titled 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL' and features a navigation menu with options like 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Data Entry' section is active, showing several configuration options:

- Lock data entry forms after the related reports are created
- Turn on estimation process
- Allow data entry future period
- Lock data entry forms after the fiscal year end: 3 Month After
- Lock report creation after the fiscal year end: 3 Month After
- WF00 submission status for Report Creation: 90
- WF01 submission status for Report Creation: 90
- WF02 submission status for Report Creation: ...

# 7. Fiscal Year End Lock(4) Check

- ① After the fiscal year ends, at the end of every month technical team needs to confirm this setting. If immediate is set, from July 1st the data entry and report creation for the last fiscal year is locked. For example on 31 August if you decides to extend data entry and report creation for the last fiscal year, you should choose 3 Month Later or more.



The screenshot shows a web browser window displaying the 'System Settings' page for the ARDS Web Portal. The browser's address bar shows the URL: `ards.kilimo.go.tz//api/apps/system-Setting/index.html#/DataEntry`. The page header features the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. A navigation menu includes 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user profile 'Toshi' is visible in the top right.

The left sidebar contains a menu with the following categories: General, Server, Appearance, DataEntry (highlighted), Calendar, DataImport, and Synchronization.

The main content area displays the following settings:

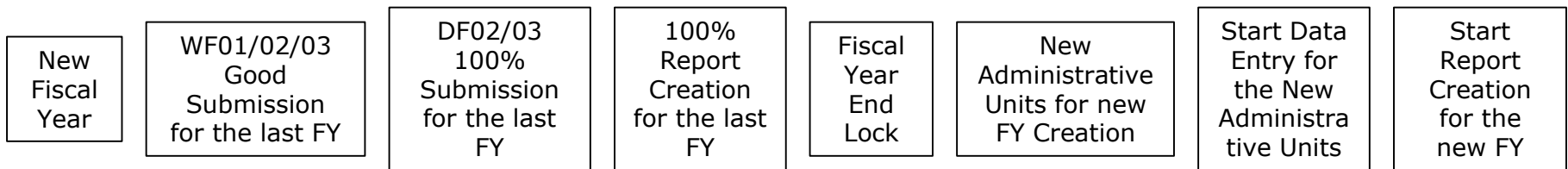
- Lock data entry forms after the related reports are created
- Turn on estimation process
- Allow data entry future period
- Lock data entry forms after the fiscal year end: 3 Month After
- Lock report creation after the fiscal year end: 3 Month After
- WF00 submission status for Report Creation: 90
- WF01 submission status for Report Creation: 90
- WF02 submission status for Report Creation: ...



# 7. Fiscal Year End Lock(5) Procedure

When the new fiscal year starts and new administrative units(mainly wards) are defined by the government, before this "Fiscal Year End Lock" for the previous fiscal year, please do not create the new administrative units, start data entry for the administrative units. If they are created, the report for the last fiscal year will include the administrative units which have not existed then for report calculation.

Similarly please do not create reports for the new fiscal year until the previous fiscal year is locked and the new administrative units are created. The report creation for the new fiscal year must be based on the new administrative units.



# **8. All Report Creation**

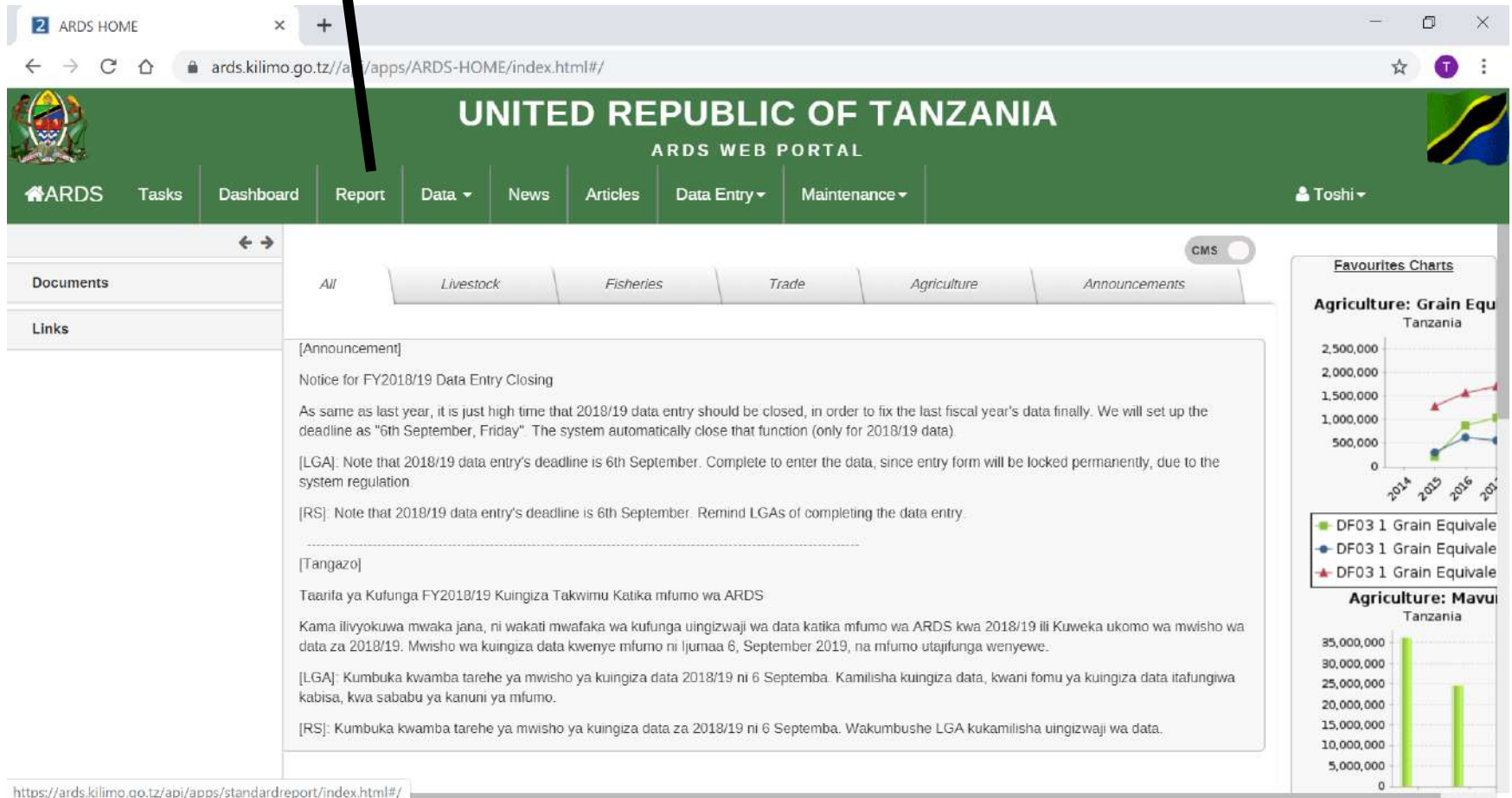
To create DIR/RIR/NIR02/03, district users need to submit related DF02/DF03, and create all related DR01/02/03. To create DR01/02/03, they need to schedule one by one.

When the fiscal year ends, administrator needs to create all DIR/RIR/NIR02/03 as written in "7. Fiscal Year End Lock". If they schedule the report creations one by one, it will be heavy burden for them.

All Report Creation enables administrators to schedule report creation for all related DR01/02/03 for DIR/RIR/NIR02/03 at the same time and to create DIR/RIR/NIR02/03 with the condition that all the related DF02/03s are submitted. This will shorten time for administrator to schedule those reports.

# 8. All Report Creation

## ① Click Report



The screenshot shows the ARDS Web Portal interface. The top navigation bar is green and contains the following items: ARDS HOME, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The 'Report' item is highlighted with a red arrow. Below the navigation bar, there is a sidebar with 'Documents' and 'Links' sections. The main content area displays an announcement titled 'Notice for FY2018/19 Data Entry Closing'. The announcement text is as follows:

[Announcement]  
Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]  
Taaarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

On the right side of the page, there are two charts under the heading 'Favourites Charts'. The first chart is 'Agriculture: Grain Equivalence Tanzania' and the second is 'Agriculture: Mavu Tanzania'. The first chart is a line graph showing data for 2014, 2015, 2016, and 2017. The second chart is a bar graph showing data for 2014 and 2015.


Year	DF03 1 Grain Equivalence
2014	~250,000
2015	~500,000
2016	~1,000,000
2017	~1,500,000

Year	Mavu
2014	~35,000,000
2015	~25,000,000

https://ards.kilimo.go.tz/api/apps/standardreport/index.html#

# 8. All Report Creation

② Click Standard Report



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/app/standardreport/index.html#`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The left sidebar contains a "Report" section with sub-items: "Standard Report", "Custom Report", and "Submission and Creation Status". The main content area, titled "Reports", lists four options: "Standard Report" (with a bar chart icon), "Static Tables" (with a document icon), "Custom Report" (with a document icon), and "Submission and Creation Status" (with a green checkmark icon). A black arrow points from the text "Click Standard Report" to the "Standard Report" option in the main content area.

# 8. All Report Creation

The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL: `ards.kilimo.go.tz//api/apps/standardreport/index.html#/dataSetReport`. The page header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The user profile "Toshi" is visible in the top right.

The main content area shows the "Standard Report" form with the following fields and annotations:

- Report:** A dropdown menu showing "National Quarterly Integrated Report (NIR02)". A thick black line points to this field with the annotation "③ Select Report".
- Report Period:** A dropdown menu showing "July - September 2018". A thick black line points to this field with the annotation "④ Select Period".
- Report Administrative Units:** A list box containing "Tanzania". A thick black line points to this field with the annotation "⑤ Select Administrative Unit".
- Buttons:** "Get Report" and "Cancel" buttons are located at the bottom of the form. A thick black line points to the "Get Report" button with the annotation "⑥ Get Report".

On the left side, a sidebar menu is visible with the following items:

- Report
  - Standard Report
  - Custom Report
  - Submission and Creation Status
- Historical Report Data
  - Static Tables
- Analytics
  - Aggregation

# 8. All Report Creation

All DRs under the selected DIR/RIR/NIR is scheduled to be created.

The screenshot shows the ARDS Web Portal interface. The page title is 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The user is logged in as 'Toshi'. The main content area displays the 'National Quarterly Integrated Report (NIR02)' for 'Tanzania' for the period 'July - September 2018'. There are buttons for 'Change Criteria' and 'Preview'. A prominent button labeled 'Create All District Reports' is highlighted with a circled '7' and a vertical line. Below this, a table titled 'Quarterly Integrated Report (DIR02/RIR02) Report Status' shows the status of reports for various administrative units. The table has three columns: 'Administrative Unit', 'Period', and 'Report Status'. The 'Report Status' column shows 'Created' for most units, but 'Not Created' for Dodoma.

Administrative Unit	Period	Report Status
Arusha	July - September 2018	Created
Dar es salaam	July - September 2018	Created
Dodoma	July - September 2018	Not Created
Geita	July - September 2018	Created
Iringa	July - September 2018	Created
Kagera	July - September 2018	Created
Katavi	July - September 2018	Created
Kigoma	July - September 2018	Created
Kilimanjaro	July - September 2018	Created

In the example above, DR01s for July-September 2019 all over the Tanzania is scheduled.

## **9. Administrative Unit Creation**

Administrative Unit Creation should be done only at the beginning of the fiscal year after the last fiscal year is closed following “7. Fiscal Year End Lock”. Otherwise, the report creation for the last fiscal year will be affected by the new administrative unit you create for the new fiscal year. Please see this page.

# 9. Administrative Unit Creation

## ① Choose Maintenance – Administrative Units

The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Maintenance' menu is open, displaying options: 'Data Administration', 'Data Elements and Computed values', 'Entry Form', 'Administrative Units', 'Settings', 'Users', 'CMS', and 'System usage statistics'. The 'Administrative Units' option is highlighted. The main content area shows a sidebar with 'Data Analysis' (Agriculture, Mavuno, Livestock, Fishery, Trade, General Information, Documents, Links) and a central panel with announcements and news. On the right, there are two charts: 'Agriculture: Grain Equ Tanzania' (line chart) and 'Agriculture: Mavu Tanzania' (bar chart).

**Administrative Units**

- Data Administration
- Data Elements and Computed values
- Entry Form
- Administrative Units
- Settings
- Users
- CMS
- System usage statistics

**Agriculture: Grain Equ Tanzania**

Year	DF03 1 Grain Equivale	DF03 1 Grain Equivale	DF03 1 Grain Equivale
2014	~500,000	~500,000	~1,500,000
2015	~500,000	~500,000	~1,500,000
2016	~500,000	~500,000	~1,500,000
2017	~500,000	~500,000	~1,500,000

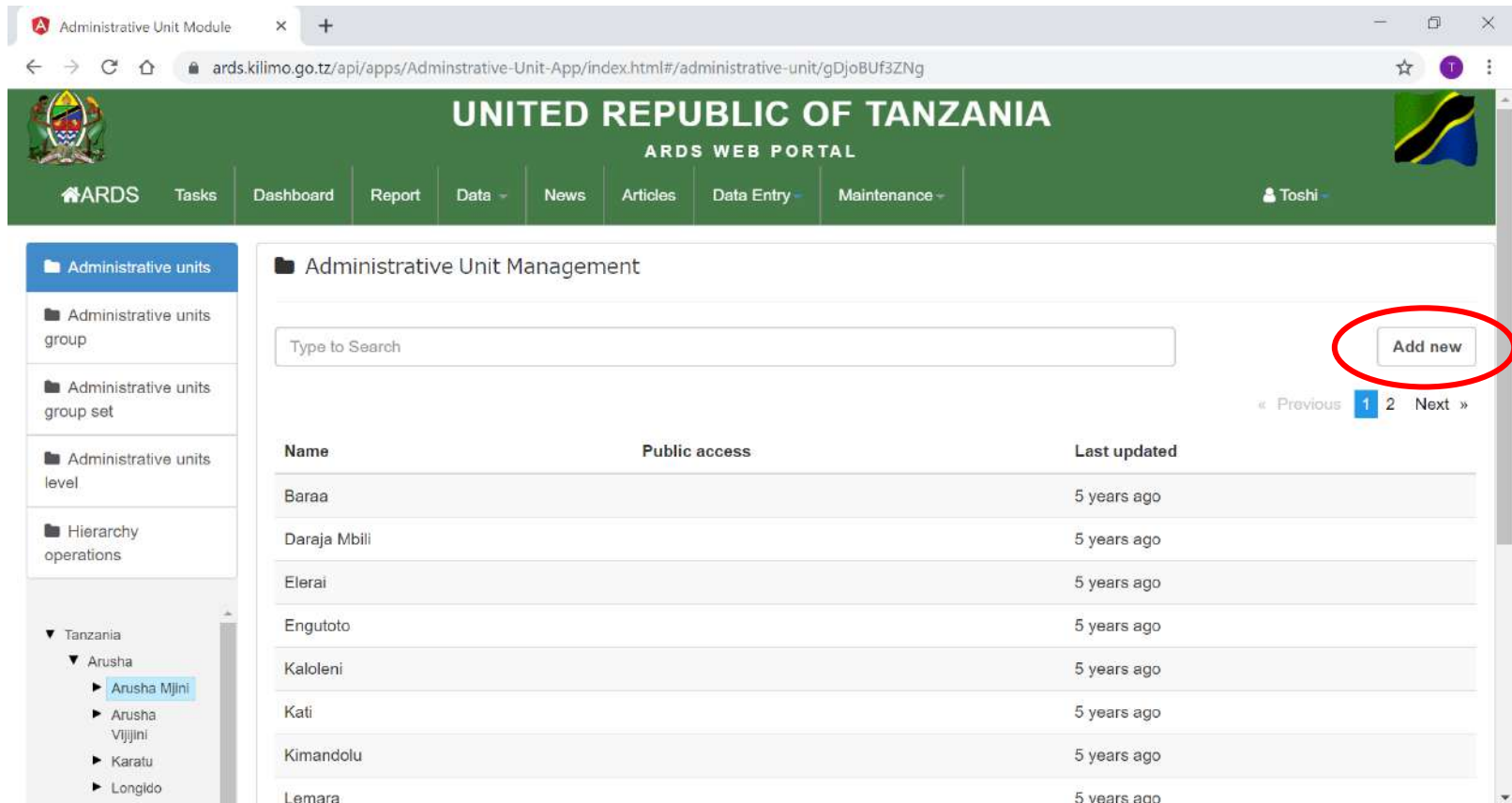
**Agriculture: Mavu Tanzania**

Year	Value
2014	~35,000,000
2015	~25,000,000



# 9. Administrative Unit Creation

- ② Choose one level higher administrative unit than you want create from the left pane. For example please choose Arusha Mjini if you want to create a new ward under it. Then click "Add new".



The screenshot displays the ARDS Web Portal interface for Administrative Unit Management. The page header includes the United Republic of Tanzania logo and the ARDS Web Portal title. The navigation menu includes ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The user profile is Toshi.

The main content area is titled "Administrative Unit Management" and features a search bar with the placeholder text "Type to Search". To the right of the search bar is an "Add new" button, which is circled in red. Below the search bar is a table listing administrative units with columns for Name, Public access, and Last updated.

Name	Public access	Last updated
Baraa		5 years ago
Daraja Mbili		5 years ago
Elerai		5 years ago
Engutoto		5 years ago
Kaloleni		5 years ago
Kati		5 years ago
Kimandolu		5 years ago
Lemara		5 years ago

The left sidebar shows a tree view of administrative units. Under Tanzania, Arusha is expanded, and Arusha Mjini is selected. Other options include Arusha Vijijini, Karatu, and Longido.

# 9. Administrative Unit Creation

- ③ Fill in administrative unit name both in “Name” and “Short name”. In “Opening date” fill in the date the administrative unit is created. And scroll down

The screenshot displays the ARDS Web Portal interface for creating a new administrative unit. The page header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right corner.

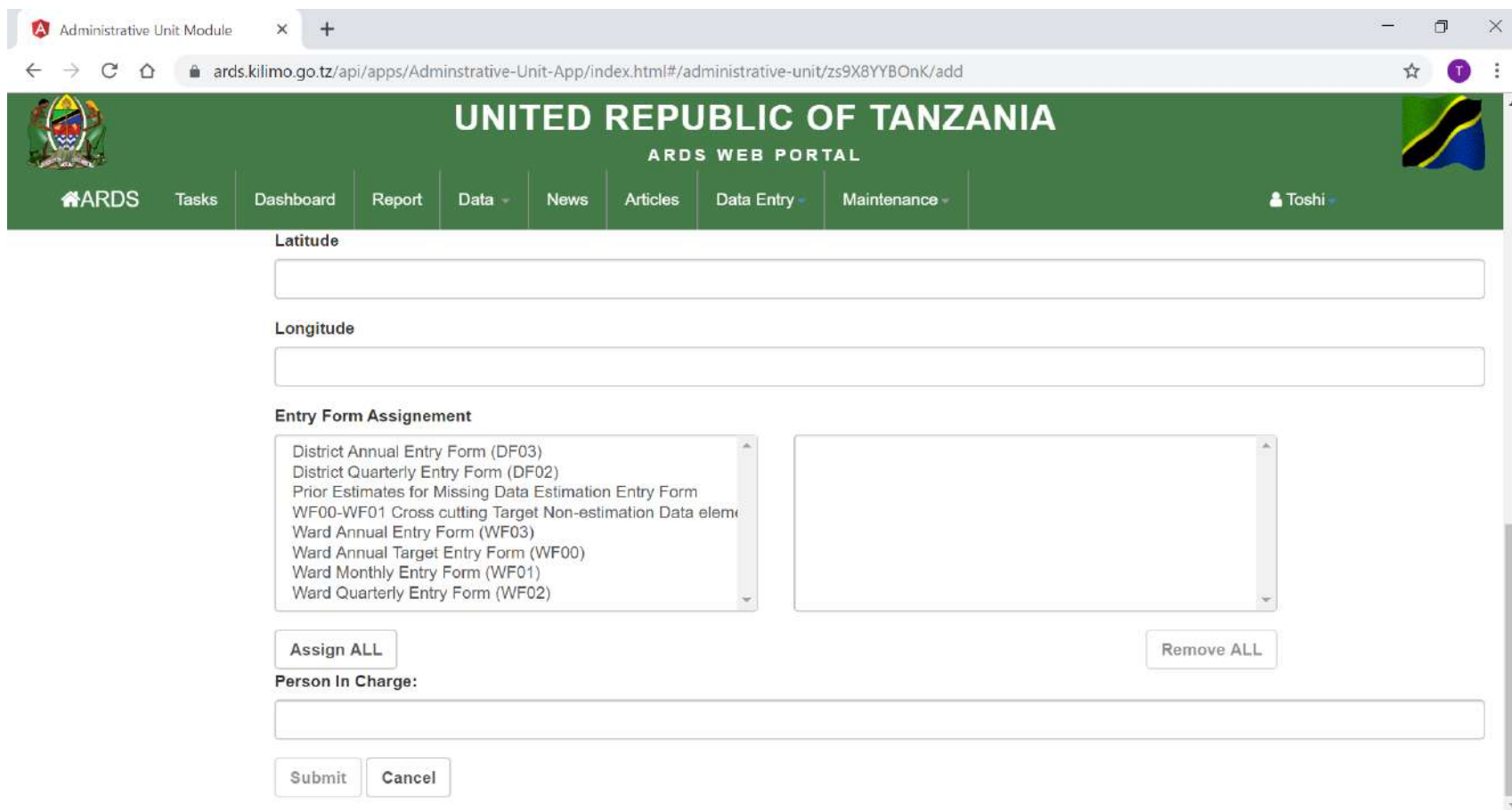
The left sidebar shows a tree view of administrative units under "Tanzania", with "Arusha Mjini" selected. The main content area contains the following form fields:

- Parent administrative unit:** A dropdown menu with "Arusha Mjini" selected.
- Name\***: A text input field.
- Short name\***: A text input field.
- Code**: A text input field.
- Opening date\***: A date picker field.
- Close date**: A date picker field.

A yellow banner at the top of the form area reads: "Cover the beginning of data entry in the new minister year".

# 9. Administrative Unit Creation

④ In “Entry Form Assignment” please select entry forms according to administrative unit level to be created. After that, in case of region or district creation, please fill in “Person in Charge” and then click “Submit”



The screenshot displays the ARDS Web Portal interface for creating an administrative unit. The page header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The form fields are as follows:

- Latitude:** A text input field.
- Longitude:** A text input field.
- Entry Form Assignment:** A dropdown menu with the following options:
  - District Annual Entry Form (DF03)
  - District Quarterly Entry Form (DF02)
  - Prior Estimates for Missing Data Estimation Entry Form
  - WF00-WF01 Cross cutting Target Non-estimation Data elem
  - Ward Annual Entry Form (WF03)
  - Ward Annual Target Entry Form (WF00)
  - Ward Monthly Entry Form (WF01)
  - Ward Quarterly Entry Form (WF02)
- Assign ALL:** A button.
- Remove ALL:** A button.
- Person In Charge:** A text input field.
- Submit:** A button.
- Cancel:** A button.

# 9. Administrative Unit Creation

⑤ In “Entry Form Assignment” please select following entry forms.

Ward: Ward Annual Target Entry Form (WF00)  
Ward Monthly Entry Form (WF01)  
Ward Quarterly Entry Form (WF02)  
Ward Annual Entry Form (WF03)

District: District Quarterly Entry Form (DF02)  
District Annual Entry Form (DF03)

Region: No need to choose entry forms.

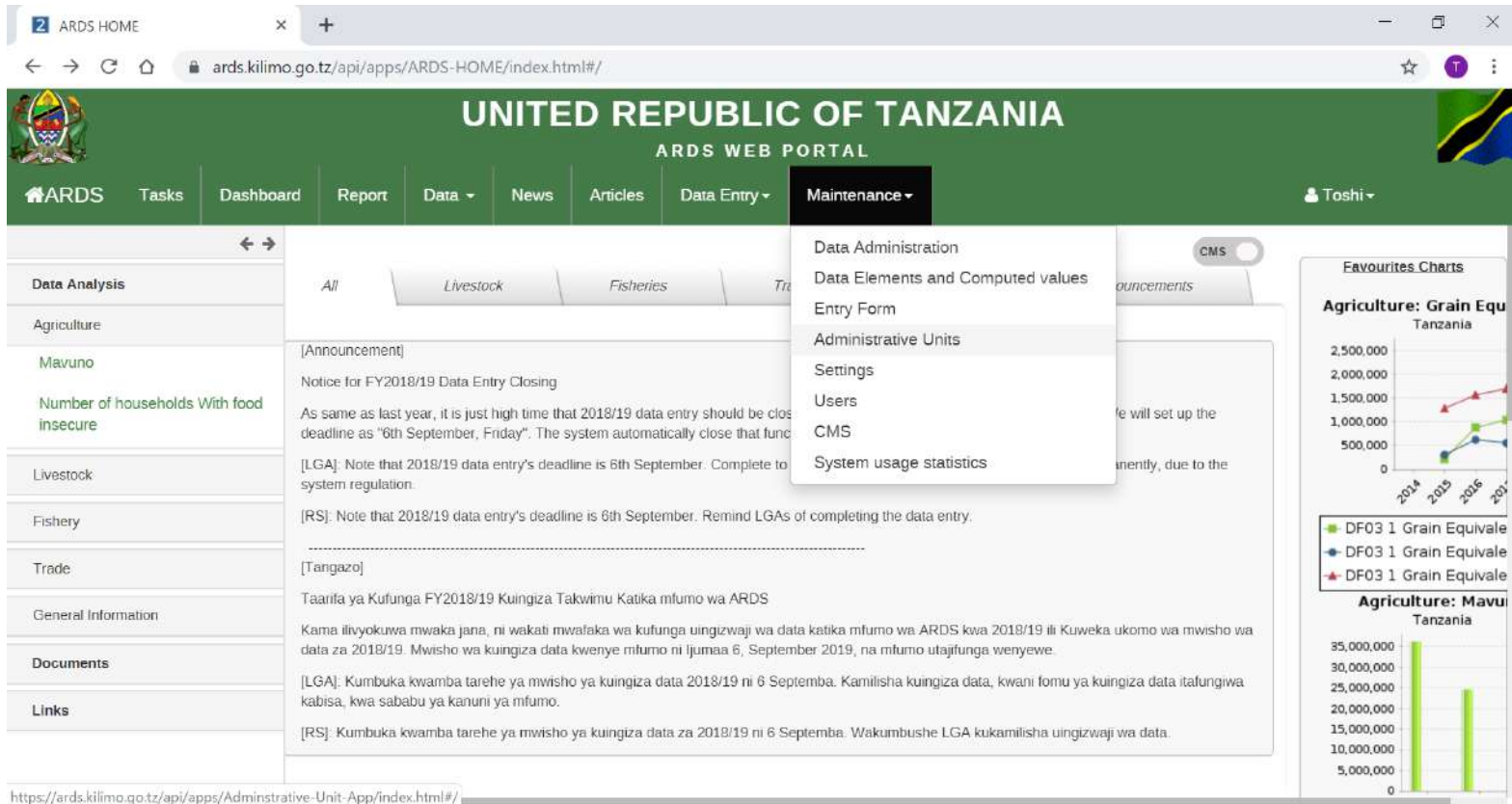
# **10. Administrative Unit Deletion**

Please use this function only to delete administrative units mistakenly created and do not have data. If you apply this function to existing administrative unit, the data also will be removed and please do so.

When administrative units(wards) are divided, please change the ward name for the ward before the separation to the name of one ward after the division, and create new ward for another new ward.

# 10. Administrative Unit Deletion

## ① Choose Maintenance – Administrative Units



The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The main navigation bar includes 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Maintenance' menu is open, displaying options: 'Data Administration', 'Data Elements and Computed values', 'Entry Form', 'Administrative Units', 'Settings', 'Users', 'CMS', and 'System usage statistics'. The 'Administrative Units' option is highlighted. The background content shows a notice for FY2018/19 Data Entry Closing and a chart titled 'Agriculture: Grain Equ Tanzania'.

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

← →

Data Analysis

Agriculture

Mavuno

Number of households With food insecure

Livestock

Fishery

Trade

General Information

Documents

Links

All Livestock Fisheries Trade

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed as deadline as "6th September, Friday". The system automatically close that function.

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to system regulation.

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwanafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumatano 6, Septemba 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data italungwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

CMS

Favourites Charts

Agriculture: Grain Equ Tanzania

Year	DF03 1 Grain Equivale	DF03 1 Grain Equivale	DF03 1 Grain Equivale
2014	~500,000	~500,000	~1,000,000
2015	~1,000,000	~1,000,000	~1,500,000
2016	~1,500,000	~1,500,000	~2,000,000
2017	~2,000,000	~2,000,000	~2,500,000

Agriculture: Mavu Tanzania

Year	Value
2014	~35,000,000
2015	~25,000,000

https://ards.kilimo.go.tz/api/apps/Adminstrative-Unit-App/index.html/#/

# 10. Administrative Unit Deletion

- ② Choose one level higher administrative unit than you want choose from the left pane.  
Then right click the administrative unit and choose Delete.

The screenshot shows the ARDS Web Portal interface for Administrative Unit Management. The page title is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The user is logged in as Toshi.

The main content area is titled "Administrative Unit Management" and features a search bar and an "Add new" button. Below the search bar is a table listing administrative units. A context menu is open over the "Arusha" row, showing options for View, Edit, and Delete.

Name	Public access	Last updated
Arusha		8 months ago
Dar es salaam		months ago
Dodoma		months ago
Geita		8 months ago
Iringa		8 months ago
Kagera		8 months ago
Katavi		8 months ago
Kigoma		8 months ago

The context menu for the "Arusha" row contains the following options:

- View
- Edit
- Delete

On the right side of the interface, there is a detailed view of the selected administrative unit, showing the following attributes and values:

Attribute	Value
Id	iPOwn2LIQ2e
Display Name	Arusha
Short Name	Arusha
Level	2
Created at	5 years ago
Last updated at	8 months ago
External Access	false
Children administrative units	7
Entry forms/ Reports	5
Users	4

# **11. Modification of Dropdown List**

Depending on districts, the values district officers want to input in the dropdown list are different and they often request M&E TWG to add new options in it. Once a year, at the beginning of the fiscal year, M&E TWG should discuss every request from district officers and make decision whether they should be added or not. If M&E TWG decides to add some options, please follow this chapter for the operation on ARDS Web Portal.



# 11. Modification of Dropdown List

## (1) Confirm Dropdown List Name

- ① Conform Dropdown list name to be modified in an entry form  
For example, "Jina la ugonjwa/Kisumbufu(i)» in Table 3.1 in WF01.

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu includes 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user is logged in as 'Toshi'.

The main content area displays a data entry form for 'Engutoto' in August 2019. The form includes a dropdown menu for 'Jina la ugonjwa/Kisumbufu(i)' and a table for '3.1 Kuzuia/ Kutibu/ Kudhibiti Magonjwa/ Visumbufu kwa Kutumia Kemikali'.

Jina la ugonjwa /Kisumbufu(i)	Zao lililo athirika(ii)	Kiasi cha uharibifu (kikubwa, wastani, kidogo)(iii)	Eneo lililoathirika (ha)(iv)	Idadi ya vijiji vilivyo athirika(v)	Dawa iliyo tumika (vi)	Kiasi cha dawa(vii)	Kipimo (kg/litre)(viii)	Idadi ya vijiji vilivyo hudumiwa(ix)	Idadi ya kaya zilizo hudumiwa(x)	Eneo lililookolewa (ha)(xi)	Maelezo(xii)
Select or s	Select or s	Select or s			Select or s		Select or s				

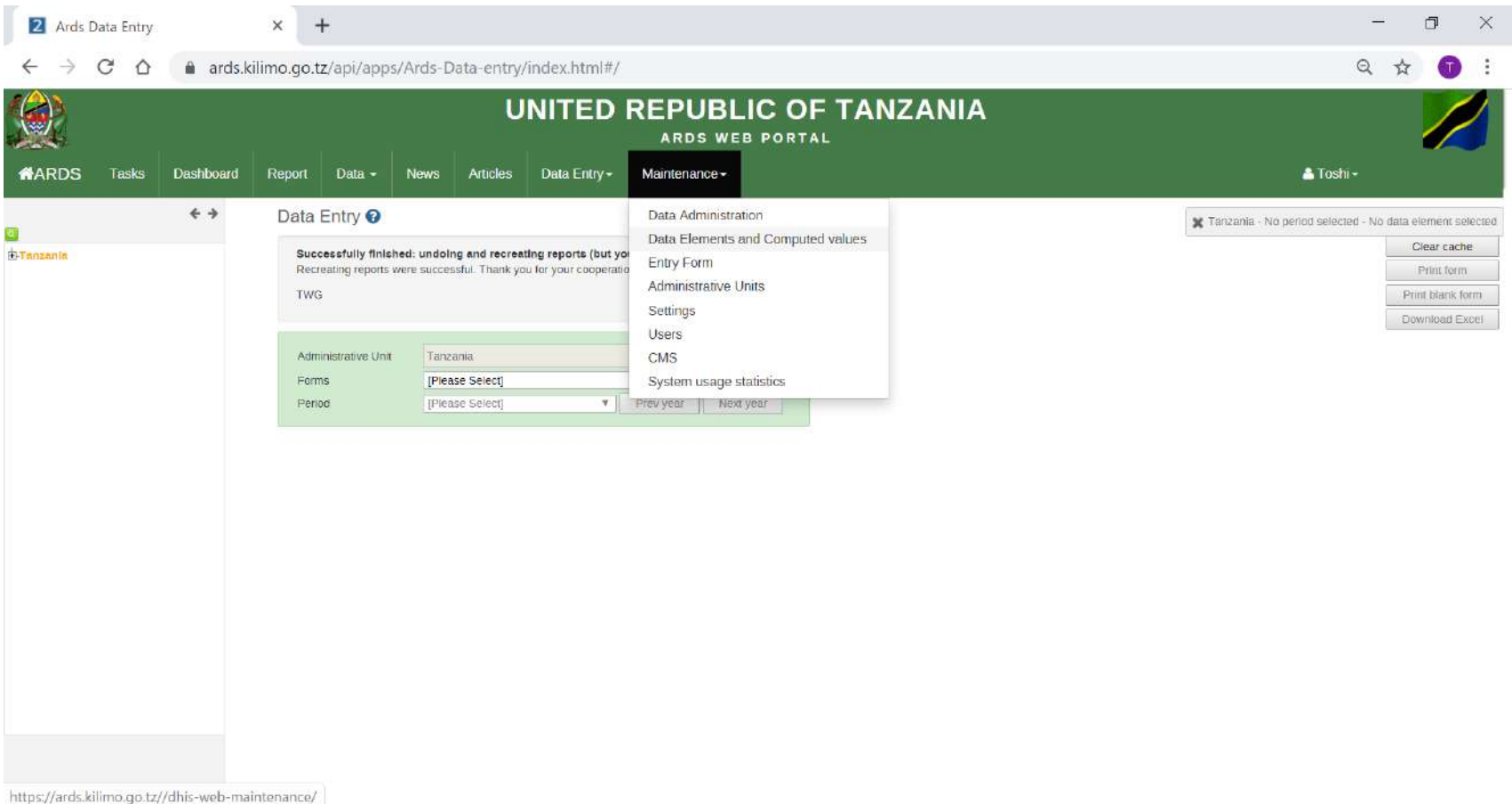
Maelezo:  
i) Andika jina la visumbufu vya mimea/magonjwa yaliyotupuka katika kipindi cha mwezi husika  
ii) Andika jina la zao lililoshambuliwa na visumbufu vya mimea/magonjwa,tumia mistari(row) moja kujaza zao moja  
iii) Changua ukubwa wa eneo lililoathirika na visumbufu vya mimea/magonjwa shamoani: Ukuubwa(kubwa)kuliko asilimia 50) Wastani(asilimia, 10-50) au dogo chini ya asilimia 10)  
iv) Andika jina la dawa iliyo tumika miara kwa miara katika kukabiliana na visumbufu vya mimea /magonjwa  
v) Eneo lililookolewa linategemea na idadi ya kaya zilizopata huduma ya mimea/magonjwa

4. Mifugo Iliyochinjwa

Aina ya mifugo(i)	Idadi ya waliochinjwa kwa mwezi huu(ii)	Bei ya wastani kwa kg(Tsh)(v)
Ng'ombe		
Kondoo		

# 11. Modification of Dropdown List (2) Access Lookup Table

① Go to Maintenance – Data Elements and Computed values

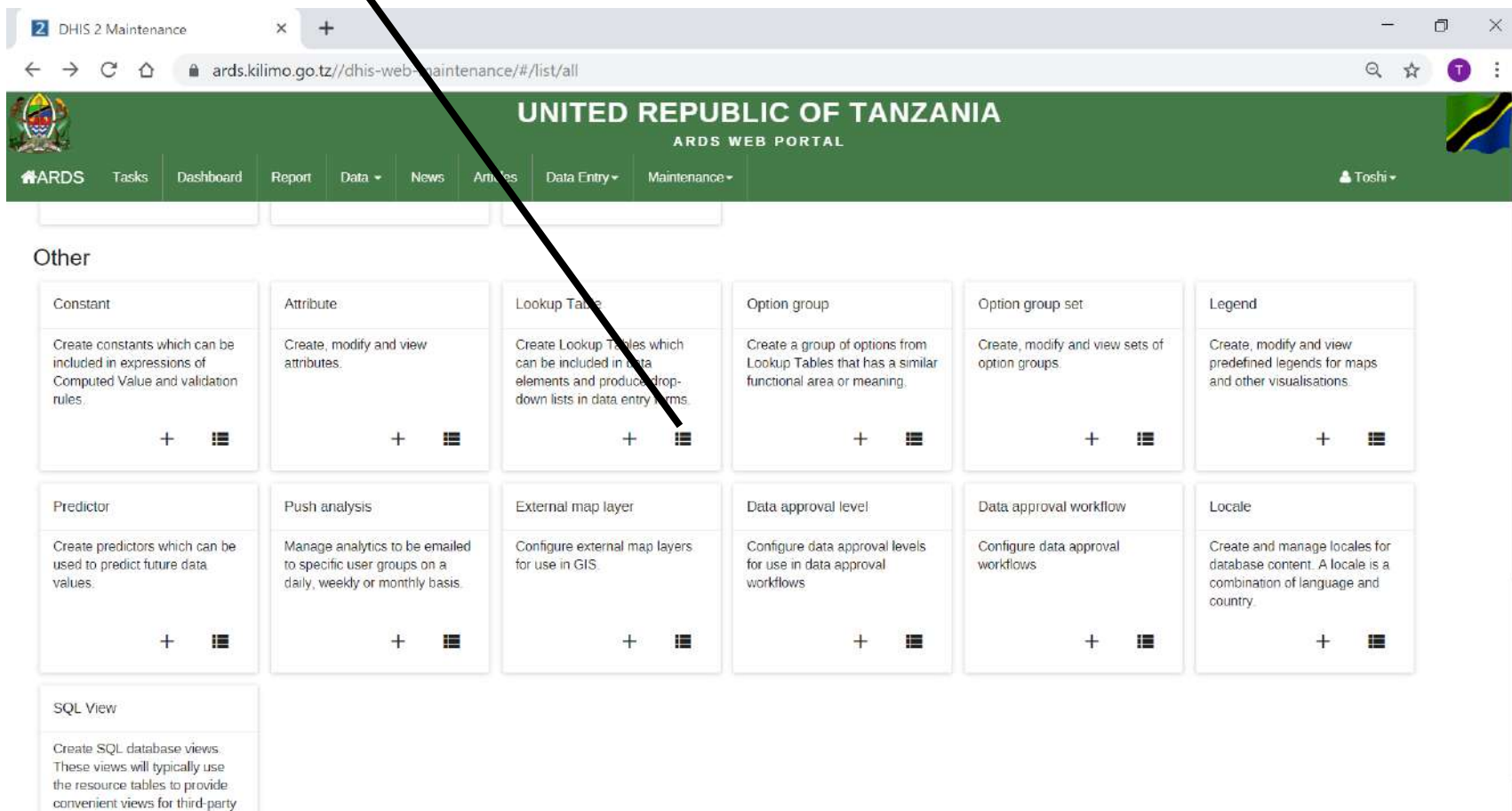


The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL [ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/](https://ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/). The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The "Maintenance" menu is open, showing options: "Data Administration", "Data Elements and Computed values", "Entry Form", "Administrative Units", "Settings", "Users", "CMS", and "System usage statistics". The "Data Elements and Computed values" option is highlighted. Below the menu, a notification states "Successfully finished: undoling and recreating reports (but yo...)" and "Recreating reports were successful. Thank you for your cooperatio...". The main content area shows a form with fields for "Administrative Unit" (Tanzania), "Forms" ([Please Select]), and "Period" ([Please Select]). There are also "Prev year" and "Next year" buttons. A status bar at the bottom right indicates "Tanzania - No period selected - No data element selected" and provides buttons for "Clear cache", "Print form", "Print blank form", and "Download Excel". The footer shows the URL <https://ards.kilimo.go.tz//dhis-web-maintenance/>.

# 11. Modification of Dropdown List

## (2) Access Lookup Table

② Click List in Lookup Table

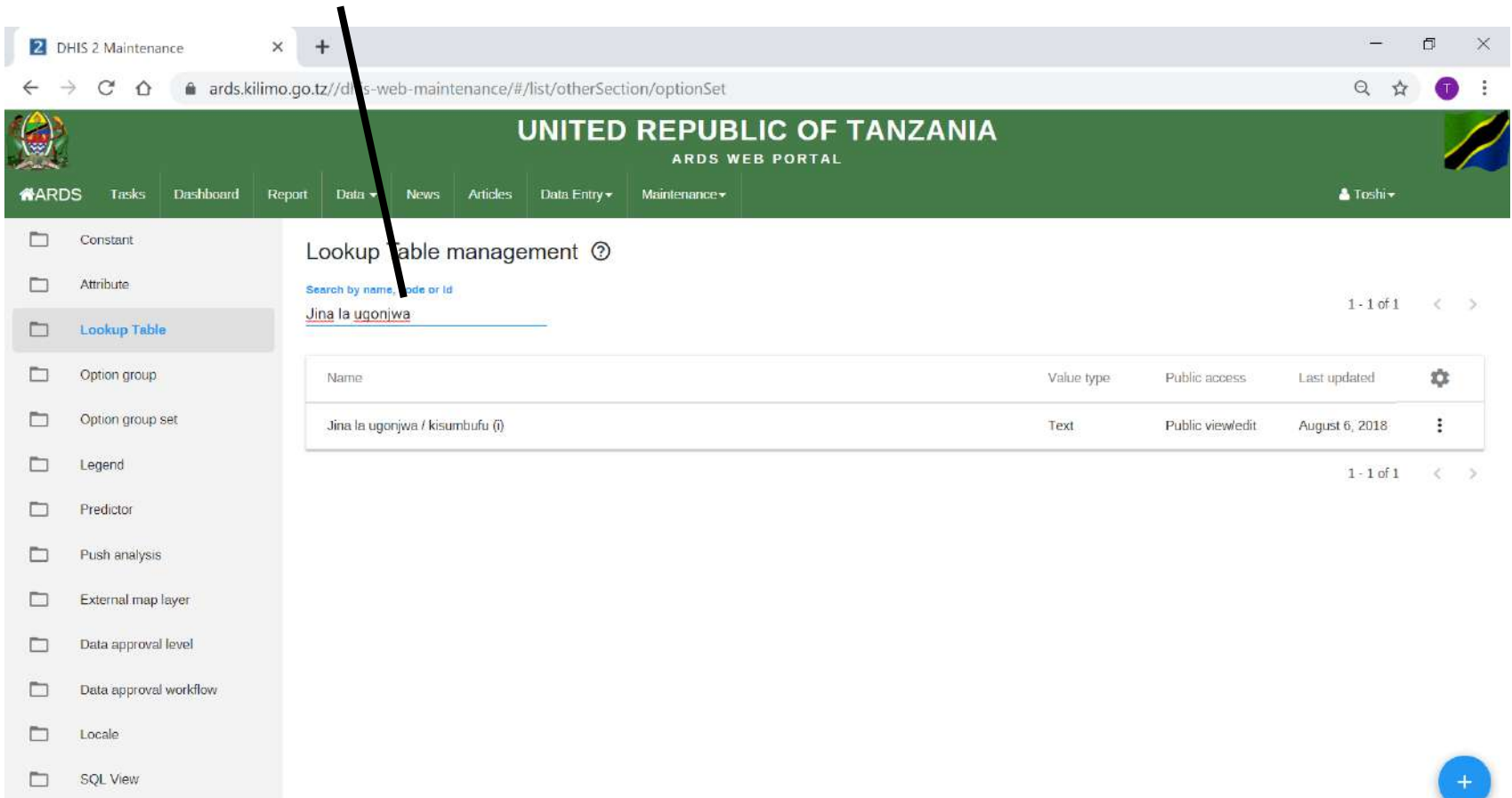


The screenshot displays the DHIS 2 Maintenance interface. The browser address bar shows the URL `ards.kilimo.go.tz//dhis-web-maintenance/#/list/all`. The page header features the United Republic of Tanzania ARDS Web Portal logo and navigation tabs for ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile for 'Toshi' is visible in the top right. The main content area is titled 'Other' and contains a grid of functional blocks. A black arrow points from the text 'Click List in Lookup Table' to the 'Lookup Table' block, which is highlighted with a white border. The 'Lookup Table' block description reads: 'Create Lookup Tables which can be included in data elements and produce drop-down lists in data entry forms.' Other blocks include Constant, Attribute, Option group, Option group set, Legend, Predictor, Push analysis, External map layer, Data approval level, Data approval workflow, and Locale. The SQL View block is partially visible at the bottom left.

# 11. Modification of Dropdown List

## (2) Access Lookup Table

- ③ To search, input dropdown list name  
In this example, Jina la ugonjwa / Kisumbufu



The screenshot shows the DHIS 2 Maintenance interface. The browser address bar indicates the URL is [ards.kilimo.go.tz/dhis-web-maintenance/#/list/otherSection/optionSet](https://ards.kilimo.go.tz/dhis-web-maintenance/#/list/otherSection/optionSet). The page header includes the United Republic of Tanzania ARDS Web Portal logo and navigation tabs for ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The user 'Toshi' is logged in.

The main content area is titled 'Lookup Table management' and includes a search bar with the text 'Jina la ugonjwa'. Below the search bar, a table displays the search results:

Name	Value type	Public access	Last updated	
Jina la ugonjwa / Kisumbufu (i)	Text	Public view/edit	August 6, 2018	

The table shows one entry with the name 'Jina la ugonjwa / Kisumbufu (i)', value type 'Text', public access 'Public view/edit', and last updated 'August 6, 2018'. The page also includes a sidebar with navigation options and a blue plus button in the bottom right corner.

# 11. Modification of Dropdown List (2) Access Lookup Table

④ Click here and select "Edit"

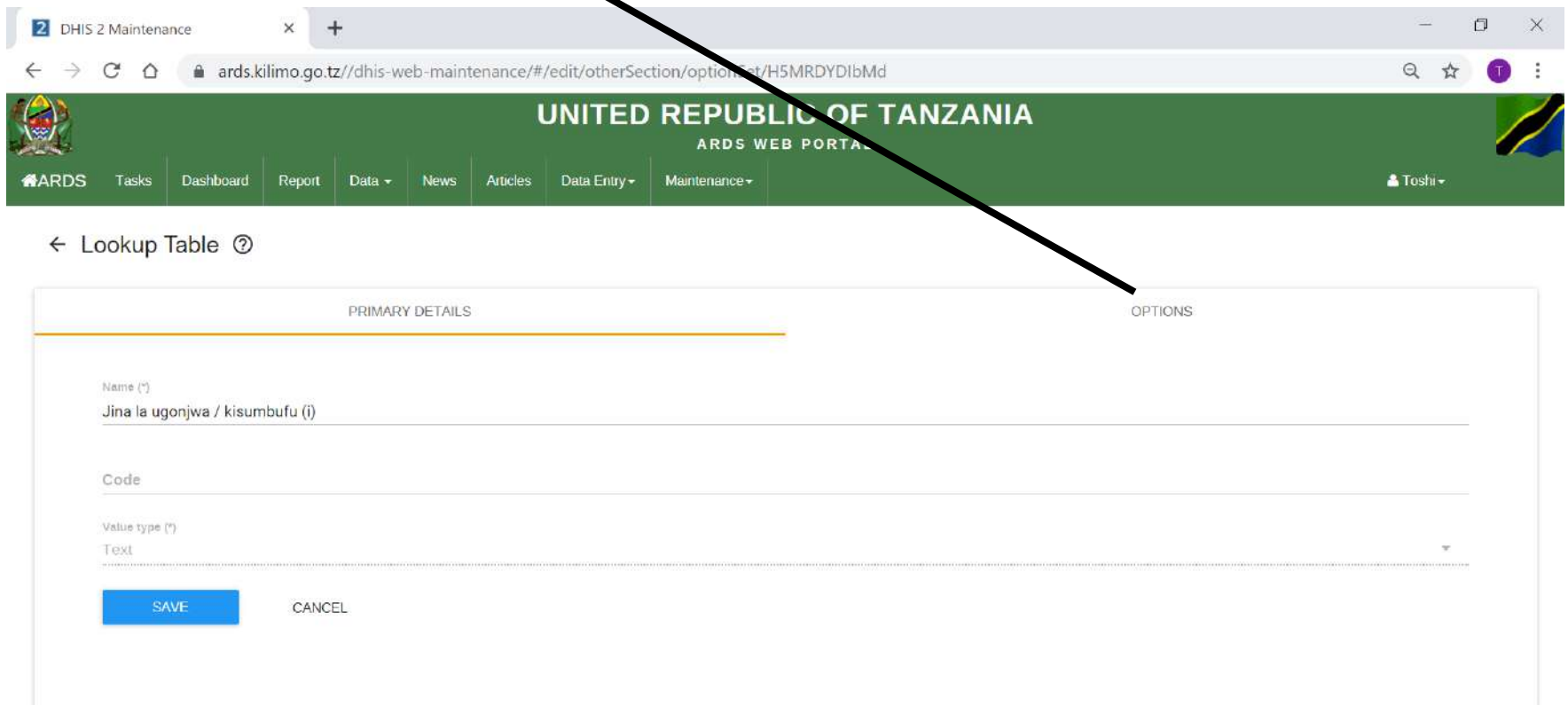
The screenshot shows the DHIS 2 Maintenance interface for the United Republic of Tanzania ARDS Web Portal. The page is titled "Lookup Table management" and displays a table of lookup tables. The table has columns for Name, Value type, Public access, and Last updated. The first entry is "Jina la ugonjwa / kisumbufu (0)" with a value type of "Text" and a public access of "Public (read only)". A dropdown menu is open over this entry, showing options: Edit, Sharing settings, Delete, Show details, and Translate. The "Edit" option is highlighted. A black arrow points from the text "Click here and select 'Edit'" to the "Edit" option in the dropdown menu.

Name	Value type	Public access	Last updated
Jina la ugonjwa / kisumbufu (0)	Text	Public (read only)	August 6, 2019

# 11. Modification of Dropdown List

## (3) Add Options

① Click OPTIONS



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz//dhis-web-maintenance/#/edit/otherSection/options/et/H5MRDYDibMd`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user is logged in as "Toshi".

The main content area is titled "Lookup Table" and has two tabs: "PRIMARY DETAILS" and "OPTIONS". The "OPTIONS" tab is active. The form contains the following fields:

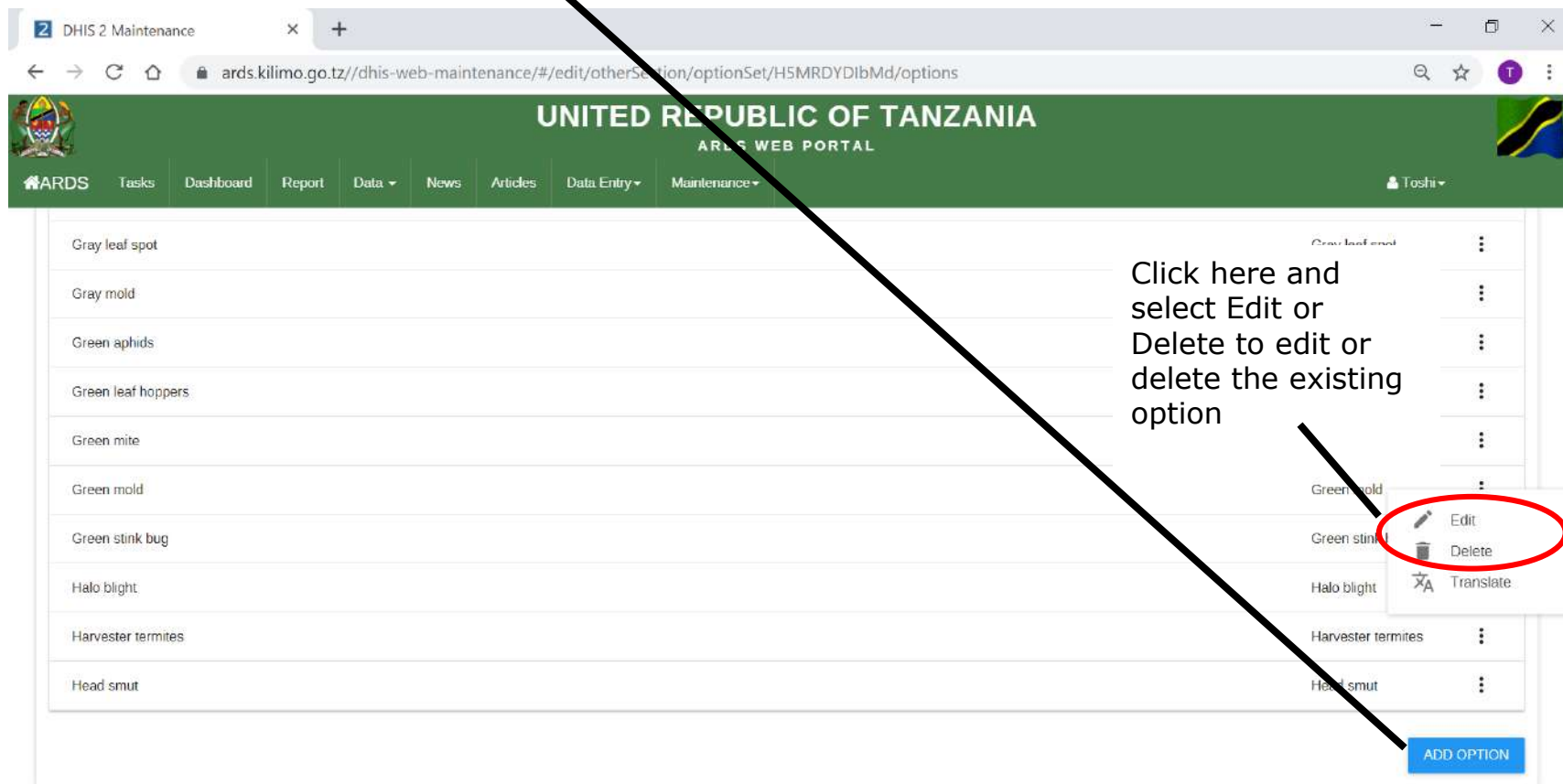
- Name (\*)**: Jina la ugonjwa / kisumbufu (i)
- Code**
- Value type (\*)**: Text

At the bottom of the form, there are two buttons: "SAVE" (blue) and "CANCEL".

# 11. Modification of Dropdown List

## (3) Add Options

② Click "ADD OPTIONS" to add new list



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The main content area displays a list of options with the following text: "Gray leaf spot", "Gray mold", "Green aphids", "Green leaf hoppers", "Green mite", "Green mold", "Green stink bug", "Halo blight", "Harvester termites", and "Head smut". On the right side of the list, there are three vertical ellipsis menus. The bottom right corner features a blue "ADD OPTION" button. A red circle highlights the "Edit" button in the dropdown menu for "Green stink bug". A black arrow points from the text "Click here and select Edit or Delete to edit or delete the existing option" to the "Edit" button. Another black arrow points from the text "Click here and select Edit or Delete to edit or delete the existing option" to the "ADD OPTION" button.

Click here and select Edit or Delete to edit or delete the existing option

Click here and select Edit or Delete to edit or delete the existing option

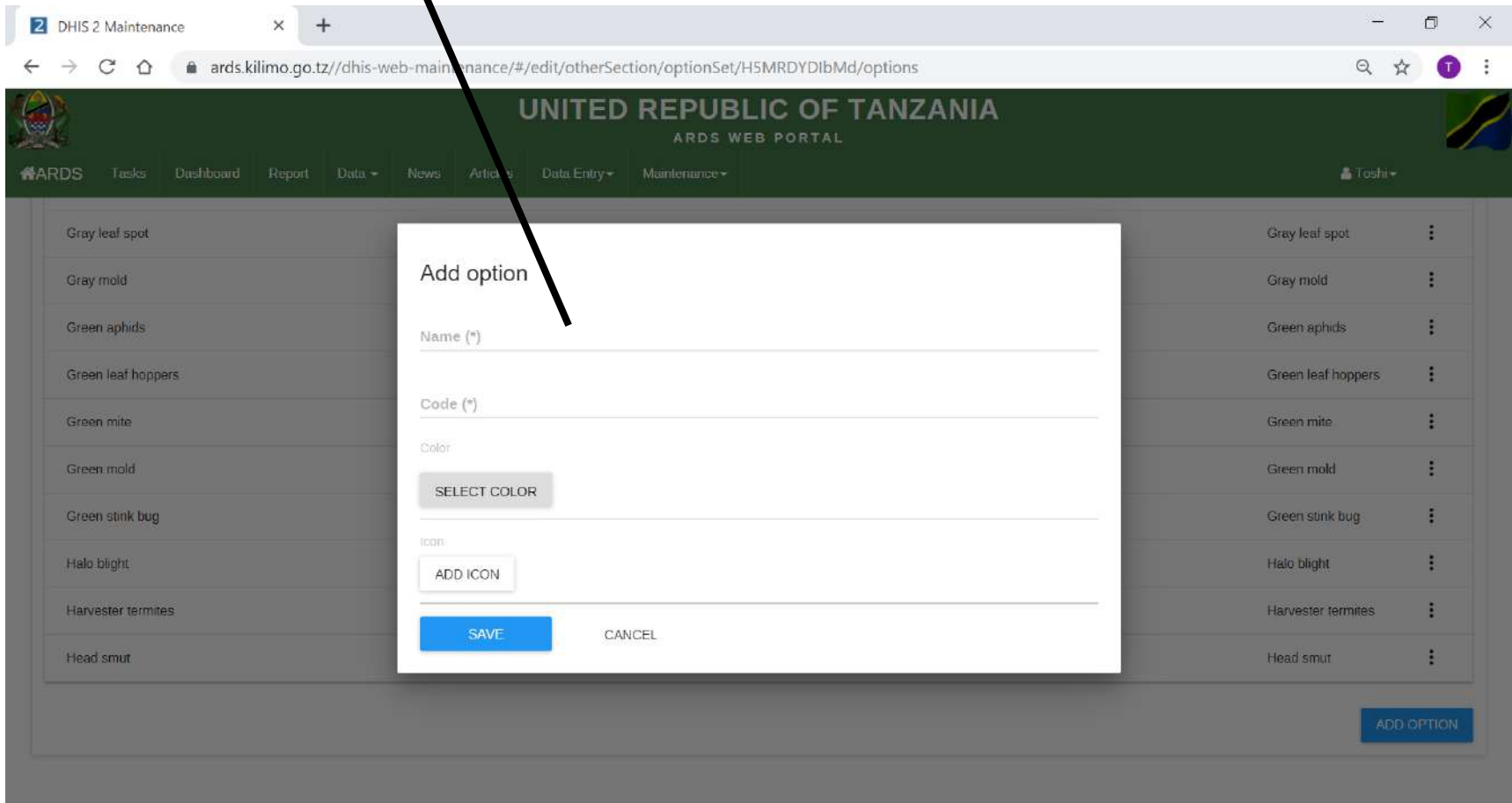
Gray leaf spot	Gray leaf spot	⋮
Gray mold	Gray mold	⋮
Green aphids	Green aphids	⋮
Green leaf hoppers	Green leaf hoppers	⋮
Green mite	Green mite	⋮
Green mold	Green mold	⋮
Green stink bug	Green stink bug	⋮
Halo blight	Halo blight	⋮
Harvester termites	Harvester termites	⋮
Head smut	Head smut	⋮

ADD OPTION

# 11. Modification of Dropdown List

## (3) Add Options

③ In both "Name" and "Code", input new option name to be added and "Save".



The screenshot displays the ARDS Web Portal interface. At the top, the header reads "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". Below the header is a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile "Toshi" is visible in the top right corner. The main content area shows a list of options on the left and right sides, including: Gray leaf spot, Gray mold, Green aphids, Green leaf hoppers, Green mite, Green mold, Green stink bug, Halo blight, Harvester termites, and Head smut. A central "Add option" dialog box is open, featuring the following fields and buttons: "Name (\*)", "Code (\*)", "Color" (with a "SELECT COLOR" button), and "Icon" (with an "ADD ICON" button). At the bottom of the dialog are "SAVE" and "CANCEL" buttons. A black arrow points from the text above to the "Name" input field. In the bottom right corner of the portal, there is an "ADD OPTION" button.



# **12. Max and Min Value Setting**

Sometimes, district officers input outliers into entry forms and it is causing the unsatisfactory data quality issue in ARDS Web Portal. To improve the quality of the data, a new function to configure maximum and minimum value was developed. This chapter explains the overview of the function and how administrators set up these values. The function for the district users will be explained in user manual.

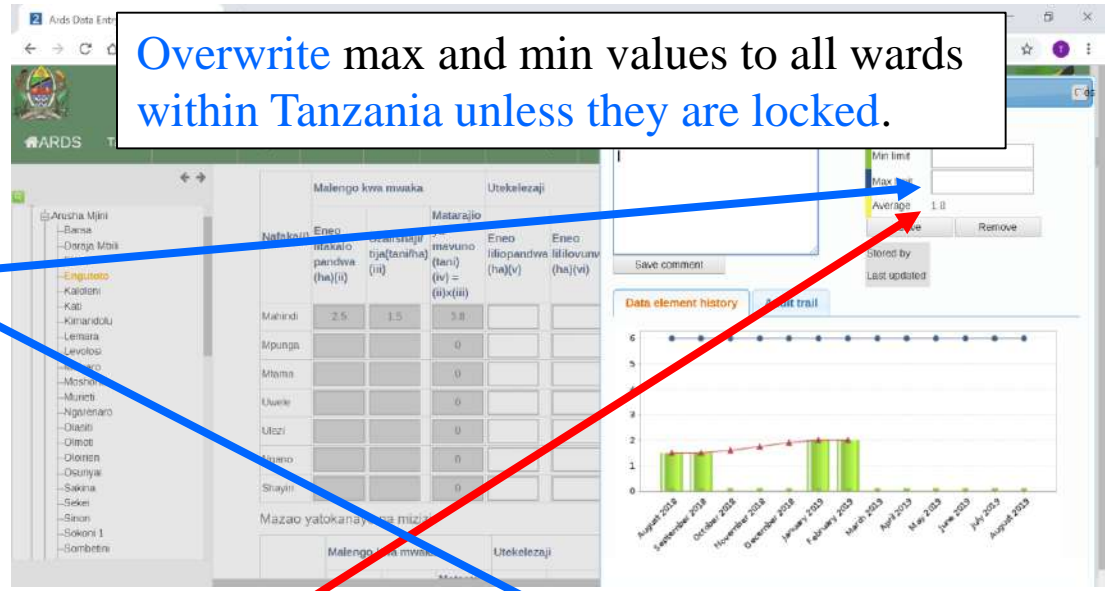
# 12. Max and Min Value Setting

## (1) Overview

Configure max and min values for Tanzania

**Administrator Screen**

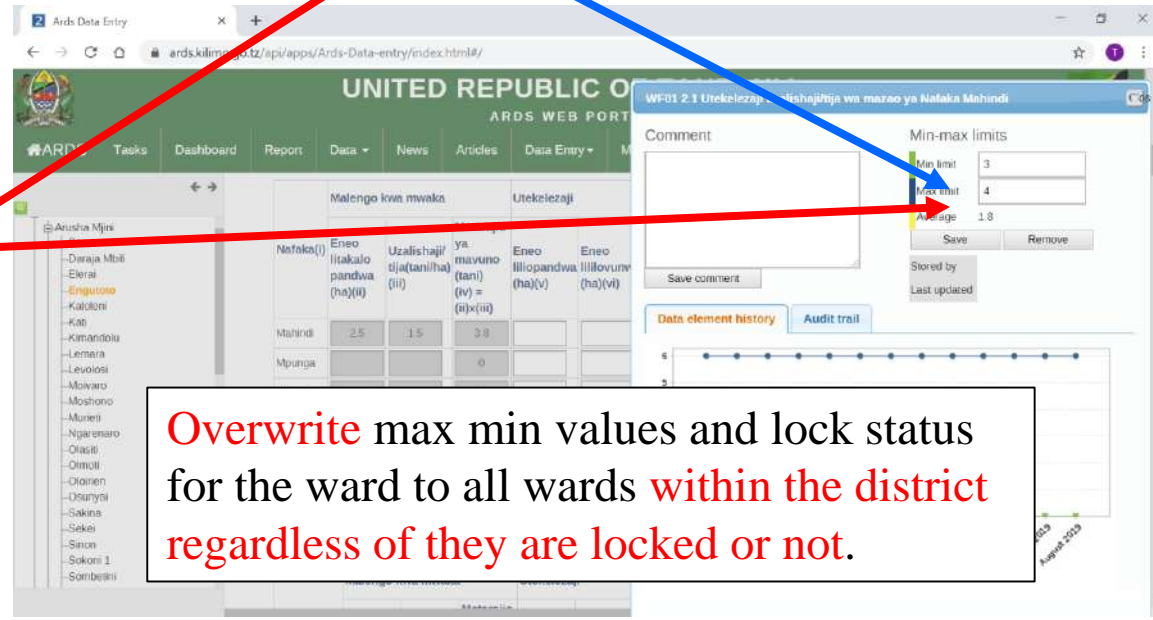
Explained in Maintenance Manual



Configure max and min values and lock/unlock for a ward. Then, the info can be applied all wards within the district.

**District Screen**

Explained in User Manual



# 12. Max and Min Value Setting

## (2) Administrator Screen

① Choose Data Entry – Min & Max config

The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The header includes the national emblem and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Data Entry' menu is open, showing options for 'Data Entry', 'Import Export', and 'Min & Max config'. The 'Min & Max config' option is selected, leading to a page titled 'Ards-min-max-config/index.html#/'. The main content area displays a news article titled 'Cooperation Framework Agreement' with text in English and Swahili. A sidebar on the left contains navigation links for 'Data Analysis', 'Agriculture', 'Livestock', 'Fishery', 'Trade', 'General Information', 'Documents', and 'Links'. A 'Favourites Charts' section on the right shows 'No chart loaded'.

<https://ards.hispztz.org/dev/api/apps/Ards-min-max-config/index.html#/>



# 12. Max and Min Value Setting

## (2) Administrator Screen

③ Scroll Down and Input Max & Min Values for Maziwa

The screenshot shows a web browser window with the URL `ards.hisptz.org/dev/api/apps/Ards-min-max-config/index.html#`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, Maintenance, and Toshi. The main content area displays a table with columns for "Min" and "Max" values for different types of milk. The table is titled "Kiasi cha uzalishaji maziwa kwa mfugo/siku".

	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk -Indigeneous cattle (Lita)	<input type="text"/>	<input type="text"/>
Milk improved cattle (Lita)	<input type="text"/>	<input type="text"/>

At the bottom left of the page, there is a button labeled "Apply change".

④ Apply Change

# 12. Max and Min Value Setting

## (2) Administrator Screen

⑤ Data is saved

The screenshot shows the ARDS Web Portal administrator interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", "Maintenance", and "Toshi".

The main content area displays a table with columns for crop names and input fields for configuration. The visible rows are:

Crop Name	Input Field 1	Input Field 2	Input Field 3	Input Field 4	Input Field 5	Input Field 6
Helianthus	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Choya (Rozella)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Below this table, there is a section titled "6.1 Maziwa" (Liquids) with a sub-header "Kiasi cha uzalishaji maziwa kwa mfugo/siku" (Milk production quantity per animal/day). This section contains a table with columns for "Min" and "Max" values:

	Min	Max
Milk -Indigeneous cattle (Lita)	<input type="text"/>	15
Milk improved cattle (Lita)	<input type="text"/>	15

At the bottom left, there is an "Apply change" button. A dark notification box at the bottom center displays the message: "Min Max configurations have been saved successfully".

# 12. Max and Min Value Setting

## (3) Alert Message

- ⑥ When the value less than min or more than max is entered in WF01, alert message is displayed.

The screenshot shows a web browser window with the URL `ards.hisptz.org/dev/api/apps/Ards-Data-entry/index.html#/`. The application interface includes a navigation menu with 'ARDS', 'Tasks', 'Dashboard', 'Report', and 'Data'. A sidebar on the left shows a location hierarchy: Tanzania > Animal Region > Bird District > Crow Ward > Hawk Ward > Owl Ward > Fish District > Catfish Ward > Food Region. The main content area displays a form for 'Viungo' (Catfish Ward) with a dropdown for 'Gwara(Lablab bean)'. A table titled 'Viungo' is shown with columns for 'Malengo kwa mwaka' (Annual target), 'Utekezaji' (Progress), and 'Bei ya soko' (Market price). The 'Utekezaji' column is further divided into 'Eneo lilitakalo pandwa (ha)(ii)', 'Uzalishaji /tija (tani/ha) (iii)', 'Matarajio ya mavuno (tani) (iv) = (ii)x(iii)', 'Eneo liliovunwa (ha)(v)', 'Eneo liliovunwa (ha)(vi)', 'Uzalishaji /tija(tani /ha)(vii)', and 'Mavuno (tani) (viii)= (vi)x(vii)'. The 'Bei ya soko' column is 'Tsh/kg(ix)'. The 'Maelezo(Zisizidi herufi hamsini)(x)' column is for additional notes. An alert message is displayed over the table, stating: 'The value of the following data element is greater than the specified maximum value.: 5' and 'WF01 2.1 Utekezaji wa eneo lililo pandwa mazao ya viungo'. An 'OK' button is visible on the alert message. A red circle with the number '7' and the text 'OK' is overlaid on the image, pointing to the 'OK' button on the alert message.

Viungo(i)	Malengo kwa mwaka			Utekezaji				Bei ya soko Tsh/kg(ix)	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji /tija (tani/ha) (iii)	Matarajio ya mavuno (tani) (iv) = (ii)x(iii)	Eneo lilitakalo pandwa (ha)(v)	Eneo liliovunwa (ha)(vi)	Uzalishaji /tija(tani /ha)(vii)	Mavuno (tani) (viii)= (vi)x(vii)		
Tangawizi			0	20			0		
Pilipili Manga			0				0		
Giligilani			0				0		
Mdalasini			0				0		
Binzari			0				0		
Vanilla			0				0		
Pilipili kali			0				0		



# 12. Max and Min Value Setting

## (3) Alert Message

⑧ Cell turns to red to alert.

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The main content area displays a data entry form for "Catfish Ward - September 2019 - WF01 2.1 Utekelezaji wa eneo lilio pandwa mazao ya viungo Tangawizi". The table below shows the data entry for various viungo (fish species).

Viungo(i)	Malengo kwa mwaka			Utekelezaji			Bei ya soko Tsh/kg(ix)	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji /tija (tani/ha) (iii)	Matajirio ya mavuno (tani) (iv) = (ii)x(iii)	Eneo lilio pandwa (ha)(v)	Eneo liliovunwa (ha)(vi)	Uzalishaji /tija(tani /ha)(vii)		
Tangawizi			0	20			0	
Pilipili Manga			0				0	
Giligilani			0				0	
Mdalasini			0				0	
Binzari			0				0	
Vanilla			0				0	
Pilipili kali			0				0	

A black arrow points to the cell containing the value "20" in the "Utekelezaji" column for "Tangawizi", which is highlighted in red to indicate an alert.



# **12. Max and Min Value Setting**

## **(4) Recommendation for setting**

Item	Recommendation for setting
Eneo liliopandwa Min	A district user should set 0 thus administrator should set nothing.
Eneo liliopandwa Max	A district user should set its area thus administrator should set nothing.
Eneo lililovunwa Min	A district user should set 0 thus administrator should set nothing.
Eneo lililovunwa Max	A district user should set its area thus administrator should set nothing.
Uzalishaji/ tija(tani/ha) Min	0 should be set.
Uzalishaji/ tija(tani/ha) Max	Administrator should values recommended from NBS.
Milk -Indigeneous cattle (Lita) Min	0 should be set.
Milk -Indigeneous cattle (Lita) Max	Administrator should values recommended from NBS.
Milk improved cattle (Lita) Min	0 should be set.
Milk improved cattle (Lita) Max	Administrator should values recommended from NBS.

# **12. Max and Min Value Setting**

## **(5) Specification for setting**

- Only Max or Min value cannot be configured.  
For each item, both Max and Min must be configured.
- However, you can keep both Max and Min blank.  
In that case, the validation for max and min will not work in WF01 and any data can be entered.
- Only integer can be configured in min or max.
- Max must be larger than min. Otherwise the cell frame turns to red to alert.
- If max or min value is entered in the corresponding item in WF01, it is accepted and alert message is not shown.

# **User Manual**

# **Simple Version**

**Ver 1.2**

**October, 2019**

**JICA Project Team**

# **Purpose of User Manual**

This User Manual is a quick reference to show how to use general functions of ARDS Web Portal to administrators, district users, region users, and other general users. This manual does not explain administrative functions to maintain ARDS Web Portal exclusively for administrators. Those functions are explained in “Maintenance Manual”.

# **Contents**

- 1. Data Entry**
- 2. Report Creation / Uncreation / Cancel**
- 3. Report Approval**
- 4. Report**
- 5. Lock / Unlock Data Entry / Report**
- 6. Pivot Table**
- 7. Map**
- 8. Static Report**
- 9. Archive Report**
- 10.Task List**
- 11. Submission and Creation Status**
- 12. Max and Min Value Setting**
- 13. Password Change**
- 14. Clear Cache & Reload**

# User Authorization to Each Function

	Administrator	District User	Region User	Other User
Data Entry	○	○	×	×
Report Creation / Uncreation / Cancel	○	○	×	×
Report Approval	○	×	○	×
Report	○	○	○	○
Lock / Unlock Data Entry / Report	×	○	○	×
Pivot Table	○	○	○	○
Map	○	○	○	○
Static Report	○	○	○	○
Archived Report	○	○	○	○
Task List (District Task)	×	○	×	×
Task List (Region Task)	×	×	○	×
Submission and Creation Status	○	○	○	○
Max and Min Value Setting	×	○	×	×
Password Change	○	○	○	○
Clear Cache and Reload	○	○	○	○

# **1. Data Entry**

**For District User, Administrator**

# 1. Data Entry

Data Entry allows District Users to submit ward entry form (monthly, quarterly, annual) and district entry form (quarterly, annual)

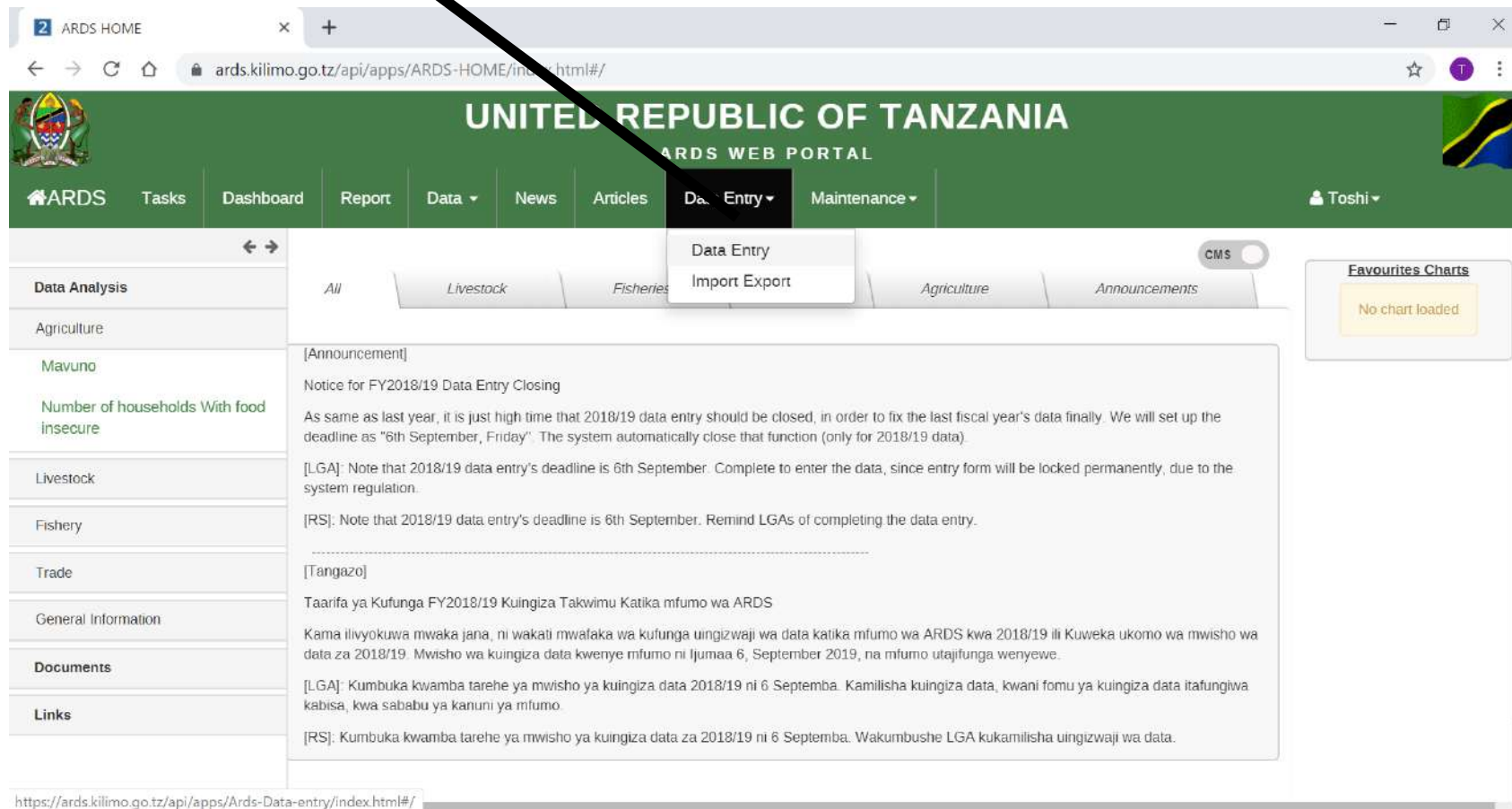
	Month	Quarter	Year	Annual Target
Ward	Ward Monthly Entry Form (WF01)	Ward Quarterly Entry Form (WF02)	Ward Annual Entry Form (WF03)	Ward Annual Target Entry Form (WF00)
District	N/A	District Quarterly Entry Form (DF02)	District Annual Entry Form (DF03)	



# 1. Data Entry

## 1.1 Enter and Submit Data

- ① Choose Data Entry-  
Data Entry



The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Data Entry' menu is highlighted, and a dropdown menu is visible with options for 'Data Entry' and 'Import Export'. The main content area displays a notice for FY2018/19 Data Entry Closing, stating that the deadline is 6th September, Friday. The notice is in both English and Swahili. The left sidebar contains various categories like 'Data Analysis', 'Agriculture', 'Livestock', 'Fishery', 'Trade', 'General Information', 'Documents', and 'Links'. The right sidebar shows 'Favourites Charts' with a 'No chart loaded' message.

https://ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/

# 1. Data Entry

## 1.1 Enter and Submit Data

② Select Administrative Unit

③ Select Entry Form

WF Select the Ward

DF Select the District

④ Select Period

# 1. Data Entry

## 1.1 Enter and Submit Data

The Entry Form selected is shown

The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/?`. The page header includes the Tanzanian national emblem, the text "PUBLIC OF TANZANIA ARDS WEB PORTAL", and a navigation menu with items like ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile for "Toshi" is visible in the top right.

A yellow notification banner at the top reads: "Please wait, while unlocking auto-growing table". Below this, a message box states: "Successfully finished: undoing and recreating reports (but you can continue entering data): Recreating reports were successful. Thank you for your cooperation".

The main content area displays a "Data Entry" form with the following fields:

- Administrative Unit: Kamwanga
- Forms: Ward Monthly Entry Form (WF01)
- Period: August 2019 (with "Prev year" and "Next year" buttons)
- Data Dimension: Actual Figure

A red instruction below the form reads: "When done, Press 'Complete' for submission".

On the right side, a notification box says "Kamwanga - August 2019 - No data element selected" and includes buttons for "Clear cache", "Print form", "Print blank form", and "Download Excel".

At the bottom, the form title is "Ward Monthly Entry Form" with the details "Ward: Kamwanga" and "August 2019". There are two input fields: "Jina la Afisa Ugani:" and "Tarehe ya kuwasilisha:".

Entry Form can be downloaded in Excel.

# 1. Data Entry

## 1.1 Enter and Submit Data

⑤ Scroll down and input the data entry form.

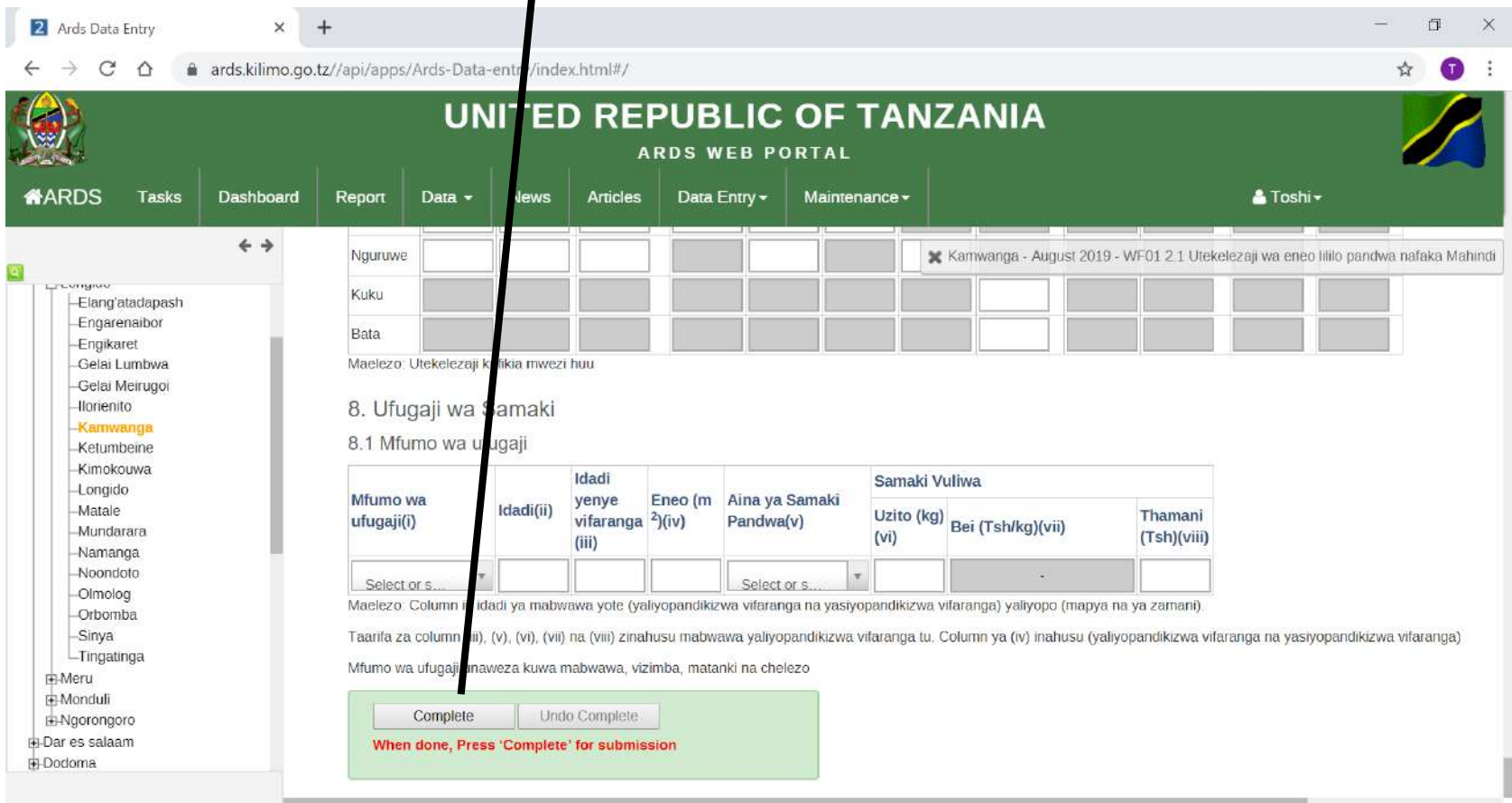
The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user is logged in as 'Toshi'. The main content area shows a notification about the 2019 crop production report and a section titled '2.1 Utekezaji wa malengo msimu' (2.1 Seasonal Target Achievement). Below this is a table for 'Mazao ya nafaka' (Crop Production) with columns for 'Malengo kwa mwaka' (Annual Target) and 'Utekezaji' (Actual Production). The table lists various crops and their production data for the year 2019.

Nafaka(i)	Malengo kwa mwaka			Utekezaji				Bei ya soko	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji/tija(tani/ha)(iii)	Matarajio ya mavuno (tani) (iv) = (ii)x(iii)	Eneo lilipandwa (ha)(v)	Eneo lililovunwa (ha)(vi)	Uzalishaji/tija(tani/ha)(vii)	Mavuno (tani) (viii)= (vi)x(vii)		
Mahindi	2000	2	4000	1			0		
Mpunga			0				0		
Mtama			0				0		
Uwele			0				0		
Ulezi			0				0		
Ngano			0				0		

# 1. Data Entry

## 1.1 Enter and Submit Data

⑥ Press Complete to submit the data.



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user is logged in as "Toshi".

The main content area displays a data entry form for "Kamwanga - August 2019 - WF01 2.1 Utekezaji wa eneo lililo pandwa nafaka Mahindi". The form includes a table for data entry with columns for "Nguruwe", "Kuku", and "Bata". Below the table, there is a section for "8. Ufugaji wa Samaki" (8.1 Mfumo wa ufugaji) with a table for recording fish farming data.

Mfumo wa ufugaji(i)	Idadi(ii)	Idadi yenye vifaranga (iii)	Eneo (m <sup>2</sup> )(iv)	Aina ya Samaki Pandwa(v)	Samaki Vuliwa		
					Uzito (kg)(vi)	Bei (Tsh/kg)(vii)	Thamani (Tsh)(viii)
Select or s...				Select or s...			

Maelezo: Column (ii) Idadi ya mabwawa yote (yaliyopandikizwa vifaranga na yasiyopandikizwa vifaranga) yaliyopo (mapya na ya zamani).  
Taarifa za column (iii), (v), (vi), (vii) na (viii) zinahusu mabwawa yaliyopandikizwa vifaranga tu. Column ya (iv) inahusu (yaliyopandikizwa vifaranga na yasiyopandikizwa vifaranga)  
Mfumo wa ufugaji unaweza kuwa mabwawa, vizimba, matanki na chelezo

At the bottom of the form, there are two buttons: "Complete" and "Undo Complete". A red text instruction reads: "When done, Press 'Complete' for submission". A red arrow points to the "Complete" button.

# 1. Data Entry

## 1.2 Complete / Undo Complete

### Complete Process

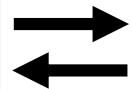
After Data Entry form is submitted, it will be **locked** and **not editable**.

Jina la kampuni ya simu	Idadi ya vijji vinasayofikiwa na huduma
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	

**Complete** Undo Complete  
When done, Press 'Complete' for submission

Data Entry is possible

Complete



Cancel



Complete form



Complete button is grayed out and deactivated.

Submitted

Jina la kampuni ya simu	Idadi ya vijji vinasayofikiwa na huduma
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	

Complete Undo Complete  
Completed by admin at 2016-10-28 See details

Data Entry is locked.

This screen transition is applicable to every data entry form.

# 1. Data Entry

## 1.2 Complete / Undo Complete

### Undo Complete Process

To unlock, Data Entry Form need to be **Undo Complete**.

Undo Complete is finished

Incomplete



OK

Complete button is activated and Undo complete is grayed out.

Data Entry is possible

This screen transition is applicable to every data entry form.

Jina la kampuni ya simu	Idadi ya vijiji vinaavyoikiwa na huduma
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	

Data Entry is locked.

Jina la kampuni ya simu	Idadi ya vijiji vinaavyoikiwa na huduma
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	



# 1. Data Entry

## 1.3 Table 2.1 and 2.2 WF01

Both tables are to input the information on crop production.

Table 2.1 is to input actually harvested data.

Please do not input estimate data for future.

2.1 Utekelezaji wa malengo msimu

Mazao ya nafaka

Baraa - Au

Nafaka(i)	Malengo kwa mwaka			Utekelezaji				Bei ya soko	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji/tija(tani/ha)(iii)	Matarajio ya mavuno (tani)(iv) = (ii)x(iii)	Eneo lililopandwa (ha)(v)	Eneo lililovunwa (ha)(vi)	Uzalishaji/tija(tani/ha)(vii)	Mavuno (tani)(viii)= (vi)x(vii)	Tsh/kg(ix)	
Mahindi	188	2.5	470				0		
Mpunga			0				0		
Mtama			0				0		
Uwele			0				0		
Ulezi			0				0		
Ngano			0				0		
Shayiri			0				0		



# 1. Data Entry

## 1.3 Table 2.1 and 2.2 WF01

2.2 Utabiri wa usalama wa chakula

Aina ya Mazao (i)	Utabiri wa usalama wa chakula	
	Eneo lililovunwa (ha) (ii)	Mavuno (tani) (iii)
Mahindi	2	3
Mpunga	2	3
Mtama	3	4
Uwele	2	3
Ulezi	3	2
Ngano	2	3
Mihogo	3	2
Viazi vitamu	4	5
Viazi mvingo	3	3
Kunde	2	2
Maharage	2	3
Ndizi mbivu(Sweet banana)	3	4
Ndizi mbichi(Plantain)	2	3

- Food security requests LGA to report **expected production** of crops which is planted within the fiscal year. Table 2.2 is for the forecast.
- You can input this only in **May**. This table is locked in other months.
- For the detail, please refer the extension officers manual

# **2. Report Creation / Uncreation / Cancel**

**For District User, Administrator**

## 2. Report Creation / Uncreation / Cancel

After LGA officers submit enough WF01, WF-02, or WF03, you **need to create DR01, DR02, or DR03** for the corresponding period. DR01/DR02/DR03 is not created automatically since the system does not understand whether the LGA officers already completed the data entry for the data entry form or still continuing. The LGA officers need to show intention that you finished the data entry for the data entry form by pressing report creation button.

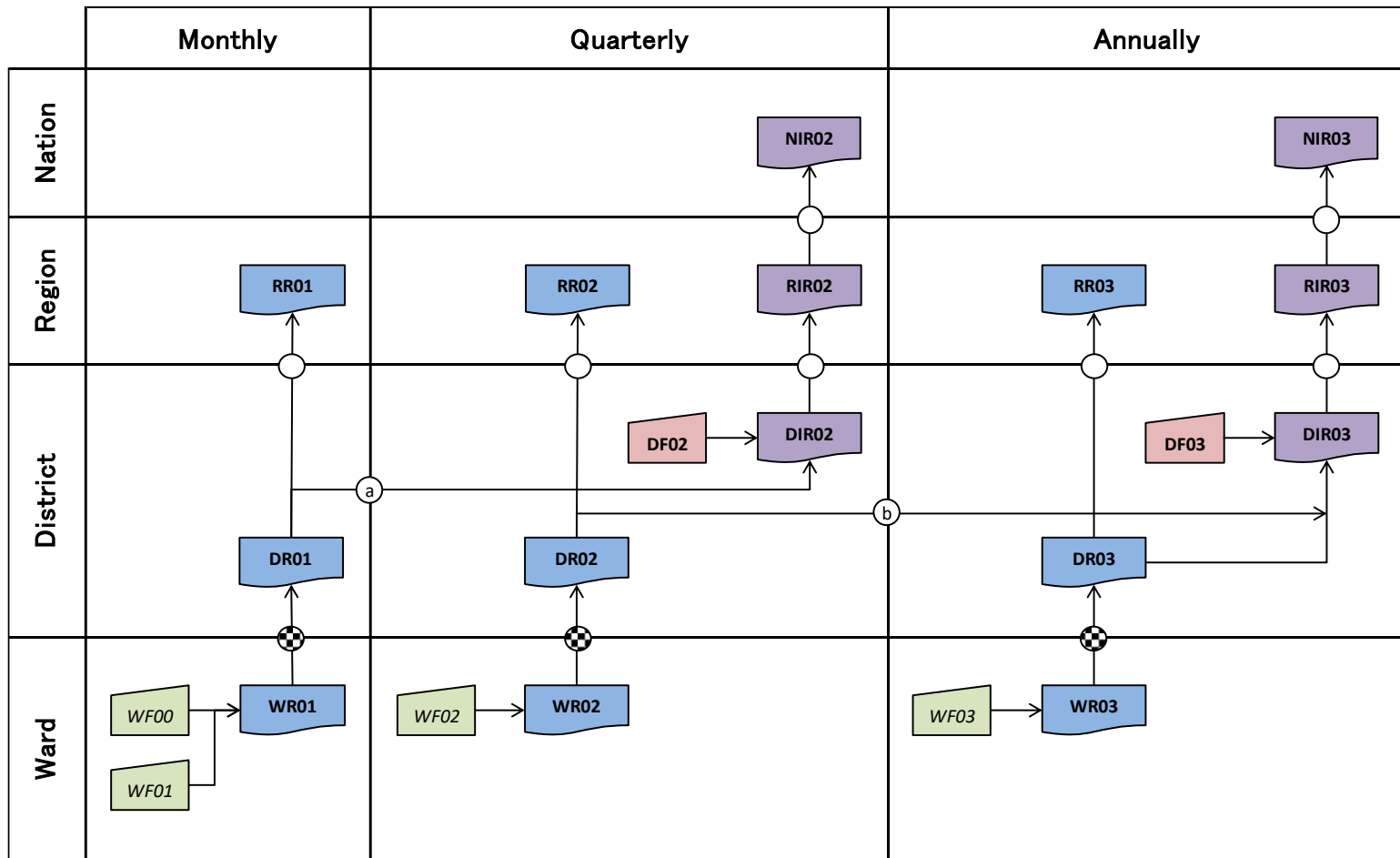
## 2. Report Creation / Uncreation / Cancel

RR01/02/03, DIR/RIR/NIR02/03 will be created automatically in case necessary condition is met and you do not need to trigger to create the reports.

Report	Necessary condition to create
RR01/RR02/RR03	Creation of DR01/DR02/DR03 respectively for all districts under the region.
DIR02	DF02 submission and DR01 creation for the district
DIR03	DF03 submission and creation of DR2 for 4 quarters for the fiscal year and DR03 for the district
RIR02/03	Creation of DIR02/DIR03 for all districts respectively under the region.
NIR02/03	Creation of RIR02/RIR03 for all regions respectively.

# 2. Report Creation / Uncreation / Cancel

Report Creation Flow (Data source of each report)

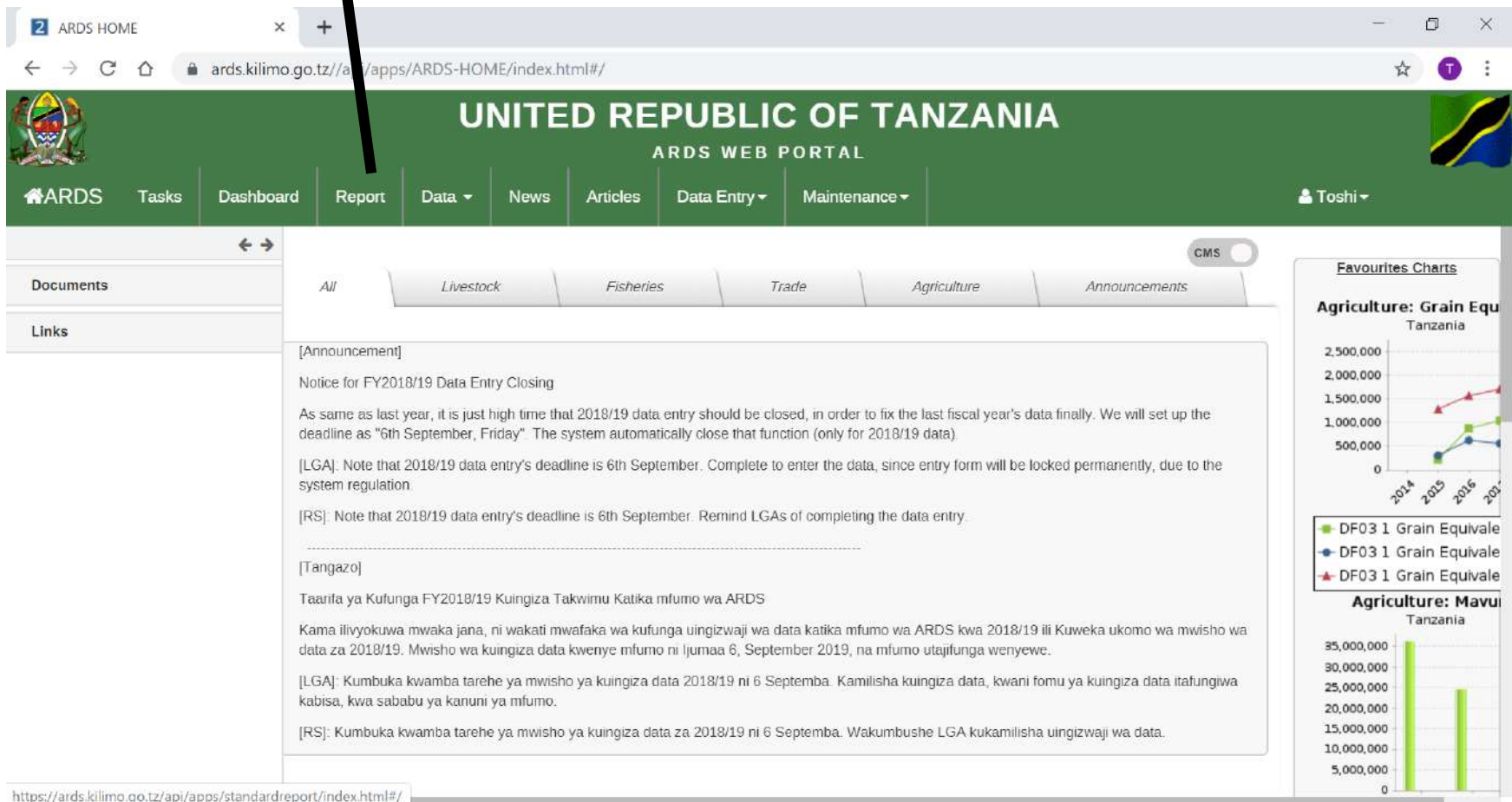


- Notes:
- Aggregation over area: wards to a district with estimation factors for missing data.
  - Aggregation over area: districts to region and regions to national.
  - Aggregation over time: 3 months aggregated to a quarter.
  - Aggregation over time: 4 quarters aggregated to a year.

# 2. Report Creation / Uncreation / Cancel

## 2.1 Report Creation

① Click Report



The screenshot displays the ARDS Web Portal interface. The top navigation bar includes the following items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The 'Report' menu item is highlighted with a red arrow. Below the navigation bar, there is a sidebar with 'Documents' and 'Links' sections. The main content area shows a notice for FY2018/19 Data Entry Closing, with a sub-section for 'Tangazo' (Notice) containing information for LGA and RS regarding the data entry deadline. On the right side, there are two charts: 'Favourites Charts' and 'Agriculture: Grain Equ Tanzania' (line chart) and 'Agriculture: Mavu Tanzania' (bar chart).

ARDS HOME

ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html#

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance

Toshi

Documents

Links

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation.

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumatano 6, Septemba 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itatungwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

Favourites Charts

Agriculture: Grain Equ Tanzania

2,500,000  
2,000,000  
1,500,000  
1,000,000  
500,000  
0

2014 2015 2016 2017

DF03 1 Grain Equivale  
DF03 1 Grain Equivale  
DF03 1 Grain Equivale

Agriculture: Mavu Tanzania

35,000,000  
30,000,000  
25,000,000  
20,000,000  
15,000,000  
10,000,000  
5,000,000  
0

https://ards.kilimo.go.tz/api/apps/standardreport/index.html#

# 2. Report Creation / Uncreation /Cancel

## 2.1 Report Creation

② Click Standard Report



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/app/standardreport/index.html#`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right corner.

The main content area is titled "Reports" and contains four report types:

- Standard Report**: View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.
- Static Tables**: View static tables report. These reports are based on appended yearly generated reports for some chosen tables.
- Custom Report**: View and add reports based on the JasperReports library. These can be based on report tables and can be designed in iReport.
- Submission and Creation Status**: Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

A black arrow points from the text "Click Standard Report" to the "Standard Report" option in the main content area.

# 2. Report Creation / Uncreation / Cancel

## 2.1 Report Creation

The screenshot displays the ARDS Web Portal interface for report creation. The page title is "Standard Report App" and the URL is "ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport". The header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The main content area is titled "Standard Report" and contains the following form elements:

- Report:** A dropdown menu showing "District/Region Monthly Report (DR01/RR01)".
- Report Period:** A dropdown menu showing "July 2019", with buttons for "Prev year", "Next year", and "Previous years reports".
- Report Administrative Units:** A list of units with checkboxes: Shinyanga, Simiyu, Bariadi Mjini, Bariadi Vijjini, Busega, and Itilima.
- Get Report:** A button at the bottom of the form.

Numbered annotations point to the following elements:

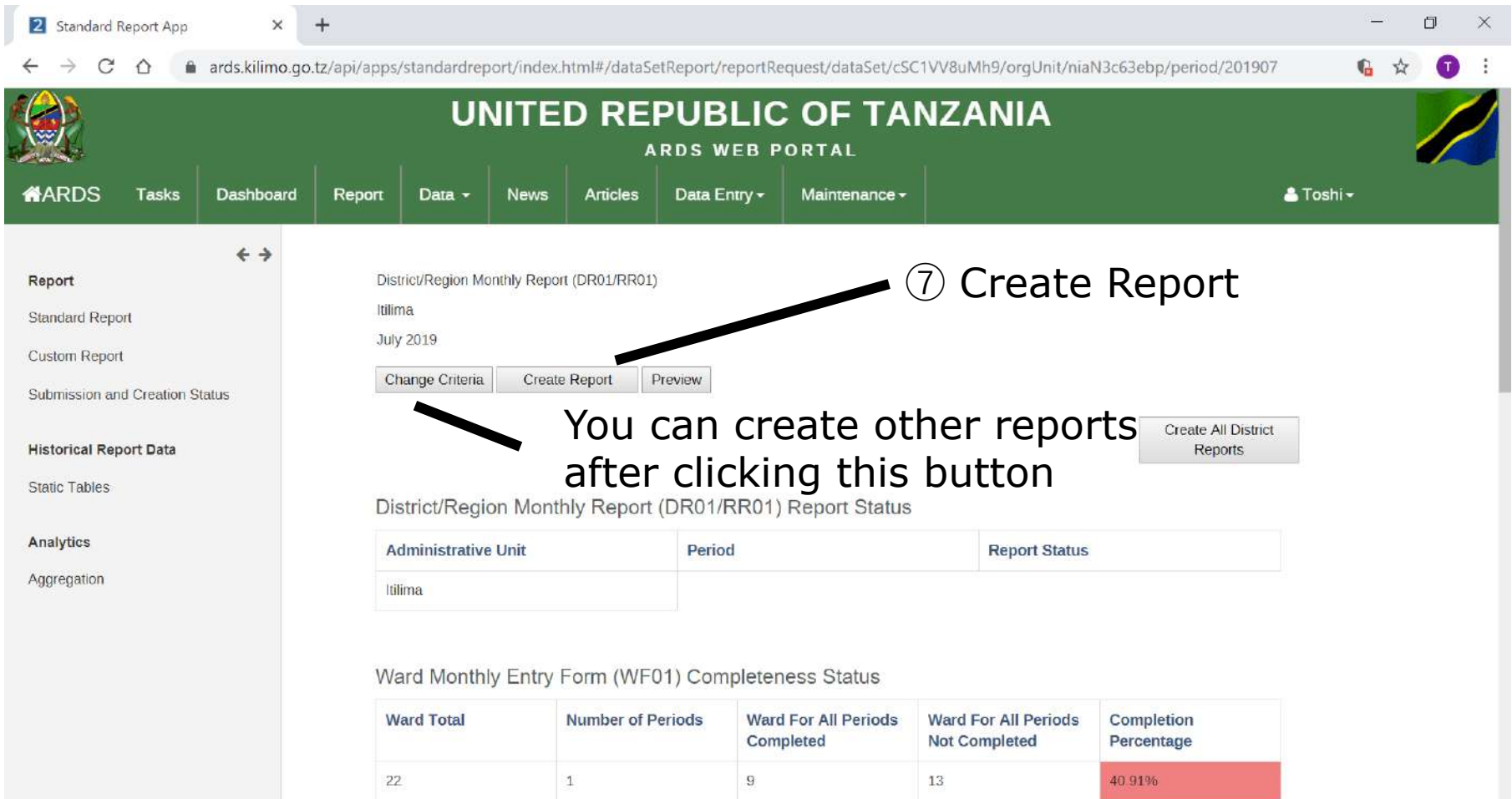
- ③ Select Report
- ④ Select Period
- ⑤ Select Administrative Unit
- ⑥ Get Report



# 2. Report Creation / Uncreation / Cancel

## 2.1 Report Creation

Report Creation screen appears if the report is not created yet.



Standard Report App

ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/niaN3c63ebp/period/201907

**UNITED REPUBLIC OF TANZANIA**  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Report

Standard Report

Custom Report

Submission and Creation Status

Historical Report Data

Static Tables

Analytics

Aggregation

District/Region Monthly Report (DR01/RR01)  
Ililima  
July 2019

Change Criteria Create Report Preview

**⑦ Create Report**

You can create other reports after clicking this button

Create All District Reports

District/Region Monthly Report (DR01/RR01) Report Status

Administrative Unit	Period	Report Status
Ililima		

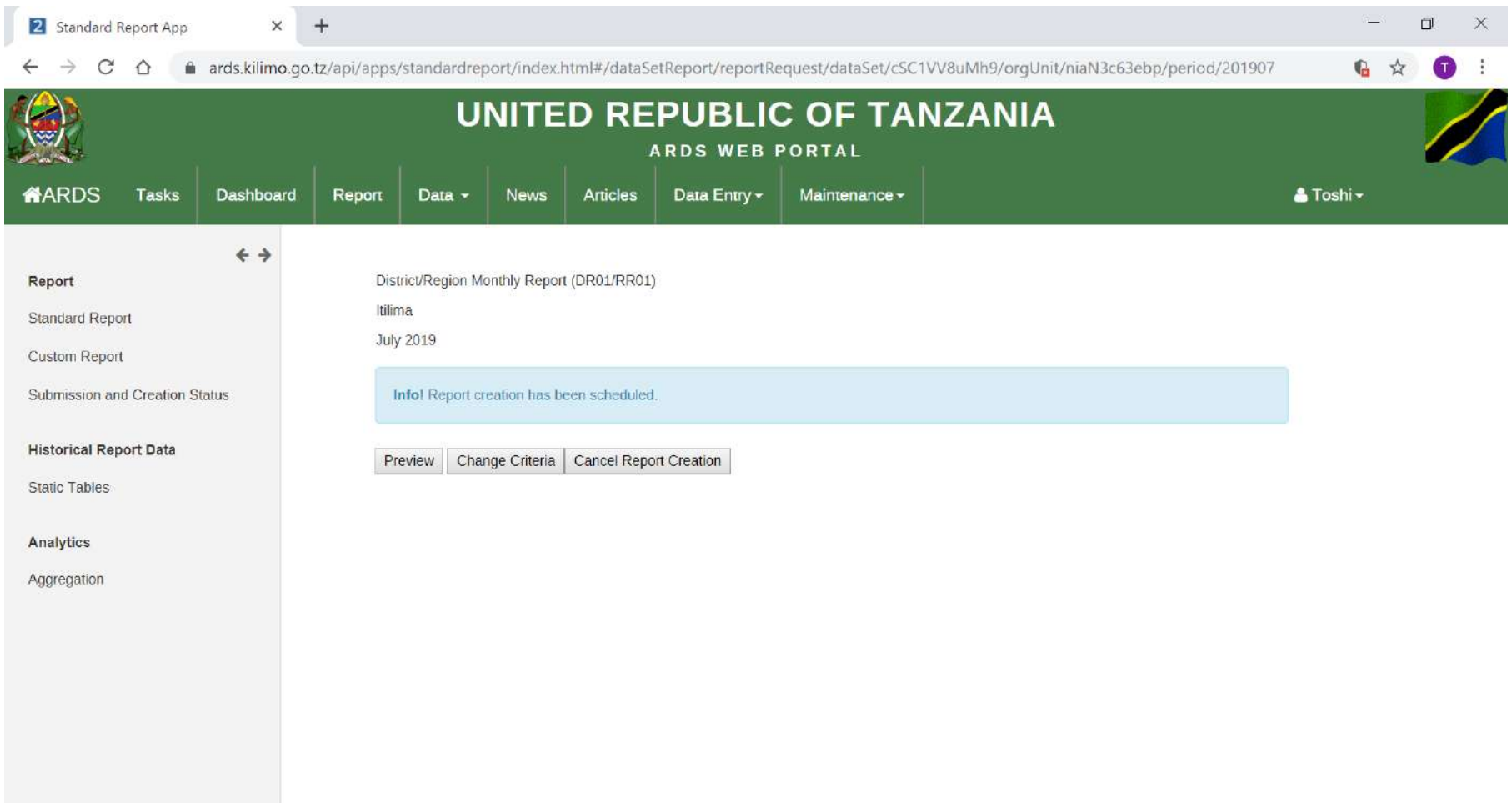
Ward Monthly Entry Form (WF01) Completeness Status

Ward Total	Number of Periods	Ward For All Periods Completed	Ward For All Periods Not Completed	Completion Percentage
22	1	9	13	40.91%

# 2. Report Creation / Uncreation / Cancel

## 2.1 Report Creation

Report Creation is scheduled. The report will be **created in the midnight** and you will see the report in the next day



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/niaN3c63ebp/period/201907`. The page header is green and features the United Republic of Tanzania coat of arms, the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL", and a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile "Toshi" is visible in the top right.

The main content area displays the following information:

- Report** (Section Header)
- Standard Report
- Custom Report
- Submission and Creation Status
- Historical Report Data** (Section Header)
- Static Tables
- Analytics** (Section Header)
- Aggregation

The main content area also displays the following information:

- District/Region Monthly Report (DR01/RR01)
- Itilima
- July 2019
- Info!** Report creation has been scheduled.
- Buttons: Preview, Change Criteria, Cancel Report Creation

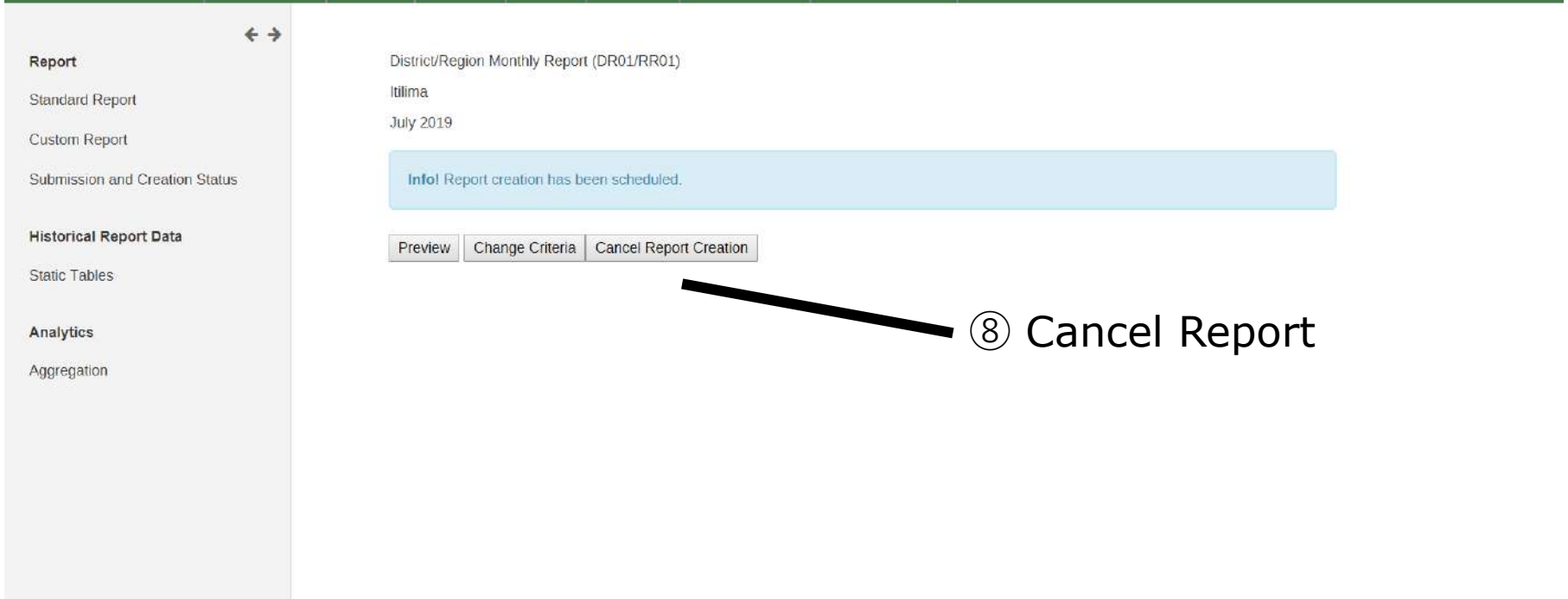
# 2. Report Creation / Uncreation /Cancel

## 2.2 Report Cancel

You can **cancel** report creation. You can do this later after repeating ①~⑥



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/niaN3c63ebp/period/201907`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user name "Toshi" is visible in the top right corner.



The screenshot shows the "Report" section of the ARDS Web Portal. The left sidebar contains the following menu items: "Report", "Standard Report", "Custom Report", "Submission and Creation Status", "Historical Report Data", "Static Tables", "Analytics", and "Aggregation". The main content area displays the following information:

- District/Region Monthly Report (DR01/RR01)
- Itilima
- July 2019

A blue information box contains the text: "Info! Report creation has been scheduled." Below this box are three buttons: "Preview", "Change Criteria", and "Cancel Report Creation". A black arrow points from the "Cancel Report Creation" button to the text "⑧ Cancel Report".

# 2. Report Creation / Uncreation / Cancel

## 2.3 Uncreation Report

To modify the data entry forms after the report creation, you need to **uncreate report** and uncomplete the data entry forms.

The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A user profile "Toshi" is visible in the top right.

The main content area shows a report titled "District/Region Monthly Report (DR01/RR01)" for "Temeke" in "July 2019". Below the report title are several buttons: "Change Criteria", "Print", "Download Excel", "Undo Report Creation", and "Approve". A black arrow points to the "Undo Report Creation" button, which is circled with a "9" and labeled "Uncreate Report".

Below the buttons is a section for "Regional Officers Comments" with a text area containing the following text: "Mtakwimu wa ARDS - Kilimo hukuingiza malengo ya uzalishaji na hii itaathiri taarifa za miezi itakayofuata. Kwa kuwa katika Halmashauri ya Manispaa ya Temeke kuna machinjio ,vipenegele Na 4,5 (a) na 5 (b) 6.2 (a) na (b) Vinatakiwa vijazwe. Hakuna takwimu za ukusanyaji wa mayai."

A blue notification bar indicates "Last Updated on Aug 29, 2019 by Wilfred Kawishe".

At the bottom, there is a section for "District Officers Comments" with a text area labeled "Write Your Comment Here".

# **2. Report Creation / Uncreation /Cancel**

## **2.3 Uncreation Report**

If DR01/02/03 is uncreated, DIR/RIR/NIR02/03 which depends on the DR01/02/03 also is uncreated. For example, when DR01 is uncreated, RR01 for the region which includes the district for the DR01, DIR02 for the district whose period includes the month for the DR01, and the RIR02/NIR02 above the DIR02 also are uncreated. Similarly when DR02 is created, the related RR02 and DIR/RIR/NIR03 are uncreated. When DR03 is uncreated, the related RR03 and DIR/RIR/NIR03 is uncreated.

# 2. Report Creation / Uncreation / Cancel

## 2.4 DR01 creation dependency

DR01 creation depends on the past months DR01 creation for the fiscal year for the district. When create button is pressed, **the past months DR01 also are scheduled** to be created.

ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Report

- Standard Report
- Custom Report
- Submission and Creation Status

Historical Report Data

- Static Tables

Analytics

- Aggregation

District/Region Monthly Report (DR01/RR01)  
Dodoma Mjini  
June 2019

Change Criteria Create Report Preview

Create Report

Create All District Reports

District/Region Monthly Report (DR01/RR01) Report Status

Administrative Unit	Period	Report Status
Dodoma Mjini	May 2019	Not Created <span>Create</span>
	April 2019	Created
	March 2019	Created
	February 2019	Created
	January 2019	Created
	December 2018	Created

Not only June, May DR01 also is scheduled to be created.

# **2. Report Creation / Uncreation / Cancel**

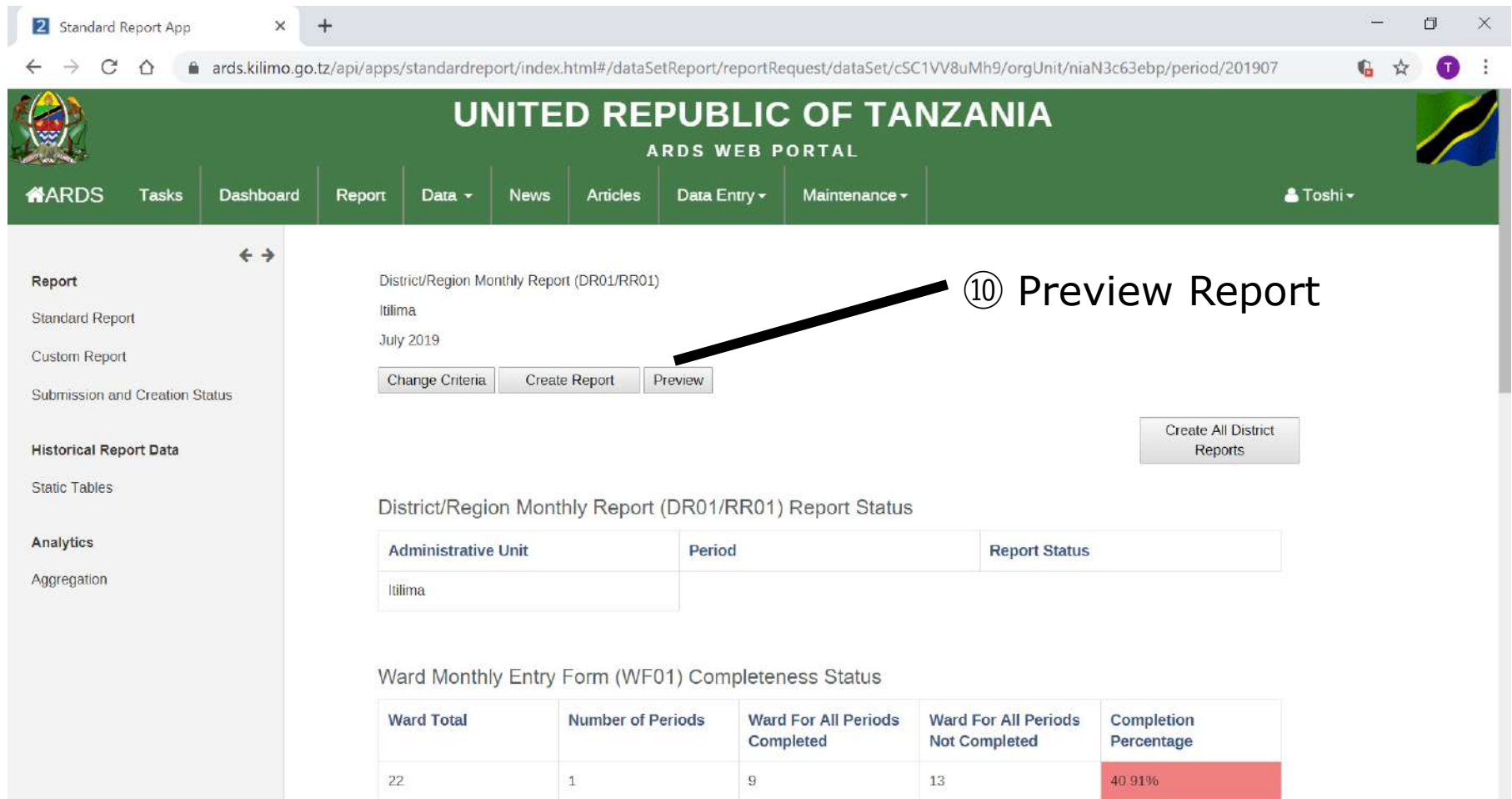
## **2.5 Preview Report**

Only after the standard report is created, you can refer official standard report after the data entry is finished. However, you can view preview report even if the data entry is not completed and the official report is not created. This is tentative report by the data submitted by then.

# 2. Report Creation / Uncreation / Cancel

## 2.5 Preview Report

Screen when the standard report is not created yet



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user 'Toshi' is logged in. The main content area displays the 'District/Region Monthly Report (DR01/RR01)' for 'Ililima' in 'July 2019'. There are three buttons: 'Change Criteria', 'Create Report', and 'Preview'. The 'Preview' button is circled with a '10' and an arrow points to it from the text '10 Preview Report'. Below this, there is a 'Create All District Reports' button. The 'District/Region Monthly Report (DR01/RR01) Report Status' table shows the report status for Ililima. The 'Ward Monthly Entry Form (WF01) Completeness Status' table shows the completion percentage for ward 22.

Administrative Unit	Period	Report Status
Ililima		

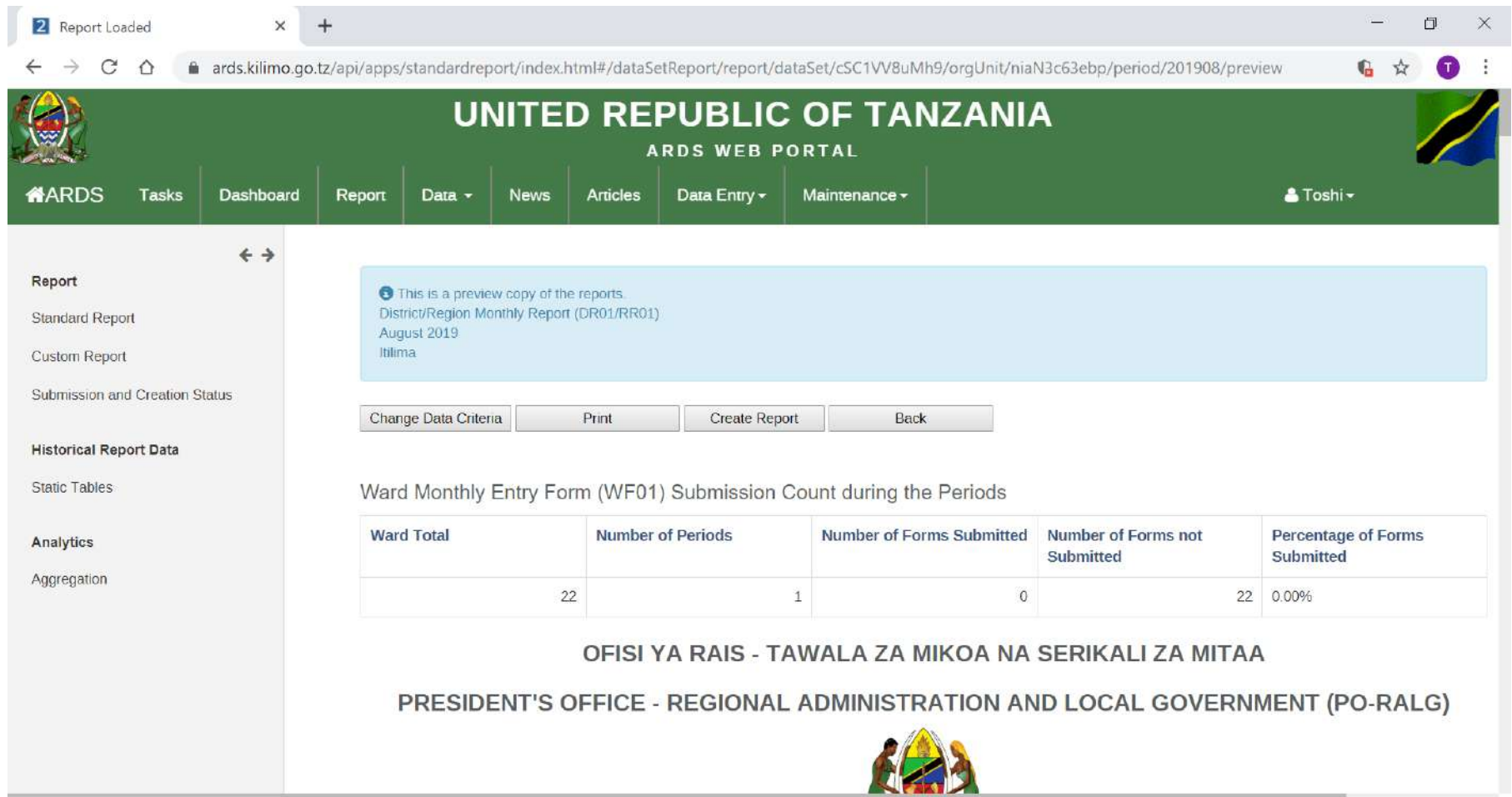
Ward Total	Number of Periods	Ward For All Periods Completed	Ward For All Periods Not Completed	Completion Percentage
22	1	9	13	40.91%



# 2. Report Creation / Uncreation / Cancel

## 2.5 Preview Report

Preview Report is shown



The screenshot shows a web browser window displaying the ARDS Web Portal. The page title is "Report Loaded" and the URL is "ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/report/dataSet/cSC1VV8uMh9/orgUnit/niaN3c63ebp/period/201908/preview". The portal header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user is logged in as "Toshi".

The main content area displays a preview report for "District/Region Monthly Report (DR01/RR01) August 2019 Itilima". A light blue box contains the text: "This is a preview copy of the reports. District/Region Monthly Report (DR01/RR01) August 2019 Itilima". Below this box are four buttons: "Change Data Criteria", "Print", "Create Report", and "Back".

The report title is "Ward Monthly Entry Form (WF01) Submission Count during the Periods". Below the title is a table with the following data:

Ward Total	Number of Periods	Number of Forms Submitted	Number of Forms not Submitted	Percentage of Forms Submitted
22	1	0	22	0.00%

At the bottom of the page, the text reads: "OFISI YA RAIS - TAWALA ZA MIKOA NA SERIKALI ZA MITAA" and "PRESIDENT'S OFFICE - REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT (PO-RALG)". The United Republic of Tanzania logo is also present at the bottom center.

# **3. Report Approval**


**For District User, Administrator**

# 3. Report Approval

Report approval function is for region users to approve created district standard report. After it is approved, district users can not uncreate the district standard report until region users unapproved it. Also, "Regional Officers Comments" and "District Officers Comments" also are locked until the uncreation.

# 3. Report Approval

① Click Report



The screenshot shows the ARDS Web Portal interface. The header is green with the text 'UNITED REPUBLIC OF TANZANIA' and 'ARDS WEB PORTAL'. The navigation menu includes 'ARDS', 'Tasks', 'Report', 'Data', 'News', 'Articles', and 'Data Entry'. The 'Report' menu item is highlighted with a black arrow. Below the header, there is a notification box with the text: 'Successfully finished: undoing and recreating reports (but you can continue entering data) Recreating reports were successful. Thank you for your cooperation TWG'. Below the notification box is a 'Reload tasks' button. The main content area shows a table with columns: Notification, LGA, Deadline, and Action. The table contains two rows of data for DR01 August 2019.

Notification	LGA	Deadline	Action
DR01 August 2019: 3 out of 7 districts created (43%) 0 approved (0%)			
> DR01 for Arusha Mjini	15 Sep	25 Sep	Not Available
> DR01 for Arusha Vijijini	15 Sep	25 Sep	Not Available

https://ards.kilimo.go.tz/api/apps/standardreport/index.html

# 3. Report Approval

## ② Click Standard Report



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Report", "Data", "News", "Articles", and "Data Entry". The "Report" menu is expanded, showing "Standard Report", "Custom Report", and "Submission and Creation Status". The "Standard Report" option is highlighted with a black arrow. The main content area displays four report categories: "Standard Report" (with a document icon), "Static Tables" (with a document icon), "Custom Report" (with a document icon), and "Submission and Creation Status" (with a green checkmark icon).

**Standard Report**  
View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.

**Static Tables**  
View static tables report. These reports are based on appended yearly generated reports for some chosen tables.

**Custom Report**  
View and add reports based on the JasperReports library. These can be based on report tables and can be designed in iReport.

**Submission and Creation Status**  
Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

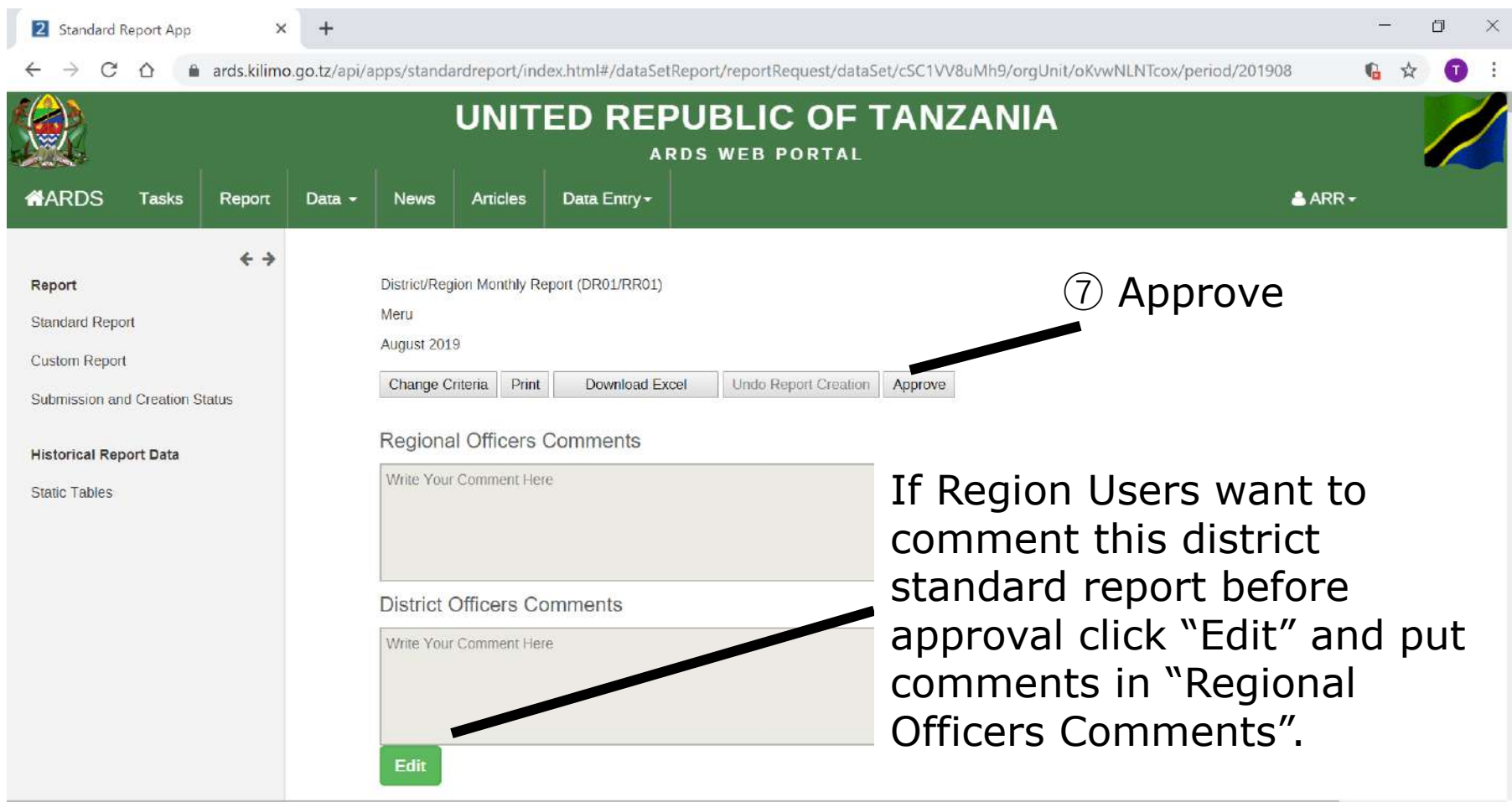
# 3. Report Approval

The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Report", "Data", "News", "Articles", "Data Entry", and "ARR". A sidebar on the left lists "Report", "Standard Report", "Custom Report", "Submission and Creation Status", "Historical Report Data", and "Static Tables".

The main content area shows the "Standard Report" form with the following fields and annotations:

- Report:** A dropdown menu showing "District/Region Monthly Report (DR01/RR01)". An arrow points to this field with the annotation "③ Select Report".
- Report Period:** A dropdown menu showing "August 2019", with "Prev year", "Next year", and "Previous years reports" buttons. An arrow points to this field with the annotation "④ Select Period".
- Report Administrative Units:** A list of units with expandable icons: Arusha Vijijini, Karatu, Longido, Meru (highlighted in blue), Monduli, and Ngorongoro. An arrow points to the "Meru" unit with the annotation "⑤ Select Administrative Unit".
- Buttons:** "Get Report" and "Cancel" buttons at the bottom. An arrow points to the "Get Report" button with the annotation "⑥ Get Report".

# 3. Report Approval



The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Report", "Data", "News", "Articles", and "Data Entry". The main content area shows a report titled "District/Region Monthly Report (DR01/RR01)" for "Meru" in "August 2019". Below the report title are buttons for "Change Criteria", "Print", "Download Excel", "Undo Report Creation", and "Approve". The "Approve" button is circled with a 7 and has an arrow pointing to it. Below the buttons are two text input fields for "Regional Officers Comments" and "District Officers Comments", each with an "Edit" button. A large text box on the right explains the approval process: "If Region Users want to comment this district standard report before approval click 'Edit' and put comments in 'Regional Officers Comments'".

Standard Report App

ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/oKvwNLNTcox/period/201908

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Report Data News Articles Data Entry ARR

Report

Standard Report

Custom Report

Submission and Creation Status

Historical Report Data

Static Tables

District/Region Monthly Report (DR01/RR01)

Meru

August 2019

Change Criteria Print Download Excel Undo Report Creation Approve

Regional Officers Comments

Write Your Comment Here

District Officers Comments

Write Your Comment Here

Edit

⑦ Approve

If Region Users want to comment this district standard report before approval click "Edit" and put comments in "Regional Officers Comments".

# **4. Report**

**For All Users**



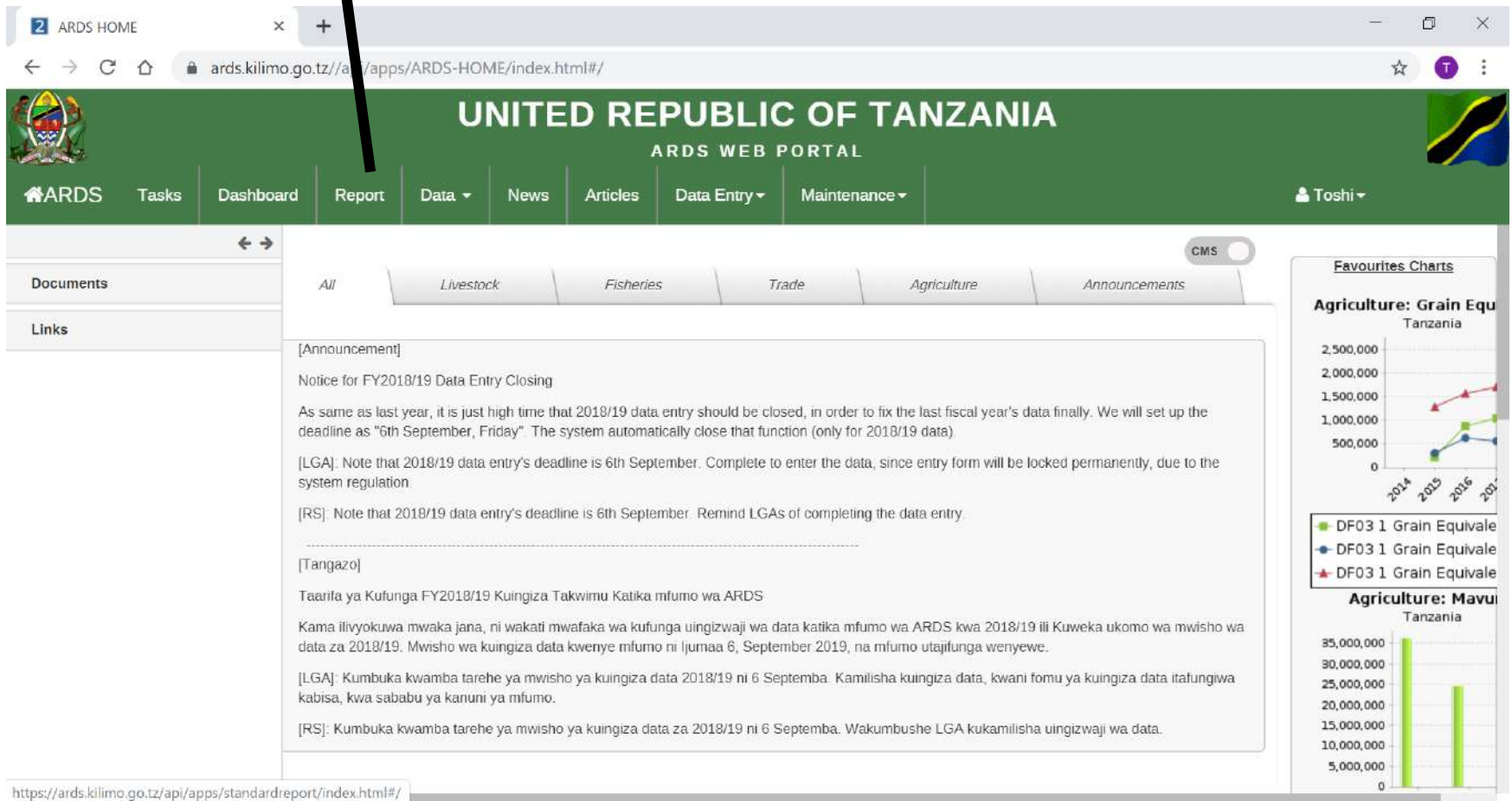
# 4. Report

Report function is to show created standard report to all users. This interface is the same as that of Report Creation / Uncreation / Cancel.

# 4. Report

## 4.1 View Report

① Click Report



The screenshot shows the ARDS Web Portal interface. The top navigation bar is green and contains the following items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A red arrow points to the 'Report' menu item. Below the navigation bar, there is a sidebar with 'Documents' and 'Links' sections. The main content area displays an announcement titled 'Notice for FY2018/19 Data Entry Closing'. To the right, there are two charts: 'Agriculture: Grain Equ Tanzania' and 'Agriculture: Mavu Tanzania'.

**UNITED REPUBLIC OF TANZANIA**  
ARDS WEB PORTAL

ARDS Tasks Dashboard **Report** Data News Articles Data Entry Maintenance Toshi

Documents Links

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data)

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

**Favourites Charts**

**Agriculture: Grain Equ Tanzania**

Year	DF03 1 Grain Equivale	DF03 1 Grain Equivale	DF03 1 Grain Equivale
2014	~200,000	~500,000	~1,200,000
2015	~500,000	~800,000	~1,500,000
2016	~800,000	~1,000,000	~1,800,000
2017	~1,000,000	~1,200,000	~2,000,000

**Agriculture: Mavu Tanzania**

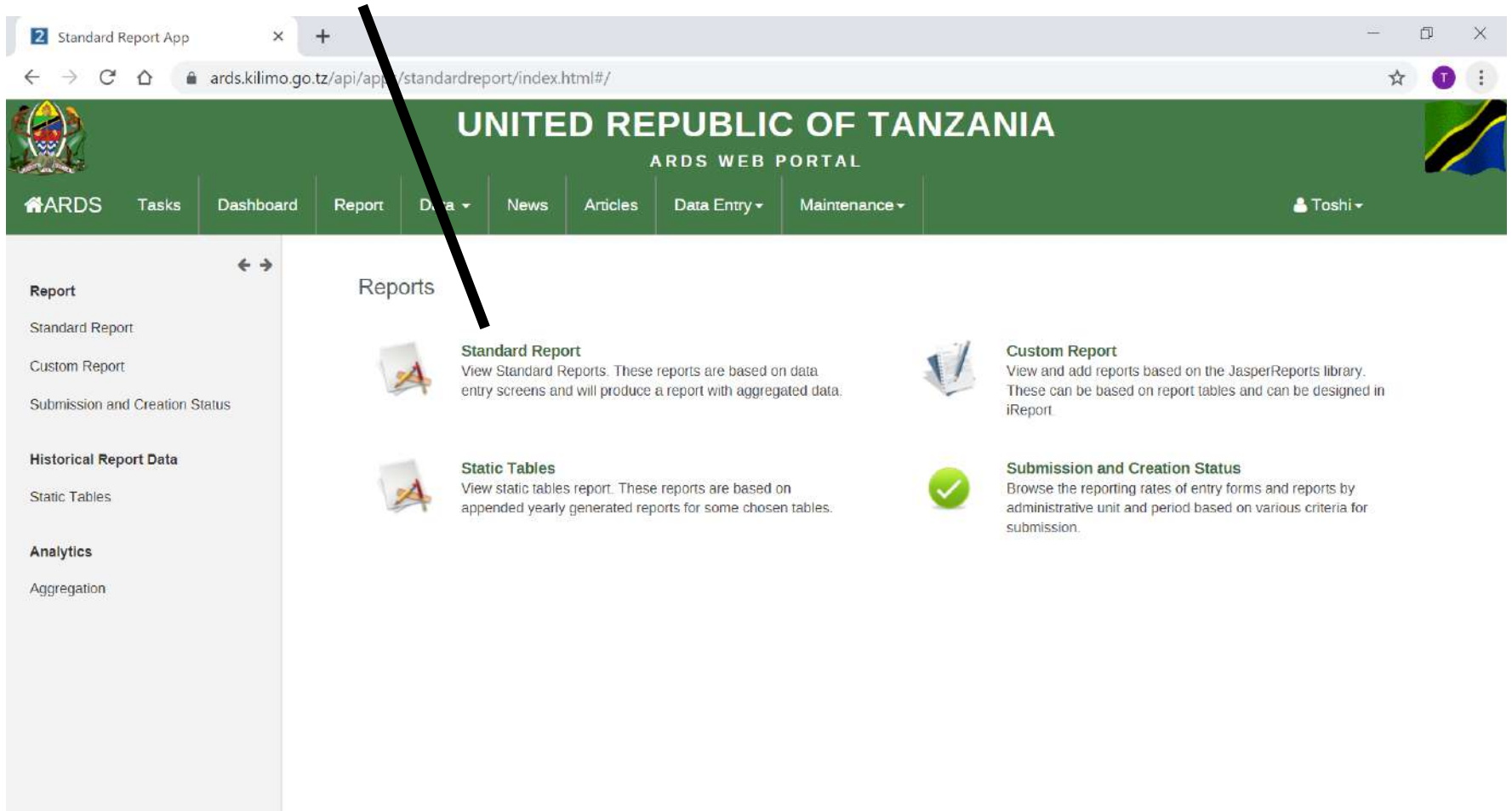
Year	Mavu
2014	~35,000,000
2016	~25,000,000

https://ards.kilimo.go.tz/api/apps/standardreport/index.html#/  
https://ards.kilimo.go.tz/api/apps/standardreport/index.html#/

# 4. Report

## 4.1 View Report

② Click Standard Report



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/app/standardreport/index.html#`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The left sidebar contains a "Report" section with sub-items: "Standard Report", "Custom Report", and "Submission and Creation Status". The main content area, titled "Reports", lists three options: "Standard Report" (with a bar chart icon), "Static Tables" (with a document icon), and "Submission and Creation Status" (with a green checkmark icon). A black arrow points from the text "Click Standard Report" to the "Standard Report" option in the main content area.

**Report**

- Standard Report
- Custom Report
- Submission and Creation Status

**Historical Report Data**

- Static Tables

**Analytics**

- Aggregation

**Reports**

- Standard Report**  
View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.
- Static Tables**  
View static tables report. These reports are based on appended yearly generated reports for some chosen tables.
- Custom Report**  
View and add reports based on the JasperReports library. These can be based on report tables and can be designed in iReport.
- Submission and Creation Status**  
Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

# 4. Report

## 4.1 View Report

The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user profile 'Toshi' is visible in the top right.

The 'Standard Report' form is highlighted with a green border and contains the following elements:

- Report:** A dropdown menu showing 'District/Region Monthly Report (DR01/RR01)'. An annotation '③ Select Report' points to this dropdown.
- Report Period:** A dropdown menu showing 'July 2019', with 'Prev year', 'Next year', and 'Previous years reports' buttons. An annotation '④ Select Period' points to the dropdown.
- Report Administrative Units:** A list of units with checkboxes: Tanzania, Arusha, Arusha Mjini (highlighted in blue), Arusha Vijijini, Karatu, and Longido. An annotation '⑤ Select Administrative Unit' points to the 'Arusha Mjini' checkbox.
- Get Report:** A button at the bottom of the form. An annotation '⑥ Get Report' points to this button.

A sidebar on the left contains the following menu items: Report, Standard Report, Custom Report, Submission and Creation Status, Historical Report Data, Static Tables, Analytics, and Aggregation.

# 4. Report

## 4.1 View Report

The selected Report appears if it is created.

The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/c5C1VV8uMh9/orgUnit/gDjo8UF3ZNg/period/201907`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The main content area features the national emblem of Tanzania and the following text:

**AGRICULTURE SECTOR DEVELOPMENT PROGRAMME (ASDP)**  
**DISTRICT MONTHLY REPORT (DR01)**  
**ARUSHA MJINI**

On the left side, there is a sidebar menu with the following items:

- Report
  - Standard Report
  - Custom Report
  - Submission and Creation Status
- Historical Report Data
  - Static Tables
- Analytics
  - Aggregation

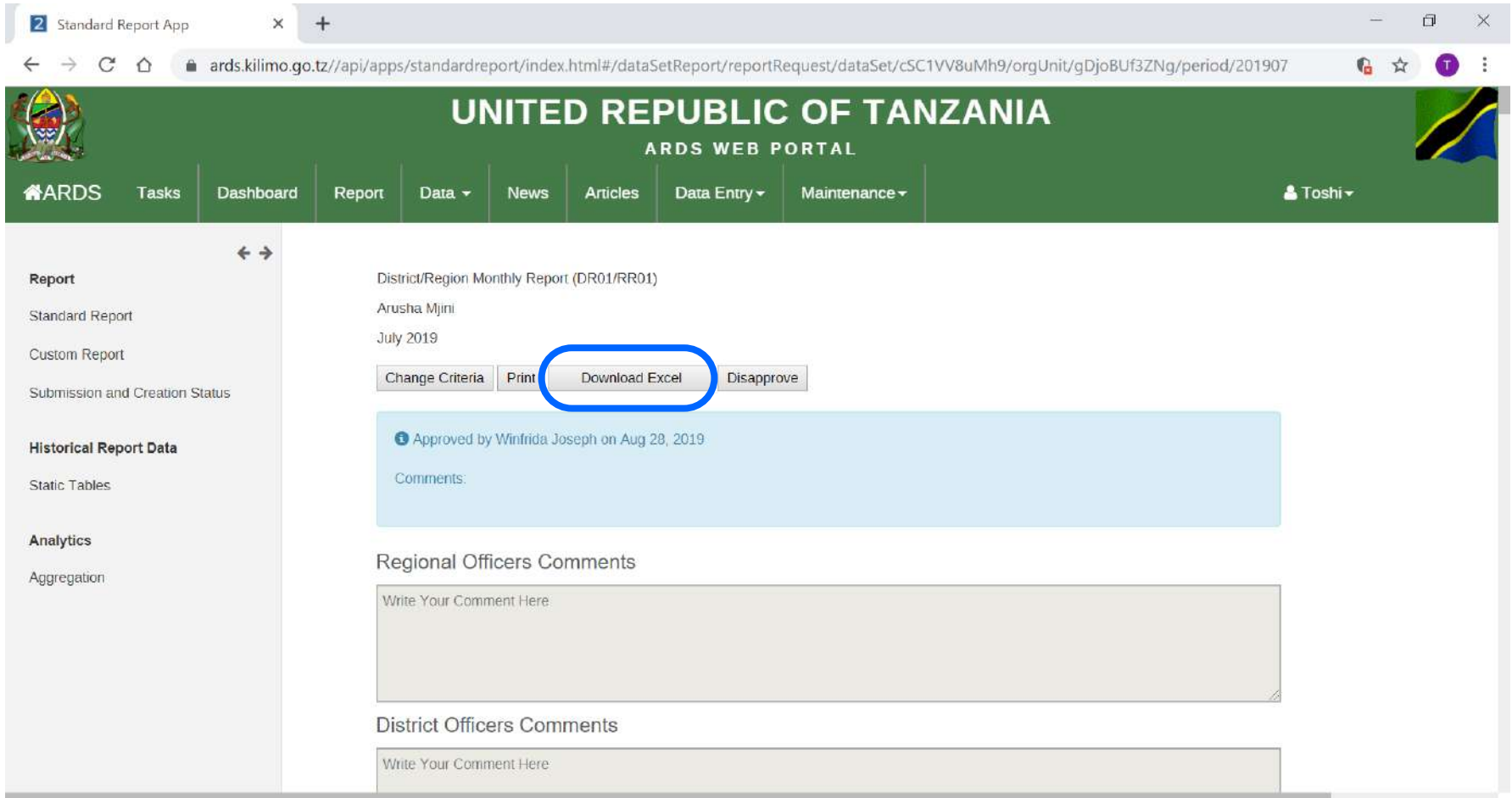
Below the main title, there is a section for "IDENTIFICATION DETAILS" with the following information:

Month:	July 2019
Name (contact person)	.....
Address	P.O. Box .....
	E-mail .....
	Mobile .....

# 4. Report

## 4.1 View Report

The Report can be downloaded in Excel.



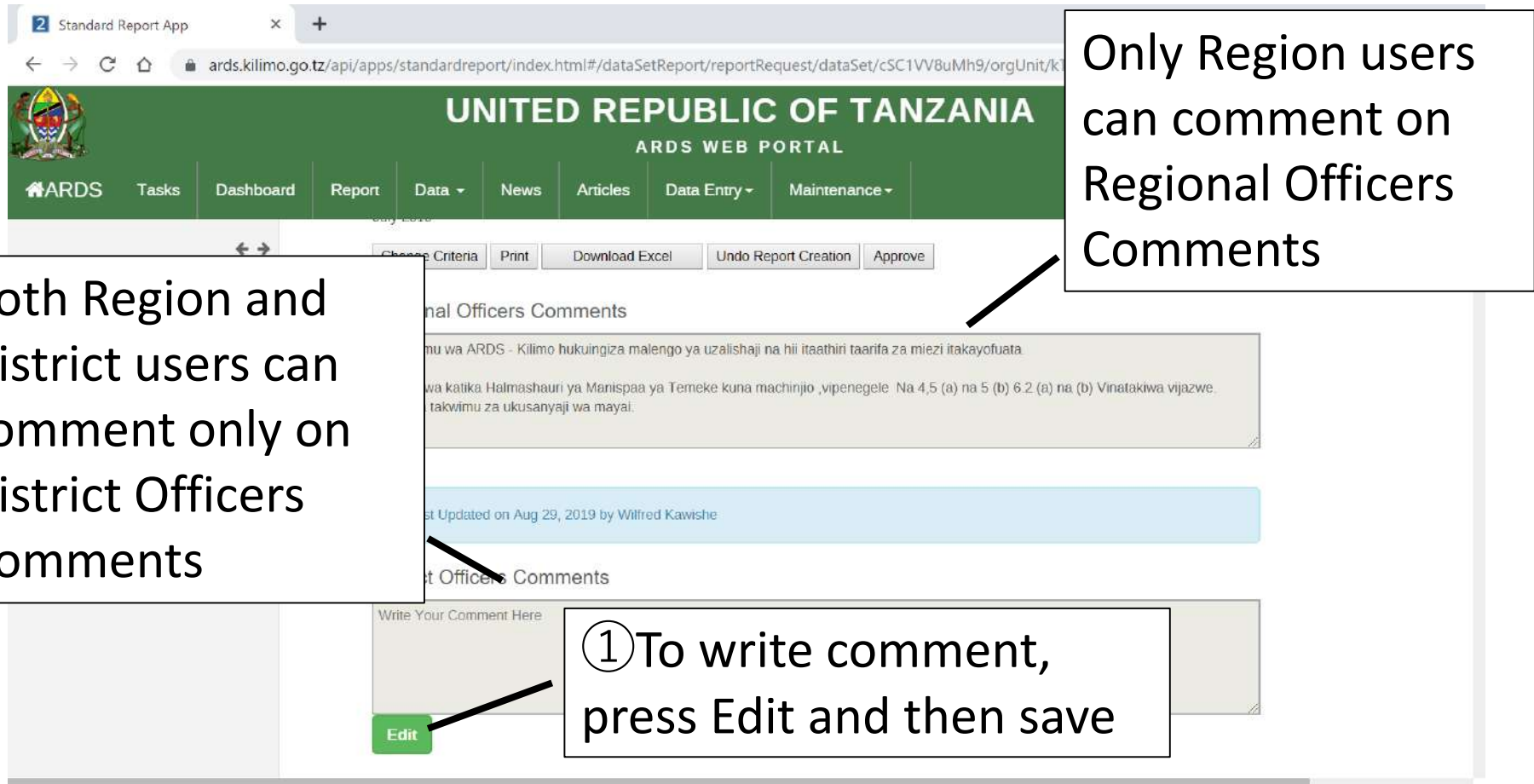
The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/gDjoBUf3ZNg/period/201907`. The page header is green and features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user is logged in as "Toshi".

The main content area displays the "District/Region Monthly Report (DR01/RR01)" for "Arusha Mjini" in "July 2019". Below the report title, there are four buttons: "Change Criteria", "Print", "Download Excel", and "Disapprove". The "Download Excel" button is highlighted with a blue circle.

Below the buttons, there is a light blue box containing the text "Approved by Winfrida Joseph on Aug 28, 2019" and a "Comments:" label. Underneath, there are two text input fields for "Regional Officers Comments" and "District Officers Comments", both with the placeholder text "Write Your Comment Here".

# 4. Report

## 4.2 Comments by Region and District Users



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". Below the menu, there are buttons for "Change Criteria", "Print", "Download Excel", "Undo Report Creation", and "Approve". The main content area displays "Regional Officers Comments" with a text box containing a comment in Swahili. Below the comment is a blue bar indicating it was updated on Aug 29, 2019 by Wilfred Kawishe. At the bottom, there is a "Write Your Comment Here" text area and a green "Edit" button.

Only Region users can comment on Regional Officers Comments

Both Region and District users can comment only on District Officers Comments

① To write comment, press Edit and then save

# 4. Report

## 4.3 Data Points

Ward Monthly Entry Form (WF01) Completeness Status

Ward Total	Number of Periods	Ward For All Periods Completed	Ward For All Periods Not Completed	Completion Percentage
3	3	4	5	44.44%

The number of wards in the district

3 months in a quarterly report DIR02

$3 \times 3 = 9$  ward entry forms, 4 are submitted, 5 are not

e.g. DIR02, Jul-Sept 2017, Bird District (3 wards under the district)

- Data points shows **Data entry forms count** (Ward For All Periods Completed)
- Able to **see** how many WF01s are submitted in a report. For increase data accountability.



# **5. Lock / Unlock Data Entry / Report**

**For District and Region Users**

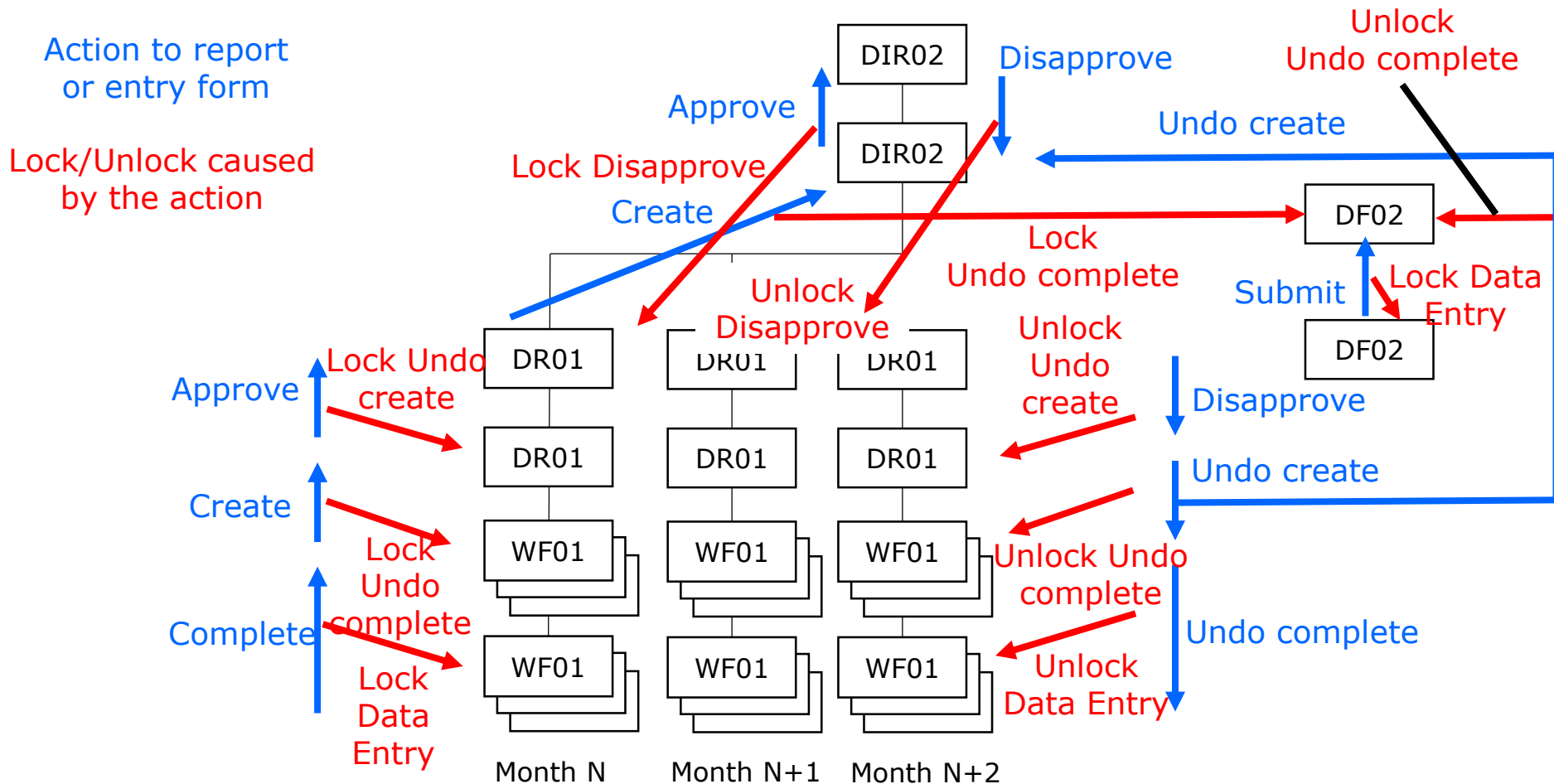
# 5. Lock/Unlock Data Entry/Report

After ward data entry forms are submitted, it will be locked until undoing submission. After that, the district report consisting the data entry form is created, undoing submission also is locked until uncreating report. After the district report is approved by region user, report uncreation is locked until unapproving the district report. Furthermore, the district integrated report is created and approved by the region user, unapproving the district report also will be locked until unapproving the district integrated report. This mechanism is complex and will be explained using diagram by separating DIR02 group and DIR03 group.

# 5. Lock/Unlock Data Entry/Report

## 5.1 DIR02 Group

To undo create DR01 or undo complete WF01/DF02, pay attention to the approval and creation status of the higher reports.



# 5. Lock/Unlock Data Entry/Report

## 5.1 DIR02 Group

Example [Restart Data Entry for WF01](#)

Condition: DIR02 including WF01 Approved  
DR01 including WF01 Approved  
WF01 Complete

①	DIR02	→	Disapprove
②	DR01	→	Disapprove
③	DR01	→	Undo Create
④	WF01	→	Undo Complete



[Restart Data Entry for WF01 is Allowed](#)

# 5. Lock/Unlock Data Entry/Report

## 5.1 DIR02 Group

Example [Restart Data Entry for DF02](#)

Condition: DIR02 including DF02 Approved  
One of the DR01 Approved  
DF02 Complete

① DIR02	→	Disapprove
② DR01 above	→	Disapprove
③ DR01 above	→	Undo Create



DIR02 is Uncreated Automatically

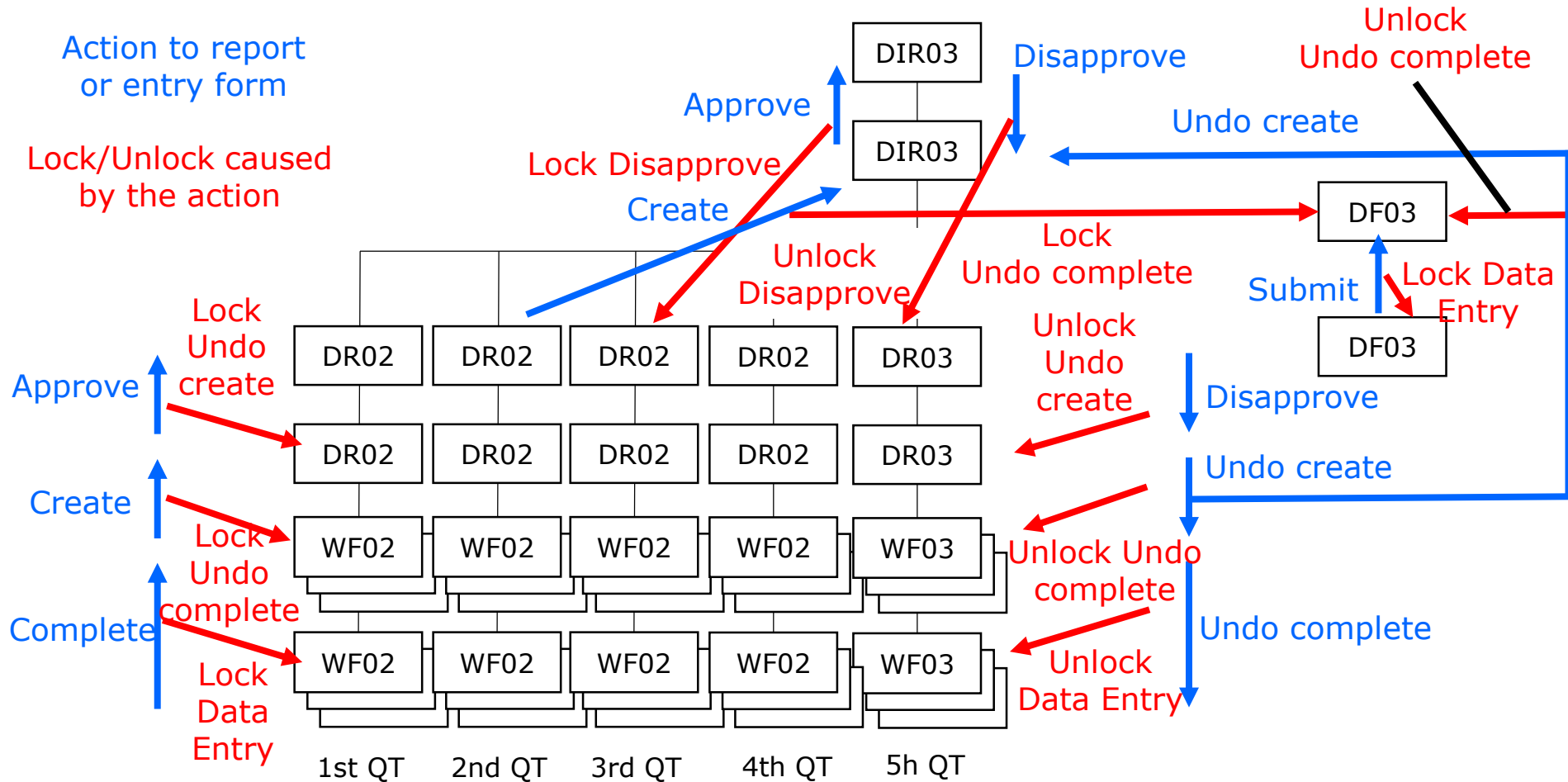


Restart Data Entry for DF02 is Allowed

# 5. Lock/Unlock Data Entry/Report

## 5.2 DIR03 Group

To undo create DR02/03 or undo complete WF02/WF03/DF03, pay attention to the approval and creation status of the higher reports.



# 5. Lock/Unlock Data Entry/Report

## 5.2 DIR03 Group

Example Restart Data Entry for WF02(WF03)

Condition: DIR03 including WF02(WF03) Approved  
DR02(DR03) including WF02(WF03) Approved  
WF02(WF03) Complete

① DIR03	→	Disapprove
② DR02 (DR03)	→	Disapprove
③ DR02 (DR03)	→	Undo Create
④ WF02(WF03)	→	Undo Complete



Restart Data Entry for WF02(WF03) is Allowed

# 5. Lock/Unlock Data Entry/Report

## 5.2 DIR03 Group

Example [Restart Data Entry for DF03](#)

Condition: DIR03 including DF03 Approved  
One of the DR02 or DR03 Approved  
DF03 Complete

① DIR03	→	Disapprove
② DR02 or DR03 above	→	Disapprove
③ DR02 or DR03 above	→	Undo Create



[DIR03 is Uncreated Automatically](#)



[Restart Data Entry for DF02 is Allowed](#)



# **6. Pivot Table**

**For All Users**

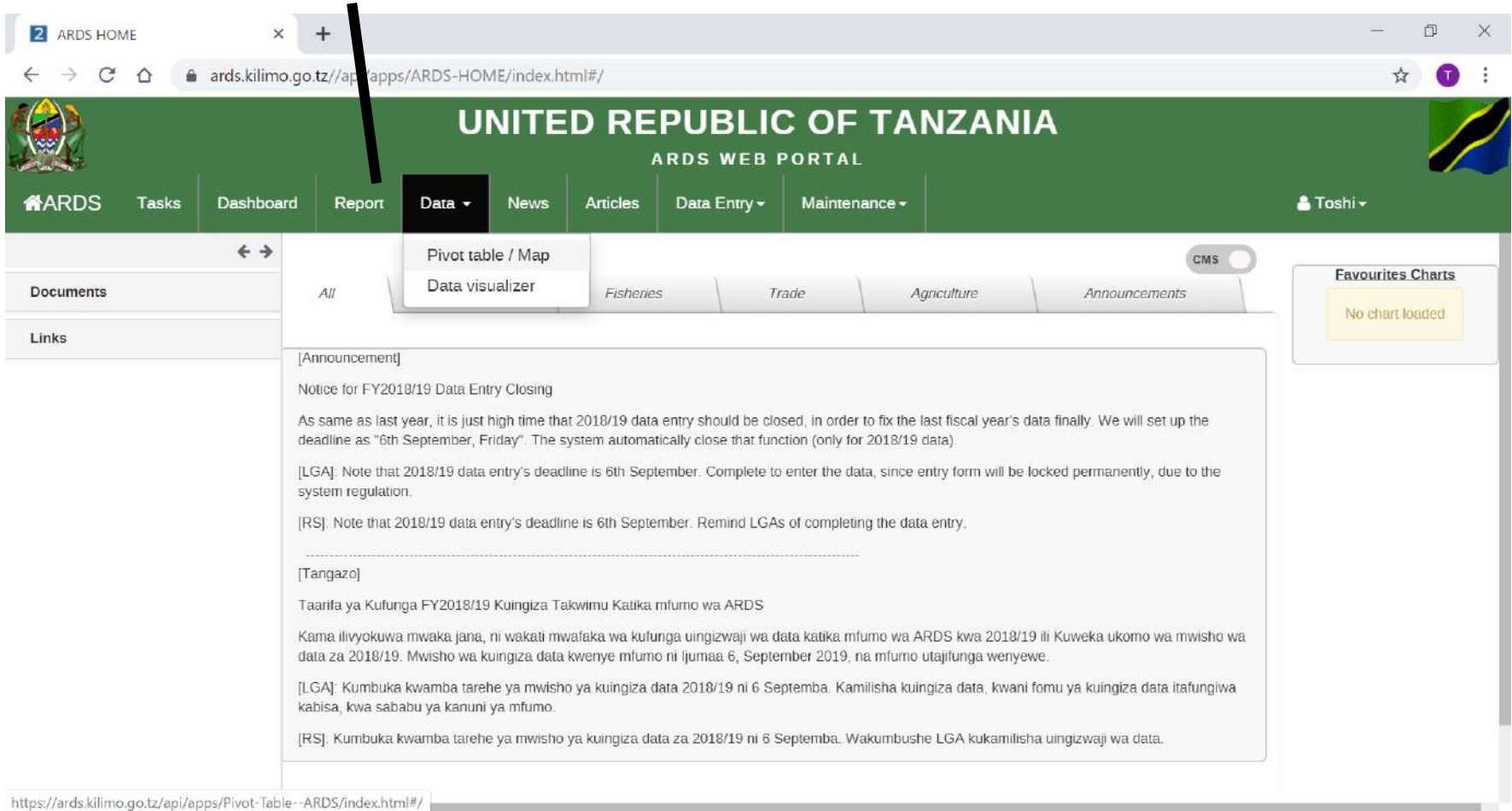
# 6. Pivot Table

Pivot Table is a tool to show the data in data entry forms or standard reports with flexible format. For example, the data in WF01 or DR01 for different months can be shown chronologically in one table. Also, values from different regions or district for an item can be compared in one table.

# 6. Pivot Table

## 6.1 View Pivot Table

① Click Data – Pivot table / Map



The screenshot shows the ARDS Web Portal interface. The top navigation bar is green and contains the following items: ARDS, Tasks, Dashboard, Report, Data (highlighted with a black box and a black arrow pointing to its dropdown menu), News, Articles, Data Entry, and Maintenance. The 'Data' dropdown menu is open, showing two options: 'Pivot table / Map' and 'Data visualizer'. Below the navigation bar, there is a sidebar with 'Documents' and 'Links' sections. The main content area displays an announcement titled '[Announcement] Notice for FY2018/19 Data Entry Closing'. The announcement text is as follows:

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation.

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

-----

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili Kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

The browser address bar shows the URL: <https://ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html/>

# 6. Pivot Table

## 6.1 General Setting

② Searching data items by typing abbreviated data entry form name, space, table number, space, item name, space, crop name(in case necessary)

The screenshot shows the PivotTable application interface. The main window is titled "Pivot table" and contains several sections:

- Buttons:** "All Data", "Data Elements", "Computed", and "Auto Growing".
- Search:** A search box containing "All Tables [Select Table]".
- Available (2):** A list of data items. One item, "WF01 2.1 Mavuno Mpunga[tani]", is highlighted with a black arrow pointing to it.
- Selected (1):** A list of selected data items. The same item, "WF01 2.1 Mavuno mahinditani", is shown here.
- Period Type:** A dropdown menu set to "Quarterly". A black arrow points to it.
- Available (4):** A list of time periods. One item, "July - September 2018", is highlighted with a black arrow pointing to it.
- Selected (12):** A list of selected time periods, including "July 2018", "August 2018", "September 2018", "October 2018", "November 2018", "December 2018", "January 2019", "February 2019", "March 2019", "April 2019", "May 2019", and "June 2019".

Annotations on the right side of the image provide instructions:

- ③ Clicking data items appeared in "Available" to move it to "Selected" to show in pivot table. Or Click ">>" to select all.
- ④ Select Period Type
- ⑤ Clicking period appeared in "Available" to move it to "Selected" to show it in pivot table. Or Click ">>" to select all.

⑥ Scroll Down

# 6. Pivot Table

## 6.1 General Setting

② Searching data items by typing abbreviated data entry form name, space, table number, space, item name, space, crop name(in case necessary)

The screenshot shows the PivotTable application interface. The main window is titled "Pivot table" and contains several sections:

- Buttons:** "All Data", "Data Elements", "Computed", and "Auto Growing".
- Search:** A search bar with the text "All Tables [Select Table]".
- Available (2):** A list of data items. One item, "WF01 2.1 Mavuno Mpunga[tani]", is highlighted with a black arrow pointing to it.
- Selected (1):** A list of selected data items. The item "WF01 2.1 Mavuno mahinditani" is shown.
- Period Type:** A dropdown menu set to "Quarterly". A black arrow points to it.
- Available (4):** A list of time periods. One item, "July - September 2018", is highlighted with a black arrow pointing to it.
- Selected (12):** A list of selected time periods, including "July 2018", "August 2018", "September 2018", "October 2018", "November 2018", "December 2018", "January 2019", "February 2019", "March 2019", "April 2019", "May 2019", and "June 2019".

Annotations on the right side of the image:

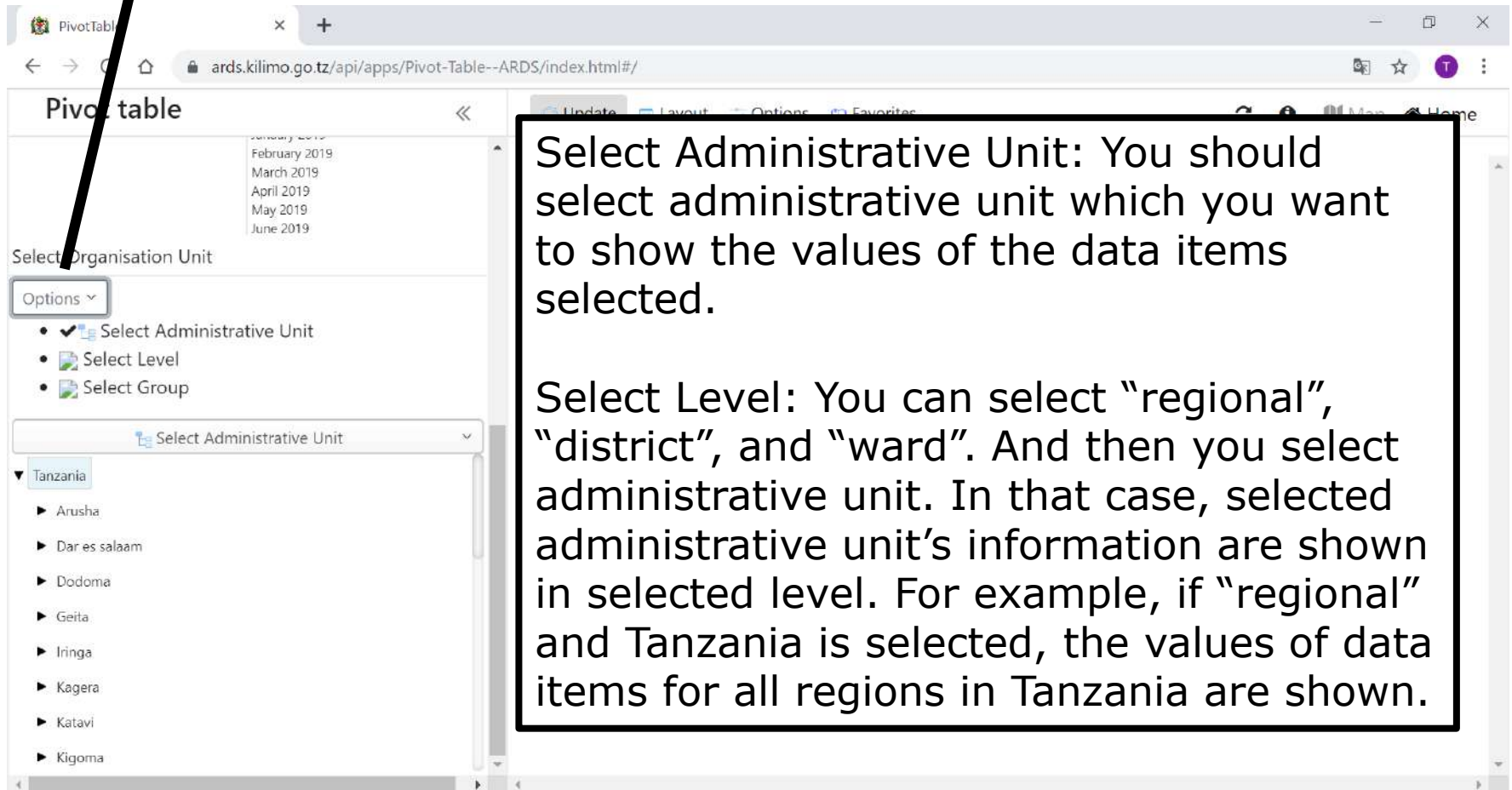
- ③ Clicking data items appeared in "Available" to move it to "Selected" to show in pivot table. Or Click ">>" to select all.
- ④ Select Period Type
- ⑤ Clicking period appeared in "Available" to move it to "Selected" to show it in pivot table. Or Click ">>" to select all.

⑥ Scroll Down

# 6. Pivot Table

## 6.1 General Setting

⑦ Click Option and Select "Select Administrative Unit" or "Select Level"



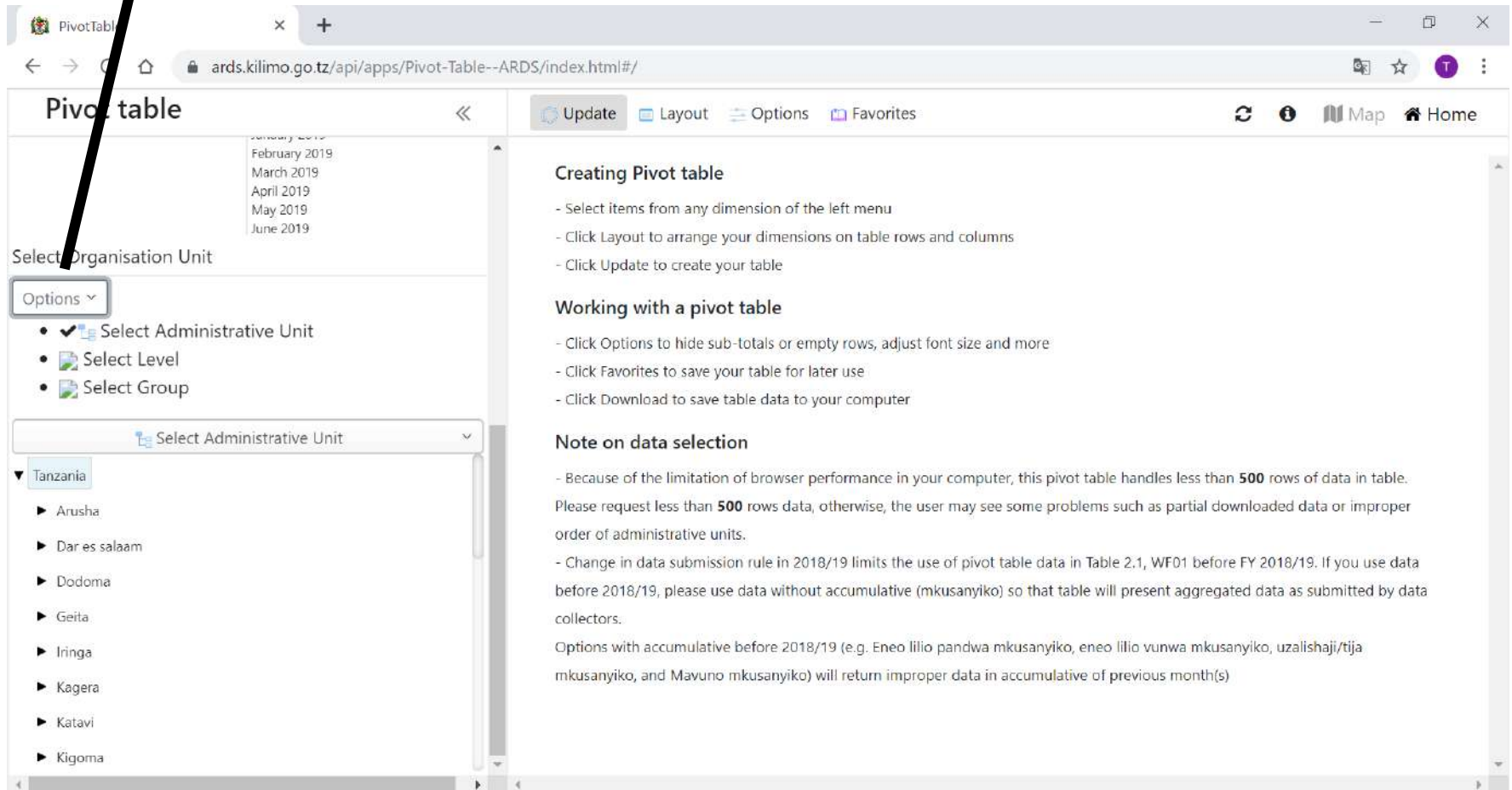
**Select Administrative Unit:** You should select administrative unit which you want to show the values of the data items selected.

**Select Level:** You can select "regional", "district", and "ward". And then you select administrative unit. In that case, selected administrative unit's information are shown in selected level. For example, if "regional" and Tanzania is selected, the values of data items for all regions in Tanzania are shown.

# 6. Pivot Table

## 6.2 Select Administrative Unit

⑧ Click Option and Select "Select Administrative Unit"



The screenshot shows a web browser window with the URL [ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/](https://ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/). The application interface is titled "Pivot table" and includes a navigation bar with "Update", "Layout", "Options", and "Favorites" buttons. A dropdown menu is open, showing a list of months from January 2019 to June 2019. Below this, the "Select Organisation Unit" section is visible, with the "Options" dropdown menu expanded to show three options: "Select Administrative Unit" (which is selected), "Select Level", and "Select Group". A second dropdown menu, labeled "Select Administrative Unit", is open, displaying a list of regions in Tanzania: Arusha, Dar es salaam, Dodoma, Geita, Iringa, Kagera, Katavi, and Kigoma. The right-hand side of the interface contains instructional text under the heading "Creating Pivot table", "Working with a pivot table", and "Note on data selection".

**Creating Pivot table**

- Select items from any dimension of the left menu
- Click Layout to arrange your dimensions on table rows and columns
- Click Update to create your table

**Working with a pivot table**

- Click Options to hide sub-totals or empty rows, adjust font size and more
- Click Favorites to save your table for later use
- Click Download to save table data to your computer

**Note on data selection**

- Because of the limitation of browser performance in your computer, this pivot table handles less than **500** rows of data in table. Please request less than **500** rows data, otherwise, the user may see some problems such as partial downloaded data or improper order of administrative units.
- Change in data submission rule in 2018/19 limits the use of pivot table data in Table 2.1, WF01 before FY 2018/19. If you use data before 2018/19, please use data without accumulative (mkusanyiko) so that table will present aggregated data as submitted by data collectors.
- Options with accumulative before 2018/19 (e.g. Eneo lilio pandwa mkusanyiko, eneo lilio vunwa mkusanyiko, uzalishaji/tija mkusanyiko, and Mavuno mkusanyiko) will return improper data in accumulative of previous month(s)

# 6. Pivot Table

## 6.2 Select Administrative Unit

⑨ Select Administrative Units you want to show

The screenshot shows a web application interface for a Pivot Table. On the left, there is a sidebar with a list of months from July 2018 to April 2019. Below the months, there are three selected administrative units: Arusha Mjini, Arusha Vijijini, and Karatu. The main area displays a table with the following data:

			May 2019	June 2019
Arusha	Arusha Mjini	WF01 2.1 Mavuno mahindi[tani]	0.0	
	Arusha Vijijini	WF01 2.1 Mavuno mahindi[tani]	2,190.0	4,266.1
	Karatu	WF01 2.1 Mavuno mahindi[tani]		

Annotations in the image:

- ⑩ Update: Points to the 'Update' button in the top right of the main area.
- ⑪ Table is shown: Points to the data table.
- ⑫ Table can be downloaded in Excel: Points to the 'Excel' button in the top right of the main area.



# 6. Pivot Table

## 6.2 Select Administrative Unit

Even if administrative units are selected if something is selected in "Select Administrative Unit" the selection will be disregarded.

The screenshot shows a web application interface for a PivotTable. The browser address bar shows `ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#`. The interface includes a "Pivot table" header, a "Monthly" filter, and a table with columns for "May 2019" and "June 2019". The table rows include administrative units like "Arusha Vijijini" and "Karatu". A callout box with a black border explains the selection logic:

- 13 Select "User Admin Unit", "User sub-units", or "User sub x2-units"
- 14 Update

User Admin Unit: Tanzania Level information is shown  
User sub-units : Region Level information is shown  
User sub x2-units : District Level information is shown

	May 2019	June 2019
Arusha Vijijini	2,190.0	4,266.1
Karatu		

# 6. Pivot Table

## 6.2 Select Administrative Unit

⑮ Values for all regions in Tanzania is shown in the table

The screenshot shows a web application interface for a Pivot Table. The browser address bar indicates the URL is `ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/?`. The application title is "Pivot table".

On the left side, there are filters for "Monthly" (set to "Monthly"), "Available (10)" months (July 2018 to April 2019), and "Selected (2)" months (May 2019 and June 2019). Below these are "User sub-units" and "Options" sections.

The main data table is as follows:

			May 2019	June 2019
Tanzania	Tanga	WF01 2.1 Mavuno mahindi[tani]	1,788.7	36,399.5
	Arusha	WF01 2.1 Mavuno mahindi[tani]	9,179.0	4,744.6
	Dar es salaam	WF01 2.1 Mavuno mahindi[tani]	70.2	533.9
	Dodoma	WF01 2.1 Mavuno mahindi[tani]	911.0	16,618.6
	Geita	WF01 2.1 Mavuno mahindi[tani]	84,337.1	94,020.1
	Iringa	WF01 2.1 Mavuno mahindi[tani]	45,276.9	107,061.1
	Kagera	WF01 2.1 Mavuno mahindi[tani]	52,203.7	58,400.4
	Katavi	WF01 2.1 Mavuno mahindi[tani]	94,436.0	205,238.5
	Kigoma	WF01 2.1 Mavuno mahindi[tani]		

An "Excel" button is visible in the top right corner of the table area. A callout box with the text "⑯ Table can be downloaded in Excel" points to this button.

# 6. Pivot Table

## 6.3 Select Level

⑰ Click Option and Select "Select Level"

The screenshot shows a web application interface for a Pivot Table. The browser address bar indicates the URL is [ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html/](https://ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html/). The interface includes a sidebar with various controls and a main data table.

**Available (10)**

- July 2018
- August 2018
- September 2018
- October 2018
- November 2018
- December 2018
- January 2019
- February 2019
- March 2019
- April 2019

**Selected (2)**

- May 2019
- June 2019

**Options**

- Select Administrative Unit
- Select Level
- Select Group

**Select Admin.units levels**

- Tanzania
  - Arusha
    - Arusha Mjini

**Table Data:**

			May 2019	June 2019
Tanzania	Tanga	WF01 2.1 Mavuno mahindi[tani]	1,788.7	36,399.5
	Arusha	WF01 2.1 Mavuno mahindi[tani]	9,179.0	4,744.6
	Dar es salaam	WF01 2.1 Mavuno mahindi[tani]	70.2	533.9
	Dodoma	WF01 2.1 Mavuno mahindi[tani]	911.0	16,618.6
	Geita	WF01 2.1 Mavuno mahindi[tani]	84,337.1	94,020.1
	Iringa	WF01 2.1 Mavuno mahindi[tani]	45,376.8	107,061.1
	Kagera	WF01 2.1 Mavuno mahindi[tani]	1,739.6	38,371.8
	Katavi	WF01 2.1 Mavuno mahindi[tani]	52,263.7	38,406.4
	Kigoma	WF01 2.1 Mavuno mahindi[tani]	94,436.0	205,238.5

# 6. Pivot Table

## 6.3 Select Level

⑱ Select Administrative Units you want to show

The screenshot shows a web application interface for a Pivot Table. The browser address bar indicates the URL is `ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/?`. The application title is "Pivot table".

On the left side, there is a list of months from August 2018 to April 2019. Below this, there is a filter for "Arusha" and a "Select Admin. units levels" dropdown menu. The dropdown menu is expanded, showing a tree view of administrative units under "Tanzania":

- Arusha
- Arusha Mjini
- Arusha Vijijini
- Karatu
- Longido
- Meru
- Monduli
- Ngorongoro

The main data table displays the following information:

			May 2019	June 2019
Tanzania	Tanga	WF01 2.1 Mavuno mahindi[tani]	1,788.7	36,399.5
	Arusha	WF01 2.1 Mavuno mahindi[tani]	9,179.0	4,744.6
	Dar es salaam	WF01 2.1 Mavuno mahindi[tani]	70.2	533.9
	Dodoma	WF01 2.1 Mavuno mahindi[tani]	911.0	16,618.6
	Geita	WF01 2.1 Mavuno mahindi[tani]	84,337.1	94,020.1
	Iringa	WF01 2.1 Mavuno mahindi[tani]	45,376.8	107,061.1
	Kagera	WF01 2.1 Mavuno mahindi[tani]	1,739.6	38,371.8
	Katavi	WF01 2.1 Mavuno mahindi[tani]	52,263.7	38,406.4

At the top of the table area, there is a message: "There are a changes in selections hit update to see the latest changes." with "Hide" and "Update" buttons. An "Excel" button is also visible in the top right corner of the table area.

# 6. Pivot Table

## 6.3 Select Level

① In "Select Admin units levels", Select "Region", "District", or "Ward". However, after the administrative unit is selected, the higher or same level is not shown. In this example, Arusha region is selected. Thus, "region" is not shown here.

PivotTable

Pivot tal

August 2018  
September 2018  
October 2018  
November 2018  
December 2018  
January 2019  
February 2019  
March 2019  
April 2019

Arusha x X clear all

Options v

Select Admin. units levels v

District

Ward

- ▶ Arusha Mjini
- ▶ Arusha Vijijini
- ▶ Karatu
- ▶ Longido
- ▶ Meru
- ▶ Monduli
- ▶ Ngorongoro

Hide Update

Excel

			May 2019	June 2019
Tanzania	Tanga	WF01 2.1 Mavuno mahindi[tani]	1,788.7	36,399.5
	Arusha	WF01 2.1 Mavuno mahindi[tani]	9,179.0	4,744.6
	Dar es salaam	WF01 2.1 Mavuno mahindi[tani]		
	Dodoma	WF01 2.1 Mavuno mahindi[tani]	911.0	16,618.6
	Geita	WF01 2.1 Mavuno mahindi[tani]	84,337.1	94,020.1
	Iringa	WF01 2.1 Mavuno mahindi[tani]	45,376.8	107,061.1
	Kagera	WF01 2.1 Mavuno mahindi[tani]	1,739.6	38,371.8
	Katavi	WF01 2.1 Mavuno mahindi[tani]	52,263.7	38,406.4

② Update

# 6. Pivot Table

## 6.3 Select Level

②1 Values for all districts in Arusha is shown in the table

The screenshot shows a web application interface for a PivotTable. The browser address bar displays the URL: [ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/](https://ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/). The application title is "Pivot table".

On the left side, there is a list of months from August 2018 to April 2019. Below this, the "District in" is set to "Arusha". The "Options" dropdown is set to "Level: District". A tree view shows the hierarchy: Tanzania > Arusha, with sub-items for Arusha Mjini, Arusha Vijijini, Karatu, Longido, Meru, Monduli, and Ngorongoro.

The main table displays data for May 2019 and June 2019. The table is filtered to show only districts within Arusha. The data is as follows:

			May 2019	June 2019
Arusha	Arusha Mjini	WF01 2.1 Mavuno mahindi[tani]	0.0	
	Ngorongoro	WF01 2.1 Mavuno mahindi[tani]	1,190.0	
	Arusha Vijijini	WF01 2.1 Mavuno mahindi[tani]	2,190.0	4,266.1
	Karatu	WF01 2.1 Mavuno mahindi[tani]		
	Longido	WF01 2.1 Mavuno mahindi[tani]		
	Meru	WF01 2.1 Mavuno mahindi[tani]	7.5	132.5
	Monduli	WF01 2.1 Mavuno mahindi[tani]	5,791.5	346.0

# 6. Pivot Table

## 6.4 Layout

22 Click Layout

The screenshot shows a web browser window with a PivotTable interface. The browser address bar shows the URL: [ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/](https://ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/). The interface includes a navigation menu on the left with months from August 2018 to April 2019. Below the menu, the 'District in' is set to 'Arusha'. The 'Options' dropdown is set to 'Level: District'. The main area displays a PivotTable with columns for 'May 2019' and 'June 2019'. The 'Layout' button in the top toolbar is highlighted with a callout. An 'Excel' button is also visible in the top right corner.

			May 2019	June 2019
Arusha	Arusha Mjini	WF01 2.1 Mavuno mahindi[tani]	0.0	
	Ngorongoro	WF01 2.1 Mavuno mahindi[tani]	1,190.0	
	Arusha Vijijini	WF01 2.1 Mavuno mahindi[tani]	2,190.0	4,266.1
	Karatu	WF01 2.1 Mavuno mahindi[tani]		
	Longido	WF01 2.1 Mavuno mahindi[tani]		
	Meru	WF01 2.1 Mavuno mahindi[tani]	7.5	132.5
	Monduli	WF01 2.1 Mavuno mahindi[tani]	5,791.5	346.0



# 6. Pivot Table

## 6.4 Layout

②③ Information items selected in rows are displayed vertically and Column are displayed horizontally. Upper item is displayed outside.

Table Layout

Filters

Column

Period

rows

Organisation Unit

Data

Update Close

Update

Table--ARDS, index.html#/?

Update Layout Options Favorites

Map Home

Excel

			May 2019	June 2019	
	Tanzania	Dar es salaam	WF01 2.1 Mavuno mahindi[tani]	70.2	533.9
			WF01 2.1 Mavuno Mpunga[tani]	13.0	511.9
		Arusha	WF01 2.1 Mavuno mahindi[tani]	9,179.0	4,744.6
			WF01 2.1 Mavuno Mpunga[tani]	2,018.0	1,004.8
			WF01 2.1 Mavuno mahindi[tani]	1,788.7	36,399.5
			WF01 2.1 Mavuno Mpunga[tani]	2,081.0	1,595.8
		Dodoma	WF01 2.1 Mavuno mahindi[tani]	911.0	16,618.6
			WF01 2.1 Mavuno Mpunga[tani]	9.0	2,922.1
			WF01 2.1 Mavuno mahindi[tani]	84 337.1	94 020.1

September 2018  
October 2018  
November 2018  
December 2018  
January 2019  
February 2019  
March 2019  
April 2019

User sub-units

Options

User sub-units x

Arusha

Dar es salaam

Dodoma

②④ Update



# 6. Pivot Table

## 6.4 Layout

⑳ Values for data item selected in "Filters" show total value for organization unit.

Table Layout

Filters  
Organisation Unit

Column  
Period

rows  
Data

User sub-units Arasha		
	May 2019	June 2019
WF01 2.1 Mavuno mahindi[tani]	1,424,277.5	2,325,407.3
WF01 2.1 Mavuno Mpunga[tani]	920,758.6	,487,596.9

㉑ Update

Totals of values from all organization units selected for WF01 2.1 Mavuno Mpunga[tani] and May 2019

User sub-units X clear all

Options

User sub-units x

- Tanzania
  - Arusha
  - Dares salaam
  - Dodoma

# 6. Pivot Table

## 6.4 Layout

②5 You can reverse the column and row.

The screenshot displays a PivotTable configuration window on the left and a browser window on the right showing the resulting data table. The configuration window has a 'Table Layout' section with 'Filters' (empty), 'rows' (Period), and 'Column' (Organisation Unit, Data). Below it are 'Update' and 'Close' buttons. The browser window shows a table with columns for 'Tanzania > Dar es salaam', 'Tanzania > Arusha', and 'Tanzania > Tanga'. The rows are 'May 2019' and 'June 2019'. The data is grouped by 'WF01 2.1' sub-units: 'Mavuno mahindi[tani]', 'Mavuno Mpunga[tani]', and 'Mavuno mahindi[tani]'. The values are numerical.

	Tanzania > Dar es salaam	Tanzania > Arusha	Tanzania > Tanga
May 2019	70.2	13.0	9,179.0
June 2019	533.9	511.9	4,744.6

②6 Update

# 6. Pivot Table

## 6.5 Option

You can add or remove some information by selecting Option

②⑦ Click Option

The screenshot shows a web application interface for a Pivot Table. The browser address bar shows the URL: [ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/](https://ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/). The page title is "Pivot table".

The interface includes a navigation bar with buttons for "Update", "Layout", "Options", and "Favorites". There are also icons for "Map" and "Home".

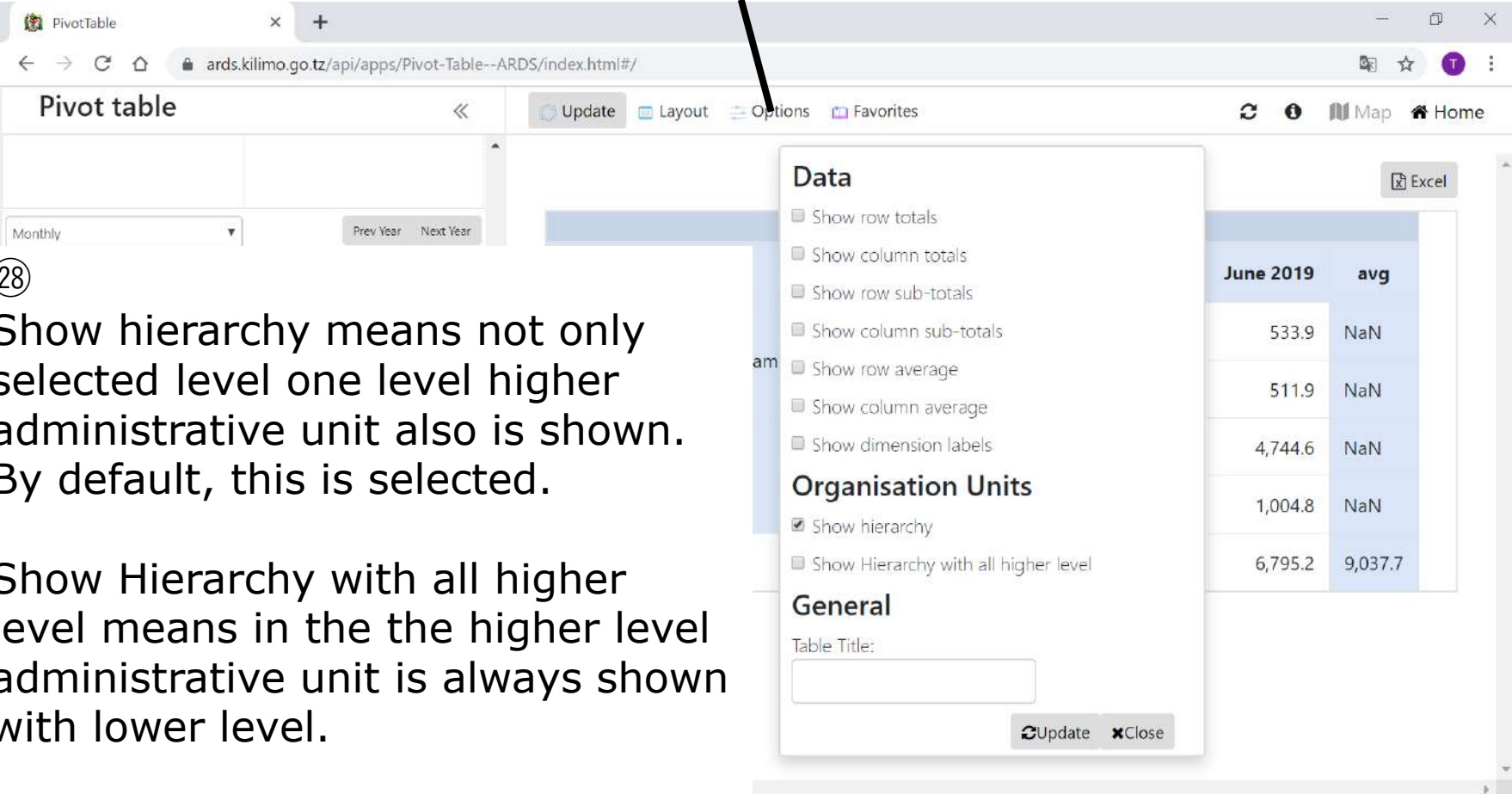
On the left side, there is a list of months from August 2018 to April 2019. Below this, there is a "District in" filter set to "Arusha" and an "Options" dropdown menu. The "Options" menu is currently open, showing a "Level" dropdown set to "District".

The main content area displays a table with data for Arusha districts in May and June 2019. The table is highlighted in blue. The data is as follows:

			May 2019	June 2019
Arusha	Arusha Mjini	WF01 2.1 Mavuno mahindi[tani]	0.0	
	Ngorongoro	WF01 2.1 Mavuno mahindi[tani]	1,190.0	
	Arusha Vijijini	WF01 2.1 Mavuno mahindi[tani]	2,190.0	4,266.1
	Karatu	WF01 2.1 Mavuno mahindi[tani]		
	Longido	WF01 2.1 Mavuno mahindi[tani]		
	Meru	WF01 2.1 Mavuno mahindi[tani]	7.5	132.5
	Monduli	WF01 2.1 Mavuno mahindi[tani]	5,791.5	346.0

# 6. Pivot Table

## 6.5 Option



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#`. The application interface includes a navigation bar with 'Update', 'Layout', 'Options', and 'Favorites' buttons. A dropdown menu is open, showing the following options:

- Data**
  - Show row totals
  - Show column totals
  - Show row sub-totals
  - Show column sub-totals
  - Show row average
  - Show column average
  - Show dimension labels
- Organisation Units**
  - Show hierarchy
  - Show Hierarchy with all higher level
- General**
  - Table Title:

At the bottom of the menu are 'Update' and 'Close' buttons. In the background, a data table is partially visible with the following data:

June 2019	avg
533.9	NaN
511.9	NaN
4,744.6	NaN
1,004.8	NaN
6,795.2	9,037.7

28

Show hierarchy means not only selected level one level higher administrative unit also is shown. By default, this is selected.

Show Hierarchy with all higher level means in the the higher level administrative unit is always shown with lower level.

Mostly these two options are used.

# 6. Pivot Table

## 6.5 Option

②9 Unselect

**Data**

- Show row totals
- Show column totals
- Show row sub-totals
- Show column sub-totals
- Show row average
- Show column average
- Show dimension labels

**Organisation Units**

- Show hierarchy
- Show Hierarchy with all higher level

**General**

Table Title:

③0 Update

April 2019

Arusha | Dar es salaam | X clear all

Options ▾

Select Administrative Unit ▾

- Tanzania
  - ▶ Arusha
  - ▶ Dar es salaam
  - ▶ Dodoma

/Pivot-Table--ARDS/index.html#/  
Update Layout Options Favorites  
Map Home

Excel

		May 2019	June 2019
Dar es salaam	WF01 2.1 Mavuno mahindi[tani]	70.2	533.9
	WF01 2.1 Mavuno Mpunga[tani]	13.0	511.9
Arusha	WF01 2.1 Mavuno mahindi[tani]	9,179.0	4,744.6
	WF01 2.1 Mavuno Mpunga[tani]	2,018.0	1,004.8

③1 Tanzania is removed

# 6. Pivot Table

## 6.5 Option

③② Select

### Data

- Show row totals
- Show column totals
- Show row sub-totals
- Show column sub-totals
- Show row average
- Show column average
- Show dimension labels

### Organisation Units

- Show hierarchy
- Show Hierarchy with all higher level

### General

Table Title:

③③ Update

Update Close

- ▼ Tanzania
  - ▶ Arusha
  - ▶ Dar es salaam
  - ▶ Dodoma

Selected (2)

			May 2019	June 2019
Tanzania	Dar es salaam	WF01 2.1 Mavuno mahindi[tani]	70.2	533.9
		WF01 2.1 Mavuno Mpunga[tani]	13.0	511.9
Tanzania	Arusha	WF01 2.1 Mavuno mahindi[tani]	9,179.0	4,744.6
		WF01 2.1 Mavuno Mpunga[tani]	2,018.0	1,004.8

③④ Tanzania is displayed in the left side of every region

# 6. Pivot Table

## 6.6 Favorites

Favorites is a function to save selected parameters such as information items, periods, administrative units, Layout and Options so that can be retrieved sooner later.

③⑤ Click Favorites

The screenshot shows a web application interface for a Pivot Table. The browser address bar indicates the URL is `ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#`. The application title is "Pivot table". The main interface has a navigation menu on the left with months from August 2018 to April 2019. Below the menu, there is a "District in" dropdown set to "Arusha" and an "Options" dropdown set to "Level: District". A tree view on the left shows the hierarchy: Tanzania > Arusha > Arusha Mjini, Arusha Vijijini, Karatu, Longido, Meru, Monduli, Ngorongoro. The main data table displays a pivot table with columns for "May 2019" and "June 2019". The data rows are filtered by "Arusha" and "Arusha Mjini". The table data is as follows:

			May 2019	June 2019
Arusha	Arusha Mjini	WF01 2.1 Mavuno mahindi[tani]	0.0	
	Ngorongoro	WF01 2.1 Mavuno mahindi[tani]	1,190.0	
	Arusha Vijijini	WF01 2.1 Mavuno mahindi[tani]	2,190.0	4,266.1
	Karatu	WF01 2.1 Mavuno mahindi[tani]		
	Longido	WF01 2.1 Mavuno mahindi[tani]		
	Meru	WF01 2.1 Mavuno mahindi[tani]	7.5	132.5
	Monduli	WF01 2.1 Mavuno mahindi[tani]	5,791.5	346.0

# 6. Pivot Table

## 6.6 Favorites

You can see favorites the user created or other one created and shared.

③⑥ Click New

The screenshot shows the PivotTable application interface. The main window displays a pivot table for 'Mpunga' with a monthly view. The 'Favorites' panel is open, showing a list of saved pivot tables. A 'New' button is visible in the top right of the Favorites panel. A search bar is present at the top of the Favorites list. The data table on the right shows values for May 2019 and June 2019.

	May 2019	June 2019
DQMS2_target_mahindi_songwe	9,179.0	4,744.6
DQMS2_target_mpunga_songwe	2,018.0	1,004.8
DQMS2_target_mihogo_njombe	70.2	533.9
DQMS2_target_maharage_njombe	13.0	511.9

You can search favorite by typing key word



# 6. Pivot Table

## 6.6 Favorites

③⑦ Input Favorites Name

③⑧ Click Save

The screenshot shows the PivotTable application interface. The main window displays a pivot table for 'Mpunga' with a 'Monthly' filter. The 'Available' list includes months from July 2018 to April 2019, and the 'Selected' list includes May 2019 and June 2019. The 'Options' section shows 'Select Administrative Unit' with 'Arusha' and 'Dar es salaam' selected. A 'Favorites' dialog box is open, showing a text input field with 'Test Toshi' and a 'Save' button. Below the input field is a search bar and a list of favorites: 'DQMS\_Waliochinjwa\_monthly\_Tabora', 'DQMS2\_Mihogo\_July', 'DQMS2\_target\_mahindi\_songwe', 'DQMS2\_target\_mpunga\_songwe', and 'DQMS2\_target\_mihogo\_njombe'. The background table shows data for May 2019 and June 2019.

May 2019	June 2019
9,179.0	4,744.6
2,018.0	1,004.8
70.2	533.9
13.0	511.9

# 6. Pivot Table

## 6.6 Favorites

③⑦ Input Favorites Name

③⑧ Click Save

The screenshot shows the PivotTable application interface. The main window displays a pivot table for 'Mpunga' with a 'Monthly' filter. The 'Available' list includes months from July 2018 to April 2019, and the 'Selected' list includes May 2019 and June 2019. The 'Options' section shows 'Select Administrative Unit' with 'Arusha' and 'Dar es salaam' selected. A 'Favorites' dialog box is open, showing a text input field with 'Test Toshi' and a 'Save' button. Below the input field is a search bar and a list of favorites: 'DQMS\_Waliochinjwa\_monthly\_Tabora', 'DQMS2\_Mihogo\_July', 'DQMS2\_target\_mahindi\_songwe', 'DQMS2\_target\_mpunga\_songwe', and 'DQMS2\_target\_mihogo\_njombe'. The background table shows data for May 2019 and June 2019.

	May 2019	June 2019
	9,179.0	4,744.6
	2,018.0	1,004.8
	70.2	533.9
	13.0	511.9

# 6. Pivot Table

## 6.6 Favorites

The screenshot shows a web application interface for a PivotTable. The main area is divided into several sections:

- Left Panel:** Contains a dropdown menu set to 'Monthly', buttons for 'Prev Year' and 'Next Year', a list of 'Available' months (July 2018 to April 2019), and a 'Selected' list (May 2019, June 2019). Below this are tabs for 'Arusha' and 'Dar es salaam', and an 'Options' dropdown.
- Center Panel:** A list of 'Favorites' with the following items: DQMS2\_target\_mahindi\_songwe, DQMS2\_target\_mpunga\_songwe, DQMS2\_target\_mihogo\_njombe, DQMS2\_target\_maharage\_njombe, DQMS2\_MpungaGeita July 2018, DQMS2\_Alizeti\_Geita\_Monthly, DQMS2\_NMbichi\_monthly\_Geita, DQMS2\_NMbivu, DQMS2\_Mahindi\_Tanga\_May2019, and Test Toshi. Each item has a trash icon, a share icon, and an edit icon.
- Right Panel:** A data table with columns for 'May 2019' and 'June 2019'. The data rows are: 9,179.0 / 4,744.6; 2,018.0 / 1,004.8; 70.2 / 533.9; and 13.0 / 511.9.

Annotations and callouts:

- A vertical line points from the 'Favorites' list to the text: **(39) Favorites is saved**
- A line points from the trash icon of 'Test Toshi' to the text: **Delete the Favorite**
- A line points from the share icon of 'Test Toshi' to the text: **(40) Share Favorites**
- A line points from the edit icon of 'Test Toshi' to the text: **Update the Favorite**

# 6. Pivot Table

## 6.6 Favorites

The screenshot shows a web application interface for a PivotTable. The main area displays a list of favorites: DQMS2\_NMbichi\_monthly\_Geita, DQMS2\_NMbivu, DQMS2\_Mahindi\_Tanga\_May2019, and Test Toshi. The 'Test Toshi' item is selected, and a dialog box is open for user selection. The dialog has a search bar and a list of user groups: All Users, Estimation Expert, and Testing Users. Each group has an eye icon (view authority) and a pencil icon (write authority). A 'Save' button is visible in the dialog. To the right, a data table is partially visible with columns for 'May 2019' and 'June 2019'. The table contains numerical values for each month.

	May 2019	June 2019
	9,179.0	4,744.6
	2,018.0	1,004.8
	70.2	533.9
	18.0	511.9

Annotations:

- ④② You can share All users or Only You. Please disregard Estimate Expert or Testing User since it is created testing purpose. Click eye to give view authority and pencil to write authority
- ④① Click

# 6. Pivot Table

## 6.7 Auto-Growing Information

Some information items are shown in blue. This is for auto-growing table or auto-growing part of the table which consists of fixed part + auto-growing part. Auto-growing information is shown in fixed layout and configuration in "Layout" does not work.

The screenshot shows a web application interface for a PivotTable. The browser address bar shows the URL: `ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html#/?`. The application title is "Pivot table". The interface includes a navigation bar with "Update", "Layout", "Options", and "Favorites" buttons. Below the navigation bar, there are tabs for "All Data", "Data Elements", "Computed", and "Auto Growing". A dropdown menu shows "All Tables [Selected Table]" and a search box contains "df02".

The main content area displays a table with the following columns: "Organisation unit name", "Period", "Type of livestock", "Animal moved into the district from other areas, Non trade", "Animal moved into the district from other areas, Trade From other LGAs in Tanzania", "Animal moved into the district from other areas, Trade From other contries(imported)", "Animal moved to other areas, from other districts, Non trade", and "Animal moved to other areas, from other districts, Trade oth LGAs: Tanza".

The table data is as follows:

Organisation unit name	Period	Type of livestock	Animal moved into the district from other areas, Non trade	Animal moved into the district from other areas, Trade From other LGAs in Tanzania	Animal moved into the district from other areas, Trade From other contries(imported)	Animal moved to other areas, from other districts, Non trade	Animal moved to other areas, from other districts, Trade oth LGAs: Tanza
Arusha	July - September 2018	Cattle	221.0	815.0	0.0	329.0	664.0
		DOG	12.0	9.0	0.0	14.0	0.0
		DONKEY	10.0	28.0	0.0	19.0	0.0
		Goat	398.0	1434.0	0.0	208.0	1270.0
		Pig	24.0	57.0	0.0	39.0	57.0

# 6. Pivot Table

## 6.8 Accumulative value and the data of the month for table 2.1 WF01

Liliopandwa, Liliovunwa, Uzalishaji/Tija and Mavuno[tani] in WF01 Table 2.1 have two options respectively.

Without Mkusanyiko: This is the data for the month

With Mkusanyiko: This is the accumulated data from the beginning of the Fiscal Year.

However, the data before and including FY2017/18 are different.

The screenshot shows a 'Pivot table' configuration window. At the top, there are four buttons: 'All Data' (highlighted with a blue border), 'Data Elements', 'Computed', and 'Auto Growing'. Below these is a dropdown menu labeled 'All Tables [Select Table]' with a downward arrow. The selected table is 'wf01 2.1 ti mahindi'. Below this, there are two columns: 'Available (0)' and 'Selected (8)'. The 'Selected' column contains a list of items: 'WF01 2.1 Mavuno mahindi[tani]', 'WF01 2.1 Utekelezaji Mkusanyiko Mavuno mahindi[tani]', 'WF01 2.1 Utekelezaji mkusanyiko lililopandwa(ha) mahindi', and 'WF01 2.1 Utekelezaji mkusanyiko'. At the bottom, there are two dropdown menus: 'Monthly' and 'Prev Year' / 'Next Year'.

# 6. Pivot Table

## 6.9 Data before and including FY 2017/18

- Change in data submission rule in 2018/19 limits the use of pivot table data in Table 2.1, WF01 before and including FY 2017/18. If you use data before and including 2017/18, please use data without accumulative (mkusanyiko) so that table will present aggregated data as submitted by data collectors.
- Options with accumulative before and including 2017/18 (e.g. Eneo lilio pandwa mkusanyiko, eneo lilio vunwa mkusanyiko, uzalishaji/tija mkusanyiko, and Mavuno mkusanyiko) will return improper data in accumulative of previous month(s)

# 6. Pivot Table

## 6.10 Limitation of a number of data downloaded

- Because of the limitation of browser performance in your computer, this pivot table handles less than 500 rows of data in table.
- Please request less than 500 rows data, otherwise, the user may see some problems such as partial downloaded data or improper order of administrative units.

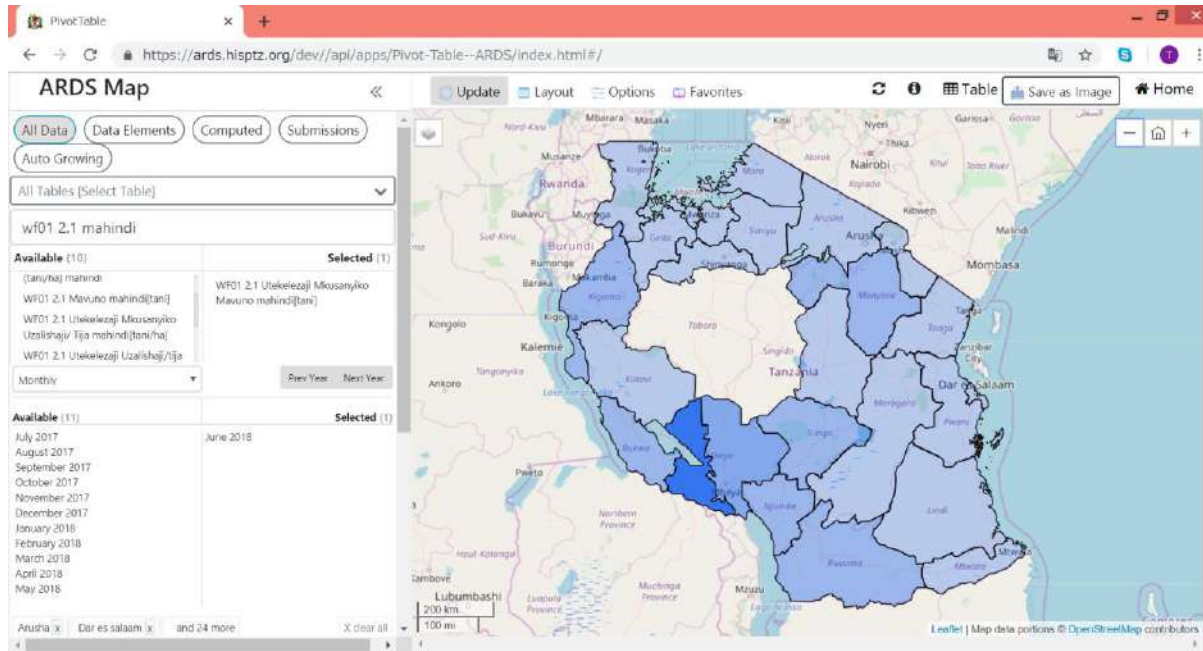


# **7. Map**

**For All Users**

# 7. Map

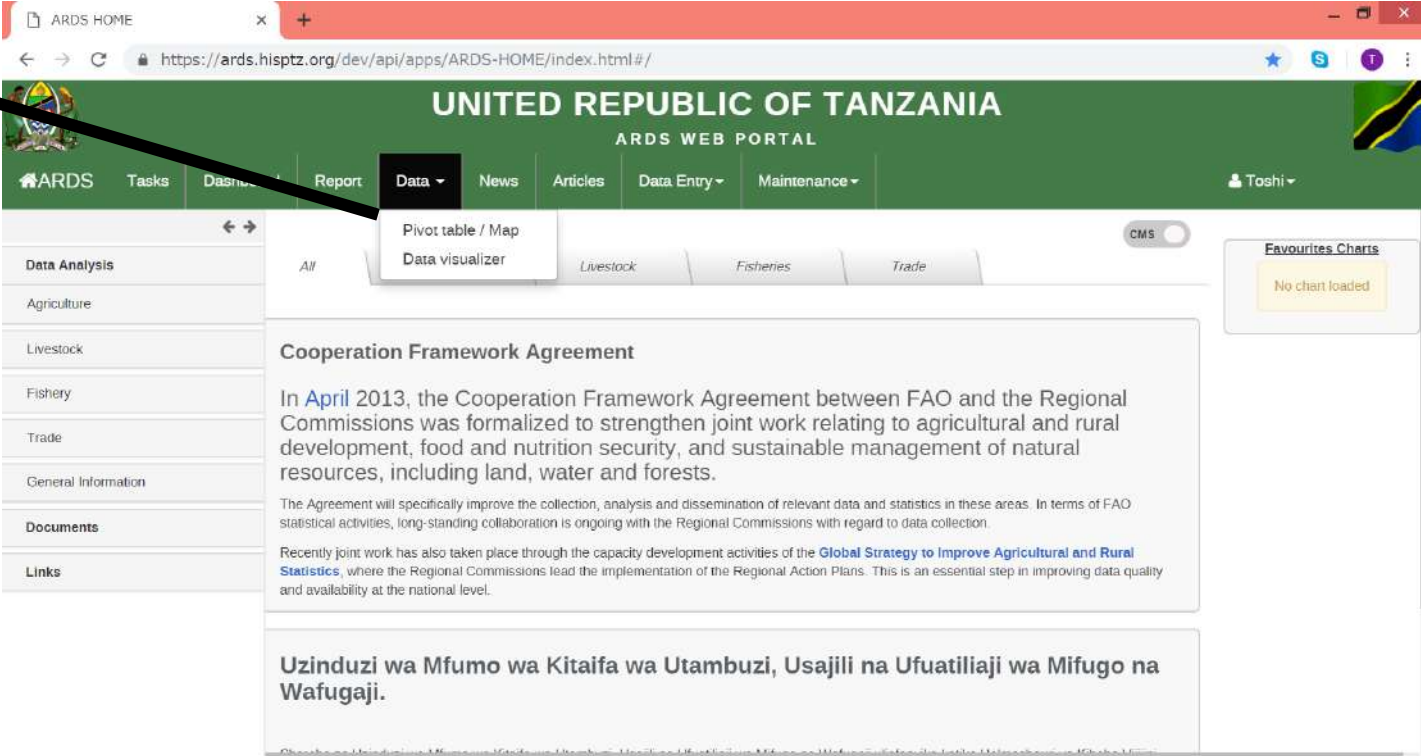
GIS is tool to **color Region** or **District** on Tanzanian Map by level of selected attribute.



EX Mahindi Production for June 2018 (Data is dummy)

# 7. Map

- ① Choose Data-Pivot table / Map



The screenshot shows the ARDS Web Portal for the United Republic of Tanzania. The page has a green header with the national emblem and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. A navigation menu includes 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Data' menu is open, showing 'Pivot table / Map' and 'Data visualizer' options. A black arrow points from the text 'Choose Data-Pivot table / Map' to the 'Data' menu. The main content area features a sidebar with categories like 'Data Analysis', 'Agriculture', 'Livestock', 'Fishery', 'Trade', 'General Information', 'Documents', and 'Links'. The main content displays a news article titled 'Cooperation Framework Agreement' with a sub-heading 'Uzinduzi wa Mfumo wa Kitaifa wa Utambuzi, Usajili na Ufuatiliaji wa Mifugo na Wafugaji.' and a 'Favourites Charts' section with a 'No chart loaded' message.

# 7. Map

② Select only 1 attribute to be shown

③ Select only 1 Period to be shown

The screenshot shows a web browser window with the URL `https://ards.hisptz.org/dev//api/apps/Pivot-Table--ARDS/index.html#/`. The application interface is titled "Pivot table" and includes a navigation bar with "Update", "Layout", "Options", and "Favorites" buttons. The main content area is divided into three sections:

- Creating Pivot table:** Contains instructions: "Select items from any dimension of the left menu", "Click Layout to arrange your dimensions on table rows and columns", and "Click Update to create your table".
- Working with a pivot table:** Contains instructions: "Click Options to hide sub-totals or empty rows, adjust font size and more", "Click Favorites to save your table for later use", and "Click Download to save table data to your computer".
- Left Sidebar:** Features a "Select Table" dropdown, an "Available" list with items like "wfd1 4 idadi", and a "Selected" list with "wfd1 4 Idadi-ya waliochujwa Ng'ombe".
- Central Area:** Includes a "Monthly" dropdown, "Prev Year" and "Next Year" buttons, and a "Selected" list with "June 2018".
- Bottom Section:** Shows an "Options" dropdown, a "Select Administrative Unit" dropdown, and a tree view of regions under "Tanzania", with "Dar es salaam" highlighted.
- Top Right:** A "Map" button is visible in the application's navigation bar.

⑤ Press Map

④ Select administrative boundary

# 7. Map

The screenshot shows a web browser window with the URL [#/](https://ards.hisptz.org/dev//api/apps/Pivot-Table--ARDS/index.html). The application title is "ARDS Map". The interface includes a navigation bar with "Update", "Layout", "Options", and "Favorites" buttons. A sidebar on the left contains a table with "Available" and "Selected" columns. The "Available" column lists various data items, including "WF01 4 Idadi ya walochinjwa Kondoo" and "WF01 4 Idadi ya walochinjwa Ng'ombe". The "Selected" column contains "WF01 4 Idadi ya walochinjwa Ng'ombe". Below the table, there are filters for "Month" (set to "June 2018") and "Year" (set to "June 2018"). A "Select Administrative Unit" dropdown is also present, showing a list of regions in Tanzania, including "Anusha", "Dar es Salaam", and "Dodoma". A large black arrow points to the "Update" button, which is circled in red. A text overlay "⑥ Update" is positioned next to the arrow.

ARDS Map

All Tables [Select Table]

wf01-4 idadi

Available (5)	Selected (1)
WF01 4 Idadi ya walochinjwa Kondoo	WF01 4 Idadi ya walochinjwa Ng'ombe
WF01 4 Idadi ya walochinjwa Kuku wa asli	
WF01 4 Idadi ya walochinjwa Kuku wa kitase	
WF01 4 Idadi ya walochinjwa Mbuzi	
WF01 4 Idadi ya walochinjwa Ng'arvina	

Month: [v] Prev Year Next Year

Available (11)	Selected (1)
July 2017	June 2018
August 2017	
September 2017	
October 2017	
November 2017	
December 2017	
January 2018	
February 2018	
March 2018	
April 2018	
May 2018	

Anusha (x) Dar es salaam (x) and 23 more X clear all

Options [v]

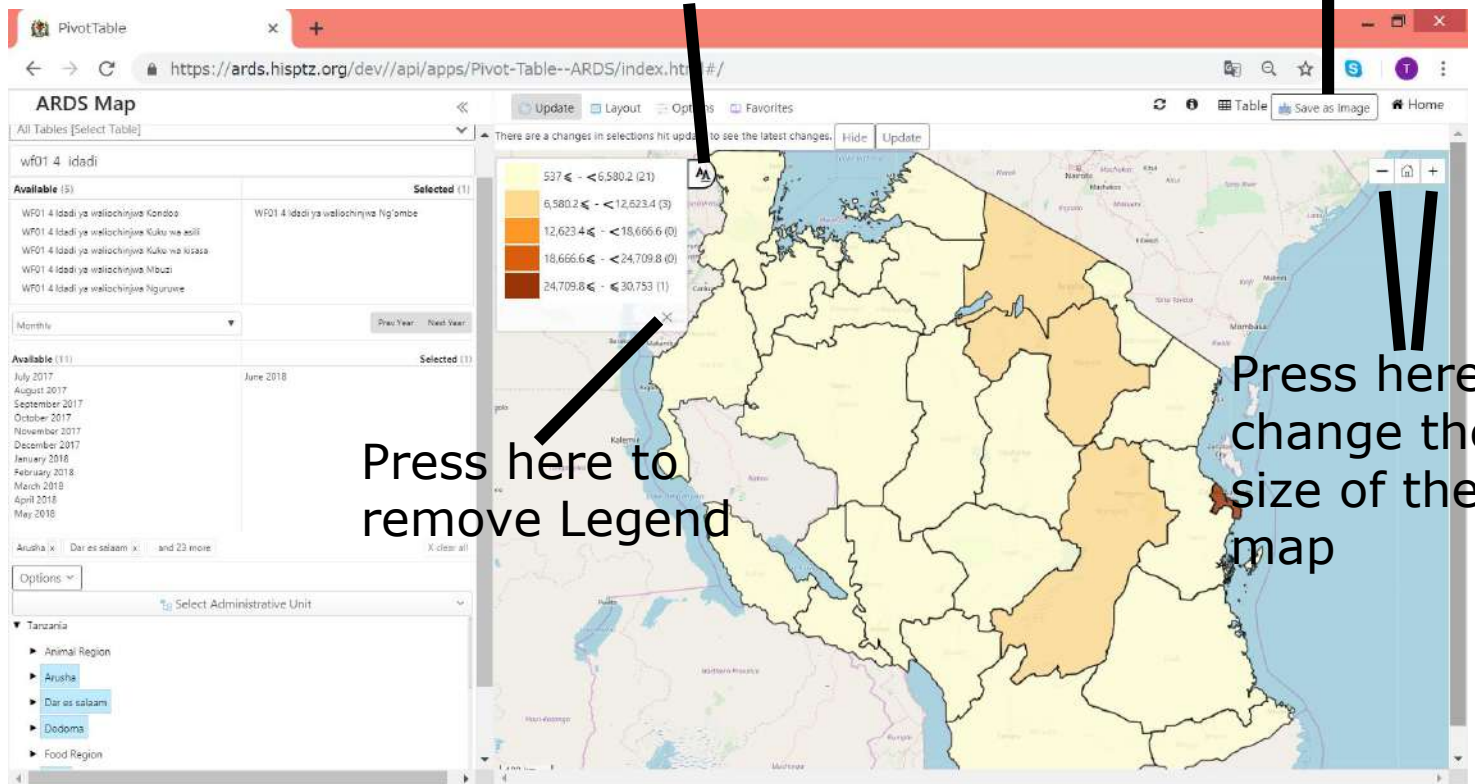
Select Administrative Unit [v]

- Tanzania
  - Animal Region
  - Anusha
  - Dar es salaam
  - Dodoma
  - Food Region

# 7. Map

Press here to change category of coloring

Press here to download the map



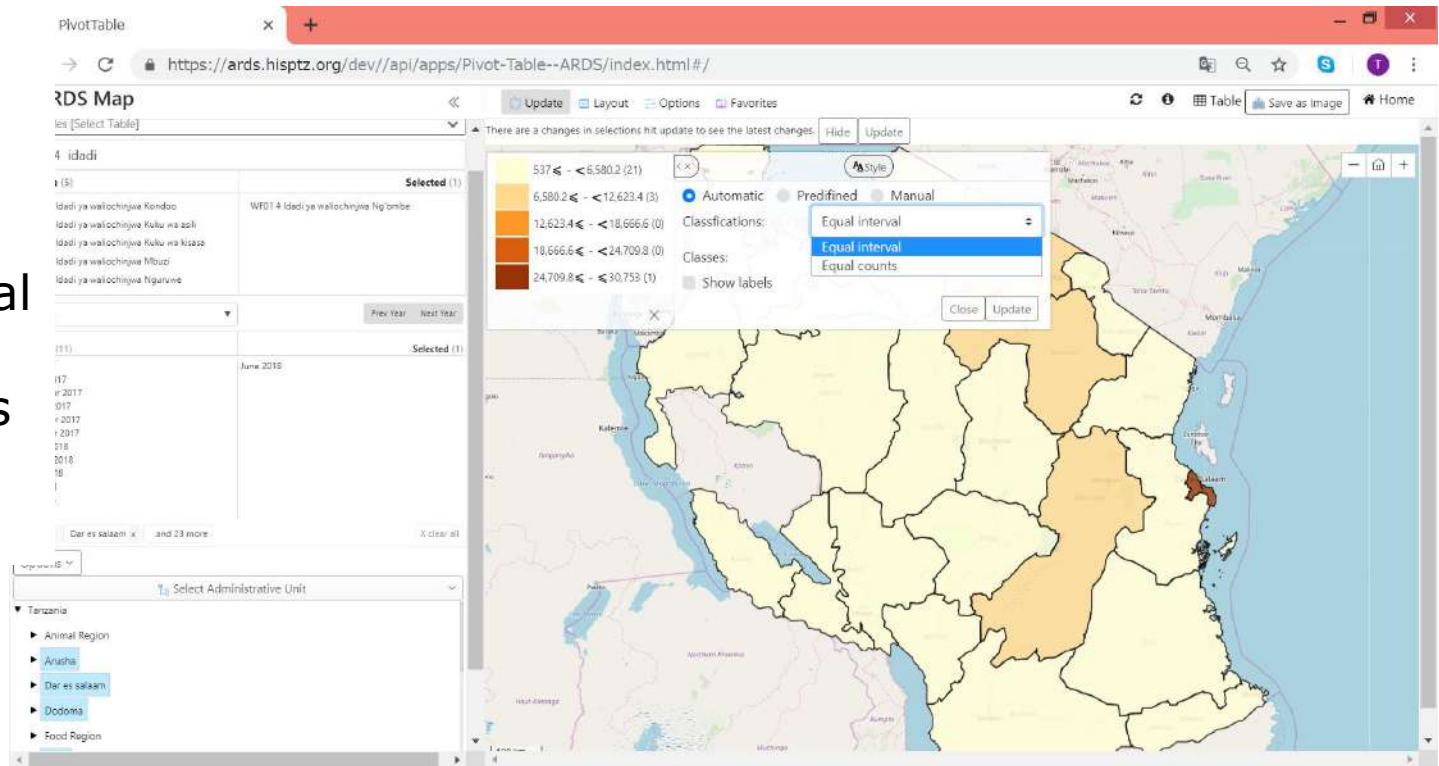
Press here to remove Legend

Press here to change the size of the map

# 7. Map

ARDS Supports  
4 types of color  
categorization.

- 1) Automatic  
- Equal Interval
- 2) Automatic  
- Equal Counts
- 3) Predefined
- 4) Manual



# 7. Map

## 1) Automatic - Equal Interval

System takes minimum value and maximum value among the selected regions / districts for the selected attribute and makes **all the intervals of the category same**



# 7. Map

## 2) Automatic - Equal Counts

System adjusts interval of each category to make the number of counts of districts /regions for each interval roughly same.

# 7. Map

## 3) Predefined

System colors regions/districts based on pre-defined setting by Administrator.

# 7. Map

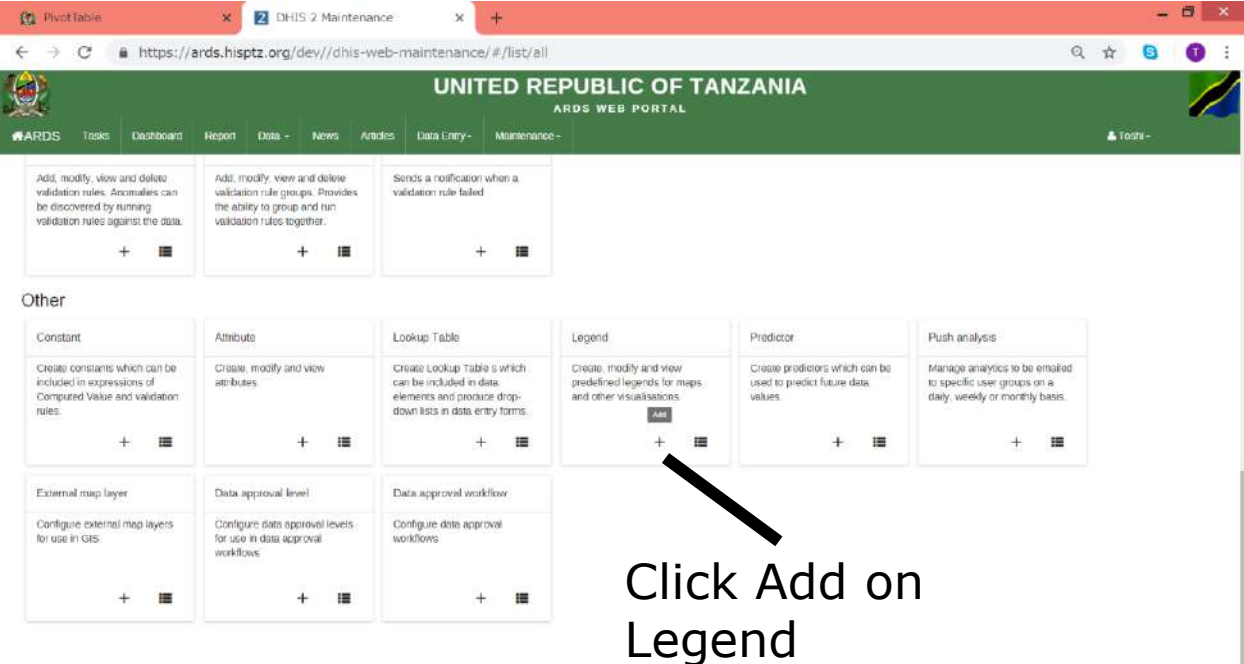
## 3) Predefined (Configuration by Administrator)

Go to  
Maintenance –  
Data Elements  
and Computer  
Values

The screenshot shows the ARDS Web Portal interface. The browser address bar displays <https://ards.hisptz.org/dev/api/apps/ARDS-HOME/index.html#/>. The page header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". A navigation menu contains items: ARDS, Tacks, Dashboard, Report, Data - , News, Articles, Data Entry - , and Maintenance - . The Maintenance menu is open, showing a list of options: Data Administration, Data Elements and Computed values, Entry Form, Administrative Units, Settings, Users, CMS, and System usage statistics. A black arrow points from the text on the left to the "Data Elements and Computed values" option in the menu. The main content area features a news article titled "Cooperation Framework Agreement" with a sub-heading "In April 2013, the Cooperation Framework strengthen joint work relating to agricul of natural resources, including land, w...". Below the article is another section titled "Uzinduzi wa Mfumo wa Kitaifa wa Utambuzi, Usajili na Ufuatiliaji wa Mifugo na Wafugaji." with a sub-heading "Sherhe za Uzinduzi wa Mfumo wa Kitaifa wa Utambuzi, Usajili na Ufuatiliaji wa Mifugo na Wafugaji uliofanyika katika Halmashauri ya Kibaha Vijijini Mkoani Pwani, tarhe 22/07/2014, Mgeni rasmi Waziri wa Maendeleo ya Mifugo na Uvuvi Mh. Da. Taus Mwangya Kamani". The footer of the page shows the URL <https://ards.hisptz.org/dev/dhis-web-maintenance/>.

# 7. Map

## 3) Predefined (Configuration by Administrator)



The screenshot shows the ARDS Web Portal maintenance page for the United Republic of Tanzania. The page is titled "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL" and features a navigation menu with options like ARDS, Tools, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The main content area displays several configuration cards, each with a description and an "Add" button. The cards include:

- Validation rules (Add, modify, view and delete validation rules. Anomalies can be discovered by running validation rules against the data.)
- Validation rule groups (Add, modify, view and delete validation rule groups. Provides the ability to group and run validation rules together.)
- Notification (Sends a notification when a validation rule failed.)
- Constant (Create constants which can be included in expressions of Computed Value and validation rules.)
- Attribute (Create, modify and view attributes.)
- Lookup Table (Create Lookup Tables which can be included in data elements and produce drop-down lists in data entry forms.)
- Legend (Create, modify and view predefined legends for maps and other visualisations.)
- Predictor (Create predictors which can be used to predict future data values.)
- Push analysis (Manage analytics to be emailed to specific user groups on a daily, weekly or monthly basis.)
- External map layer (Configure external map layers for use in GIS.)
- Data approval level (Configure data approval levels for use in data approval workflows.)
- Data approval workflow (Configure data approval workflows.)

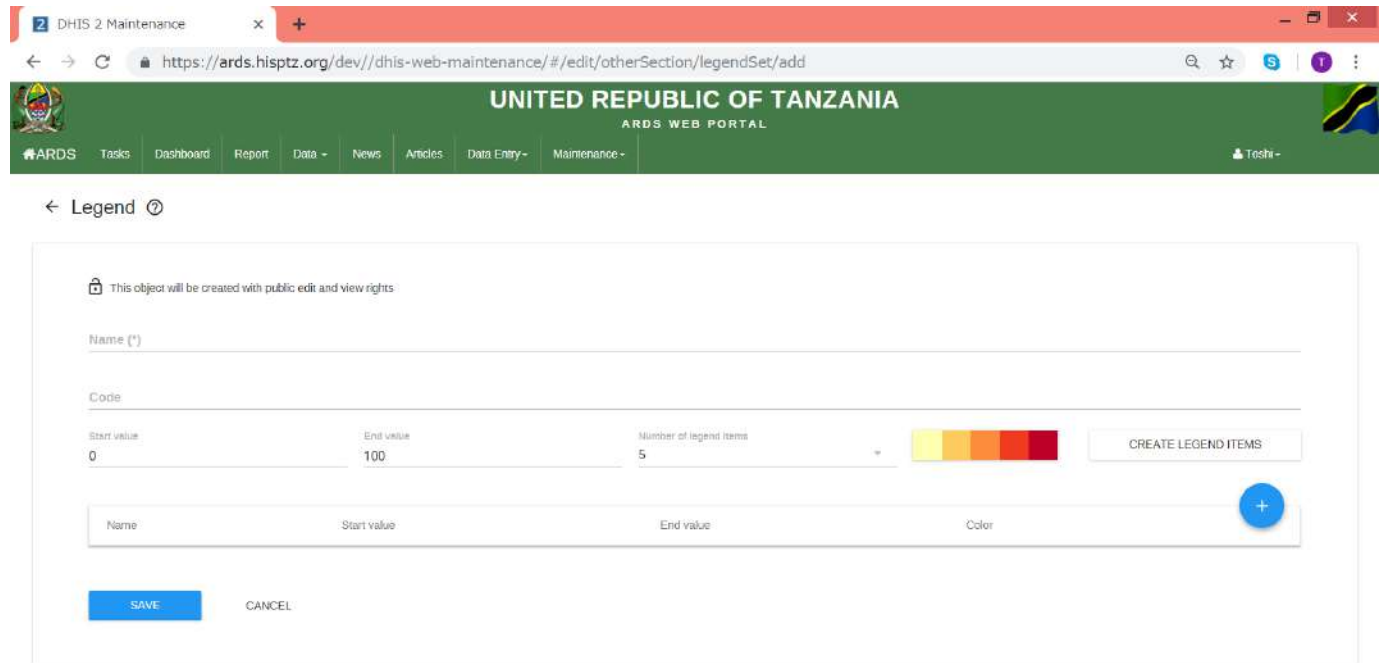
An arrow points to the "Add" button on the "Legend" card, with the text "Click Add on Legend" below it.

# 7. Map

## 3) Predefined (Configuration by Administrator)

You can create "Pre defined" category definition either by

1. Putting Start Items and End Items, pressing CREATE LEGEND ITEMS and then modify each item.
- or
2. Defining each category one by one



The screenshot shows a web browser window with the URL <https://ards.hispztz.org/dev//dhis-web-maintenance/#/edit/otherSection/legendSet/add>. The page header includes the United Republic of Tanzania ARDS Web Portal logo and navigation menu. The main content area is titled "Legend" and contains a form for creating a legend set. The form includes a lock icon and the text "This object will be created with public edit and view rights". The form fields are: Name (\*), Code, Start value (0), End value (100), Number of legend items (5), and a color selection bar. A "CREATE LEGEND ITEMS" button is located to the right of the color bar. Below the form is a table with columns for Name, Start value, End value, and Color, and a blue plus button. At the bottom of the form are "SAVE" and "CANCEL" buttons.

# 7. Map

You can add legend item by pressing here

## 3) Predefined (Configuration by Administrator)

The screenshot shows the 'ARDS WEB PORTAL' for the 'UNITED REPUBLIC OF TANZANIA'. The page is titled 'DHIS 2 Maintenance' and the URL is 'https://ards.hisptz.org/dev//dhis-web-maintenance/#/edit/otherSection/legendSet/add'. The main content area is for editing a legend set named 'Cool\_Toshi'. It includes fields for 'Name (\*)', 'Code', 'Start value' (0), 'End value' (50000000), and 'Number of legend items' (5). A color palette is visible, and a 'CREATE LEGEND ITEMS' button is present. Below this is a table with 5 rows, each representing a legend item with its name, start and end values, and color. A blue '+' button is located to the right of the table. At the bottom, there are 'SAVE' and 'CANCEL' buttons.

Name	Start value	End value	Color
0 - 10000000	0	10000000	#ffff22
10000000 - 20000000	10000000	20000000	#ffcc5c
20000000 - 30000000	20000000	30000000	#ff8c5c
30000000 - 40000000	30000000	40000000	#ff3c20
40000000 - 50000000	40000000	50000000	#bd0020

You can edit each legend item by pressing here

Please save Predefined legend created

# 7. Map

## 4) Manual

System colors regions/districts based on setting by each User.

# 7. Map

## 4) Manual (Configuration by User)

Add legend items to cover every range of attribute selected  
Choose "color" or "pattern"

Select "color" or "pattern"

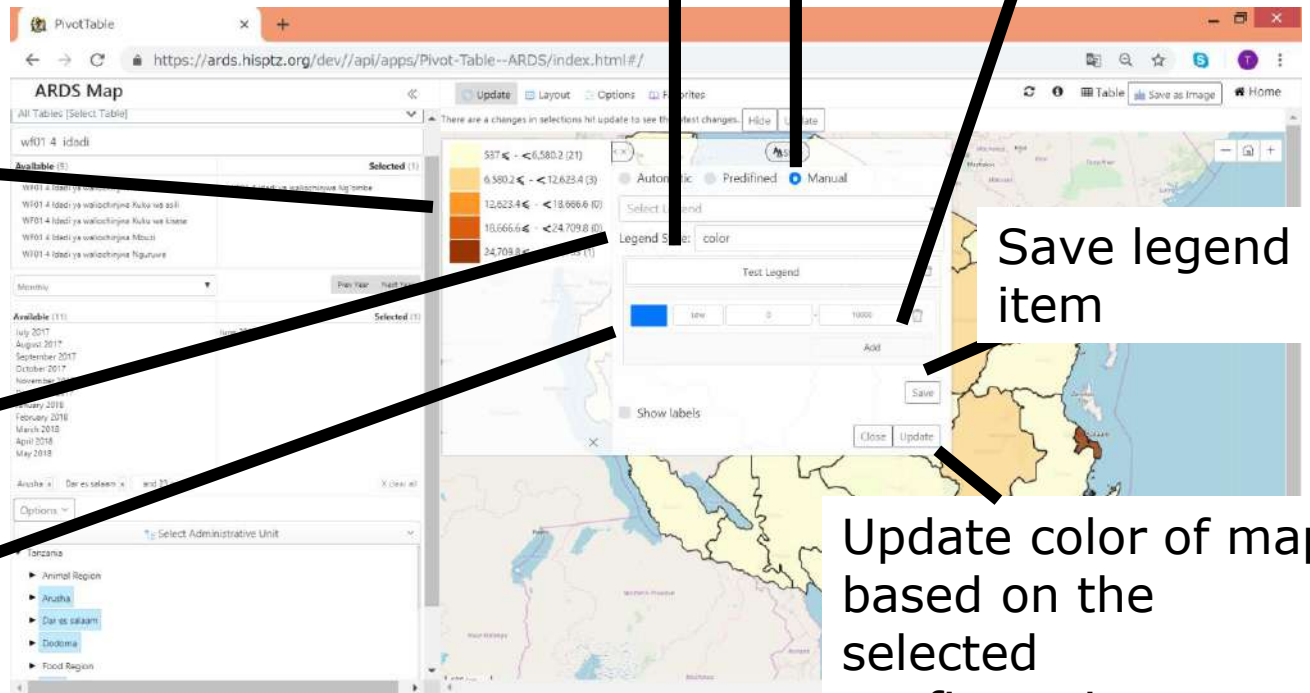
Input name of legend

Click Manual

Add legend item

Save legend item

Update color of map based on the selected configuration





# 7. Map

Color here will be the legend for the item

You can copy & paste this to copy the color to different items

The screenshot displays the ARDS Map application interface. On the left, there are two data tables. The first table, titled 'wf01 4 idadi', lists various administrative units with their corresponding values. The second table, titled 'Months', lists months from July 2017 to May 2018. The main area of the interface is a map of Tanzania, which is color-coded according to the legend. A legend configuration panel is open over the map, showing a color scale from light yellow to dark brown. The legend is set to 'Manual' mode, and the 'Legend Style' is set to 'color'. A color picker is also visible, showing the selected color #0077fc. The interface includes navigation buttons like 'Update', 'Layout', 'Options', and 'Favorites', as well as a 'Save as Image' button. The browser address bar shows the URL: https://ards.hisptz.org/dev//api/apps/Pivot-Table--ARDS/index.html#/. The text 'Color here will be the legend for the item' points to the color picker, and 'Choose colors by selecting these three' points to the three color swatches in the legend panel.

Available (5)	Selected (1)
WF01 4 idadi ya waliochinywa Kandoo	WF01 4 idadi ya waliochinywa Ng'ombe
WF01 4 idadi ya waliochinywa Kuku wa asili	
WF01 4 idadi ya waliochinywa Kuku wa kizazi	
WF01 4 idadi ya waliochinywa Mibuzi	
WF01 4 idadi ya waliochinywa Ng'unuwa	

Available (11)	Selected (1)
July 2017	June 2018
August 2017	
September 2017	
October 2017	
November 2017	
December 2017	
January 2018	
February 2018	
March 2018	
April 2018	
May 2018	

# **8. Static Table**

**For All Users**

# 8. Static Table

ARDS Web Portal does not keep administrative boundary for the past fiscal Year

## Issues and Solution

① **Pivot table** analysis for past fiscal year is based on the latest administrative unit **not on the administrative unit by then.**

-> Static Table

② **Reports** which belong to **administrative unit removed are not obtainable.**

-> Archived Report

# 8. Static Table

## Issues and Solution

- ① **Pivot table** analysis for past fiscal year is based on the latest administrative unit **not on the administrative unit by then.**  
-> Static Table

Static Report is **the reports** to created at the end of fiscal year **based on the administrative units for the fiscal year.**

# 8. Static Table

The screenshot shows a web browser window with the URL `https://ards.hisptz.org/dev//api/apps/standardreport/index.html#/`. The page header is green and features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The main content area is titled "Reports" and contains four report options:

- Standard Report**: View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.
- Static Tables**: View static tables report. These reports are based on appended yearly generated reports for some chosen tables. This option is highlighted with a light blue background and a black arrow pointing to it from the text "Click Static Tables" below.
- Custom Report**: View and add reports based on the JasperReports library. These can be based on report tables and can be designed in iReport.
- Submission and Creation Status**: Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

A left sidebar menu is visible, with "Static Tables" selected under the "Historical Report Data" section.

# 8. Static Table

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The left sidebar lists "Report", "Standard Report", "Custom Report", "Submission and Creation Status", "Historical Report Data", "Static Tables", "Analytics", and "Aggregation". The main content area is titled "Static tables" and shows "Historical data from 2016/2017 to 2017/2018" with a "Debug" button. Three items are listed: "1. Crops", "2. Livestock", and "3. Animal Products".

Click "1. Crops" to see each crop table

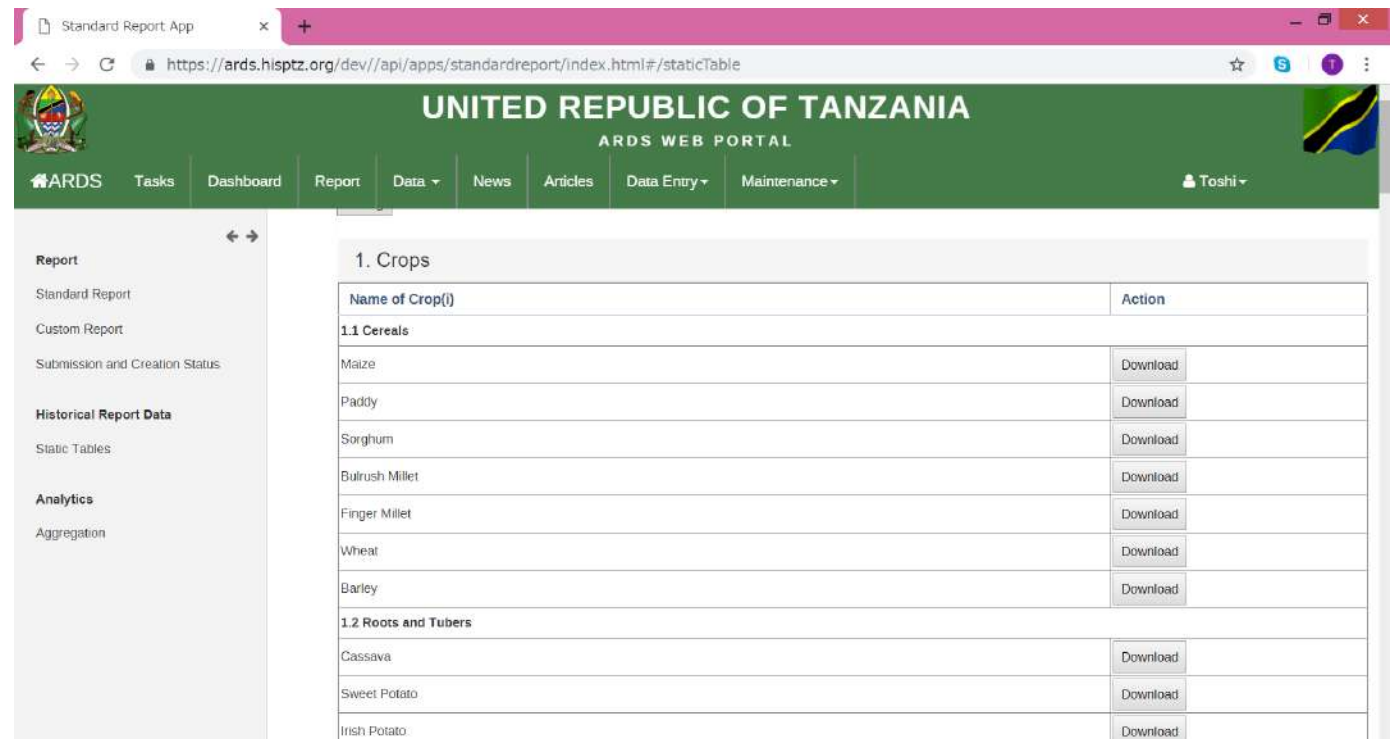
Click "2. Livestock" to see "Livestock Population" and "Livestock Slaughtered"

Click "3. Animal Products" to see "Eggs", "Milks", and "Hide and Skin"

# 8. Static Table

## 1. Crops

By clicking  
“Download”  
button you  
can get Excel  
report




The screenshot shows a web browser window displaying the ARDS Web Portal. The page title is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The user is logged in as Toshi. The main content area displays a table titled "1. Crops" with the following data:

Name of Crop(i)	Action
<b>1.1 Cereals</b>	
Maize	Download
Paddy	Download
Sorghum	Download
Bulrush Millet	Download
Finger Millet	Download
Wheat	Download
Barley	Download
<b>1.2 Roots and Tubers</b>	
Cassava	Download
Sweet Potato	Download
Irish Potato	Download

# 8. Static Table

## 2. Livestock and 3. Animal Products

By clicking  
“Download”  
button you  
can get Excel  
report



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The main content area displays a search bar with "Rozella" and a "Download" button. Below this, there are two sections:

### 2. Livestock

Name of Crop(i)	Action
Livestock Population	Download
Livestock Slaughtered	Download

### 3. Animal Products

Name of Crop(i)	Action
Eggs	Download
Milk	Download
Hide and Skin	Download



# 8. Static Table

## Specification of Each Report

Table	Data Source	Trigger for creation
Crop Table	Last Quarter of Table 1 DIR02	NIR02 for the last quarter for the FY creation
Livestock Population	Table 9 DIR03 and Table 10 DIR03	NIR03 creation
Livestock Slaughtered	Last Quarter of Table 4 DIR02	NIR02 for the last quarter for the FY creation
Milk	Last Quarter of Table 6(b) DIR02	NIR02 for the last quarter for the FY creation
Egg	All Quarters for the FY of Table 6(b) DIR02	NIR02 for the last quarter for the FY creation
Hide and Skin	All Quarters for the FY of Table 6(c) DIR02	NIR02 for the last quarter for the FY creation

# 8. Static Table

## Common Requirement

- The data for the newly created regions/districts can be inserted while keeping blank for the data for the regions/districts for the past FY.
- If some regions or districts are removed, the data for the regions or districts are put as “-”.
- When the trigger file is removed, the information above also is removed.

# **9. Archived Report**

**For All Users**

# 9. Archived Report

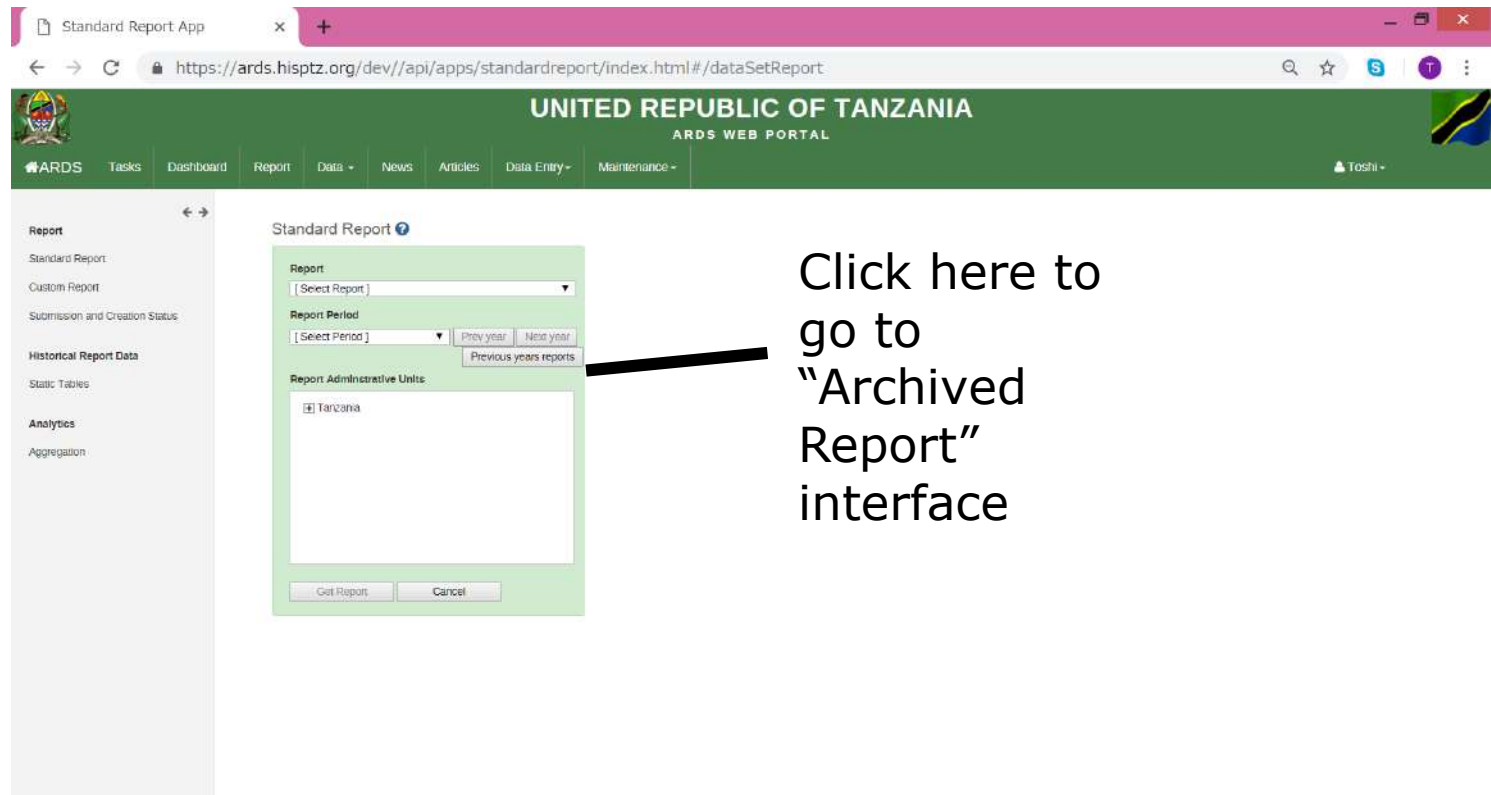
Issues and Solution

② **Reports** which belong to **administrative unit removed are not obtainable.**

-> Archived Report

Archived Report is **the interface to retrieve standard reports for administrative unit which existed before but removed already.**

# 9. Archived Report



The screenshot displays the ARDS Web Portal interface for the United Republic of Tanzania. The browser address bar shows the URL: `https://ards.hispztz.org/dev//api/apps/standardreport/index.html#/dataSetReport`. The page header includes the national emblem, the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL", and a user profile for "Toshi". The main navigation menu contains: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A left sidebar lists menu items under "Report": Standard Report, Custom Report, Submission and Creation Status, Historical Report Data, Static Tables, Analytics, and Aggregation. A modal dialog box titled "Standard Report" is open, featuring a "Report" dropdown menu, a "Report Period" dropdown menu, and buttons for "Prev year", "Next year", and "Previous years reports". The "Report Administrative Units" section lists "Tanzania". At the bottom of the modal are "Get Report" and "Cancel" buttons. A black arrow points from the text "Click here to go to 'Archived Report' interface" to the "Previous years reports" button.

Click here to go to "Archived Report" interface

# 9. Archived Report

ARDS - Archived Standard Report

https://ards.hispztz.org/dev//api/apps/archived-standard-report/index.html#/

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

Tasks Dashboard Report Data News Articles Data Entry Maintenance

Toshi

Report

- Standard Report
- Custom Report
- Submission and Creation Status
- Historical Report Data
- Static Tables
- Analytics
- Aggregation

Change Fiscal Year: 2017-2018

Report: [ Select Data Set ]

Report Period: [ Select Period ] Current year reports

Report Administrative Units

- Tanzania

Get Report Cancel

① Select Fiscal Year

Corresponding "Periods" are loaded

Corresponding "Administrative Units" are loaded

# 9. Archived Report

ARDS - Archived Standard Report

https://ards.hispztz.org/dev/api/apps/archived-standard-report/index.html#/

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Tosh

Report

Standard Report

Custom Report

Submission and Creation Status

Historical Report Data

Static Tables

Analytics

Aggregation

Change Fiscal Year 2017-2018

Report  
District/Region Monthly Report (DR01/RR01)

Report Period  
June 2018 Current year reports

Report Administrative Units

Tanzania

- Animal Region
- Bird District
- Fish District
- Food Region

Get Report Cancel

② Choose "Report"

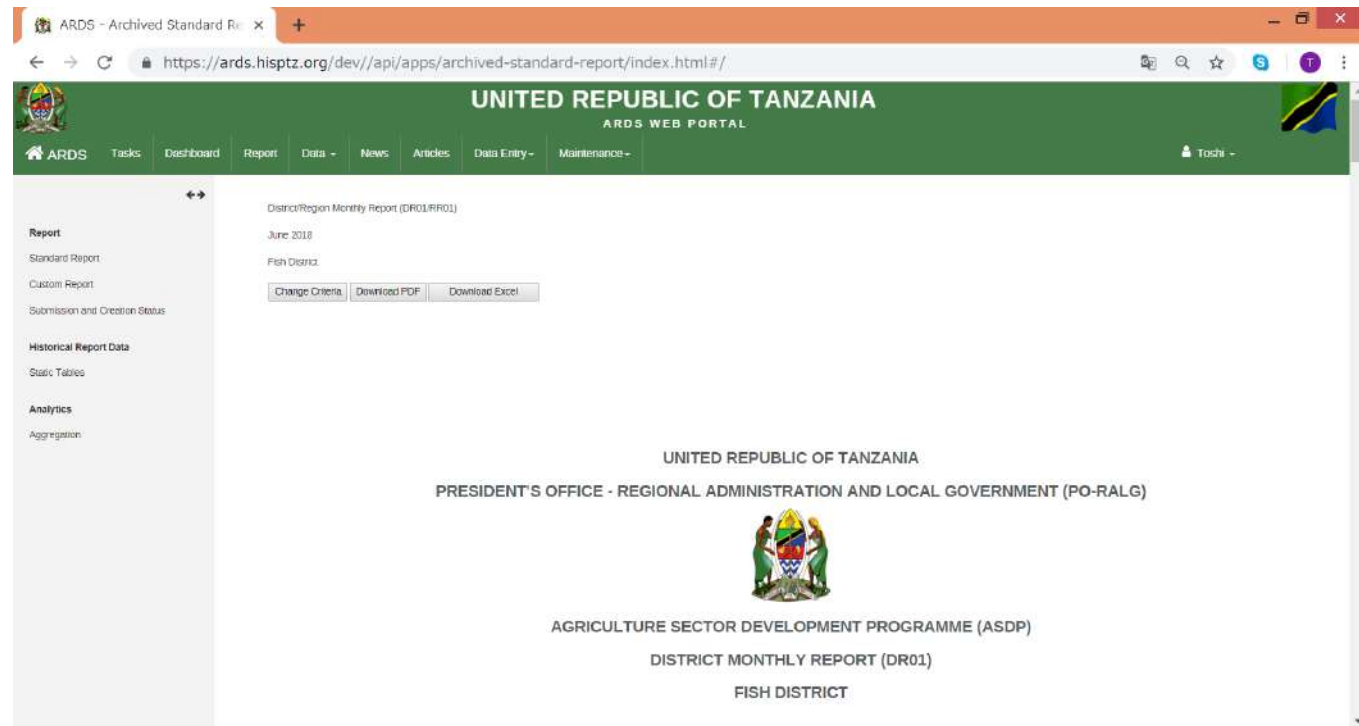
③ Choose "Report Period"

④ Choose "Administrative Units"

⑤ Get Report

# 9. Archived Report

Your can get selected standard report



The screenshot displays a web browser window with the URL <https://ards.hisptz.org/dev/api/apps/archived-standard-report/index.html#/>. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". A navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A sidebar on the left lists "Report", "Standard Report", "Custom Report", "Submission and Creation Status", "Historical Report Data", "Static Tables", "Analytics", and "Aggregation". The main content area shows "District/Region Monthly Report (DR01/RR01)", "June 2018", and "Fish District". Below this, there are buttons for "Change Criteria", "Download PDF", and "Download Excel". The footer contains the text "UNITED REPUBLIC OF TANZANIA PRESIDENT'S OFFICE - REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT (PO-RALG)", the national coat of arms, "AGRICULTURE SECTOR DEVELOPMENT PROGRAMME (ASDP)", "DISTRICT MONTHLY REPORT (DR01)", and "FISH DISTRICT".



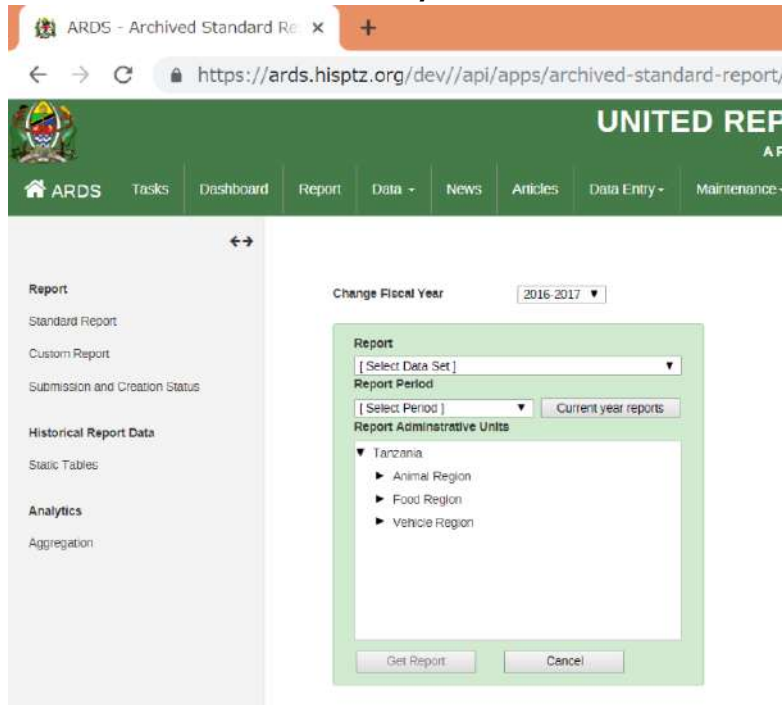
# 9. Archived Report

Administrative Units can be different depending on fiscal year.

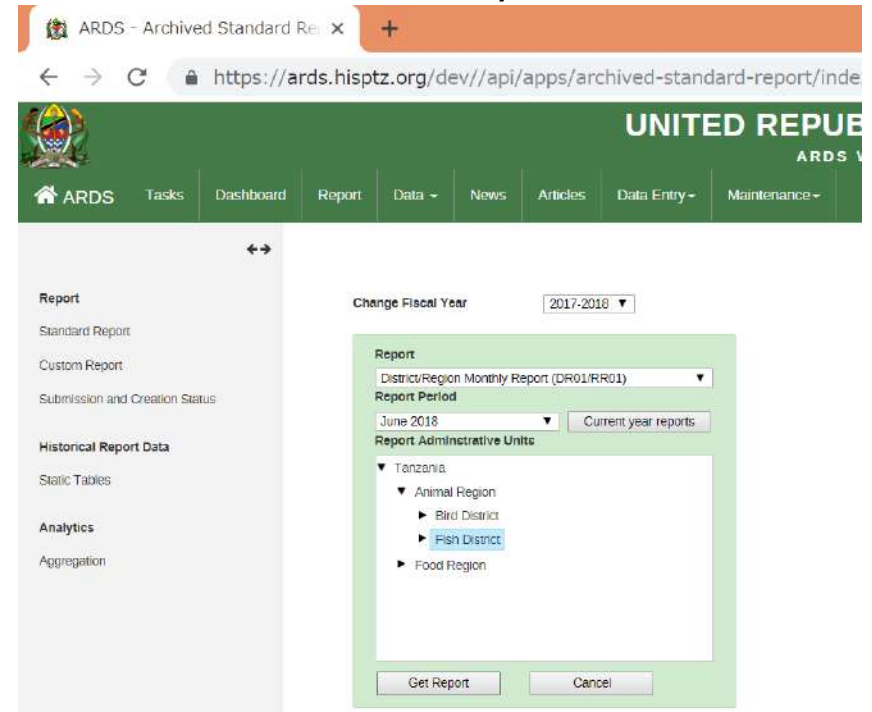
FY 2016/17

year.

FY 2017/18



The screenshot shows the ARDS Archived Standard Report interface for FY 2016/17. The browser address bar displays `https://ards.hisptz.org/dev//api/apps/archived-standard-report/`. The page header includes the United Republic of Tanzania logo and navigation links: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A sidebar on the left lists menu items: Report, Standard Report, Custom Report, Submission and Creation Status, Historical Report Data, Static Tables, Analytics, and Aggregation. The main content area features a 'Change Fiscal Year' dropdown set to '2016-2017'. Below this is a report configuration box with a 'Report' section containing a '[ Select Data Set ]' dropdown, a 'Report Period' section with a '[ Select Period ]' dropdown and a 'Current year reports' button, and a 'Report Administrative Units' section with a tree view showing 'Tanzania' expanded to include 'Animal Region', 'Food Region', and 'Vehicle Region'. 'Get Report' and 'Cancel' buttons are at the bottom.



The screenshot shows the ARDS Archived Standard Report interface for FY 2017/18. The browser address bar displays `https://ards.hisptz.org/dev//api/apps/archived-standard-report/index`. The page header includes the United Republic of Tanzania logo and navigation links: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A sidebar on the left lists menu items: Report, Standard Report, Custom Report, Submission and Creation Status, Historical Report Data, Static Tables, Analytics, and Aggregation. The main content area features a 'Change Fiscal Year' dropdown set to '2017-2018'. Below this is a report configuration box with a 'Report' section containing a 'District/Region Monthly Report (DR01/RR01)' dropdown, a 'Report Period' section with a 'June 2018' dropdown and a 'Current year reports' button, and a 'Report Administrative Units' section with a tree view showing 'Tanzania' expanded to include 'Animal Region', 'Bird District', 'Fish District', and 'Food Region'. 'Get Report' and 'Cancel' buttons are at the bottom.

# 9. Archived Report

Administrative Unit is automatically archived at the end of Fiscal Year. Reports creation / approval in standard reports will be synchronized with archived report after that.

# **10. Task List**

**For District and Region Users**

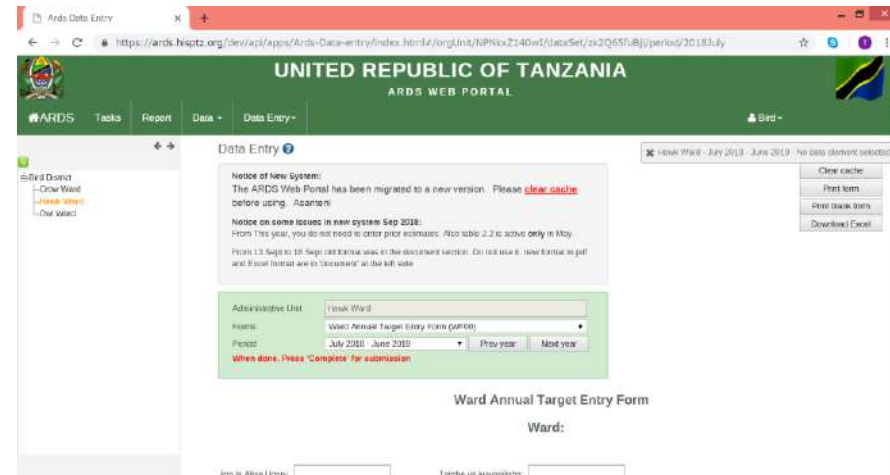
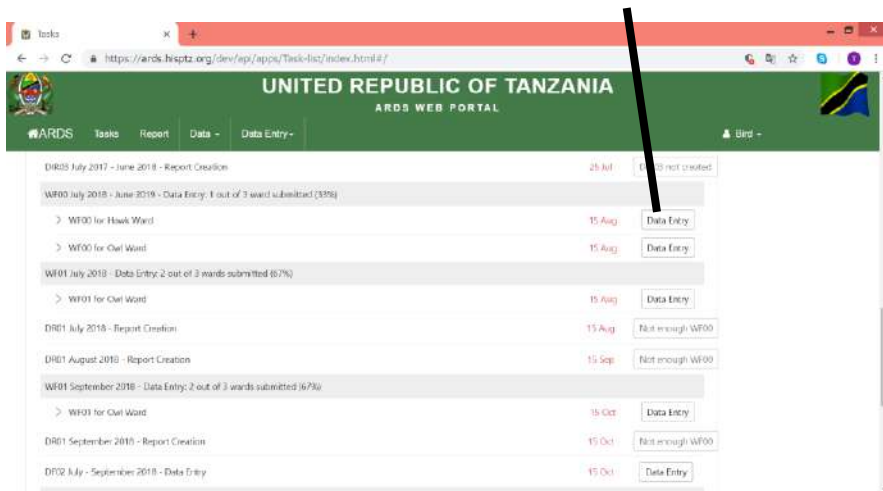
# 10. Task List

Task List shows **tasks for LGA officers and Region officers.**

After the task is clicked, **the screen shifts to the task.**

Click WF00 for 2018/19 task for Hawk Ward

WF00 for 2018/19 for Hawk Ward



# 10. Task List

Task Lists are different between LGA and Region since LGA and Region officers has different tasks.

## Task List for LGA officer

The screenshot shows the ARDS Web Portal interface for a Bird District LGA officer. The header includes the United Republic of Tanzania logo and navigation links for ARDS, Tasks, Report, Data, and Data Entry. A notification box contains system migration notices. Below, a table lists tasks with columns for Notification, Deadline, and Action.

Notification	Deadline	Action
DR01 July 2017 - Approval by RS Not Yet Approved	25 Aug	<a href="#">View Report</a>
DR01 August 2017 - Approval by RS Not Yet Approved	25 Sep	<a href="#">View Report</a>
DR02 LGA - September 2017 - Data Entry	15 Oct	<a href="#">Data Entry</a>

## Task List for Region officer

The screenshot shows the ARDS Web Portal interface for an Animal Region officer. The header includes the United Republic of Tanzania logo and navigation links for ARDS, Tasks, Report, Data, News, Articles, and Data Entry. A notification box contains system migration notices. Below, a table lists tasks with columns for Notification, LGA Deadline, and Action.

Notification	LGA Deadline	Action
DR01 July 2017: 2 out of 2 districts created (100%) 0 approved (0%)		
> DR01 for Bird District: Not yet approved	15 Aug 25 Aug	<a href="#">View Report</a>
> DR01 for LGA: Not yet approved	15 Oct 18 Oct	<a href="#">View Report</a>

# 10. Task List

Task List is to remind tasks to do for LGA and Region officer. So, LGA and Region officers are responsible for making tasks in Task List empty.

# 10. Task List

Tasks for LGA officers and Region officers

LGA Officers	Region Officers
1. Data Entry Task 2. Report Creation Task 3. Report Approval Notification	4. Report Approval Task

# 10. Task List

## 1. Data Entry Task for LGA Officers (Status Change)

- The task begin to appear from “Start Showing” date.
- The **deadline** is **highlighted** with red from **the next day** of the deadline.
- The **tasks** will be **removed** after the entry forms are **submitted**, the **fiscal year** is **locked**, or the **related reports** are **created**.



# 10. Task List

## 2. Report Creation Task for LGA Officers (Status Change)

- The task begin to appear from “Start Showing” date.
- The **deadline** is **highlighted** with red from **the next day** of the deadline.
- The **tasks** are **removed** after the reports are created, or **the fiscal year** is **locked**.

# 10. Task List

## 2. Report Creation Task for LGA Officers (Status Change)

In addition, **messages** shown and **enable/disable of creation button** for DR01, DR02, DR03 are **different** depending on **dependency** situation

# 10. Task List

## 2. Report Creation Task for LGA Officers (Status Change)

Messages shown on DR01

Task	Dependency	Message
DR01	WF00 less than 90%	Not Enough WF00
	Enough WF00 WF01 less than 90%	Not Enough WF01
	Enough WF00 / WF01 Any previous months' DR01 in the fiscal year has not been created	Previous DR01 Not Yet Created
	Enough WF00 / WF01 All previous DR01 created	Create Report Button (DR01 can be created)

# 10. Task List

## 2. Report Creation Task for LGA Officers (Status Change) Messages shown on DR02, DR03

Task	Dependency	Message
DR02	WF02 less than 90%	Not Enough WF02
	Enough WF02	Create Report Button (DR02 can be created)
DR03	WF03 less than 90%	Not Enough WF03
	Enough WF03	Create Report Button (DR03 can be created)

# 10. Task List

3. Report Approval Notification for LGA Officers (Status Change)
  - DR01/DR02/DR03 Report Approval Notification appears after the report is created.
  - DIR02/DIR03 Report Approval Notification from “Start Showing” date.

# 10. Task List

## 3. Report Approval Notification for LGA Officers (Status Change)

- The **deadline** is **highlighted** with red from **the next day** of the deadline.
- The **tasks** are **removed** after the reports are approved by RS or **the fiscal year** is **locked**.

# 10. Task List

## 3. Report Approval Notification for LGA Officers (Status Change)

In addition, **messages** shown and **enable/disable of view** for DIR02, DIR03 are **different** depending on the **report creation** status

# 10. Task List

## 3. Report Approval Notification for LGA Officers (Status Change)

Task	Report Creation	Message
DIR02	DIR02 not created	DIR02 Not Created
	DIR02 created	View Report Button ( <a href="#">Linked to DIR02</a> )
DIR03	DIR03 not created	DIR03 Not Created
	DIR03 created	View Report Button ( <a href="#">Linked to DIR03</a> )



# 10. Task List

## 4. Report Approval Task for Region Officers (Status Change)

- DR01/DR02/DR03/ DIR02/DIR03 Report Approval Notification from “Start Showing” date.
- Both LGA deadline to create report and Deadline to approve the report for RS are shown.
- LGA deadline is highlighted with red from the next day of the deadline, If the report is not created.

# 10. Task List

## 4. Report Approval Task for Region Officers (Status Change)

- Deadline to approve the report for RS is **highlighted** with red from **the next day** of the deadline.
- The **tasks** are **removed** after the reports are approved by RS or **the fiscal year** is **locked**.

# 10. Task List

## 4. Report Approval Task for Region Officers (Status Change)

In addition, [messages](#) shown and [enable/disable of view](#) for DR01/DR02/DR03/DIR02/DIR03 are [different](#) depending on the [report creation](#) status

Not created: Not Available

Created: View Report Button (Linked to the report)

# 10. Task List

LGA

rev.2018-10-05

Report/ Data Entry Form			Task / Notification							
Code	Name	Period	Type	Start Showing Task/Notification	Dependencies (when to enable task)	Start of Reminder for Follow Up (Start Highlighting)	Task Deadline (Start Highlighting)	Stop Showing Task/Notification	Display Priority Order	
							Sort Priority 1		Sort Priority 2	
DIR02 Group	WF00	Ward Annual Target Data Entry Form	Annual	Task: Data Submission	Start of Fiscal Year: 16th of Jul. of the fiscal year	--	n/a	15th of Aug. of the fiscal year	When submitted or <del>DR01</del> -created or fiscal year locked	2
	WF01	Ward Monthly Data Entry Form	Monthly	Task: Data Submission	1st of the following month	--	n/a	15th of following month	When submitted or DR01 created or fiscal year locked	3
	DR01	District Monthly Report	Monthly	Task: Report Creation	1st of the following month	WF00: 90% submission, WF01: 90% submission, DR01: previous month	n/a	15th of following month	When created or fiscal year locked	4
				<i>Notification: Approval Status</i>	After DR01 creation	--	n/a	25th of following month	When approved by RS or fiscal year locked	5
	DF02	District Quarterly Data Entry Form	Quarterly	Task: Data Submission	1st of the month following the quarter	--	n/a	15th of the month following the quarter	When submitted or fiscal year locked	6
	DIR02	District Integrated Quarterly Report	Quarterly	<i>Notification: Approval Status</i>	1st of the month following the quarter	--	n/a	25th of the month following the quarter	When approved by RS or fiscal year locked	7
	DIR03 Group	WF02	Ward Quarterly Data Entry Form	Quarterly	Task: Data Submission	1st of the month following the quarter	--	n/a	15th of the month following the quarter	When submitted or DR02 created or fiscal year locked
DR02		District Quarterly Report	Quarterly	Task: Report Creation	1st of the month following the quarter	WF02: 90% submission, DR02: previous quarter	n/a	15th of the month following the quarter	When created or fiscal year locked	9
				<i>Notification: Approval Status</i>	After DR02 creation	--	n/a	25th of the month following the quarter	When approved by RS or fiscal year locked	10
WF03		Ward Annual Data Entry Form	Annual	Task: Data Submission	After Fiscal Year: 1st of Jul. following the fiscal year	--	n/a	15th of Jul. following the fiscal year	When submitted or DR03 created or fiscal year locked	11
DR03		District Annual Report	Annual	Task: Report Creation	1st of Jul. following the fiscal year	WF03: 90% submission	n/a	15th of Jul. following the fiscal year	When created or fiscal year locked	12
				<i>Notification: Approval Status</i>	After DR03 creation	--	n/a	25th of the month following the quarter	When approved by RS or fiscal year locked	13
DF03		District Annual Data Entry Form	Annual	Task: Data Submission	1st of Jul. following the fiscal year	--	n/a	15th of Jul. following the fiscal year	When submitted or fiscal year locked	14
DIR03	District Integrated Annual Report	Annual	<i>Notification: Approval Status</i>	1st of Jul. following the fiscal year	--	n/a	25th of Jul. following the fiscal year	When approved by RS or fiscal year locked	15	

# 10. Task List

Region									
Report/ Data Entry Form			Task / Notification						
Code	Name	Period	Type	Start Showing Task/Notification	Dependencies (when to enable task)	Start of Reminder for Follow Up (Start Highlighting)	Task Deadline (Start Highlighting)	Stop Showing Task/Notification	Display Priority Order
							Sort Priority 1		Sort Priority 2
DR01	District Monthly Report	Monthly	Task: Report Approval	1st of the following month	DR01 created by LGA	16th of the following month	25th of following month	When approved	1
DIR02	District Integrated Quarterly Report	Quarterly	Task: Report Approval	1st of the month following the quarter	DIR02 becomes available	16th of the month following the quarter	25th of the month following the quarter	When approved	2
DR02	District Quarterly Report	Quarterly	Task: Report Approval	1st of the month following the quarter	DR02 created by LGA	16th of the month following the quarter	25th of the month following the quarter	When approved	3
DR03	District Annual Report	Annual	Task: Report Approval	1st of Jul. following the fiscal year	DR03 created by LGA	16th of Jul. following the fiscal year	25th of Jul. following the fiscal year	When approved	4
DIR03	District Integrated Annual Report	Annual	Task: Report Approval	1st of Jul. following the fiscal year	DIR03 becomes available	16th of Jul. following the fiscal year	25th of Jul. following the fiscal year	When approved	5

# **11. Submission and Creation Status**

**For All Users**

# **11. Submission and Creation Status**

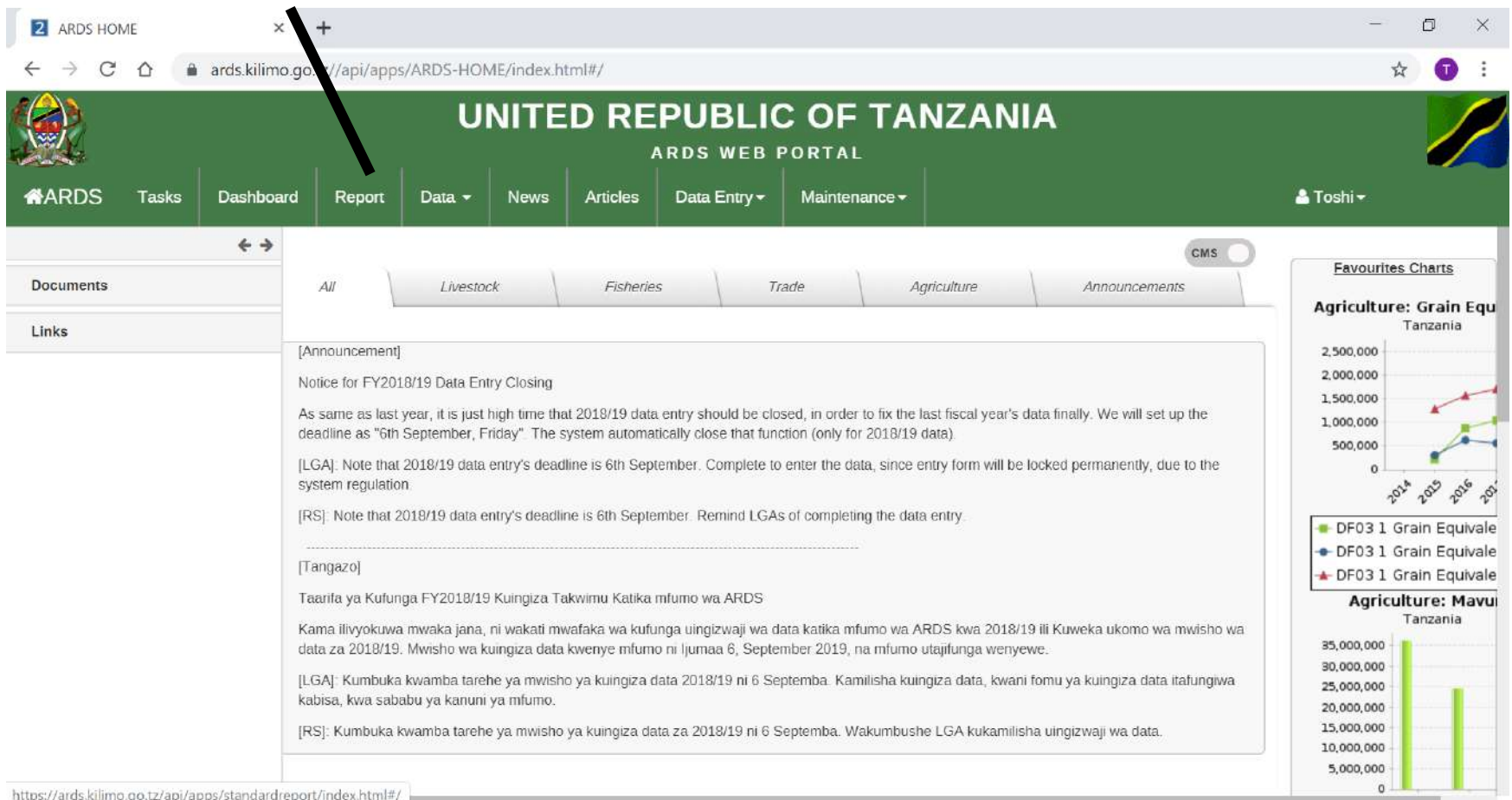
## **11.1 Standard Operation**

Submission and Creation Status is to show how many data entry forms are submitted and how many reports are created for each period and administrative unit. This function is used for central government users or region users to check progress of the data entry for report creation and to promote the progress. District users can check which data entry forms they submitted or which reports they already created.

# 11. Submission and Creation Status

## 11.1 Standard Operation

① Click Report



The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. A red arrow points to the 'Report' menu item. Below the navigation bar, there are tabs for 'Livestock', 'Fisheries', 'Trade', 'Agriculture', and 'Announcements'. The main content area displays an announcement regarding the closing of data entry for FY2018/19. On the right side, there are two charts: 'Agriculture: Grain Equivalence Tanzania' and 'Agriculture: Mavu Tanzania'.

ARDS HOME

ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html#

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard **Report** Data News Articles Data Entry Maintenance

Toshi

Documents

Links

All Livestock Fisheries Trade Agriculture Announcements

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taanifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani tomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

Favourites Charts

Agriculture: Grain Equivalence Tanzania

Year	DF03 1 Grain Equivalence
2014	~200,000
2015	~500,000
2016	~1,000,000
2017	~1,500,000
2018	~1,800,000

Agriculture: Mavu Tanzania

Year	Mavu
2014	~35,000,000
2015	~25,000,000

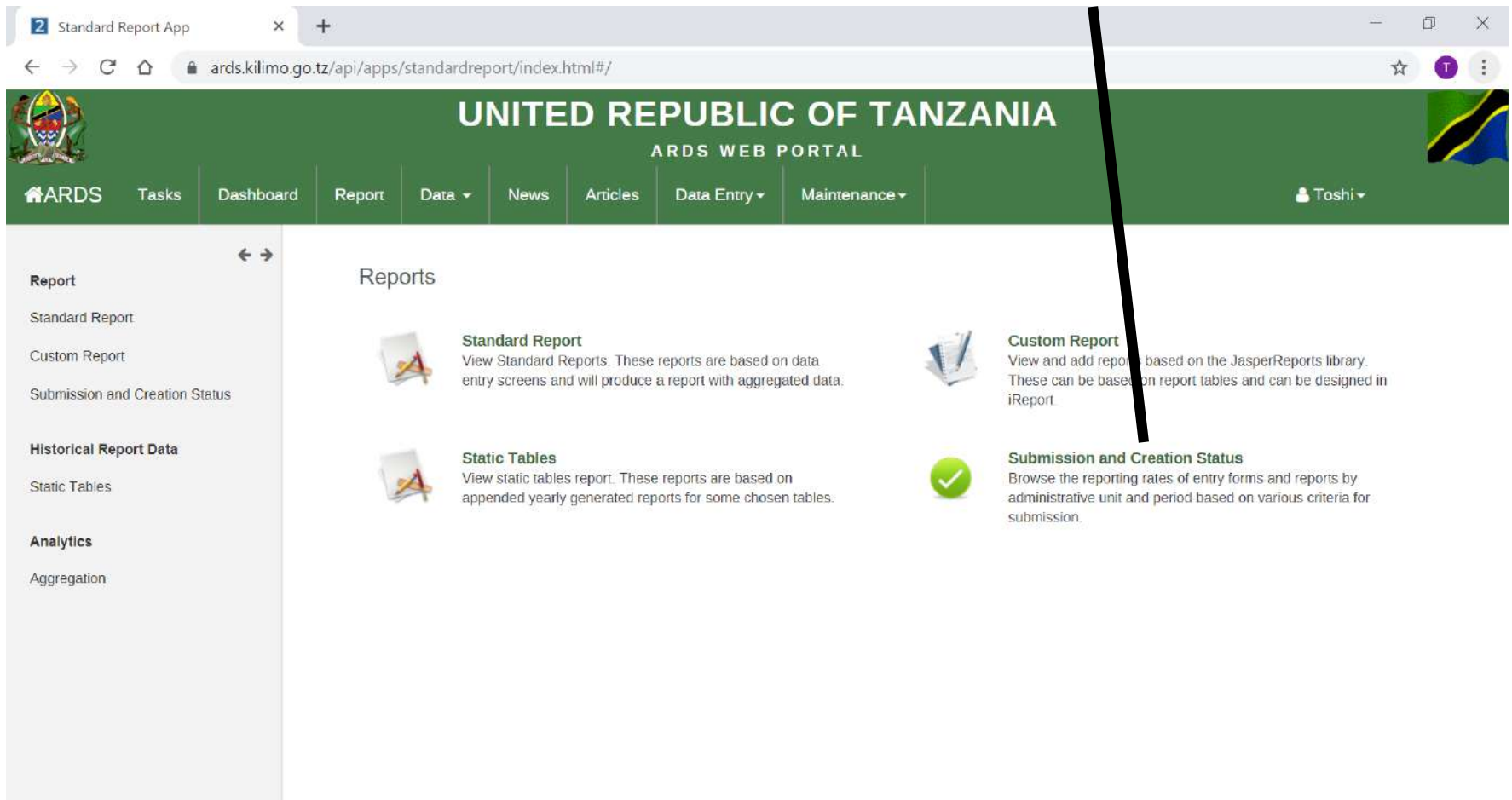
https://ards.kilimo.go.tz/api/apps/standardreport/index.html#



# 11. Submission and Creation Status

## 11.1 Standard Operation

② Click Submission and Creation Status



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#`. The header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The sidebar on the left is expanded, showing the following categories and items:

- Report**
  - Standard Report
  - Custom Report
  - Submission and Creation Status**
- Historical Report Data**
  - Static Tables
- Analytics**
  - Aggregation

The main content area, titled "Reports", contains three items:

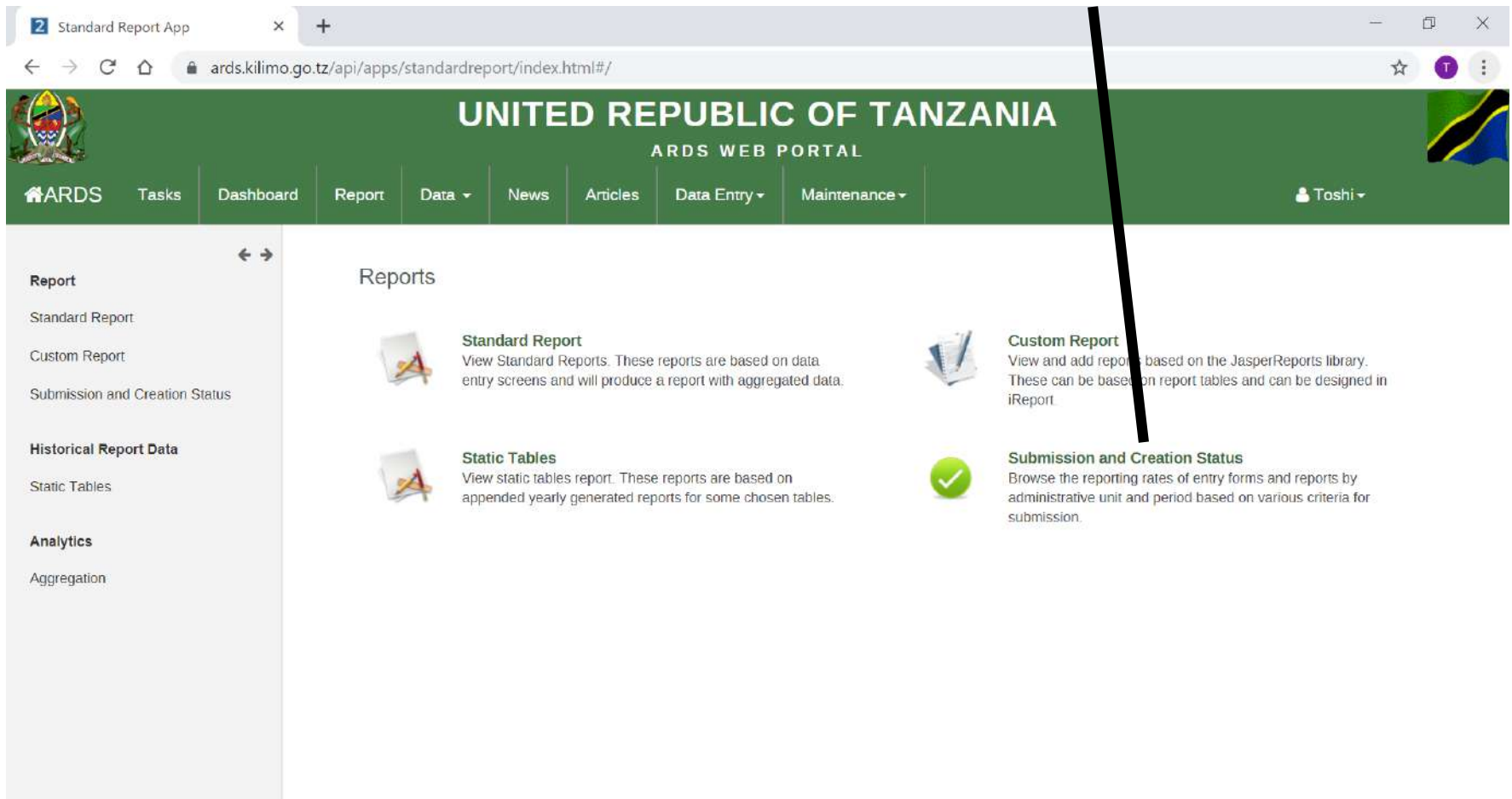
- Standard Report**: View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.
- Static Tables**: View static tables report. These reports are based on appended yearly generated reports for some chosen tables.
- Submission and Creation Status**: Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

A thick black arrow points from the text "Click Submission and Creation Status" to the "Submission and Creation Status" option in the sidebar.

# 11. Submission and Creation Status

## 11.1 Standard Operation

② Click Submission and Creation Status



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/?`. The header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The sidebar on the left is expanded to show the "Report" section, with "Submission and Creation Status" highlighted. The main content area, titled "Reports", lists four options: "Standard Report", "Static Tables", "Custom Report", and "Submission and Creation Status". A black arrow points from the text above to the "Submission and Creation Status" option in the sidebar.

**Report**

- Standard Report
- Custom Report
- Submission and Creation Status**

**Historical Report Data**

- Static Tables

**Analytics**

- Aggregation

**Reports**

- Standard Report**  
View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.
- Static Tables**  
View static tables report. These reports are based on appended yearly generated reports for some chosen tables.
- Custom Report**  
View and add reports based on the JasperReports library. These can be based on report tables and can be designed in iReport.
- Submission and Creation Status**  
Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

# 11. Submission and Creation Status

## 11.1 Standard Operation

### ③ Choose Administrative Unit

Submission and Creation status

ards.kilimo.go.tz/api/apps/Submission-and-Creation-status/index.html#

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Tosh

Submission and Creation Status

Administrative unit

Show person in charge  
 Show Hierarchy

▼ Tanzania

- ▶ Arusha
- ▶ Dar es salaam
- ▶ Dodoma
- ▶ Geita
- ▶ Iringa

Administrative unit children

Show Districts

Entry form / Report

Ward Monthly Entry Form (WF01) Submission

Period

Monthly Prev Year Next Year Date of report

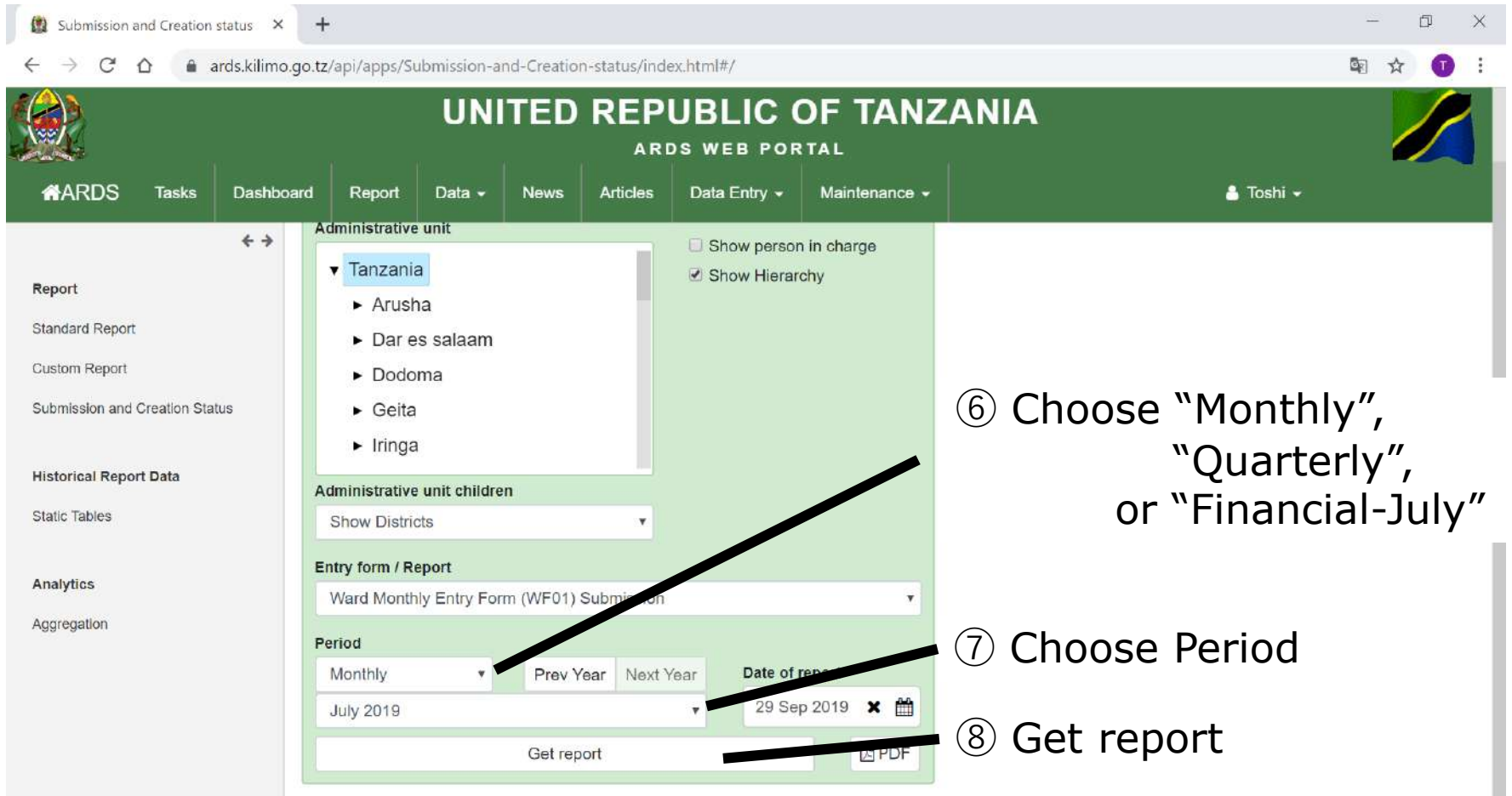
July 2019 29 Sep 2019

④ Choose "Show Regions", "Show Districts", or "Show Wards"

⑤ Select "Data Entry Form" or "Standard Report" you want to check submission status or creation status

# 11. Submission and Creation Status

## 11.1 Standard Operation



The screenshot displays the ARDS Web Portal interface for the United Republic of Tanzania. The main content area is titled "Administrative unit" and includes a tree view for selecting a region (Tanzania, Arusha, Dar es salaam, Dodoma, Geita, Iringa). Below this, there are sections for "Administrative unit children" (Show Districts), "Entry form / Report" (Ward Monthly Entry Form (WF01) Submission), and "Period" (Monthly, Prev Year, Next Year). The "Date of report" is set to 29 Sep 2019. A "Get report" button is located at the bottom of the form, and a PDF icon is visible next to it.

⑥ Choose "Monthly", "Quarterly", or "Financial-July"

⑦ Choose Period

⑧ Get report

# 11. Submission and Creation Status

## 11.1 Standard Operation

⑨ Submission Rate appears

The screenshot shows the ARDS Web Portal interface. The main content area displays the title "Tanzania - Ward Monthly Entry Form" and "Submission Status as of Sep 29, 2019". A table below lists submission data for various wards in Arusha. Two callouts with arrows point to the "Actual Entry forms" and "Entry forms on time" columns, with text boxes above them: "Information on the current submission" and "Information on the submission by the deadline".

Parent	Name	Actual Entry forms	Expected Entry forms	Percent	Entry forms on time	Percent on time
Arusha	Arusha Mjini	25	25	100	23	92
	Arusha Vijijini	27	27	100	9	33.3
	Karatu	14	14	100	14	100
	Longido	18	18	100	5	27.8
	Meru	26	26	100	13	50
	Monduli	20	20	100	0	0
	Ngorongoro	28	28	100	28	100

# 11. Submission and Creation Status

## 11.2 Report Creation Status

### Report Creation Status (DR/RR01)

⑩ Click District/Region Monthly Report (DR01/RR01) Creation and Get Report

⑪ DR01/RR01 Creation Status is shown.

Region Monthly Report (RR01)						
Name	Actual Reports	Expected Reports	Percent	Reports on time	Percent on time	
ARDE Region	1	1	100	0	0	
Mara	1	1	100	0	0	
Rukwa	1	1	100	0	0	
Tanzania	3	3	100	0	0	

District Monthly Report (DR01)						
Name	Actual Reports	Expected Reports	Percent	Reports on time	Percent on time	
ARDE Region	2	2	100	2	100	
Mara	2	2	100	2	100	
Rukwa	4	4	100	4	100	
Tanzania	8	8	100	8	100	

# 11. Submission and Creation Status

## 11.2 Report Creation Status

Information on the current creation

Information on the creation by the deadline

Approval status (Only for district report)

Tanzania - District Monthly Report (DR01) - July 2019  
Report Creation Status as of Sep 29, 2019

Parent	Name	Actual Reports	Expected Reports	Percent	Reports on time	Percent on time	Approved reports	Percent approved
Arusha	Arusha Mjini	1	1	100	0	0	1	100
	Arusha Vijijini	1	1	100	0	0	1	100
	Karatu	1	1	100	0	0	1	100
	Longido	1	1	100	0	0	1	100
	Meru	1	1	100	0	0	1	100
	Monduli	1	1	100	0	0	1	100
	Ngorongoro	1	1	100	0	0	1	100
Ilala		1	1	100	1	100	1	100



# 11. Submission and

# Creation Status

## 11.3 Show District/Ward Submission Rate

⑫ Choose Show Districts or Show Wards

⑬ Submission rates for all districts or wards in Tanzania is shown

Name	Actual Entry forms	Expected Entry forms	Percent	Entry forms on time	Percent on time
Animal District	0	2	0	0	0
Fish District	0	1	0	0	0
Bunke Mjini	2	2	88.7	0	0
Bunke Vijiji	1	1	100	0	0
Kilimbo	18	23	82.6	11	47.8
Nyasi	18	26	64.3	18	64.2
Bumbaweinga Mjini	13	19	68.4	13	68.4
Bumbaweinga Vijiji	22	27	61.8	22	61.8
Tanzania	78	104	72.1	64	61.5



# 11. Submission and Creation Status

## 11.4 Past Submission Rate

⑭ Choose the date you want to see submission rate

⑮ Submission rates for the day is shown

Name	Actual Entry forms	Expected E	Percent	Entry forms on time	Percent on time
Arusha District	0	2	0	0	0
Fish District	0	1	0	0	0
Bunda Mjini	2	3	66.7	0	0
Bunda Vijijini	1	1	100	0	0
Kalambo	19	23	82.6	11	47.8
Nkasi	18	28	64.3	18	64.3
Sumbawanga Mjini	13	19	68.4	13	68.4
Sumbawanga Vijijini	22	27	81.5	22	81.5
Tanzania	76	104	72.1	54	61.5

# 11. Submission and Creation Status

## 11.5 Person in Charge

The screenshot shows the ARDS Web portal interface. The browser address bar indicates the URL: 192.81.135.5:9081/dev/api/apps/submissionStatus/index.html. The page title is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The main content area is titled "Submission and Creation Status".

Annotations:

- ⑩ Click "Show person in charge" (points to the checkbox in the "Administrative unit" section)
- ⑪ Person in charge will appear (points to the "Person in charge" column in the table)

Administrative unit: Tanzania

Administrative unit children: Show Regions

Entry form / Report: Ward Monthly Entry Form (WF01) Submission

Period: Monthly, June 2016

Date of report: 10 Aug 2017

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Tanzania - Ward Monthly Entry Form (WF01) Submission - June 2016  
Submission Status as of Aug 10, 2017

Parent	Name	Person in charge	Actual Entry forms	Expected Entry forms	Percent	Entry forms on time	Percent on time
	ARCS Region	Chacha	0	0	0	0	0
Tanzania	Manyara	Piswika	0	4	75	0	0
	Rukwa		72	97	74.0	84	89.0
Tanzania			72	104	72.1	84	81.5

# 11. Submission and Creation Status

## 11.5 Person in Charge

18 Click "Show Hierarchy"

19 In addition to administrative unit level selected in "Administrative Units children", the one level higher level is shown in "Parent".

Parent	Name	Person in charge	Actual Entry forms	Expected Entry forms
	ARDS Region	Choche	0	3
Tanzania	Manyara	Pisotika	3	4
	Rukwa		72	97
Tanzania			75	104

# **12. Max and Min Value Setting**

**For District Users**

# **12. Max and Min Value Setting**

Sometimes, district officers input outliers into entry forms and it is causing the unsatisfactory data quality issue in ARDS Web Portal. To improve the quality of the data, a new function to configure maximum and minimum value was developed. This chapter explains the overview of the function and how district users set up these values. The function for the administrators will be explained in user manual.

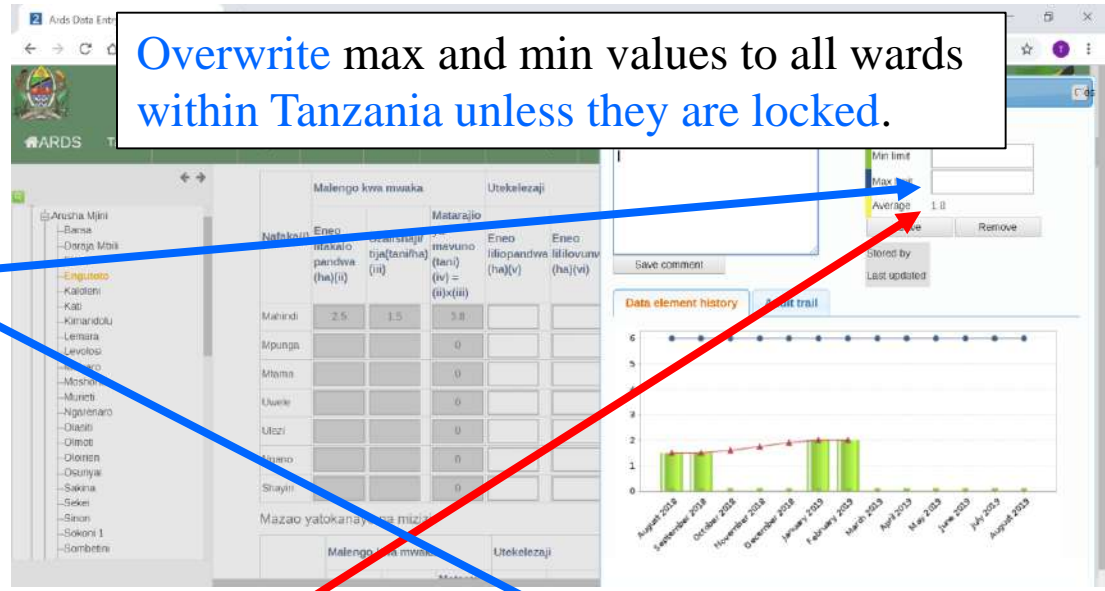
# 12. Max and Min Value Setting

## 12.1 Overview

Configure max and min values for Tanzania

**Administrator Screen**

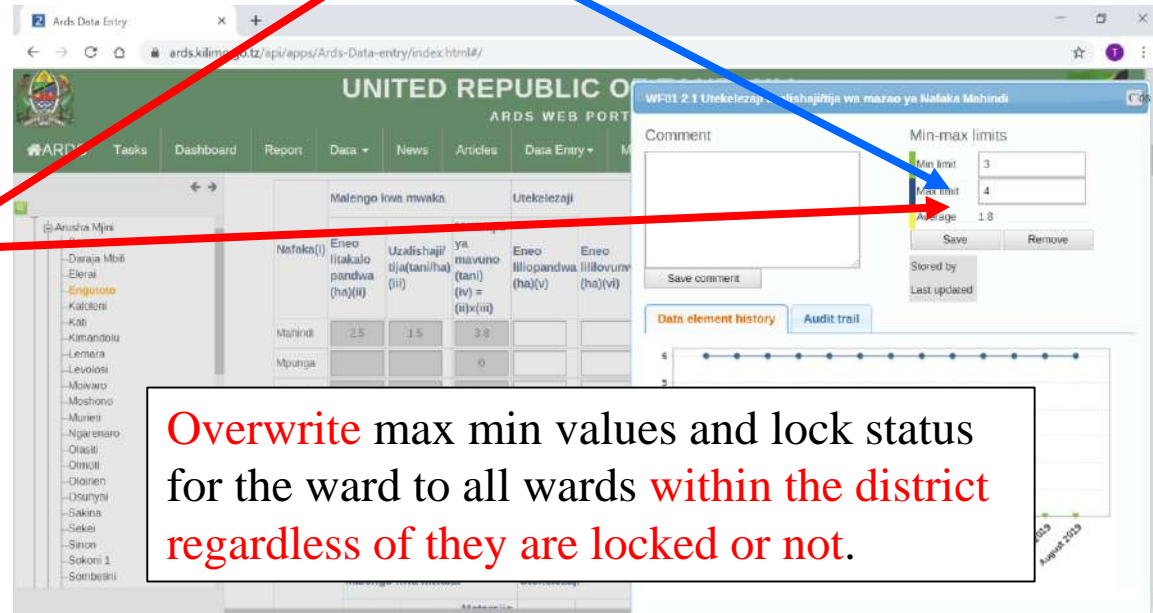
Explained in Maintenance Manual



Configure max and min values and lock/unlock for a ward. Then, the info can be applied all wards within the district.

**District Screen**

Explained in User Manual



# 12. Max and Min Value Setting

## 12.2 District Screen

① Choose Data Entry – Min & Max config

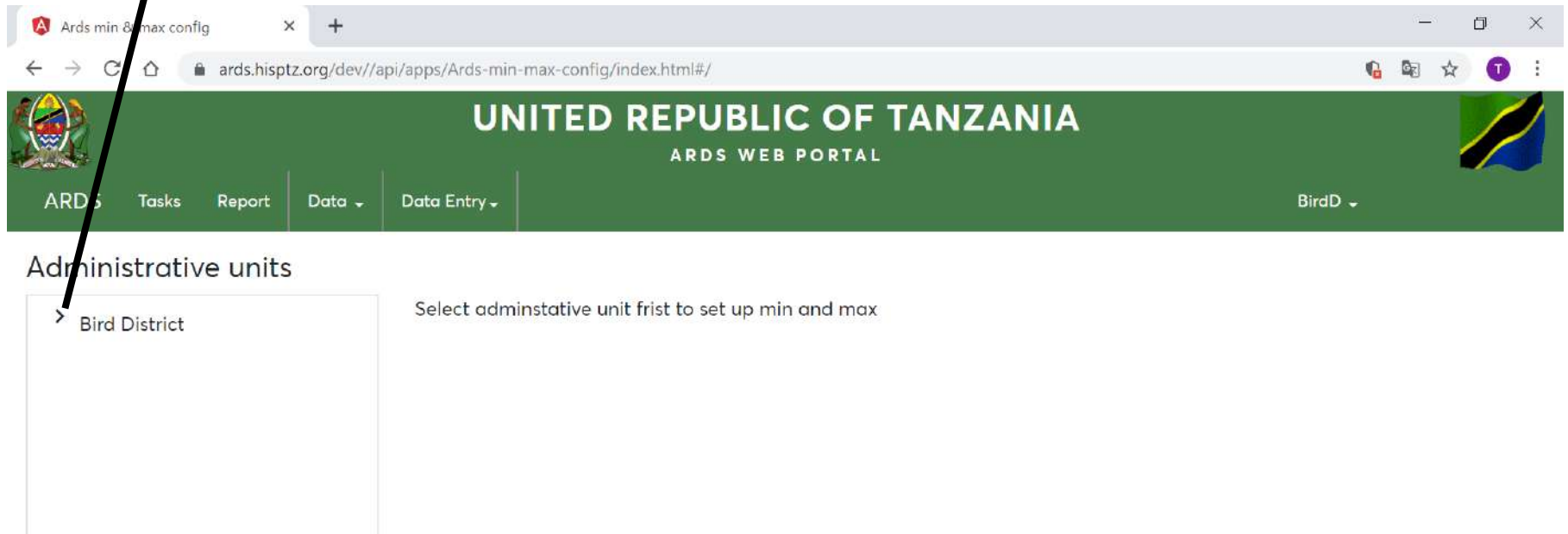


The screenshot shows a web browser window with the URL [ards.hisptz.org/dev/api/apps/ARDS-HOME/index.html#/](https://ards.hisptz.org/dev/api/apps/ARDS-HOME/index.html#/). The page header is green and features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". A navigation menu includes "ARDS", "Report", "Data", and "Data Entry". The "Data Entry" menu is open, showing options: "Data Entry", "Import Export", and "Min & Max config". The "Min & Max config" option is highlighted. Below the menu, there are tabs for "Agriculture", "Livestock", "Fisheries", and "Trade". The main content area displays a "Cooperation Framework Agreement" section with text about the agreement between FAO and the Regional Commissions. A sidebar on the right contains a "Favourites\_Charts" section with a "No chart loaded" message. The footer contains the URL <https://ards.hisptz.org/dev//api/apps/Ards-min-max-config/index.html#/> and the text "2014. Moeni rasmi Waziri wa Maendeleo wa Mifugo na Uvuvi Mhe. Dkt. Titus Mlengeya Kamani."

# 12. Max and Min Value Setting

## 12.2 District Screen

② Click ">" to show wards under the district



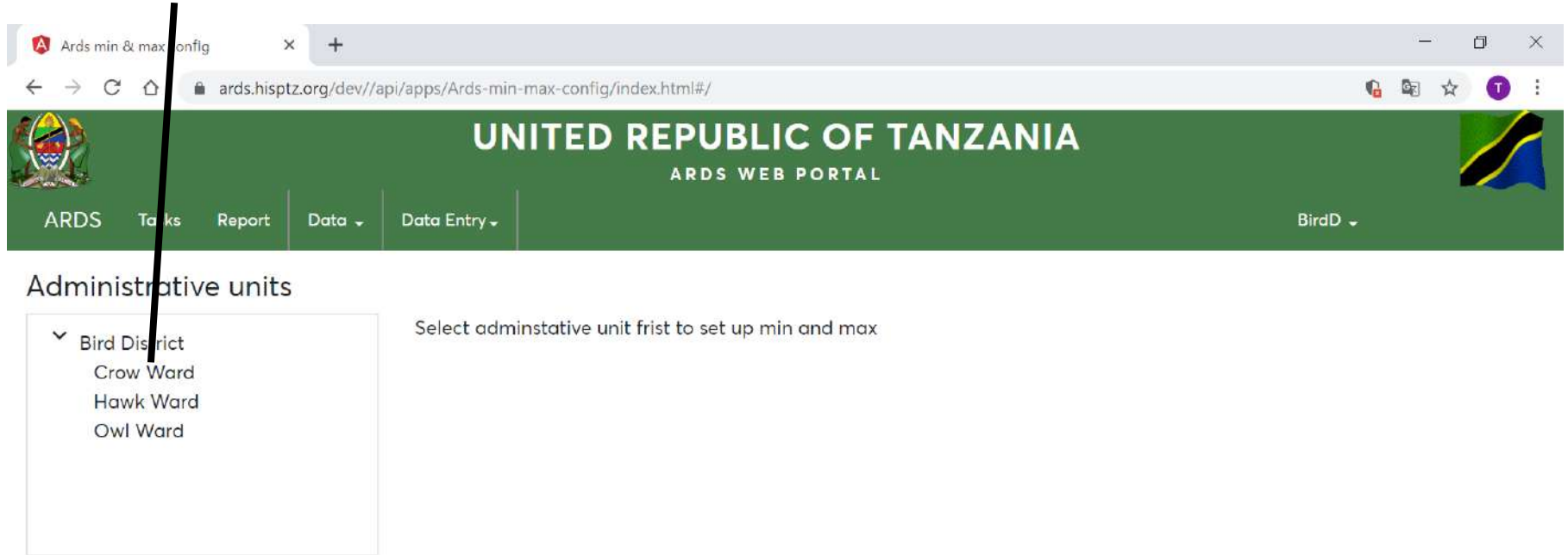
The screenshot shows a web browser window with the URL `ards.hisptz.org/dev/api/apps/Ards-min-max-config/index.html#`. The page header is green and features the United Republic of Tanzania coat of arms, the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL", and the Tanzanian flag. A navigation bar contains "ARDS", "Tasks", "Report", "Data", "Data Entry", and "BirdD". The main content area is titled "Administrative units" and includes a text prompt: "Select administrative unit first to set up min and max". A dropdown menu is open, showing "Bird District" with a right-pointing chevron (>) to its left. A black arrow points from the text above to this chevron.



# 12. Max and Min Value Setting

## 12.2 District Screen

③ Select a ward

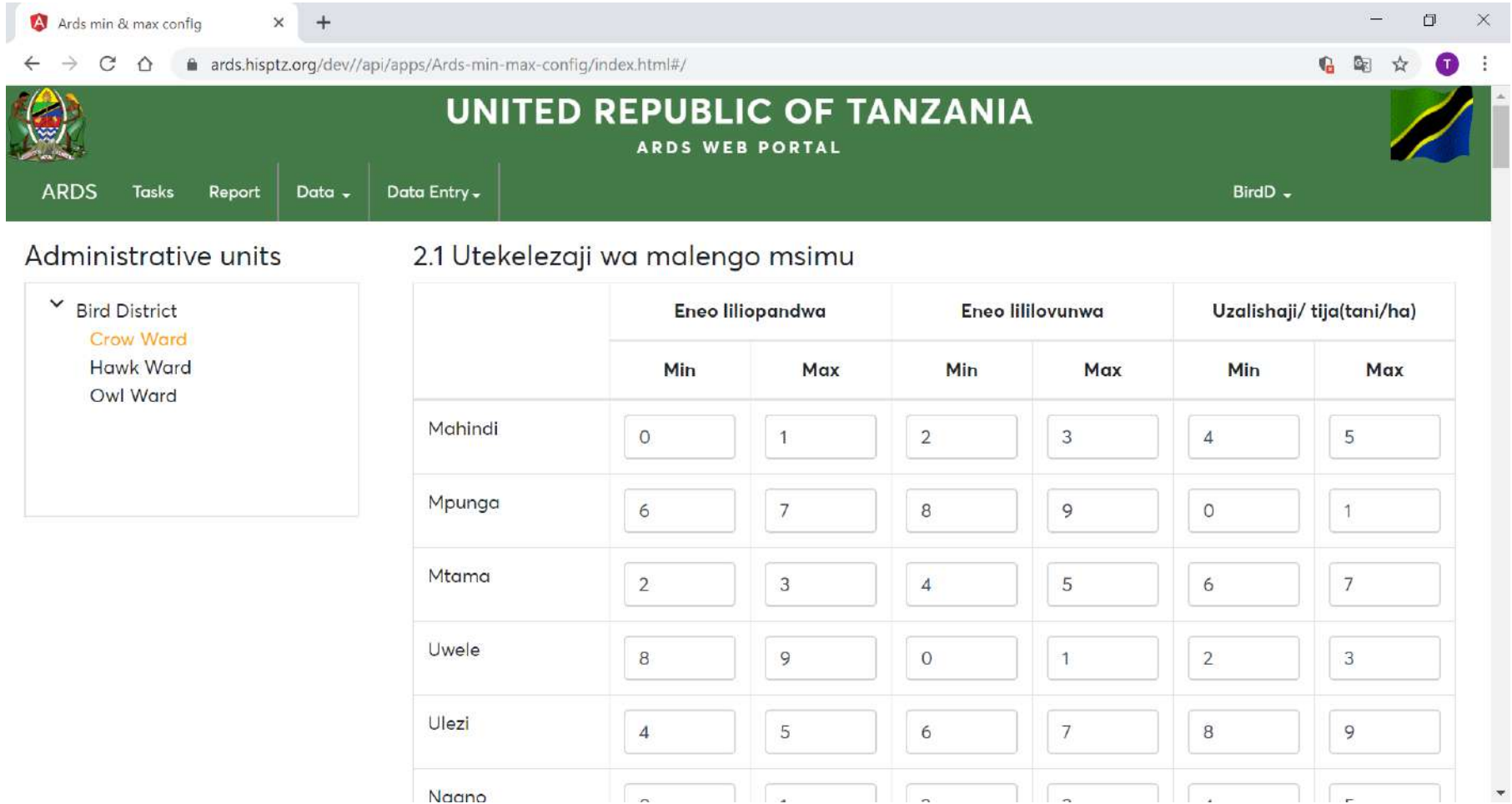


The screenshot shows a web browser window with the URL `ards.hisptz.org/dev//api/apps/Ards-min-max-config/index.html#`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with items: "ARDS", "Tasks", "Report", "Data", "Data Entry", and "BirdD". The main content area is titled "Administrative units" and contains a dropdown menu with the following options: "Bird District", "Crow Ward", "Hawk Ward", and "Owl Ward". To the right of the dropdown menu, there is a text prompt: "Select administrative unit first to set up min and max". A vertical black line is drawn over the dropdown menu, indicating the selection process.

# 12. Max and Min Value Setting

## 12.2 District Screen

④ Input Max & Min Values for Crops for the selected ward



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Report', 'Data', 'Data Entry', and 'BirdD'. The 'Administrative units' dropdown menu is open, showing 'Bird District' (selected), 'Crow Ward', 'Hawk Ward', and 'Owl Ward'. The '2.1 Utekelezaji wa malengo msimu' table is displayed, showing min and max values for various crops across different wards.

	Eneo liliopandwa		Eneo lililovunwa		Uzalishaji/ tija(tani/ha)	
	Min	Max	Min	Max	Min	Max
Mahindi	0	1	2	3	4	5
Mpunga	6	7	8	9	0	1
Mtama	2	3	4	5	6	7
Uwele	8	9	0	1	2	3
Ulezi	4	5	6	7	8	9
Naano						

# 12. Max and Min Value Setting

## 12.2 District Screen

⑤ Scroll Down and Input Max & Min Values for Maziwa for the selected ward

The screenshot shows a web browser window with the URL `ards.hispztz.org/dev//api/apps/Ards-min-max-config/index.html#`. The page header is green with the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with "ARDS", "Tasks", "Report", "Data", and "Data Entry".

The main content area displays a table for configuring values for different bird species. The table has columns for species names and input fields for values 6 through 11. The species listed are Helianthus and Choya (Rozella).

Species	6	7	8	9	10	11
Helianthus	2	3	4	5	6	7
Choya (Rozella)	8	9	0	1	2	3

Below this table is a section titled "6.1 Maziwa" with a table for setting minimum and maximum values for milk production. The table has columns for "Min" and "Max" values.

	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk -Indigeneous cattle (Lita)	4	5
Milk improved cattle (Lita)	6	7

At the bottom of the page, there are three buttons: "Save", "Lock config", and "Apply min & Max to all wards".

# 12. Max and Min Value Setting

## 12.2 District Screen

⑥ "Save" to apply changes to the selected ward

The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The page title is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Report", "Data", and "Data Entry". The "Data Entry" dropdown is open, showing a list of districts: "Mzingo", "Helianthus", "Choya (Rozella)", and "6.1 Maziwa". The "6.1 Maziwa" section is expanded, showing a table for "Kiasi cha uzalishaji maziwa kwa mfugo/siku" (Milk production per cow/day). The table has columns for "Min" and "Max" values. The "Save" button is highlighted with a red arrow.

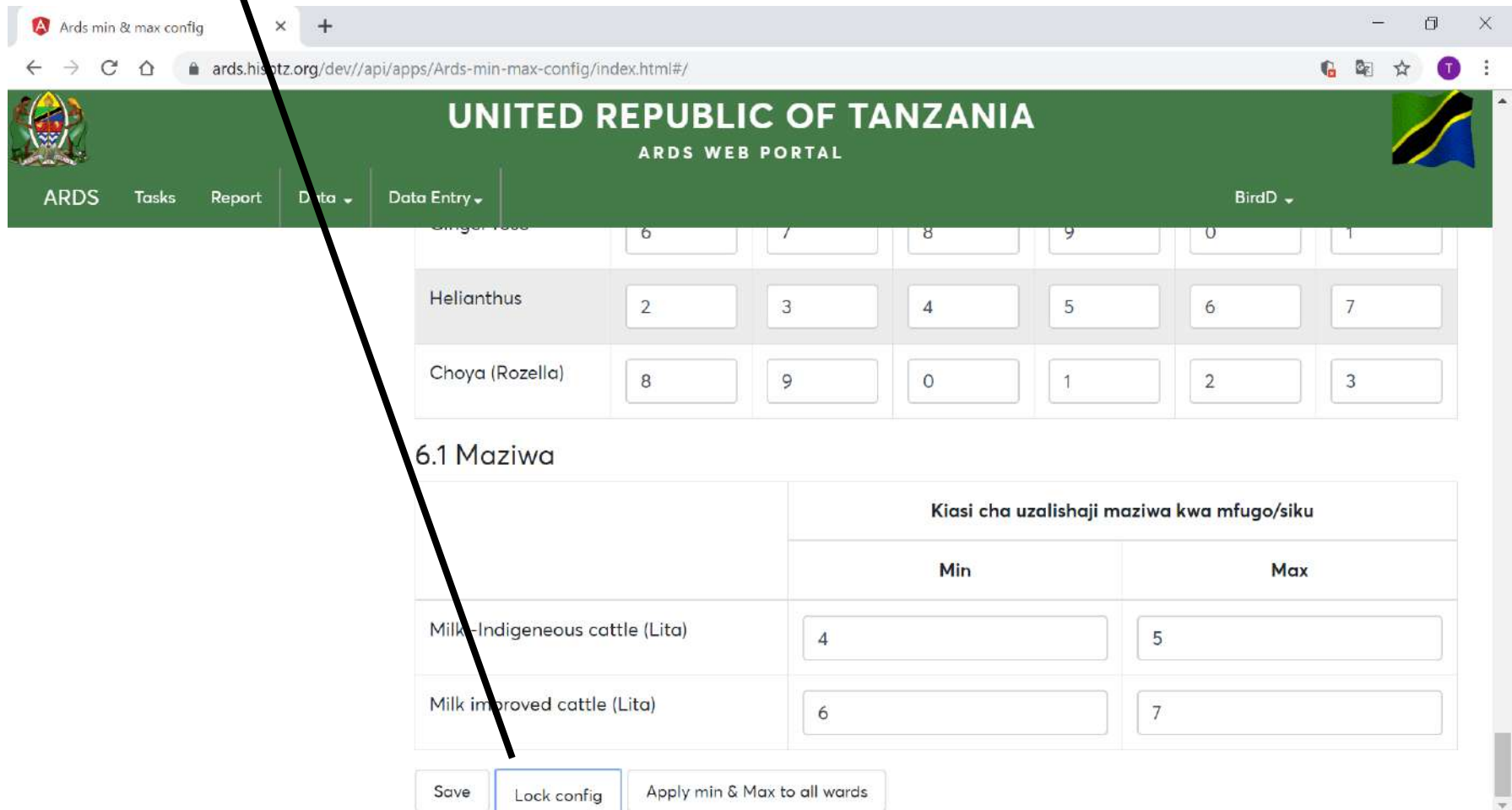
	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk -Indigeneous cattle (Lita)	4	5
Milk improved cattle (Lita)	6	7

Buttons: Save, Lock config, Apply min & Max to all wards

# 12. Max and Min Value Setting

## 12.2 District Screen

⑦ Click "Lock config" to lock max and min values for the selected ward



The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The page is titled "ARDS min & max config" and displays a configuration table for "6.1 Maziwa". The table has columns for different wards (6, 7, 8, 9, 0, 1) and rows for different species: Helianthus and Choya (Rozella). Below the table, there is a section for "6.1 Maziwa" with a table for "Kiasi cha uzalishaji maziwa kwa mfugo/siku". This table has columns for "Min" and "Max" values for "Milk-Indigeneous cattle (Lita)" and "Milk improved cattle (Lita)". At the bottom of the page, there are three buttons: "Save", "Lock config", and "Apply min & Max to all wards". A black arrow points from the instruction above to the "Lock config" button.

	6	7	8	9	0	1
Helianthus	2	3	4	5	6	7
Choya (Rozella)	8	9	0	1	2	3

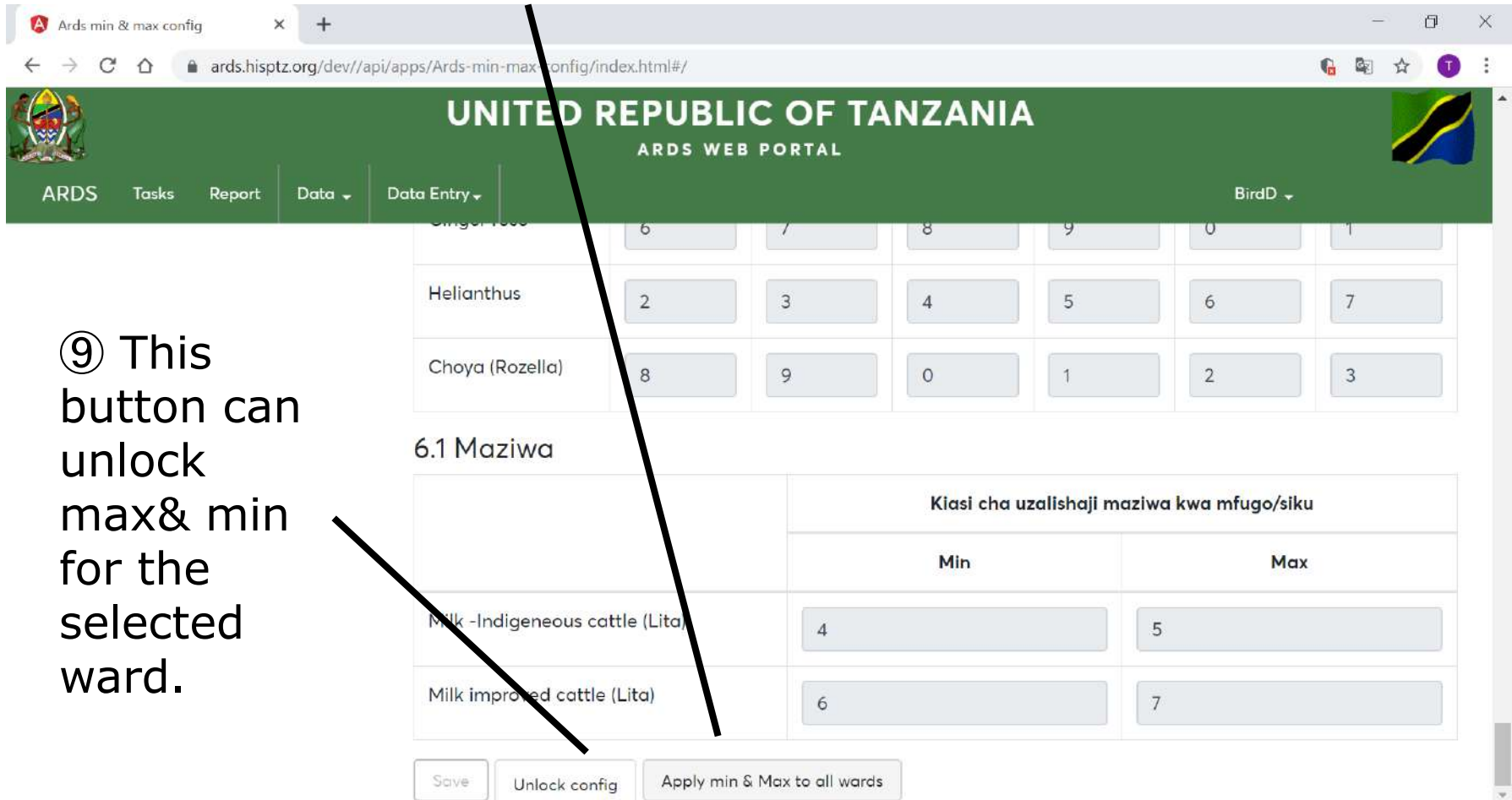
	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk-Indigeneous cattle (Lita)	4	5
Milk improved cattle (Lita)	6	7

Buttons: Save, Lock config, Apply min & Max to all wards

# 12. Max and Min Value Setting

## 12.2 District Screen

⑧ Click "Apply max & min to all wards" to copy max and min and lock status for selected the ward to all wards under the district regardless of the lock status of copied wards.



The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The page title is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Report", "Data", "Data Entry", and "BirdD". The main content area displays a table of data for various crops and a section for "6.1 Maziwa" (Dairy) with a table for "Kiasi cha uzalishaji maziwa kwa mfugo/siku" (Dairy production per herd/day). The table for dairy production has columns for "Min" and "Max" values. The "Apply min & Max to all wards" button is highlighted with a black arrow.

	6	7	8	9	0	1
Helianthus	2	3	4	5	6	7
Choya (Rozella)	8	9	0	1	2	3

	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk -Indigeneous cattle (Lita)	4	5
Milk improved cattle (Lita)	6	7

Buttons: Save, Unlock config, Apply min & Max to all wards

⑨ This button can unlock max& min for the selected ward.

# 12. Max and Min Value Setting

## 12.3 Alert Message

- ⑨ When the value less than min or more than max is entered in WF01, alert message is displayed.

The screenshot shows a web browser with two tabs: 'Ards min & max config' and 'Ards Data Entry'. The URL is 'ards.hisptz.org/dev/api/apps/Ards-Data-entry/index.html#/'. The application interface includes a navigation menu with 'ARDS', 'Tasks', 'Dashboard', 'Report', and 'Data'. A sidebar on the left shows a tree view of regions: Tanzania, Animal Region, Bird District, Crow Ward, Hawk Ward, Owl Ward, Fish District, Catfish Ward, and Food Region. The main content area displays a table for 'Viungo' (Villages) with columns for 'Malengo kwa mwaka' (Annual targets), 'Utekezaji' (Progress), and 'Bei ya soko' (Market price). The 'Utekezaji' column is further divided into 'Eneo litakalo pandwa (ha)(ii)', 'Uzalishaji /tija (tani/ha) (iii)', 'Matarajio ya mavuno (tani) (iv) = (ii)x(iii)', 'Eneo lilio pandwa (ha)(v)', 'Eneo liliovunwa (ha)(vi)', 'Uzalishaji /tija(tani /ha)(vii)', and 'Mavuno (tani) (viii)= (vi)x(vii)'. The 'Tangawizi' row has a value of '20' in the 'Eneo lilio pandwa (ha)(v)' column. An alert message is displayed over the table, stating: 'The value of the following data element is greater than the specified maximum value.: 5' and 'WF01 2.1 Utekezaji wa eneo lililo pandwa mazao ya viungo'. An 'OK' button is visible on the alert. A circled '7' and the text 'OK' are overlaid on the right side of the image, with an arrow pointing to the 'OK' button on the alert.

Viungo(i)	Malengo kwa mwaka			Utekezaji			Bei ya soko Tsh/kg(ix)	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji /tija (tani/ha) (iii)	Matarajio ya mavuno (tani) (iv) = (ii)x(iii)	Eneo lilio pandwa (ha)(v)	Eneo liliovunwa (ha)(vi)	Uzalishaji /tija(tani /ha)(vii)		
Tangawizi			0	20			0	
Pilipili Manga			0				0	
Giligilani			0				0	
Mdalasini			0				0	
Binzari			0				0	
Vanilla			0				0	
Pilipili kali			0				0	

# 12. Max and Min Value Setting

## 12.3 Alert Message

⑩ Cell turns to red to alert.

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. A user profile 'Toshi' is visible in the top right. The main content area displays a data entry form for 'Catfish Ward - September 2019 - WF01 2.1 Utekelezaji wa eneo lilio pandwa mazao ya viungo Tangawizi'. The table below shows data for various 'Viungo' (fish species) with columns for 'Malengo kwa mwaka', 'Utekelezaji', and 'Bei ya soko'. The 'Utekelezaji' column is further divided into 'Eneo lilio pandwa' and 'Eneo liliovunwa'. The 'Bei ya soko' column is labeled 'Tsh/kg(ix)'. The 'Maelezo(Zisizidi herufi hamsini)(x)' column is also present. A red cell is highlighted in the 'Utekelezaji' column for the 'Tangawizi' row, indicating an alert.

Viungo(i)	Malengo kwa mwaka			Utekelezaji			Bei ya soko Tsh/kg(ix)	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji /tija (tani/ha) (iii)	Matajio ya mavuno (tani) (iv) = (ii)x(iii)	Eneo lilio pandwa (ha)(v)	Eneo liliovunwa (ha)(vi)	Uzalishaji /tija(tani /ha)(vii)		
Tangawizi			0	20			0	
Pilipili Manga			0				0	
Giligilani			0				0	
Mdalasini			0				0	
Binzari			0				0	
Vanilla			0				0	
Pilipili kali			0				0	



# **12. Max and Min Value Setting**

## **12.4 Recommendation for setting**

Item	Recommendation for setting
Eneo liliopandwa Min	A district user should set 0.
Eneo liliopandwa Max	A district user should set its area.
Eneo lililovunwa Min	A district user should set 0.
Eneo lililovunwa Max	A district user should set its area.
Uzalishaji/ tija(tani/ha) Min	A district user should set 0.
Uzalishaji/ tija(tani/ha) Max	District user should values applicable for the district or each ward.
Milk -Indigeneous cattle (Lita) Min	A district user should set 0.
Milk -Indigeneous cattle (Lita) Max	District user should values applicable for the district or each ward.
Milk improved cattle (Lita) Min	A district user should set 0.
Milk improved cattle (Lita) Max	District user should values applicable for the district or each ward.

# **12. Max and Min Value Setting**

## **12.5 Specification for setting**

- Only Max or Min value cannot be configured.  
For each item, both Max and Min must be configured.
- However, you can keep both Max and Min blank.  
In that case, the validation for max and min will not work in WF01 and any data can be entered.
- Only integer can be configured in min or max.
- Max must be larger than min. Otherwise the cell frame turns to red to alert.
- If max or min value is entered in the corresponding item in WF01, it is accepted and alert message is not shown.

# **13. Password Change**

**For All Users**

# 13. Password Change

Password change is used for each user to change password to login ARDS Web Portal. When an administrator create a new user on ARDS Web Portal, he/she assigns some temporally password for the ID. After that the user need to change the password which will not be shared with others. Also, it is desirable to change the password periodically to avoid security risk.

Password must have at least 8 characters, one upper case, and one special characters,

# 13. Password Change

① Click User Name and "Change Password"

The screenshot displays the ARDS Web Portal interface. At the top, there is a navigation bar with the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below this, a menu contains various options: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. On the right side, a user profile dropdown menu is open, showing the user's name "Toshi" and several options: Update Info, User Settings, Help Center, About ARDS, Change Password, and Logout. A black arrow points from the text above to the "Change Password" option in the dropdown menu. The main content area shows an announcement regarding the closing of data entry for FY2018/19, with a deadline of 6th September, Friday. The URL at the bottom of the browser is <https://ards.kilimo.go.tz/dhis-web-commons-about/showUpdateUserAccountForm.action>.

# 13. Password Change

② Input current password

The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/dhis-web-commons-about/showUpdateUserAccountForm.action`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile "Toshi" is visible in the top right. The main content area is titled "User account" and contains a "Details" section with the following fields:

- Username:
- Old password:
- New password:
- Retype new password:

Below the fields is a "Save" button. Four annotations with arrows point to these elements:

- ② Input current password: points to the "Old password" field.
- ③ Input new password: points to the "New password" field.
- ④ "Save": points to the "Save" button.
- ③ Input new password: also points to the "Retype new password" field.

Password will be changed from "the current password" to "the new password".

# **14. Clear Cache & Reload**

**For All Users**

It is necessary for users to do Clear Cache whenever ARDS server administrator update screens, programs, or dropdown lists. Otherwise users may see the screens cached which do not reflect these updates.



# 14. Clear Cache & Reload

## 14.1 Clear Browser Cache –On ARDS-

See right hand side of the Entry Screen (Do not select Forms or Periods)

The screenshot shows the ARDS Data Entry interface. On the left, there is a 'Data Entry' section with a help icon. Below it, there are two informational boxes: 'What is new?' and 'Attention to all ARDS Web Portal users:'. Below these are three dropdown menus: 'Administrative Unit' (set to 'Bird District'), 'Forms' (set to '[Please Select]'), and 'Period' (set to '[Please Select]'). To the right of the 'Period' dropdown are 'Prev year' and 'Next year' buttons. On the far right, there is a browser window titled 'Bird District - No per...' with three buttons: 'Clear cache', 'Print form', and 'Print blank form'. A blue box highlights the 'Clear cache' button, and the word 'Click' is written in blue text next to it.

# 14. Clear Cache & Reload

## 14.1 Clear Browser Cache -On ARDS-

ohs2.dashboard.current.region	<input type="checkbox"/>
ohs2.menu.ui.headerBar.link	<input type="checkbox"/>
ohs2.menu.ui.headerBar.logo	<input type="checkbox"/>
ohs2.menu.ui.headerBar.title	<input type="checkbox"/>
ohs2.menu.ui.headerBar.userStyle	<input type="checkbox"/>
tcversions	<input type="checkbox"/>
ouRoots	<input type="checkbox"/>
ouUsername	<input type="checkbox"/>
ouVersion	<input type="checkbox"/>

### IndexedDB

ohs2ou	<input type="checkbox"/>
ohs2ec	<input type="checkbox"/>
ohs2de	<input type="checkbox"/>
ohs2	<input type="checkbox"/>
ohs2ic	<input type="checkbox"/>

This clears selected items from your browser cache.

Click Select all  
And then Clear

# 14. Clear Cache & Reload

## 14.1 Clear Browser Cache –On ARDS-

Clearing cache

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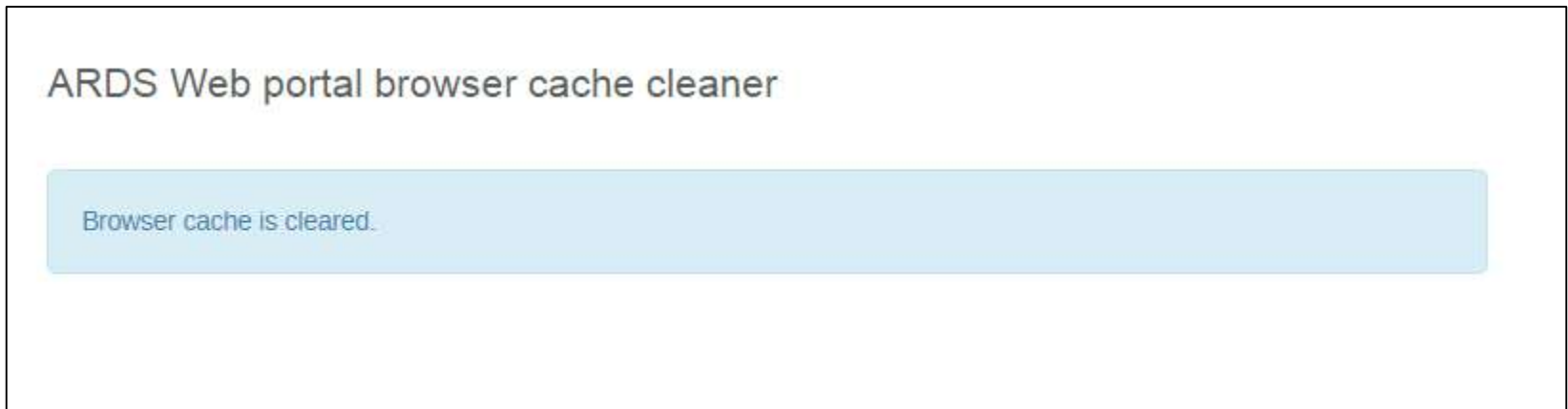
Are your sure you want to proceed with the cleaning?

---

Click

# 14. Clear Cache & Reload

## 14.1 Clear Browser Cache –On ARDS-

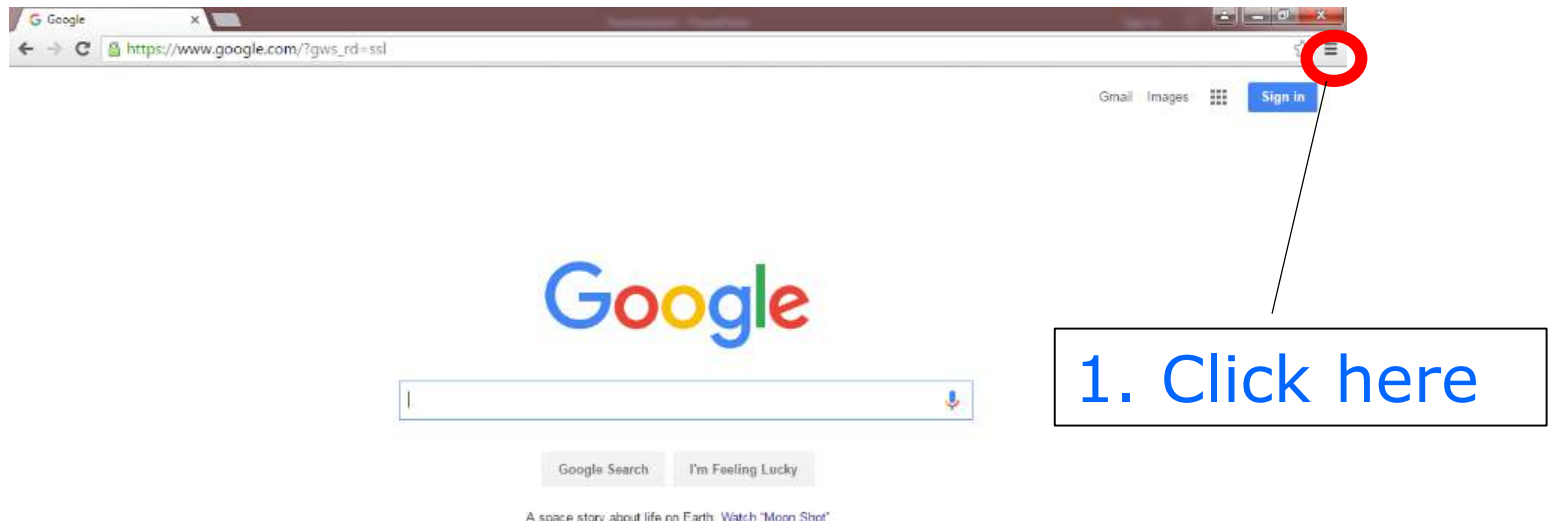


Cache is cleared.

Additionally, you need to clear cache of your browser explained in the following slides.

# 14. Clear Cache & Reload

## 14.2 Clear Browser Cache -Google Chrome-

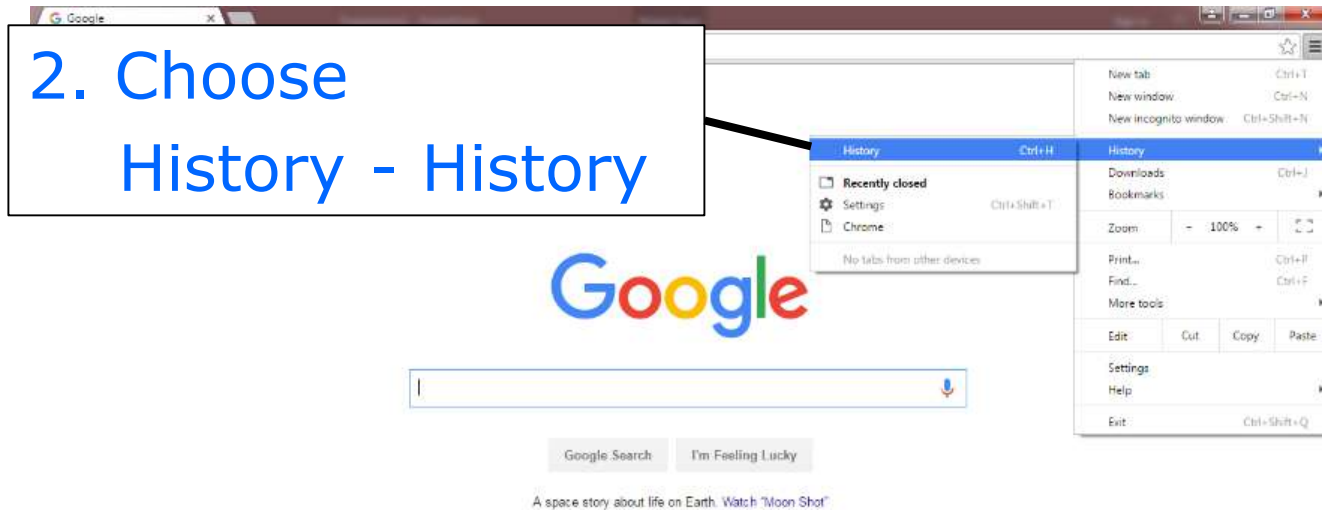


Please close every ARDS Screen before this operation.  
You can replace Step 1 & 2 with "Ctrl + Shift Delete"

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# 14. Clear Cache & Reload

## 14.2 Clear Browser Cache -Google Chrome-

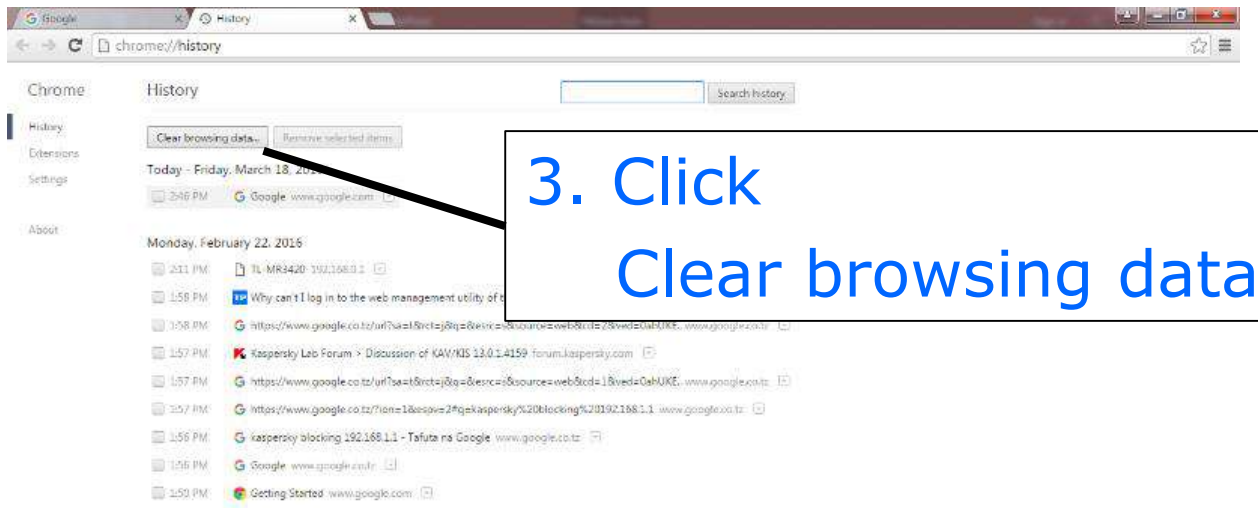


You can replace Step 1 & 2 with "Ctrl + Shift Delete"



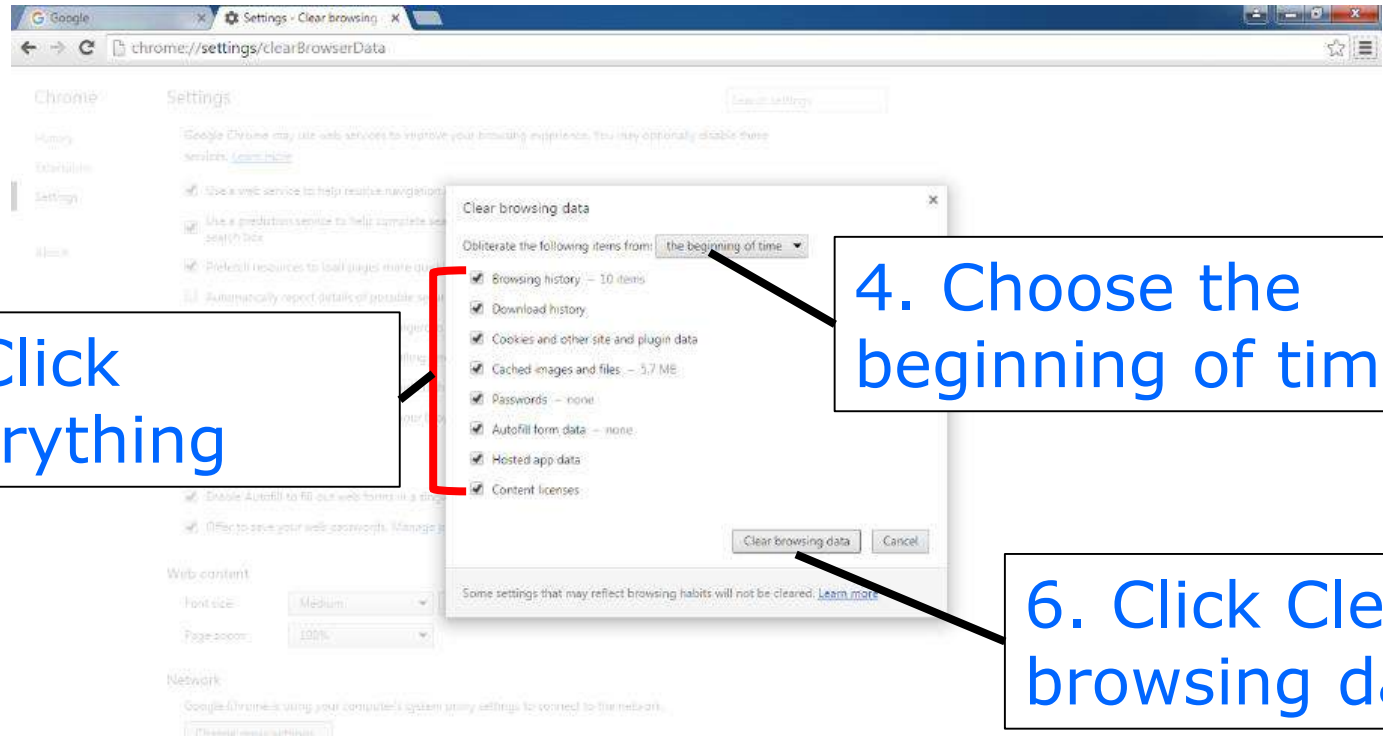
# 14. Clear Cache & Reload

## 14.2 Clear Browser Cache -Google Chrome-



# 14. Clear Cache & Reload

## 14.2 Clear Browser Cache -Google Chrome-



5. Click Everything

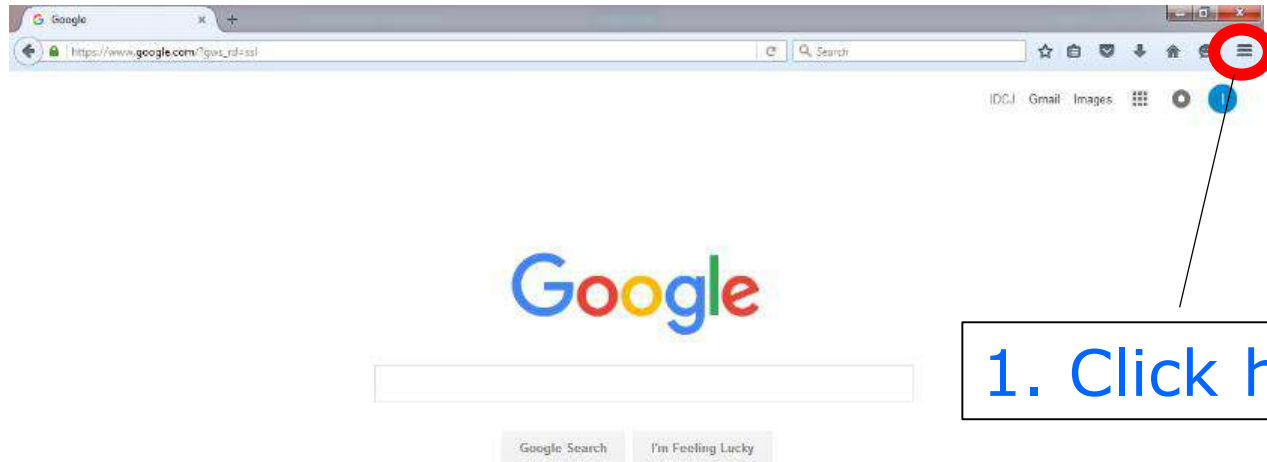
4. Choose the beginning of time

6. Click Clear browsing data



# 14. Clear Cache & Reload

## 14.3 Clear Browser Cache -Firefox-

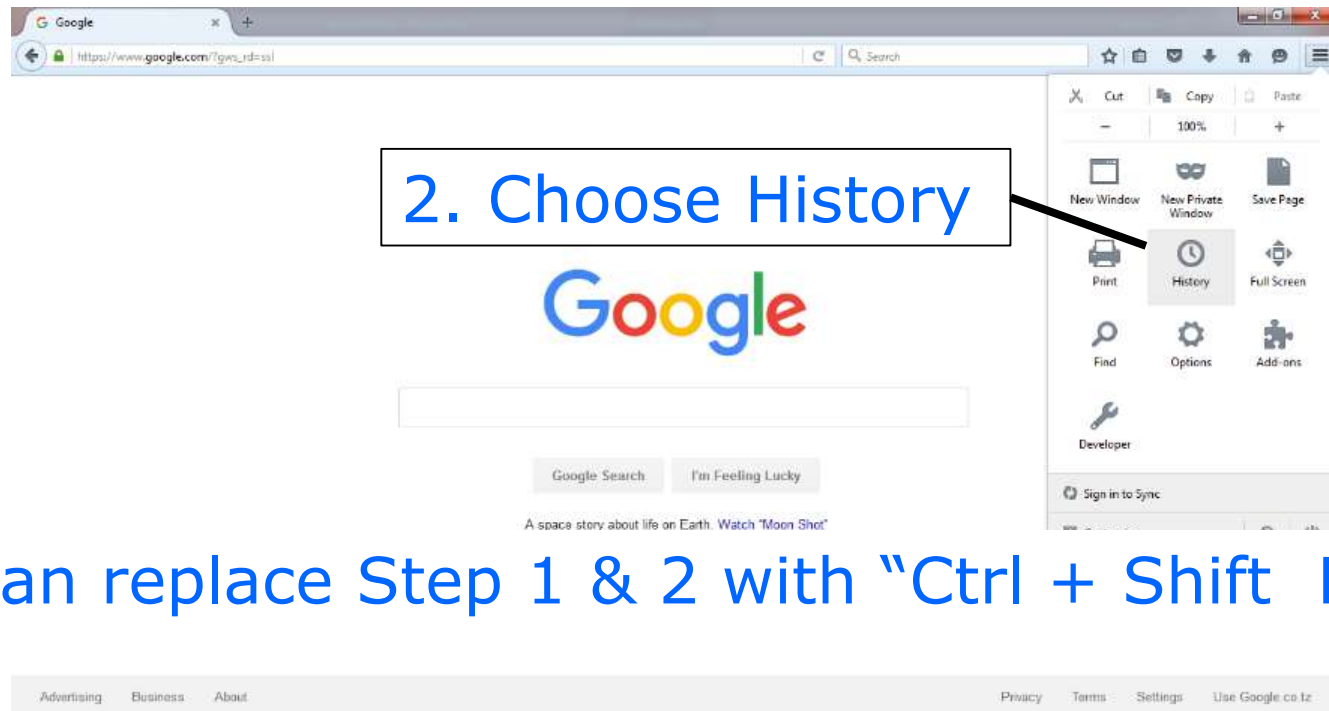


Please close every ARDS Screen before this operation.  
You can replace Step 1 & 2 with "Ctrl + Shift Delete"

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# 14. Clear Cache & Reload

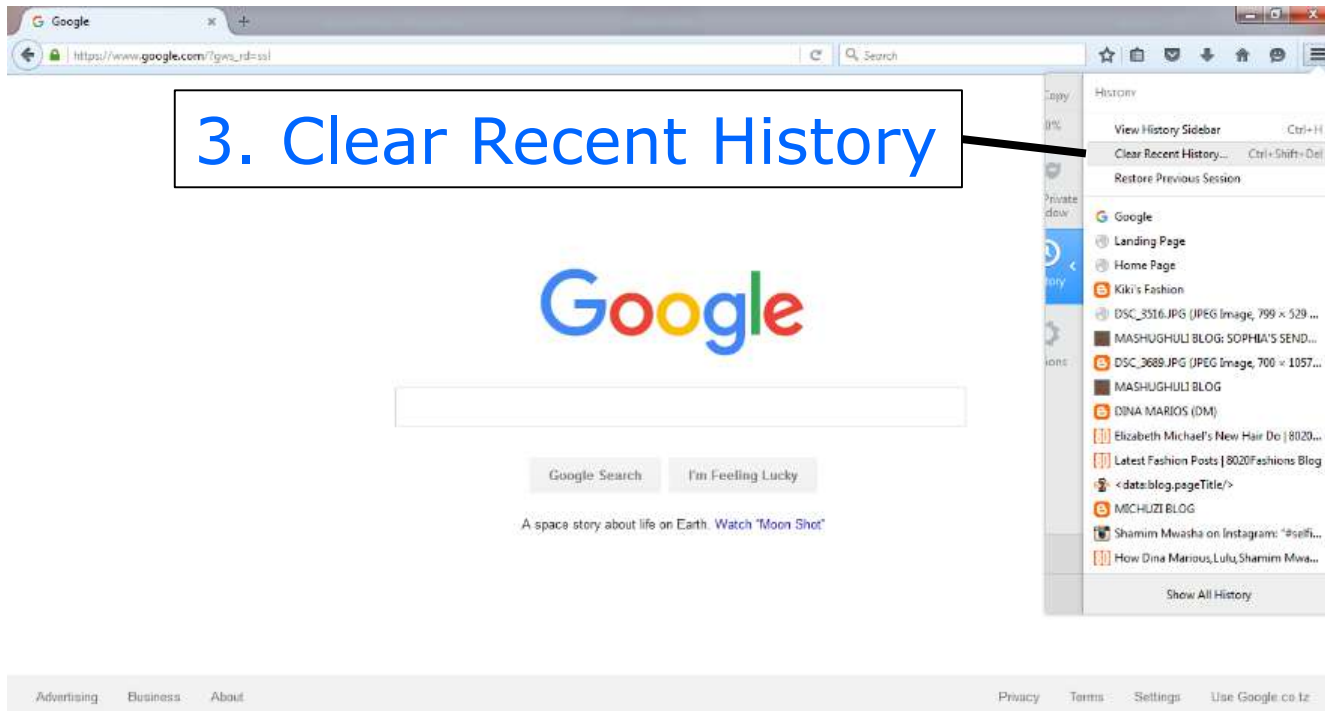
## 14.3 Clear Browser Cache -Firefox-



You can replace Step 1 & 2 with "Ctrl + Shift Delete"

# 14. Clear Cache & Reload

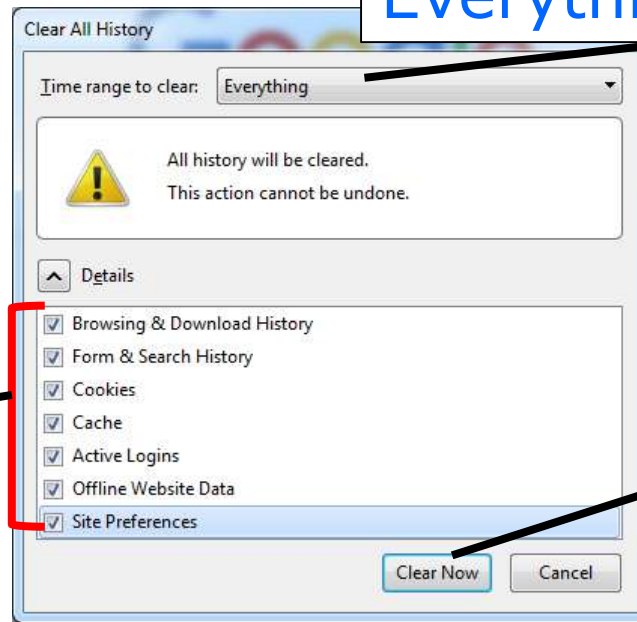
## 14.3 Clear Browser Cache -Firefox-



# 14. Clear Cache & Reload

## 14.3 Clear Browser Cache -Firefox-

4. Choose Everything



5. Click Everything

6. Click Clear Now

# **14. Clear Cache & Reload**

## **14.4 Reload**

**Slow Internet connectivity sometimes causes that users can not download whole screen data into browser and thus may causes irregular looking tables such as heading only table. By reloading, we may be able to download whole screen data.**

# 14. Clear Cache & Reload

## 14.4 Reload

Click here

The screenshot shows a web browser window with the URL [www.ards.go.tz/dhis-web-dataentry/index.action](http://www.ards.go.tz/dhis-web-dataentry/index.action). The browser's address bar has a red circle around the 'Reload' button (a circular arrow icon). A callout box with the text 'Click here' points to this button. The page header is green and contains the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL' and a navigation menu with items: ARDS, Dashboard, Report, Analysis, Data, News, Articles, ARDS LGMD2, and Maintenance. The user's name 'Toshiaki Suzuki' is visible in the top right. The main content area is titled 'Data Entry' and contains a form with the following fields: 'Administrative Unit' (set to 'Tanzania'), 'Forms' (a dropdown menu with '[ Select Form ]'), and 'Period' (a dropdown menu with 'Prev year' and 'Next year' buttons). To the right of the form are three buttons: 'Run validation', 'Print form', and 'Print blank form'. A notification box at the top right says 'Tanzania - No Period Selected - No Data Element Selected'. At the bottom right, a status bar indicates 'Please wait, system is loading 31 Program of 38'.

# **FAQ for troubleshooting of ARDS Web Portal**

**Ver 1.0**

**October, 2019**

**JICA Project Team**

## What- Purpose

This brief shows how to solve issues which happens the most frequently. Some of the problems are software problems (bugs) which only the software developer, University of Dar es Salaam, can solve. However, the many issues can be solved without contacting them. This FAQ will list up those administrative problems and solutions for them.

## For Who- Audience

This reference is mainly for technicians (administrators- Admin) who take care of day-to-day management of ARDS Web Portal. Admin should have knowledge of how to solve the issues frequently happens. Also, this manual is useful for Technical Team and M&E TWG members as reference document.

## How to use

Admin need to confirm carefully the procedures of how to solve frequently happening issues.



# **FAQ 1 : Strange issue**

**Issue: ARDS Web Portal shows strange screen or behavior.**

**Solution: Whenever users see some issues in ARDS Web Portal, please request them to clear cache. please see "13. Clear Cache & Reload" in the "User Manual".**

## **FAQ 2 : ARDS Web Portal not accessible**

**Issue:** Even if you initiate browser and type “ards.kilimo.go.tz”, the result shows error messages.

### **Solution:**

**The cause of the error depends of the error message shown.**

#### **1. Server is not responding.**

**It is possible that power outage or network problem is happening in Kilimo 4 where the server is located. In case the LED is off on the server, please boot the server and UPS.**

# **FAQ 2 : ARDS Web Portal not accessible**

## **Solution:**

### **2. SQL Error**

**In case the error message shows data base error, it is possible that ARDS application is down while the server OS is on. In this case, please contact UDSM to re-start ARDS Web Application.**

**Henry: 0716-290-994, Tuzo: 0659-376-016**

### **3. Network Error or DNS Error**

**In case the error message shows Network Error or DNS Error, it is possible that user's network has problem. In this case, please ask the user to re-start the router or modem they are using. If not solved, please let them wait until the issue is solved.**

## **FAQ 3 : Data Lock**

**Issue: Data Entry forms cannot be unlocked and cannot modify the data.**

**District report cannot be uncreated and cannot unlock the data entry forms.**

**Solution: It is possible that the **higher level of reports** have been **created and approved**. To solve this issue, region officers need unapproved higher level of reports and district officers need to uncreate the higher level of reports. For the detail, please see "5. Lock / Unlock Data Entry / Report" in the "User Manual".**

## **FAQ 4 : Report creation button**

**Issue: Report creation button is not shown in the standard report screen, even if the district report is not created.**

**Solution: It is possible that the report creation is locked by the fiscal year end lock. Please see "7. Fiscal Year End Lock" in the "Maintenance Manual".**

## **FAQ 5 : No task in Task List**

**Issue: Tasks for the district or the region are not shown even if these tasks are not completed yet.**

**Solution: It is possible that the district or the region is not selected in the user setting. Please confirm the corresponding district or region is selected in “Data capture and maintenance organisation units” in user addition screen. Please see “1. User Addition” in the “Maintenance Manual”.**

## **FAQ 6 : Report creation after all entry forms submission**

**Issue: Even if 100% of ward entry forms(WF01, WF02, or WF03) are submitted, the corresponding district report(DR01, DR02, or DR03) is not created automatically.**

**Solution: This is not an issue. You needs to schedule the report creation manually even if 100% of ward entry forms are submitted.**

## **FAQ 7 : Report creation under 90% ward entry form submission**

**Issue:** Even if the submission rate of ward entry forms(WF01, WF02, or WF03) is less than 90%, the corresponding district report (DR01, DR02, or DF03) can be created.

**Solution:** District report can be created regardless of the submission rate of the corresponding ward entry forms. Even if it is 0%, the report can be created. 90% of the submission is the condition to show "Report Creation" button in the task list. However, even if it is not shown in the task list, the report creation can be scheduled in the standard report screen.



## **FAQ 8 : DIR03 Creation**

**Issue: Even if all DR03 is created, the corresponding DIR03 is not created.**

**Solution: This is not an issue. To create DIR03, not only DR03, all DR02s(July-September, October-December, January-March, April-June) for the fiscal year must be created and DF03 for the fiscal year must be submitted. Please check DR02 creation and DF03 submission status.**

## **FAQ 9 : Ward Report Creation Status**

**Issue:** In “Submission and Creation Status” screen, when a district is selected in “Administrative unit”, and “District/Region Monthly Report (DR01/RR01) Creation, “District/Region Quarterly Report (DR02/RR02) Creation, or “District/Region Annual Report (DR03/RR03) Creation is selected, report creation status for all wards shows 0%, even if the data is submitted.

**Solution:** This is not an issue. Report creation status for each ward is not ward entry form submission status. Since ward report is not defined in ARDS Web Portal, this always shows 0.

# FAQ 9 : Ward Report Creation Status

Submission and Creation status

ards.kilimo.go.tz/api/apps/Submission-and-Creation-status/index.html#/

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Submission and Creation Status

Administrative unit

- ▼ Tanzania
  - ▼ Arusha
    - ▶ **Arusha Mjini**
    - ▶ Arusha Vijijini
    - ▶ Karatu
    - ▶ Longido

Show person in charge  
 Show Hierarchy

Administrative unit children

Entry form / Report

District/Region Monthly Report (DR01/RR01) Creation

Period

Monthly   Date of report

July 2019

09 Oct 2019

A district selected

DR01/RR01,  
DR02/RR02, or  
DR03/RR03 Creation

# FAQ 9 : Ward Report Creation Status

The screenshot displays the ARDS Web Portal interface. The main heading is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile is "Toshi". The page title is "Arusha Mjini - District/Region Monthly Report (DR01/RR01) Creation - July 2019" and the subtitle is "Report Creation Status as of Oct 9, 2019". A table lists the report creation status for various wards, with all values being 0.

Parent	Name	Actual Reports	Expected Reports	Percent	Reports on time	Percent on time	Approved reports	Percent approved
	Baraa	0	0	0	0	0	0	0
	Daraja Mbili	0	0	0	0	0	0	0
	Elerai	0	0	0	0	0	0	0
	Engutoto	0	0	0	0	0	0	0
	Kaloleni	0	0	0	0	0	0	0
	Kati	0	0	0	0	0	0	0
	Kimandolu	0	0	0	0	0	0	0
	Lemara	0	0	0	0	0	0	0

**Report Creation Status shows 0%.**

## **FAQ 10 : ARDS Web Portal does not react long time after login**

**Issue:** ARDS Web Portal does not react long time after login. Even if RS or LGA try to move to standard report screen or data entry screen from another screen, it does not react.

**Solution:** Time out from ARDS Web Portal might cause this issue. Please request them to clear cache. please see "13. Clear Cache & Reload" in the "User Manual". After that, let them to login ARDS Web Portal again.

# **User Manual**

# **Simple Version**

**Ver 1.3**

**October, 2020**

**JICA Project Team**

# **Purpose of User Manual**

This User Manual is a quick reference to show how to use general functions of ARDS Web Portal to administrators, district users, region users, and other general users. This manual does not explain administrative functions to maintain ARDS Web Portal exclusively for administrators. Those functions are explained in “Maintenance Manual”.

# **Contents**

- 1. Data Entry**
- 2. Report Creation / Uncreation / Cancel**
- 3. Report Approval**
- 4. Report**
- 5. Lock / Unlock Data Entry / Report**
- 6. Pivot Table**
- 7. Map**
- 8. Static Report**
- 9. Archive Report**
- 10. Task List**
- 11. Submission and Creation Status**
- 12. Max and Min Value Setting**
- 13. Password Change**
- 14. Clear Cache & Reload**



# User Authorization to Each Function

	Administrator	District User	Region User	Other User
Data Entry	○	○	×	×
Report Creation / Uncreation / Cancel	○	○	×	×
Report Approval	○	×	○	×
Report	○	○	○	○
Lock / Unlock Data Entry / Report	×	○	○	×
Pivot Table	○	○	○	○
Map	○	○	○	○
Static Report	○	○	○	○
Archived Report	○	○	○	○
Task List (District Task)	×	○	×	×
Task List (Region Task)	×	×	○	×
Submission and Creation Status	○	○	○	○
Max and Min Value Setting	×	○	×	×
Password Change	○	○	○	○
Clear Cache and Reload	○	○	○	○

# **1. Data Entry**

**For District User, Administrator**

# 1. Data Entry

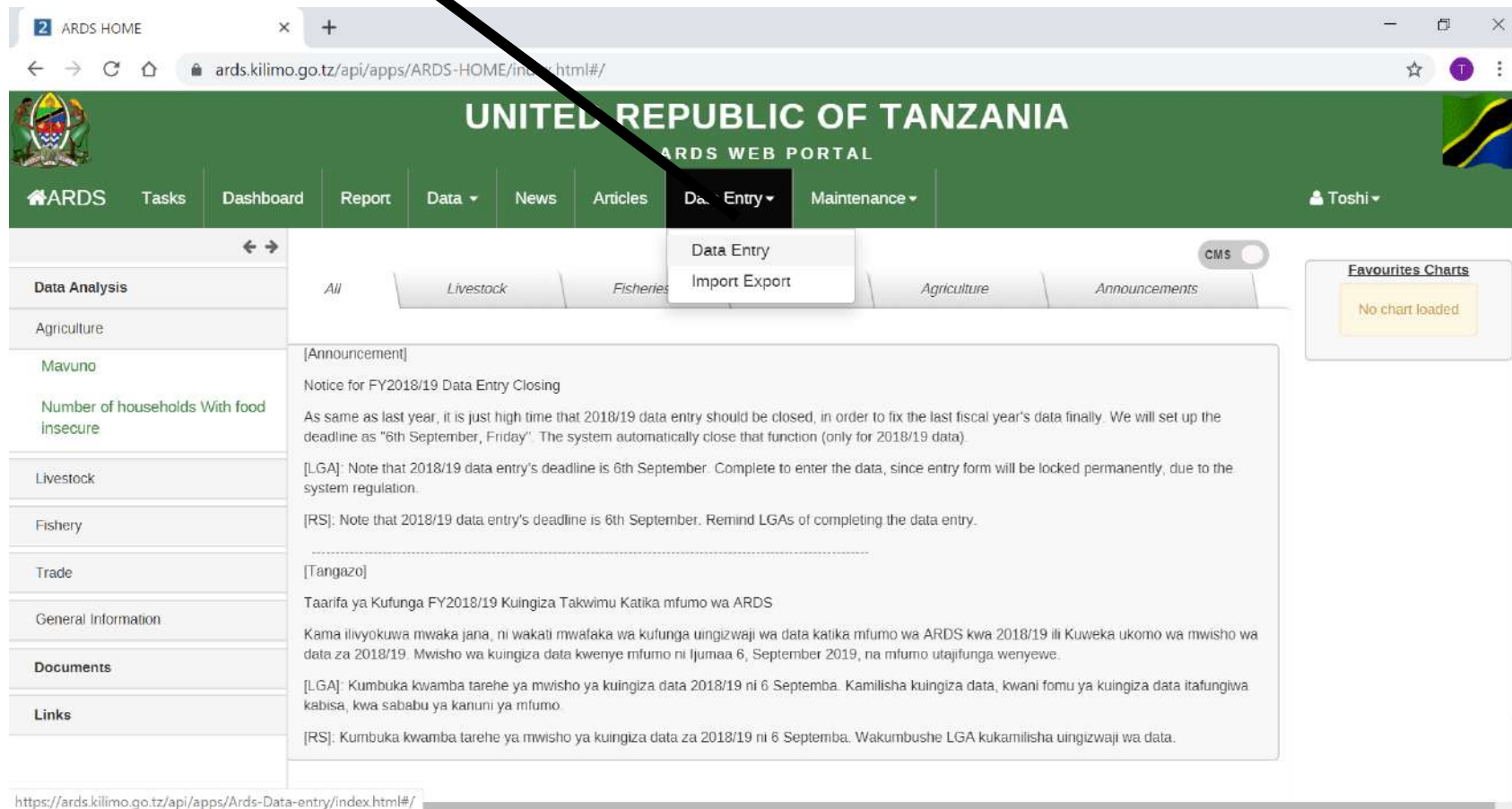
Data Entry allows District Users to submit ward entry form (monthly, quarterly, annual) and district entry form (quarterly, annual)

	Month	Quarter	Year	Annual Target
Ward	Ward Monthly Entry Form (WF01)	Ward Quarterly Entry Form (WF02)	Ward Annual Entry Form (WF03)	Ward Annual Target Entry Form (WF00)
District	N/A	District Quarterly Entry Form (DF02)	District Annual Entry Form (DF03)	

# 1. Data Entry

## 1.1 Enter and Submit Data

- ① Choose Data Entry-  
Data Entry



The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The 'Data Entry' menu is highlighted, and a dropdown menu is visible with options for 'Data Entry' and 'Import Export'. The main content area displays a notice for FY2018/19 Data Entry Closing, stating that the deadline is 6th September, Friday. The notice is repeated for Livestock, Fishery, and Trade categories. The footer shows the URL: <https://ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/>

# 1. Data Entry

## 1.1 Enter and Submit Data

② Select Administrative Unit

③ Select Entry Form

WF Select the Ward

DF Select the District

④ Select Period

# 1. Data Entry

## 1.1 Enter and Submit Data

The Entry Form selected is shown

The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/?`. The page header includes the text "Please wait, while unlocking auto-growing table" and "PUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user is logged in as "Toshi".

The main content area displays a "Data Entry" section with a success message: "Successfully finished: undoing and recreating reports (but you can continue entering data): Recreating reports were successful. Thank you for your cooperation." Below this, a form is shown with the following fields:

- Administrative Unit: Kamwanga
- Forms: Ward Monthly Entry Form (WF01)
- Period: August 2019 (with "Prev year" and "Next year" buttons)
- Data Dimension: Actual Figure

A red note below the form states: "When done, Press 'Complete' for submission". To the right of the form, there are buttons for "Clear cache", "Print form", "Print blank form", and "Download Excel".

Below the form, the title "Ward Monthly Entry Form" is displayed, followed by "Ward: Kamwanga" and "August 2019". At the bottom, there are input fields for "Jina la Afisa Ugani:" and "Tarehe ya kuwasilisha:".

A sidebar on the left lists various administrative units, with "Kamwanga" highlighted in orange. A notification box at the top right of the content area reads "Kamwanga - August 2019 - No data element selected".

Entry Form can be downloaded in Excel.

# 1. Data Entry

## 1.1 Enter and Submit Data

⑤ Scroll down and input the data entry form.

Ards Data Entry

ards.kilimo.go.tz/api/apps/Ards-Data-entry/index.html#/

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Malengo ya mwaka yaandikwe kwenye mwezi wa Julai tu na kuacha wazi miezi inayofuata.

Tafadhali pitia orodha ya mazao yaliyoko kwenye mwongozo ukurasa wa sita na kisha onge

Kamwanga - August 2019 - WF01 2.1 Utekezaji wa eneo lililo pandwa nafaka Mahindi

2.1 Utekezaji wa malengo msimu

Mazao ya nafaka

Nafaka(i)	Malengo kwa mwaka			Utekezaji				Bei ya soko	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji/tija(tani/ha)(iii)	Matarajio ya mavuno (tani)(iv) = (ii)x(iii)	Eneo lilipopandwa (ha)(v)	Eneo lililovunwa (ha)(vi)	Uzalishaji/tija(tani/ha)(vii)	Mavuno (tani)(viii) = (vi)x(vii)		
Mahindi	2000	2	4000	1			0		
Mpunga			0				0		
Mtama			0				0		
Uwele			0				0		
Ulezi			0				0		
Ngano			0				0		

# 1. Data Entry

## 1.1 Enter and Submit Data

⑥ Press Complete to submit the data.

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'ARDS WEB PORTAL'. The navigation menu includes 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user is logged in as 'Toshi'.

The main content area displays a data entry form for 'Kamwanga - August 2019 - WF01 2.1 Utekezaji wa eneo lililo pandwa nafaka Mahindi'. The form includes a table for data entry and a section for '8. Ufugaji wa Samaki' (8.1 Mfumo wa ufugaji).

Mfumo wa ufugaji(i)	Idadi(ii)	Idadi yenye vifaranga (iii)	Eneo (m <sup>2</sup> )(iv)	Aina ya Samaki Pandwa(v)	Samaki Vuliwa	Uzito (kg)(vi)	Bei (Tsh/kg)(vii)	Thamani (Tsh)(viii)
Select or s...				Select or s...				

Maelezo: Column (ii) Idadi ya mabwawa yote (yaliyopandikizwa vifaranga na yasiyopandikizwa vifaranga) yaliyopo (mapya na ya zamani).  
Taarifa za column (iii), (v), (vi), (vii) na (viii) zinahusu mabwawa yaliyopandikizwa vifaranga tu. Column ya (iv) inahusu (yaliyopandikizwa vifaranga na yasiyopandikizwa vifaranga) Mfumo wa ufugaji unaweza kuwa mabwawa, vizimba, matanki na chelezo

Buttons: Complete, Undo Complete

When done, Press 'Complete' for submission



# 1. Data Entry

## 1.2 Complete / Undo Complete

### Complete Process

After Data Entry form is submitted, it will be **locked** and **not editable**.

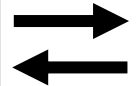
Jina la kampuni ya simu	Idadi ya vijji vinasayofikiwa na huduma
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	

Complete Undo Complete

When done, Press 'Complete' for submission

Data Entry is possible

Complete



Cancel



Complete form



Complete button is grayed out and deactivated.

Submitted

Jina la kampuni ya simu	Idadi ya vijji vinasayofikiwa na huduma
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	

Complete Undo Complete

Completed by admin on 2016-10-28 See details

Data Entry is locked.

This screen transition is applicable to every data entry form.

# 1. Data Entry

## 1.2 Complete / Undo Complete

### Undo Complete Process

To unlock, Data Entry Form need to be **Undo Complete**.

Undo Complete is finished

The screenshot shows a data entry form titled '11.2 Simu'. It has a table with columns for 'Jina la kampuni ya simu' and 'Idadi ya vijji vinaavyoikiwa na huduma'. The rows are for Sasatel, Tigo, TTCL, Vodacom, Airtel, and Zantel. At the bottom, there are two buttons: 'Complete' and 'Undo Complete'. The 'Undo Complete' button is highlighted with a red rectangle. Below the buttons, it says 'Completed by: admin at 2016-10-28 See details.'

Data Entry is locked.

Incomplete



Cancel

The dialog box is titled 'www.ards.go.tz の内容:'. It contains the text 'Are you sure you will undo the registration?' and a checkbox with the label 'このシステム以上917000件を生成しない'. There are two buttons: 'OK' and 'キャンセル'. The 'OK' button is highlighted with a blue rectangle.



OK

Complete button is activated and Undo complete is grayed out.

The screenshot shows the same data entry form as before. The 'Complete' button is now highlighted with a red rectangle, and the 'Undo Complete' button is grayed out. Below the buttons, it says 'When done, Press 'Complete' for submission'.

Data Entry is possible

This screen transition is applicable to every data entry form.

# 1. Data Entry

## 1.3 Table 2.1 and 2.2 WF01

Both tables are to input the information on crop production.

Table 2.1 is to input actually harvested data.

Please do not input estimate data for future.

2.1 Utekelezaji wa malengo msimu

Baraa - Au

Mazao ya nafaka

Nafaka(i)	Malengo kwa mwaka			Utekelezaji				Bei ya soko	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji/tija(tani/ha)(iii)	Matarajio ya mavuno (tani)(iv) = (ii)x(iii)	Eneo lililopandwa (ha)(v)	Eneo lililovunwa (ha)(vi)	Uzalishaji/tija(tani/ha)(vii)	Mavuno (tani)(viii)= (vi)x(vii)	Tsh/kg(ix)	
Mahindi	188	2.5	470				0		
Mpunga			0				0		
Mtama			0				0		
Uwele			0				0		
Ulezi			0				0		
Ngano			0				0		
Shayiri			0				0		

# 1. Data Entry

## 1.3 Table 2.1 and 2.2 WF01

2.2 Utabiri wa usalama wa chakula

Aina ya Mazao (i)	Utabiri wa usalama wa chakula	
	Eneo lililovunwa (ha) (ii)	Mavuno (tani) (iii)
Mahindi	2	3
Mpunga	2	3
Mtama	3	4
Uwele	2	3
Ulezi	3	2
Ngano	2	3
Mihogo	3	2
Viazi vitamu	4	5
Viazi mviringo	3	3
Kunde	2	2
Maharage	2	3
Ndizi mbivu(Sweet banana)	3	4
Ndizi mbichi(Plantain)	2	3

- Food security requests LGA to report **expected production** of crops which is planted within the fiscal year. Table 2.2 is for the forecast.
- You can input this only in **May**. This table is locked in other months.
- For the detail, please refer the extension officers manual

# **2. Report Creation / Uncreation / Cancel**

**For District User, Administrator**

## 2. Report Creation / Uncreation / Cancel

After LGA officers submit enough WF01, WF-02, or WF03, you **need to create DR01, DR02, or DR03** for the corresponding period. DR01/DR02/DR03 is not created automatically since the system does not understand whether the LGA officers already completed the data entry for the data entry form or still continuing. The LGA officers need to show intention that you finished the data entry for the data entry form by pressing report creation button.

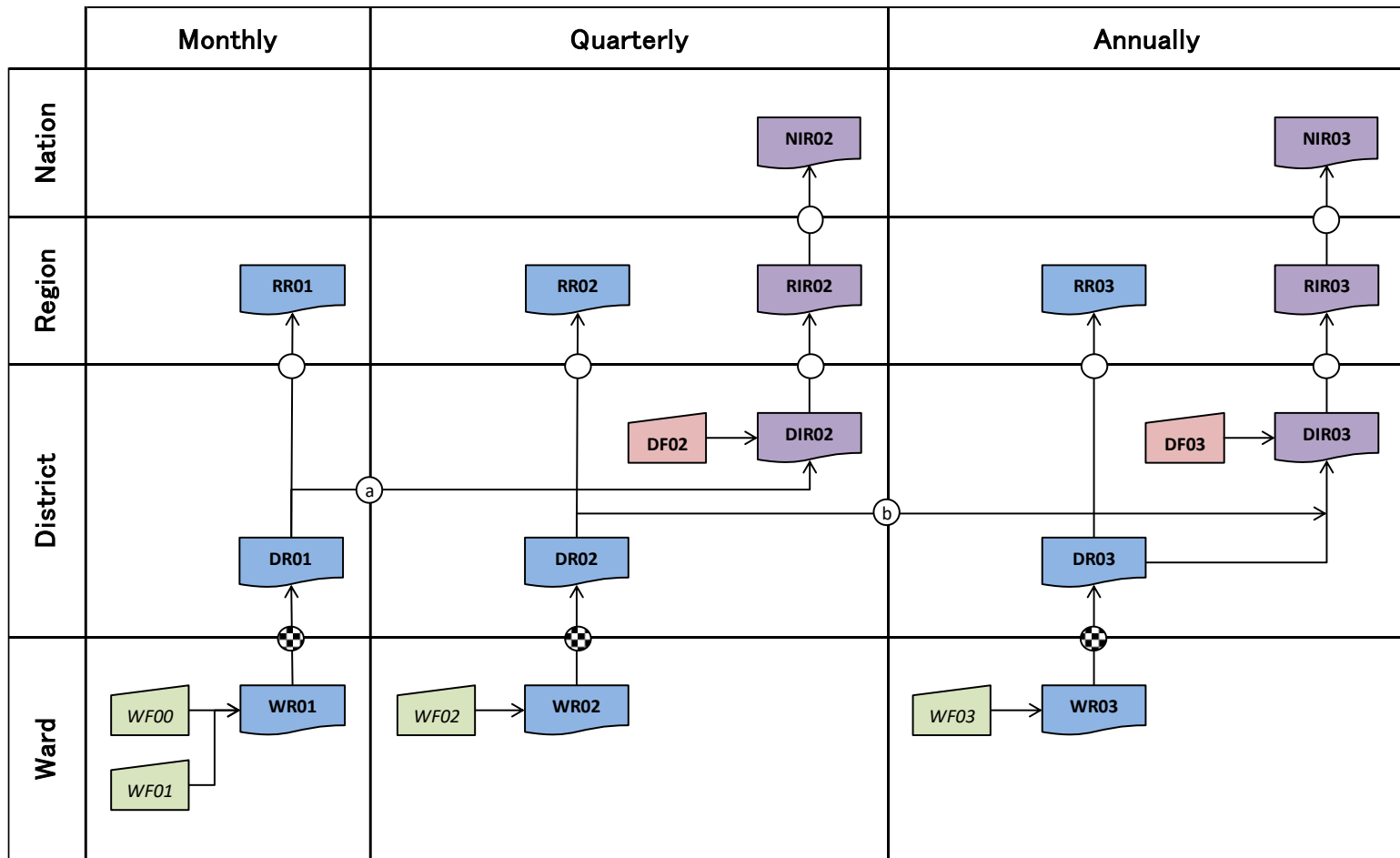
## 2. Report Creation / Uncreation / Cancel





RR01/02/03, DIR/RIR/NIR02/03 will be created automatically in case necessary condition is met and you do not need to trigger to create the reports.

Report	Necessary condition to create
RR01/RR02/RR03	Creation of DR01/DR02/DR03 respectively for all districts under the region.
DIR02	DF02 submission and DR01 creation for the district
DIR03	DF03 submission and creation of DR2 for 4 quarters for the fiscal year and DR03 for the district
RIR02/03	Creation of DIR02/DIR03 for all districts respectively under the region.
NIR02/03	Creation of RIR02/RIR03 for all regions respectively.

# 2. Report Creation / Uncreation / Cancel

Report Creation Flow (Data source of each report)



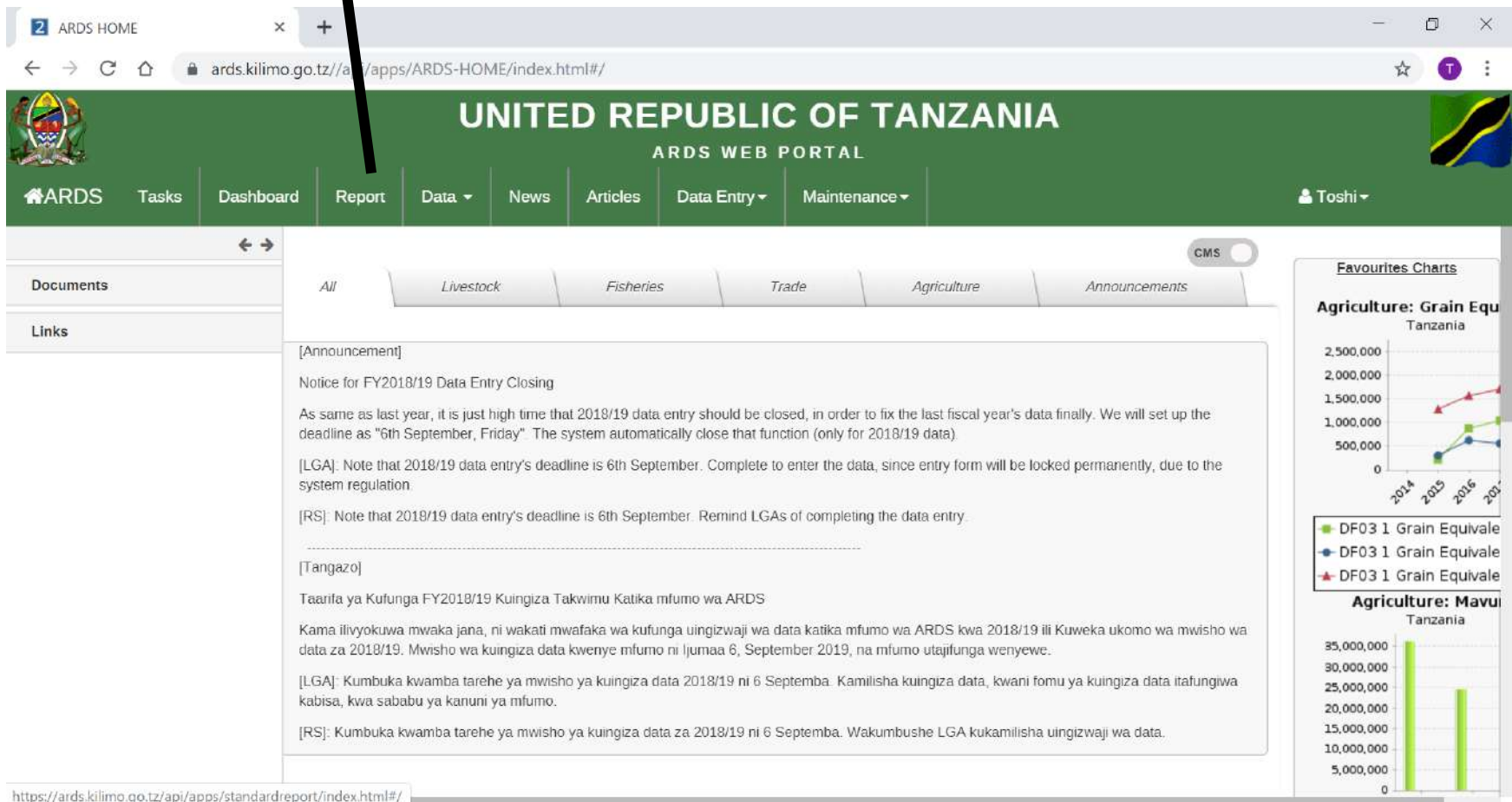
- Notes:
-  Aggregation over area: wards to a district with estimation factors for missing data.
  -  Aggregation over area: districts to region and regions to national.
  -  Aggregation over time: 3 months aggregated to a quarter.
  -  Aggregation over time: 4 quarters aggregated to a year.



# 2. Report Creation / Uncreation / Cancel

## 2.1 Report Creation

① Click Report



The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', a search icon, and the URL 'ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html/'. The main header features the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. Below the header is a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The 'Report' item is highlighted with a red arrow. The main content area displays a notice for FY2018/19 Data Entry Closing, with sections for [Announcement], [Tangazo], and [RS]. On the right side, there are two charts: 'Favourites Charts' and 'Agriculture: Grain Equ Tanzania' (line chart) and 'Agriculture: Mavu Tanzania' (bar chart).

Documents

Links

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation.

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumatano 6, Septemba 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani tomu ya kuingiza data itatungwa kabisa, kwa sababu ya kanuni ya mfumo.

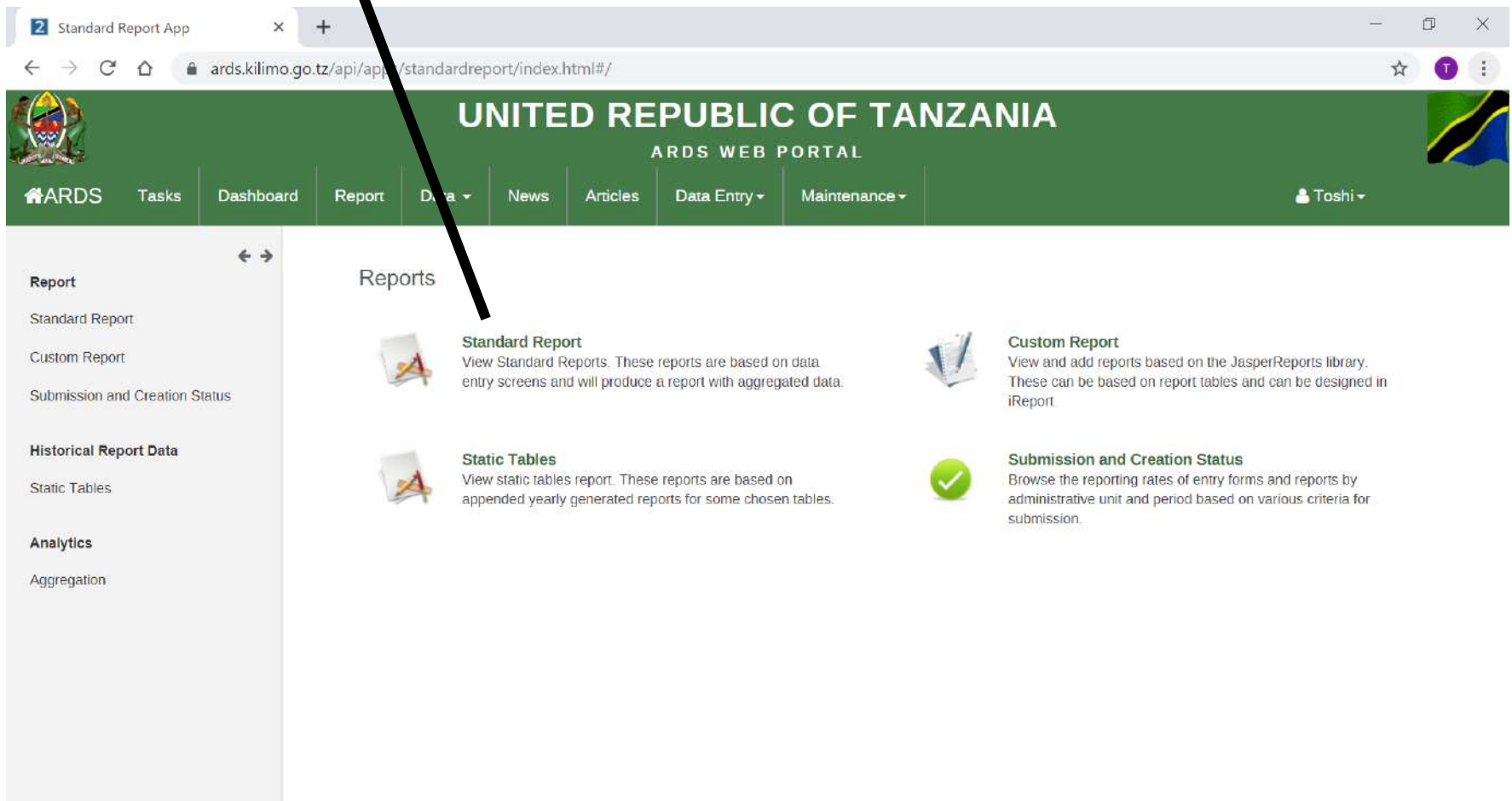
[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

https://ards.kilimo.go.tz/api/apps/standardreport/index.html#

# 2. Report Creation / Uncreation /Cancel

## 2.1 Report Creation

② Click Standard Report



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/app/standardreport/index.html#`. The header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The left sidebar contains a "Report" section with sub-items: "Standard Report", "Custom Report", and "Submission and Creation Status". The main content area, titled "Reports", lists four options: "Standard Report" (with a bar chart icon), "Static Tables" (with a document icon), "Custom Report" (with a document icon), and "Submission and Creation Status" (with a green checkmark icon). A black arrow points from the text "Click Standard Report" to the "Standard Report" option in the main content area.

# 2. Report Creation / Uncreation / Cancel

## 2.1 Report Creation

The screenshot displays the ARDS Web Portal interface for report creation. The page title is "Standard Report". The main content area contains the following form elements:

- Report:** A dropdown menu with "District/Region Monthly Report (DR01/RR01)" selected.
- Report Period:** A dropdown menu with "July 2019" selected, and buttons for "Prev year", "Next year", and "Previous years reports".
- Report Administrative Units:** A list of units with checkboxes: Shinyanga, Simiyu, Bariadi Mjini, Bariadi Vijjini, Busega, and Itilima. The "Itilima" unit is highlighted in blue.
- Get Report:** A button at the bottom of the form.

Annotations with numbered circles and arrows point to the following elements:

- ③ Select Report (points to the Report dropdown)
- ④ Select Period (points to the Report Period dropdown)
- ⑤ Select Administrative Unit (points to the Itilima checkbox)
- ⑥ Get Report (points to the Get Report button)

# 2. Report Creation / Uncreation / Cancel

## 2.1 Report Creation

Report Creation screen appears if the report is not created yet.

Standard Report App

ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/niaN3c63ebp/period/201907

**UNITED REPUBLIC OF TANZANIA**  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Report

- Standard Report
- Custom Report
- Submission and Creation Status
- Historical Report Data
- Static Tables
- Analytics
- Aggregation

District/Region Monthly Report (DR01/RR01)  
Ililima  
July 2019

Change Criteria Create Report Preview

**7 Create Report**

You can create other reports after clicking this button

Create All District Reports

District/Region Monthly Report (DR01/RR01) Report Status

Administrative Unit	Period	Report Status
Ililima		

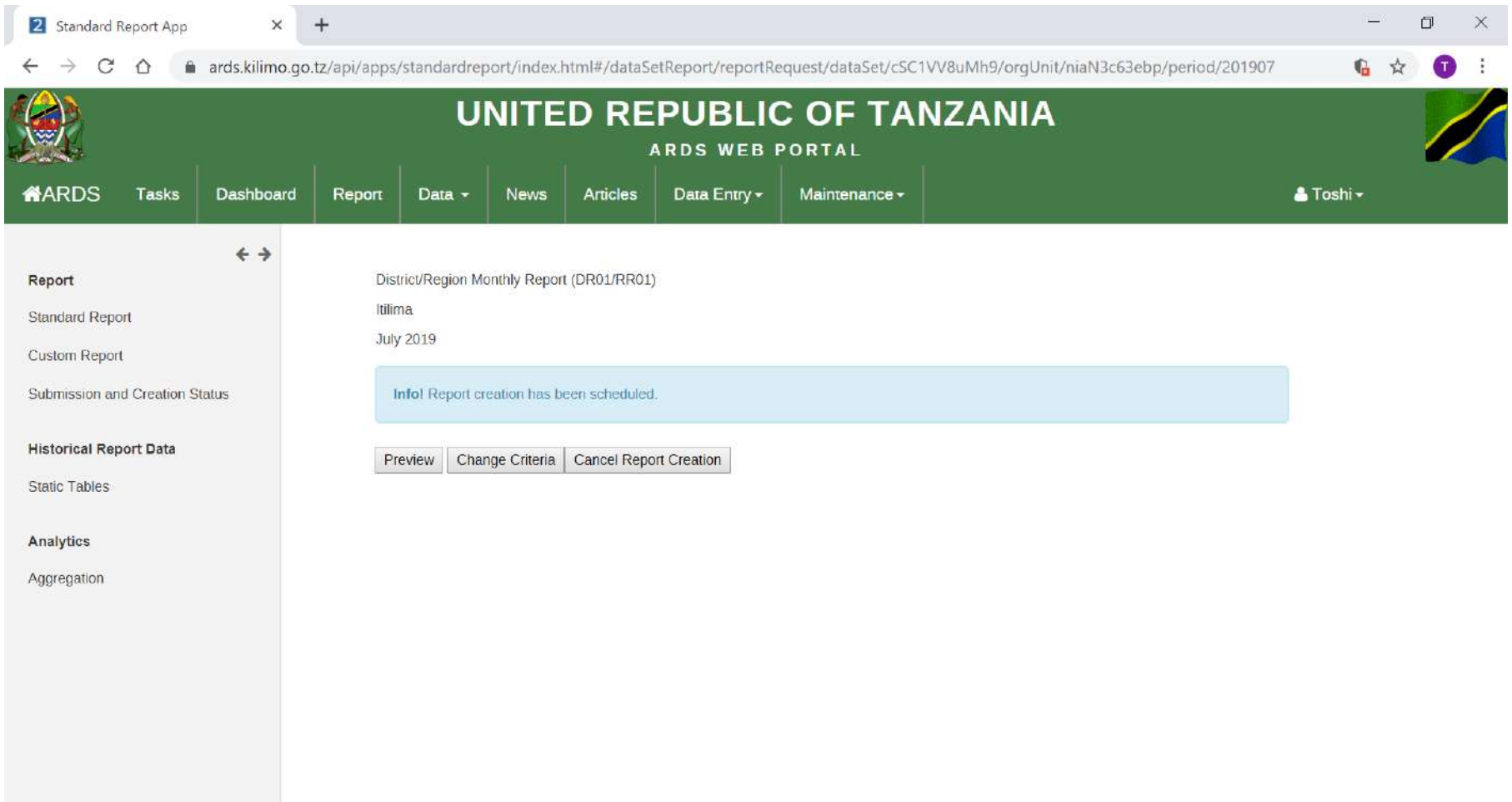
Ward Monthly Entry Form (WF01) Completeness Status

Ward Total	Number of Periods	Ward For All Periods Completed	Ward For All Periods Not Completed	Completion Percentage
22	1	9	13	40.91%

# 2. Report Creation / Uncreation / Cancel

## 2.1 Report Creation

Report Creation is scheduled. The report will be **created in the midnight** and you will see the report in the next day



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/niaN3c63ebp/period/201907`. The page header is green and features the United Republic of Tanzania coat of arms on the left, the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL" in the center, and the Tanzanian flag on the right. A navigation menu below the header includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A user profile "Toshi" is visible in the top right.

The main content area is divided into a left sidebar and a main panel. The sidebar has a "Report" section with sub-items: "Standard Report", "Custom Report", "Submission and Creation Status", "Historical Report Data", "Static Tables", "Analytics", and "Aggregation". The main panel displays the following information:

- District/Region Monthly Report (DR01/RR01)
- Itilima
- July 2019
- A light blue notification box: "Info! Report creation has been scheduled."
- Three buttons: "Preview", "Change Criteria", and "Cancel Report Creation".

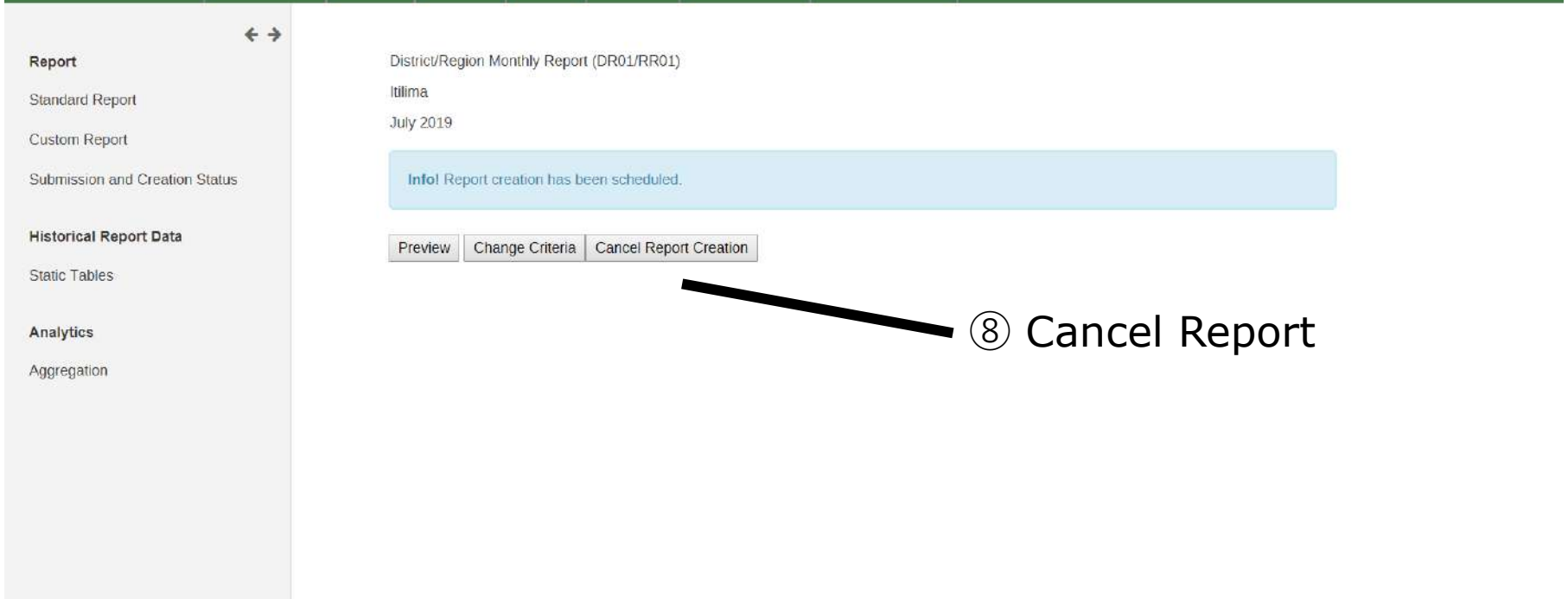
# 2. Report Creation / Uncreation /Cancel

## 2.2 Report Cancel

You can **cancel** report creation. You can do this later after repeating ①~⑥



The screenshot shows the ARDS Web Portal interface. The browser address bar displays the URL: `ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/niaN3c63ebp/period/201907`. The page header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right corner.



The screenshot shows the report creation confirmation screen. The page title is "District/Region Monthly Report (DR01/RR01)". The location is "Itilima" and the period is "July 2019". A blue information box states: "Info! Report creation has been scheduled." Below this, there are three buttons: "Preview", "Change Criteria", and "Cancel Report Creation". A black arrow points from the "Cancel Report Creation" button to the text "⑧ Cancel Report".



# 2. Report Creation / Uncreation / Cancel

## 2.3 Uncreation Report

To modify the data entry forms after the report creation, you need to **uncreate report** and uncomplete the data entry forms.

The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A user profile "Toshi" is visible in the top right.

The main content area shows a report titled "District/Region Monthly Report (DR01/RR01)" for "Temeke" in "July 2019". Below the report title are several buttons: "Change Criteria", "Print", "Download Excel", "Undo Report Creation", and "Approve". A black arrow points to the "Undo Report Creation" button, which is circled with a "9" and labeled "Uncreate Report".

Below the buttons is a section for "Regional Officers Comments" containing a text box with the following text: "Mtakwimu wa ARDS - Kilimo huingiza malengo ya uzalishaji na hii itaathiri taarifa za miezi itakayofuata. Kwa kuwa katika Halmashauri ya Manispaa ya Temeke kuna machinjio ,vipenegele. Na 4,5 (a) na 5 (b) 6.2 (a) na (b) Vinatakiwa vijazwe. Hakuna takwimu za ukusanyaji wa mayai."

Below the comments is a blue box indicating "Last Updated on Aug 29, 2019 by Wilfred Kawishe".

At the bottom, there is a section for "District Officers Comments" with a text box labeled "Write Your Comment Here".

# **2. Report Creation / Uncreation /Cancel**

## **2.3 Uncreation Report**

If DR01/02/03 is uncreated, DIR/RIR/NIR02/03 which depends on the DR01/02/03 also is uncreated. For example, when DR01 is uncreated, RR01 for the region which includes the district for the DR01, DIR02 for the district whose period includes the month for the DR01, and the RIR02/NIR02 above the DIR02 also are uncreated. Similarly when DR02 is created, the related RR02 and DIR/RIR/NIR03 are uncreated. When DR03 is uncreated, the related RR03 and DIR/RIR/NIR03 is uncreated.



# 2. Report Creation / Uncreation / Cancel

## 2.4 DR01 creation dependency

DR01 creation depends on the past months DR01 creation for the fiscal year for the district. When create button is pressed, **the past months DR01 also are scheduled** to be created.

ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Report

- Standard Report
- Custom Report
- Submission and Creation Status

Historical Report Data

- Static Tables

Analytics

- Aggregation

District/Region Monthly Report (DR01/RR01)  
Dodoma Mjini  
June 2019

Change Criteria Create Report Preview

Create Report

Create All District Reports

District/Region Monthly Report (DR01/RR01) Report Status

Administrative Unit	Period	Report Status
Dodoma Mjini	May 2019	Not Created <span>Create</span>
	April 2019	Created
	March 2019	Created
	February 2019	Created
	January 2019	Created
	December 2018	Created

Not only June, May DR01 also is scheduled to be created.

# **2. Report Creation / Uncreation / Cancel**

## **2.5 Preview Report**

Only after the standard report is created, you can refer official standard report after the data entry is finished. However, you can view preview report even if the data entry is not completed and the official report is not created. This is tentative report by the data submitted by then.

# 2. Report Creation / Uncreation / Cancel

## 2.5 Preview Report

Screen when the standard report is not created yet

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user 'Toshi' is logged in. The main content area displays the 'District/Region Monthly Report (DR01/RR01)' for 'Ililima' in 'July 2019'. There are three buttons: 'Change Criteria', 'Create Report', and 'Preview'. The 'Preview' button is circled with a '10' and an arrow points to it from the text '10 Preview Report'. Below this, there is a 'Create All District Reports' button. The 'District/Region Monthly Report (DR01/RR01) Report Status' table shows the report status for Ililima. The 'Ward Monthly Entry Form (WF01) Completeness Status' table shows the completion percentage for 22 wards, with a 40.91% completion rate.

Standard Report App

ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/niaN3c63ebp/period/201907

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Toshi

Report

District/Region Monthly Report (DR01/RR01)  
Ililima  
July 2019

Change Criteria Create Report Preview

Create All District Reports

District/Region Monthly Report (DR01/RR01) Report Status

Administrative Unit	Period	Report Status
Ililima		

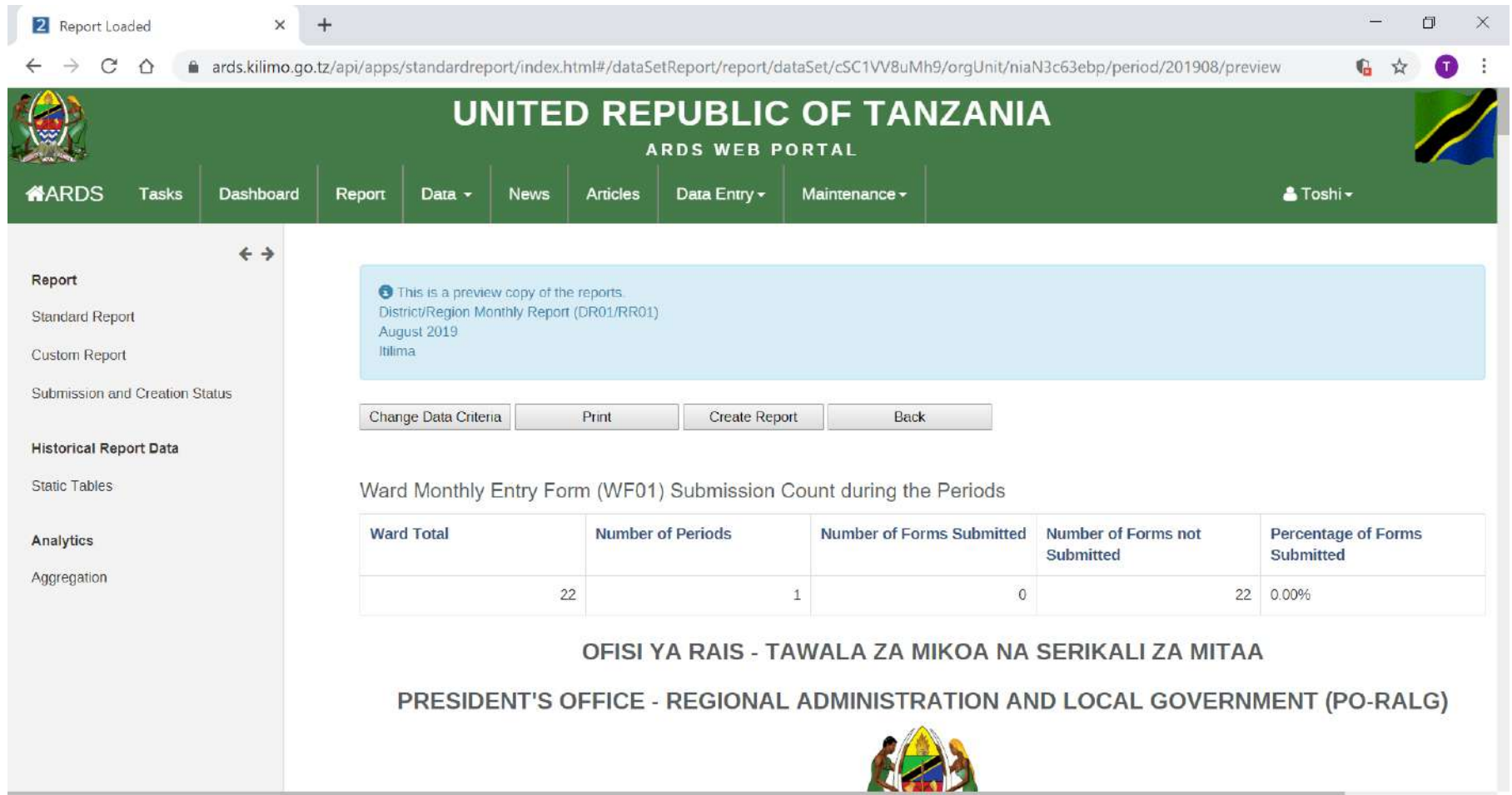
Ward Monthly Entry Form (WF01) Completeness Status

Ward Total	Number of Periods	Ward For All Periods Completed	Ward For All Periods Not Completed	Completion Percentage
22	1	9	13	40.91%

# 2. Report Creation / Uncreation / Cancel

## 2.5 Preview Report

Preview Report is shown



The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user "Toshi" is logged in. The main content area shows a preview report for "District/Region Monthly Report (DR01/RR01) August 2019 Itilima". A table titled "Ward Monthly Entry Form (WF01) Submission Count during the Periods" is displayed with the following data:

Ward Total	Number of Periods	Number of Forms Submitted	Number of Forms not Submitted	Percentage of Forms Submitted
22	1	0	22	0.00%

Below the table, the text "OFISI YA RAIS - TAWALA ZA MIKOA NA SERIKALI ZA MITAA" and "PRESIDENT'S OFFICE - REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT (PO-RALG)" is visible, along with the national emblem.

# **3. Report Approval**


**For District User, Administrator**

# 3. Report Approval

Report approval function is for region users to approve created district standard report. After it is approved, district users can not uncreate the district standard report until region users unapproved it. Also, "Regional Officers Comments" and "District Officers Comments" also are locked until the uncreation.

# 3. Report Approval

① Click Report




The screenshot shows the ARDS Web Portal interface. The header is green with the text 'UNITED REPUBLIC OF TANZANIA' and 'ARDS WEB PORTAL'. The navigation menu includes 'ARDS', 'Tasks', 'Report', 'Data', 'News', 'Articles', and 'Data Entry'. The 'Report' menu item is highlighted with a black arrow. Below the header, there is a notification box with the text: 'Successfully finished: undoing and recreating reports (but you can continue entering data) Recreating reports were successful. Thank you for your cooperation TWG'. Below the notification box, there is a 'Reload tasks' button. The main content area shows a table with columns: 'Notification', 'LGA', 'Deadline', and 'Action'. The table contains two rows of data:

Notification	LGA	Deadline	Action
DR01 August 2019: 3 out of 7 districts created (43%) 0 approved (0%)			
> DR01 for Arusha Mjini	15 Sep	25 Sep	Not Available
> DR01 for Arusha Vijijini	15 Sep	25 Sep	Not Available

The URL in the browser address bar is <https://ards.kilimo.go.tz/api/apps/Task-list/index.html#/>. The URL in the footer is <https://ards.kilimo.go.tz/api/apps/standardreport/index.html>.

# 3. Report Approval

## ② Click Standard Report



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The main navigation menu includes "ARDS", "Tasks", "Report", "Data", "News", "Articles", and "Data Entry". A user profile icon labeled "ARR" is visible in the top right corner. The left sidebar contains a "Report" section with a sub-menu: "Standard Report", "Custom Report", and "Submission and Creation Status". Below this is a "Historical Report Data" section with "Static Tables". The main content area, titled "Reports", lists four options: "Standard Report" (with a document icon), "Static Tables" (with a document icon), "Custom Report" (with a document icon), and "Submission and Creation Status" (with a green checkmark icon). A black arrow points from the text "Click Standard Report" to the "Standard Report" option in the main content area.



# 3. Report Approval

The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Report", "Data", "News", "Articles", "Data Entry", and "ARR". A sidebar on the left lists "Report", "Standard Report", "Custom Report", "Submission and Creation Status", "Historical Report Data", and "Static Tables".

The main content area shows the "Standard Report" form with the following fields and annotations:

- Report:** A dropdown menu showing "District/Region Monthly Report (DR01/RR01)". An annotation "③ Select Report" points to this field.
- Report Period:** A dropdown menu showing "August 2019", with "Prev year", "Next year", and "Previous years reports" buttons. An annotation "④ Select Period" points to this field.
- Report Administrative Units:** A list of units with expandable icons: "Arusha Vijijini", "Karatu", "Longido", "Meru" (highlighted in blue), "Monduli", and "Ngorongoro". An annotation "⑤ Select Administrative Unit" points to the "Meru" unit.
- Buttons:** "Get Report" and "Cancel" buttons at the bottom. An annotation "⑥ Get Report" points to the "Get Report" button.

# 3. Report Approval

The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Report", "Data", "News", "Articles", and "Data Entry". The main content area shows a report titled "District/Region Monthly Report (DR01/RR01)" for "Meru" in "August 2019". Below the report title are buttons for "Change Criteria", "Print", "Download Excel", "Undo Report Creation", and "Approve". A circled number "7" is placed above the "Approve" button, with an arrow pointing to it. Below the buttons are two text input fields for "Regional Officers Comments" and "District Officers Comments", each with a placeholder "Write Your Comment Here". A green "Edit" button is located at the bottom left of the "District Officers Comments" field. A large text box on the right side of the screen provides instructions: "If Region Users want to comment this district standard report before approval click 'Edit' and put comments in 'Regional Officers Comments'".

Standard Report App

ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/oKwvNLNTcox/period/201908

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Report Data News Articles Data Entry ARR

Report

Standard Report

Custom Report

Submission and Creation Status

Historical Report Data

Static Tables

District/Region Monthly Report (DR01/RR01)

Meru

August 2019

Change Criteria Print Download Excel Undo Report Creation Approve

Regional Officers Comments

Write Your Comment Here

District Officers Comments

Write Your Comment Here

Edit

⑦ Approve

If Region Users want to comment this district standard report before approval click "Edit" and put comments in "Regional Officers Comments".

# **4. Report**

**For All Users**

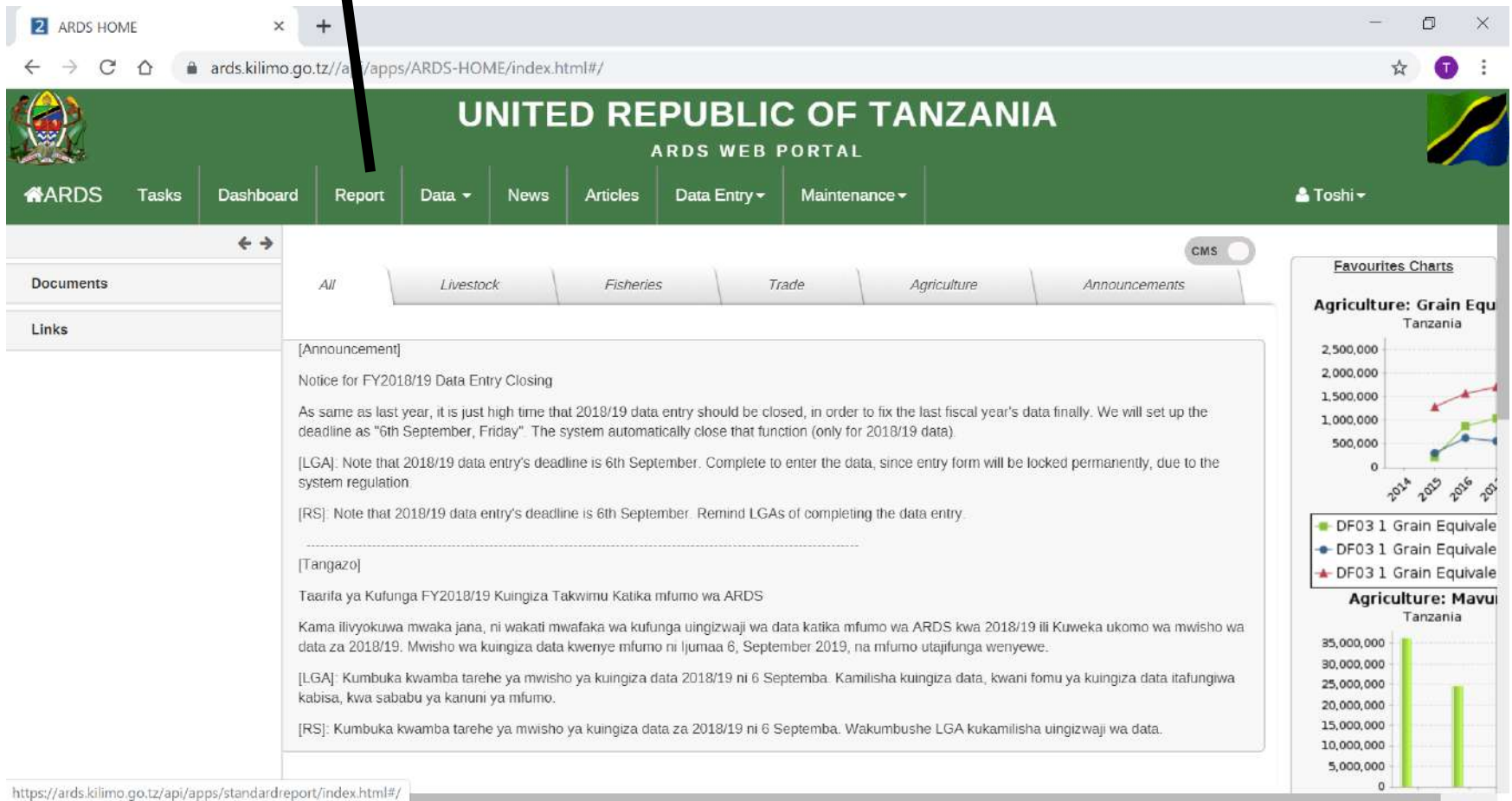
# 4. Report

Report function is to show created standard report to all users. This interface is the same as that of Report Creation / Uncreation / Cancel.

# 4. Report

## 4.1 View Report

① Click Report



The screenshot shows the ARDS Web Portal interface. The top navigation bar is green and contains the following items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A red arrow points to the 'Report' menu item. Below the navigation bar, there is a sidebar with 'Documents' and 'Links' sections. The main content area displays an announcement titled 'Notice for FY2018/19 Data Entry Closing'. To the right, there are two charts: 'Agriculture: Grain Equ Tanzania' and 'Agriculture: Mavu Tanzania'.

**UNITED REPUBLIC OF TANZANIA**  
ARDS WEB PORTAL

ARDS Tasks Dashboard **Report** Data News Articles Data Entry Maintenance Toshi

Documents Links

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data)

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili Kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Jumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

**Favourites Charts**

**Agriculture: Grain Equ Tanzania**

Year	DF03 1 Grain Equivale	DF03 1 Grain Equivale	DF03 1 Grain Equivale
2014	~200,000	~500,000	~1,200,000
2015	~500,000	~800,000	~1,500,000
2016	~800,000	~1,000,000	~1,800,000
2017	~1,000,000	~1,200,000	~2,000,000

**Agriculture: Mavu Tanzania**

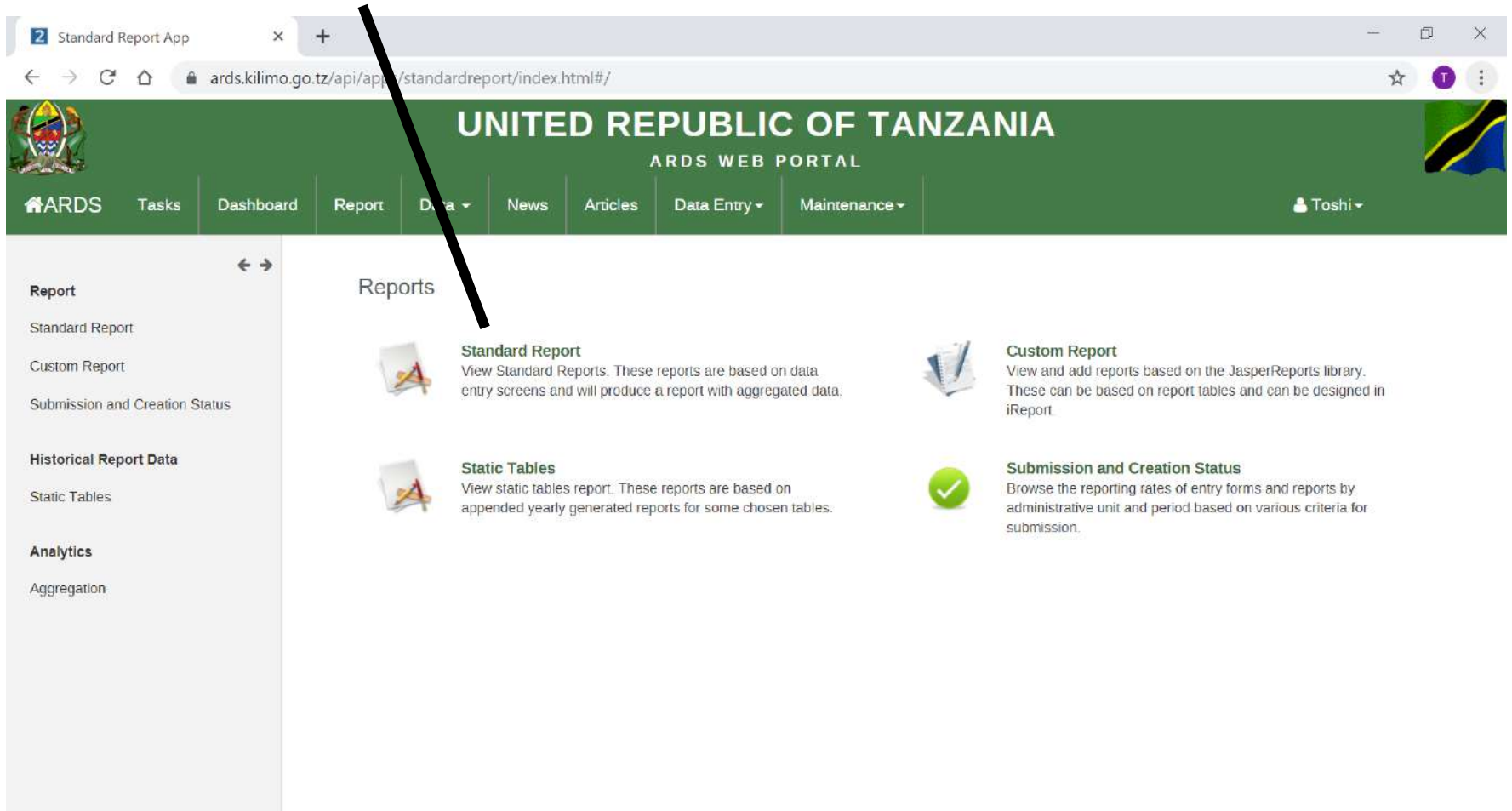
Year	Mavu
2014	~35,000,000
2016	~25,000,000

https://ards.kilimo.go.tz/api/apps/standardreport/index.html#/  
https://ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html#/

# 4. Report

## 4.1 View Report

② Click Standard Report



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/app/standardreport/index.html#`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The main content area is titled "Reports" and contains three cards: "Standard Report" (with a bar chart icon), "Static Tables" (with a document icon), and "Custom Report" (with a document icon). The "Standard Report" card is highlighted with a black arrow pointing to it from the text above. The left sidebar menu is expanded to show "Report" with sub-items: "Standard Report", "Custom Report", and "Submission and Creation Status". Under "Historical Report Data", there is "Static Tables". Under "Analytics", there is "Aggregation".

# 4. Report

## 4.1 View Report

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. A user profile 'Toshi' is visible in the top right.

The main content area displays the 'Standard Report' form with the following fields and annotations:

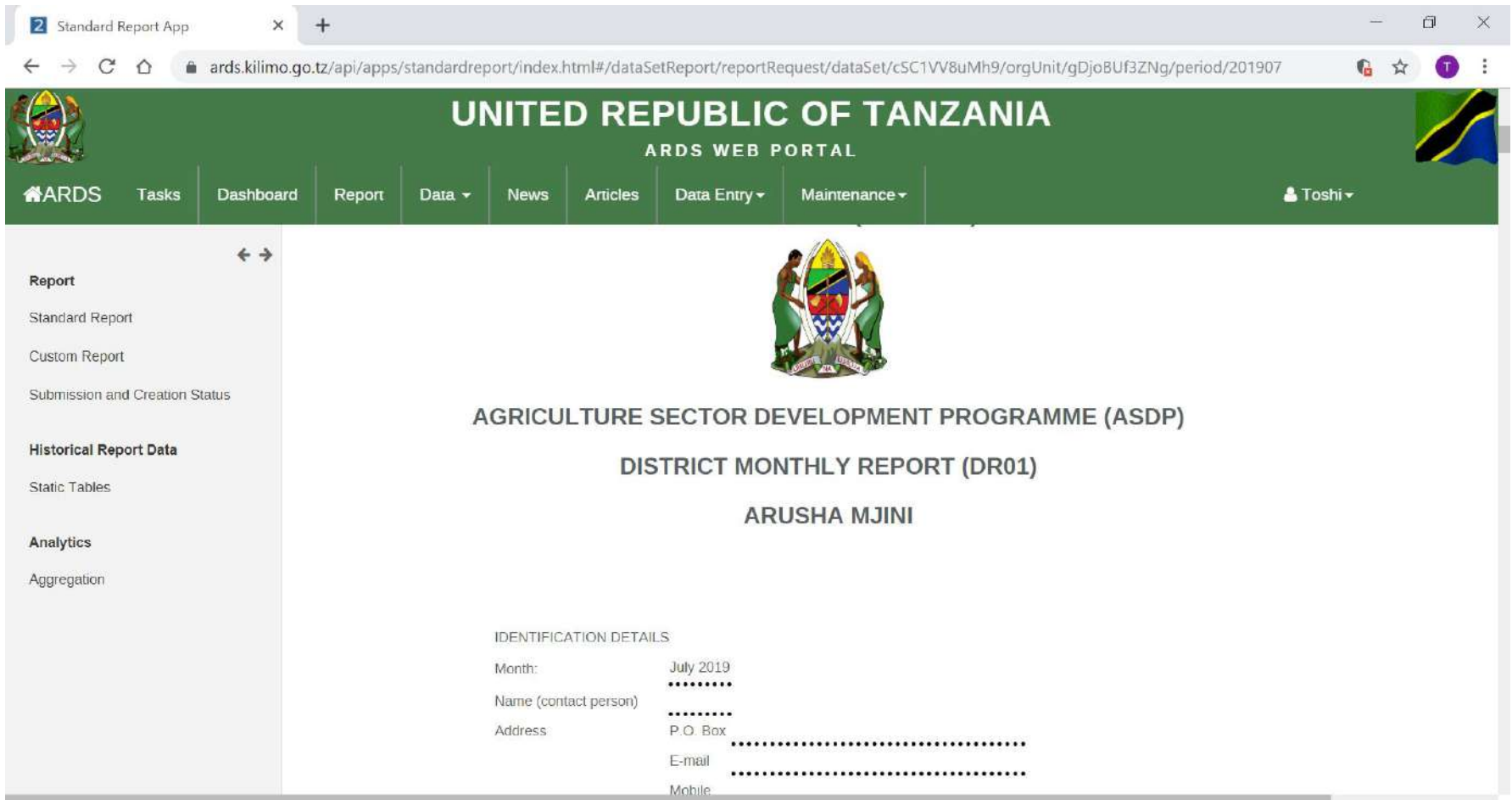
- Report:** A dropdown menu showing 'District/Region Monthly Report (DR01/RR01)' with a black line pointing to it and the annotation '③ Select Report'.
- Report Period:** A dropdown menu showing 'July 2019' with buttons for 'Prev year', 'Next year', and 'Previous years reports'. A black line points to the dropdown and the annotation '④ Select Period'.
- Report Administrative Units:** A list of units with checkboxes: Tanzania, Arusha, Arusha Mjini (highlighted in blue), Arusha Vijijini, Karatu, and Longido. A black line points to 'Arusha Mjini' and the annotation '⑤ Select Administrative Unit'.
- Get Report:** A button at the bottom of the form with a black line pointing to it and the annotation '⑥ Get Report'.

A sidebar on the left contains the following menu items: Report, Standard Report, Custom Report, Submission and Creation Status, Historical Report Data, Static Tables, Analytics, and Aggregation.

# 4. Report

## 4.1 View Report

The selected Report appears if it is created.



The screenshot displays a web browser window with the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/c5C1VV8uMh9/orgUnit/gDjo8UF3ZNg/period/201907`. The page header is green and features the United Republic of Tanzania coat of arms on the left, the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL" in the center, and a Tanzanian flag on the right. A navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A user profile "Toshi" is visible in the top right.

The main content area shows the report title: "AGRICULTURE SECTOR DEVELOPMENT PROGRAMME (ASDP) DISTRICT MONTHLY REPORT (DR01) ARUSHA MJINI". Above the title is the national coat of arms. Below the title is a section for "IDENTIFICATION DETAILS" with the following information:

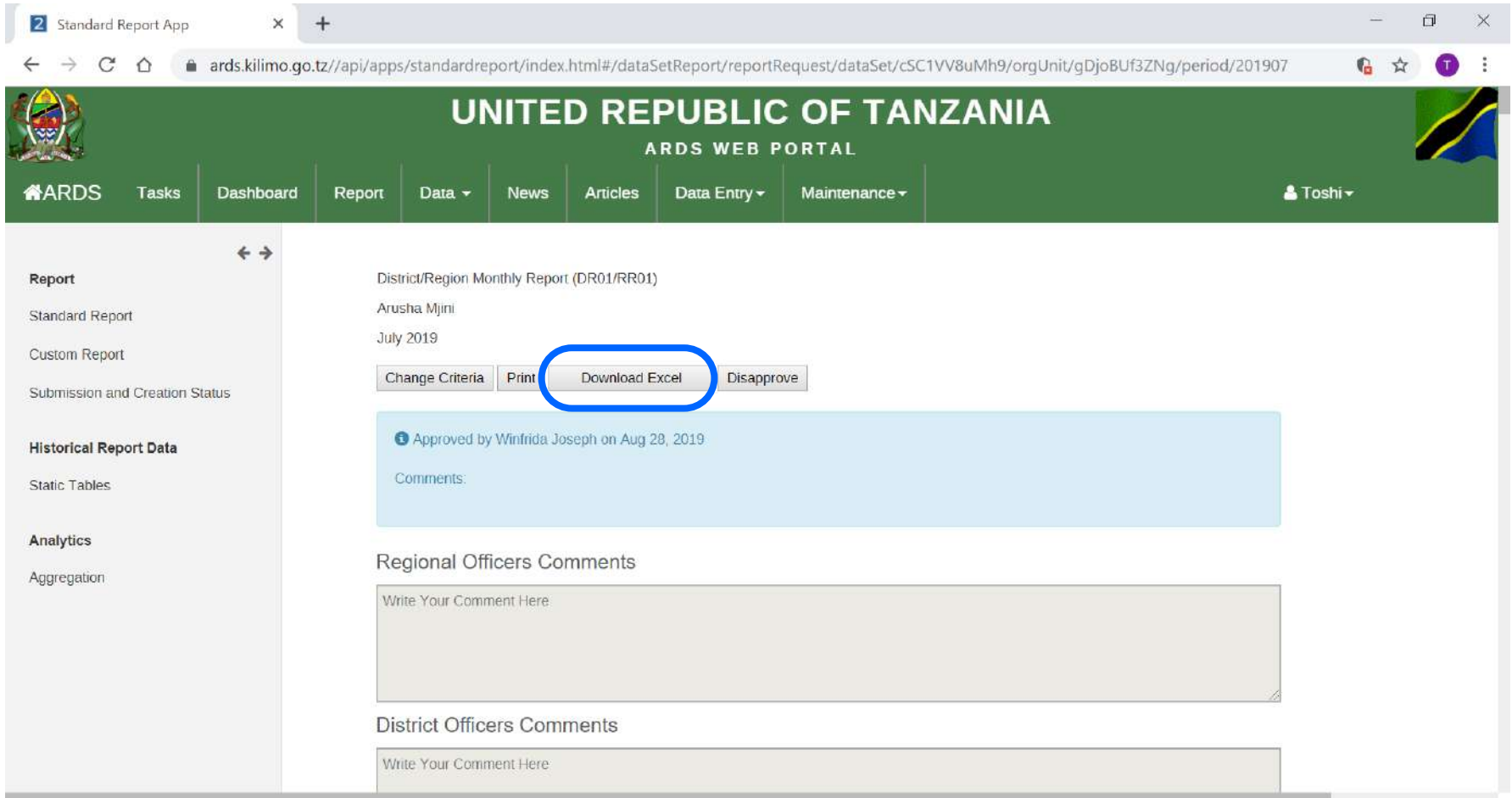
Month:	July 2019
Name (contact person)	.....
Address	P.O. Box .....
	E-mail .....
	Mobile .....



# 4. Report

## 4.1 View Report

The Report can be downloaded in Excel.



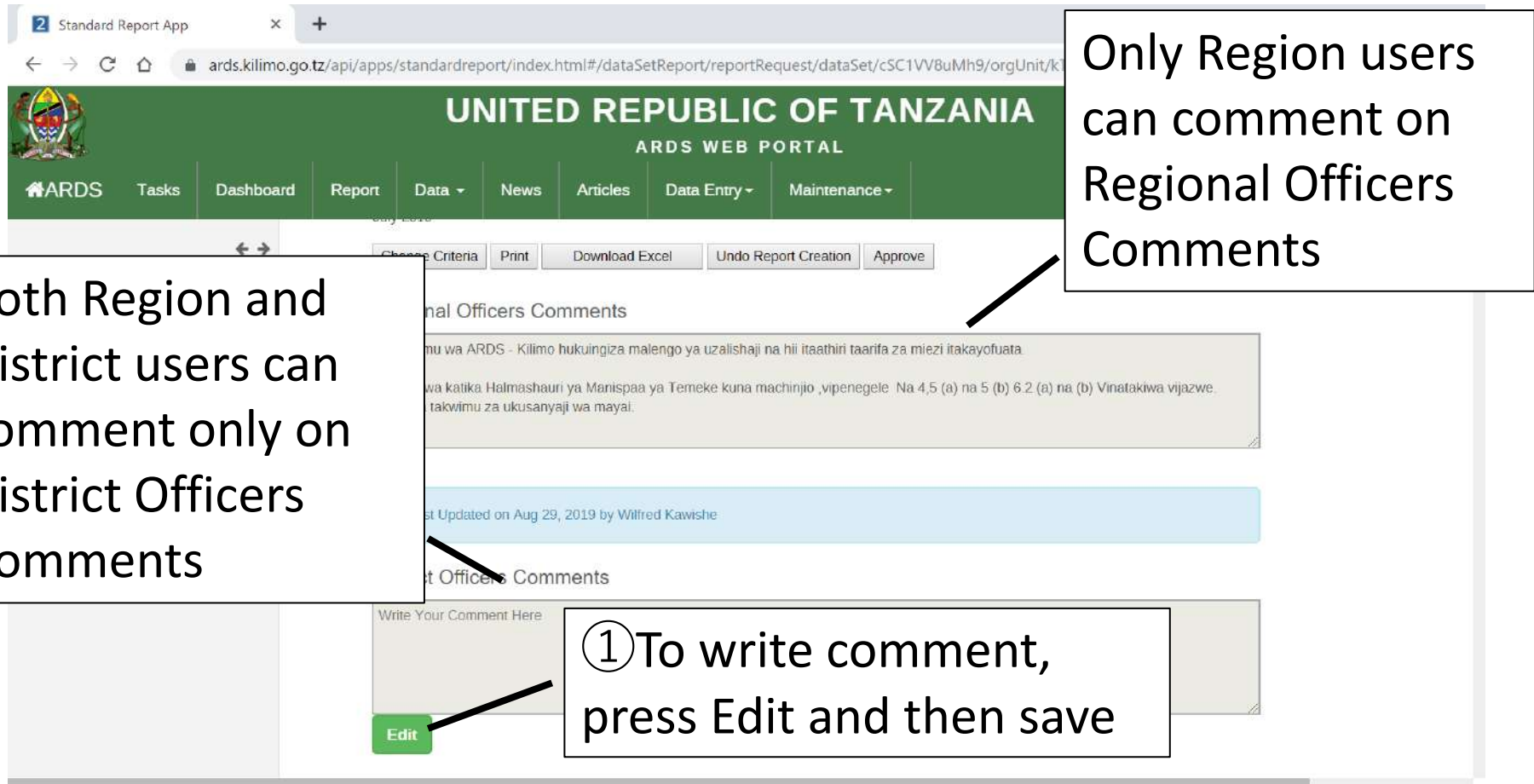
The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL: `ards.kilimo.go.tz/api/apps/standardreport/index.html#/dataSetReport/reportRequest/dataSet/cSC1VV8uMh9/orgUnit/gDjoBUf3ZNg/period/201907`. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The main content area displays the "District/Region Monthly Report (DR01/RR01)" for "Arusha Mjini" in "July 2019". Below the report title, there are four buttons: "Change Criteria", "Print", "Download Excel", and "Disapprove". The "Download Excel" button is highlighted with a blue circle.

Below the buttons, a light blue box contains the text: "Approved by Winfrida Joseph on Aug 28, 2019". Below this, there is a "Comments:" section. The "Regional Officers Comments" section has a text area with the placeholder "Write Your Comment Here". The "District Officers Comments" section also has a text area with the placeholder "Write Your Comment Here".

# 4. Report

## 4.2 Comments by Region and District Users



The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". Below the menu, there are buttons for "Change Criteria", "Print", "Download Excel", "Undo Report Creation", and "Approve". The main content area shows a section titled "Regional Officers Comments" with a text box containing a comment in Swahili. Below the comment is a blue bar indicating it was updated on Aug 29, 2019 by Wilfred Kawishe. At the bottom, there is a "Write Your Comment Here" text area and a green "Edit" button.

Only Region users can comment on Regional Officers Comments

Both Region and District users can comment only on District Officers Comments

① To write comment, press Edit and then save

# 4. Report

## 4.3 Data Points

Ward Monthly Entry Form (WF01) Completeness Status

Ward Total	Number of Periods	Ward For All Periods Completed	Ward For All Periods Not Completed	Completion Percentage
3	3	4	5	44.44%

The number of wards in the district

3 months in a quarterly report DIR02

$3 \times 3 = 9$  ward entry forms, 4 are submitted, 5 are not

e.g. DIR02, Jul-Sept 2017, Bird District (3 wards under the district)

- Data points shows **Data entry forms count** (Ward For All Periods Completed)
- Able to **see** how many WF01s are submitted in a report. For increase data accountability.

# **5. Lock / Unlock Data Entry / Report**

**For District and Region Users**

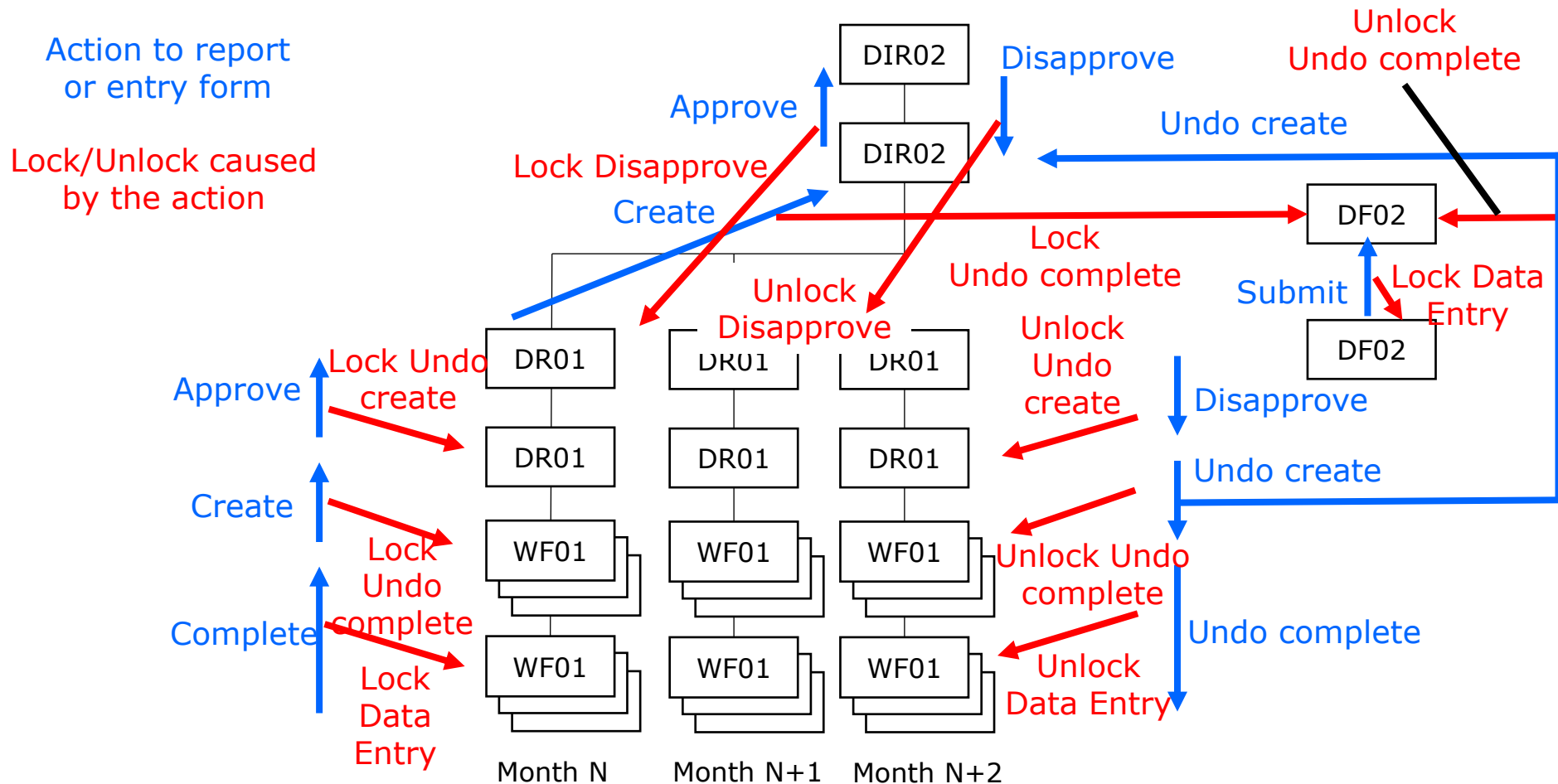
# 5. Lock/Unlock Data Entry/Report

After ward data entry forms are submitted, it will be locked until undoing submission. After that, the district report consisting the data entry form is created, undoing submission also is locked until uncreating report. After the district report is approved by region user, report uncreation is locked until unapproving the district report. Furthermore, the district integrated report is created and approved by the region user, unapproving the district report also will be locked until unapproving the district integrated report. This mechanism is complex and will be explained using diagram by separating DIR02 group and DIR03 group.

# 5. Lock/Unlock Data Entry/Report

## 5.1 DIR02 Group

To undo create DR01 or undo complete WF01/DF02, pay attention to the approval and creation status of the higher reports.



# 5. Lock/Unlock Data Entry/Report

## 5.1 DIR02 Group

Example [Restart Data Entry for WF01](#)

Condition: DIR02 including WF01 Approved  
DR01 including WF01 Approved  
WF01 Complete

①	DIR02	→	Disapprove
②	DR01	→	Disapprove
③	DR01	→	Undo Create
④	WF01	→	Undo Complete



[Restart Data Entry for WF01 is Allowed](#)

# 5. Lock/Unlock Data Entry/Report

## 5.1 DIR02 Group

Example [Restart Data Entry for DF02](#)

Condition: DIR02 including DF02 Approved  
One of the DR01 Approved  
DF02 Complete

① DIR02	→	Disapprove
② DR01 above	→	Disapprove
③ DR01 above	→	Undo Create



[DIR02 is Uncreated Automatically](#)



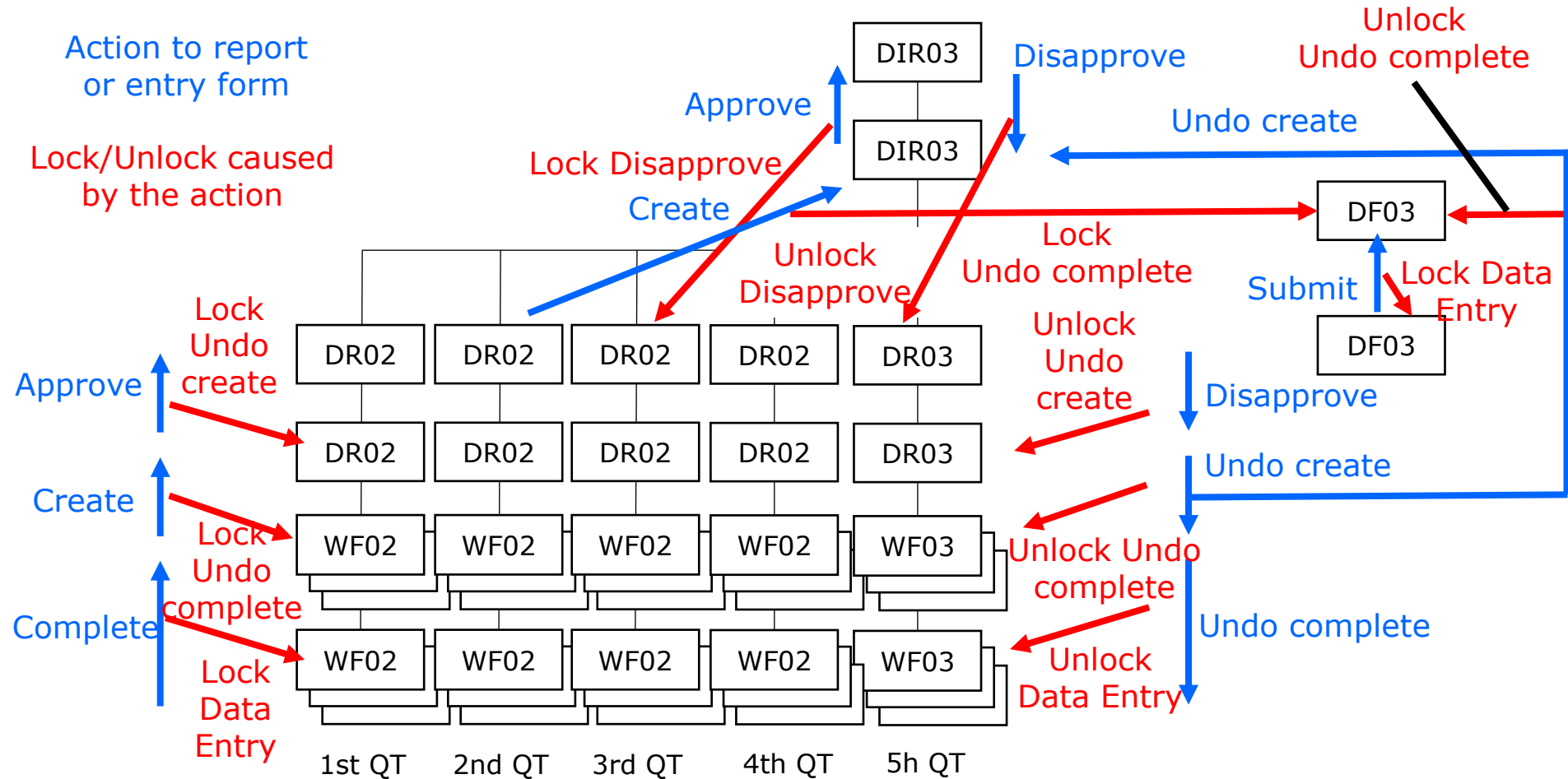
[Restart Data Entry for DF02 is Allowed](#)



# 5. Lock/Unlock Data Entry/Report

## 5.2 DIR03 Group

To undo create DR02/03 or undo complete WF02/WF03/DF03, pay attention to the approval and creation status of the higher reports.



# 5. Lock/Unlock Data Entry/Report

## 5.2 DIR03 Group

Example Restart Data Entry for WF02(WF03)

Condition: DIR03 including WF02(WF03) Approved  
DR02(DR03) including WF02(WF03) Approved  
WF02(WF03) Complete

① DIR03	→	Disapprove
② DR02 (DR03)	→	Disapprove
③ DR02 (DR03)	→	Undo Create
④ WF02(WF03)	→	Undo Complete



Restart Data Entry for WF02(WF03) is Allowed

# 5. Lock/Unlock Data Entry/Report

## 5.2 DIR03 Group

Example [Restart Data Entry for DF03](#)

Condition: DIR03 including DF03 Approved  
One of the DR02 or DR03 Approved  
DF03 Complete

① DIR03	→	Disapprove
② DR02 or DR03 above	→	Disapprove
③ DR02 or DR03 above	→	Undo Create



[DIR03 is Uncreated Automatically](#)



[Restart Data Entry for DF02 is Allowed](#)

# **6. Pivot Table**

**For All Users**

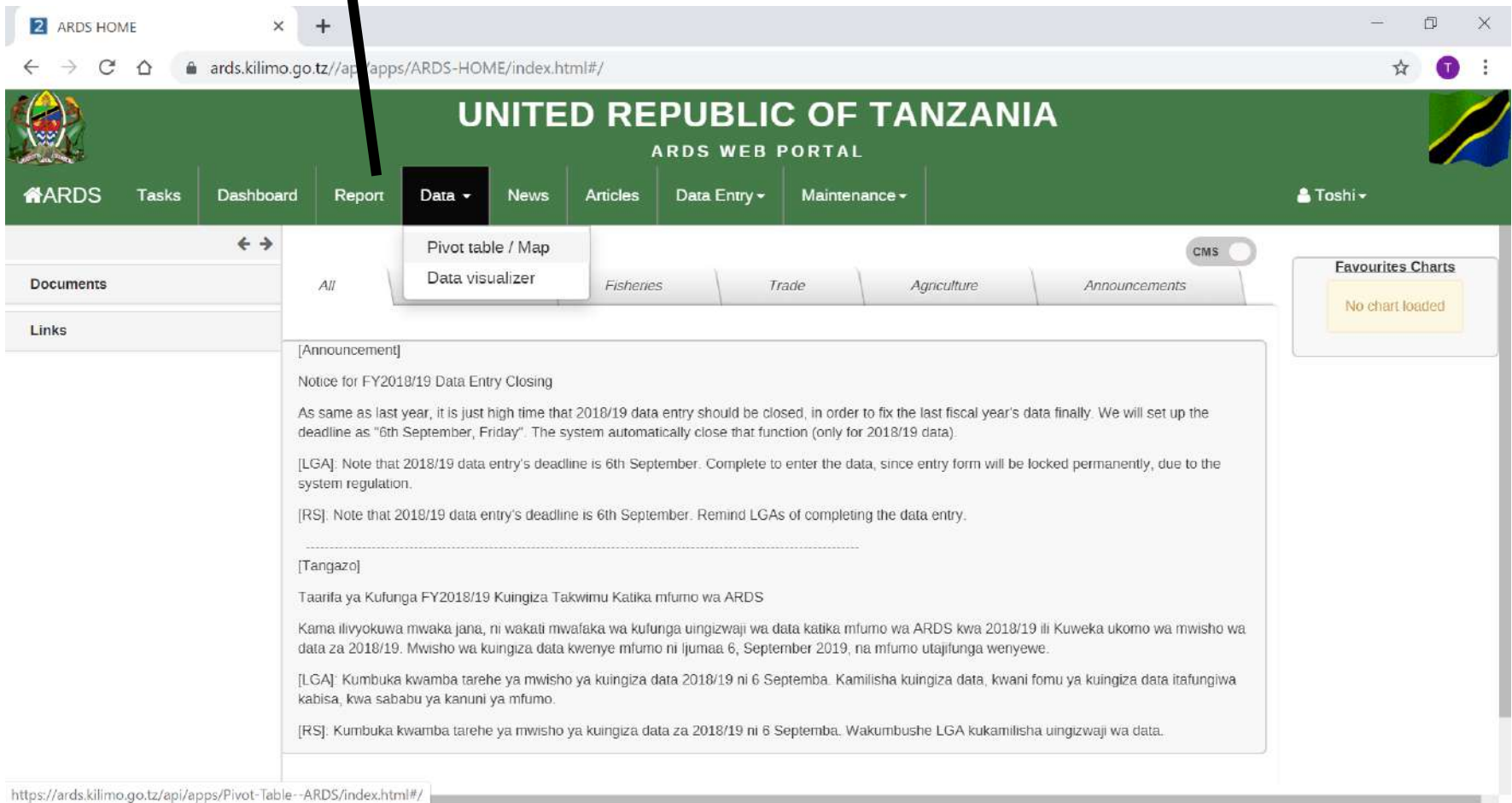
# 6. Pivot Table

Pivot Table is a tool to show the data in data entry forms or standard reports with flexible format. For example, the data in WF01 or DR01 for different months can be shown chronologically in one table. Also, values from different regions or district for an item can be compared in one table.

# 6. Pivot Table

## 6.1 View Pivot Table

① Click Data – Pivot table / Map



The screenshot shows the ARDS Web Portal interface. The top navigation bar is green and contains the following items: ARDS, Tasks, Dashboard, Report, Data (highlighted with a black box and a dropdown menu), News, Articles, Data Entry, and Maintenance. The 'Data' dropdown menu is open, showing 'Pivot table / Map' and 'Data visualizer'. A black arrow points to the 'Data' menu item. The main content area displays an announcement titled '[Announcement] Notice for FY2018/19 Data Entry Closing'. The announcement text is as follows:

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation.

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

-----

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili Kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani fomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

The browser address bar shows the URL: <https://ards.kilimo.go.tz/api/apps/Pivot-Table--ARDS/index.html/>

# 6. Pivot Table

## 6.1 General Setting

② Searching data items by typing abbreviated data entry form name, space, table number, space, item name, space, crop name(in case necessary)

The screenshot shows the PivotTable application interface. The browser address bar displays 'ards.kilimo.go.tz/api/apps/PTable-20/index.html'. The application title is 'Pivot table'. The interface includes a navigation bar with 'Update', 'Download', 'Layout', 'Options', 'Favorites', 'Update Indicators', and 'Map'. Below this, there are tabs for 'All Data', 'Data Elements', 'Computed', and 'Auto Growing'. A dropdown menu shows 'All Tables [Select Table]' with 'wf01 2.1 mavuno mpunga' selected. The main area is divided into 'Available (1)' and 'Selected (1)' sections. The 'Available' section contains 'WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]'. The 'Selected' section contains 'WF01 2.1 Mavuno Mpunga[tani]'. Below this, there is a 'Monthly' dropdown menu and 'Prev Year' and 'Next Year' buttons. The 'Available (0)' section is empty, and the 'Selected (12)' section contains a list of months from July 2019 to June 2020. The interface also includes a 'Select Organisation Unit' dropdown at the bottom.

③ Clicking data items appeared in "Available" to move it to "Selected" to show in pivot table. Or Click ">>" to select all.

④ Select Period Type

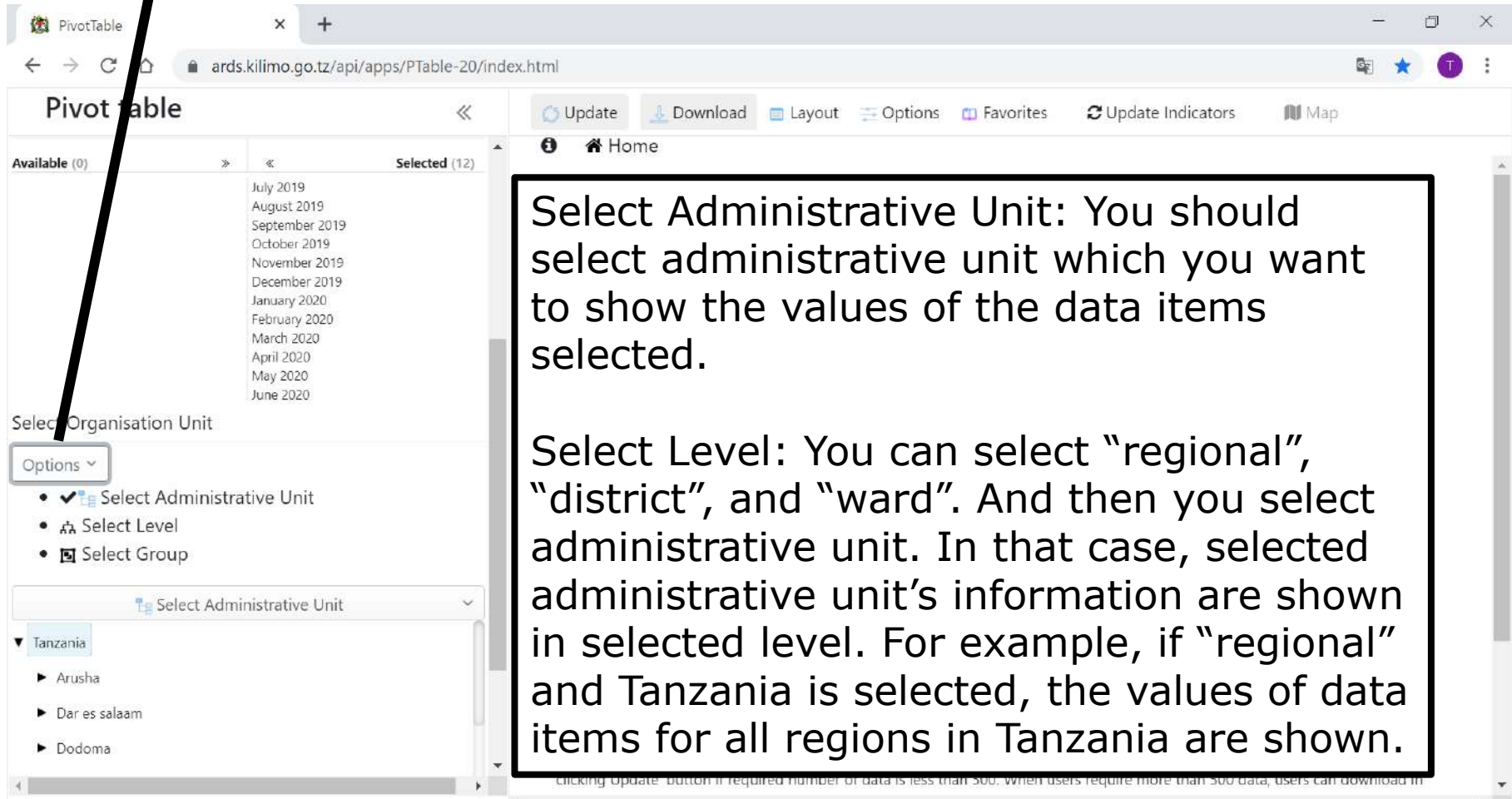
⑤ Clicking period appeared in "Available" to move it to "Selected" to show it in pivot table. Or Click ">>" to select all.

⑥ Scroll Down

# 6. Pivot Table

## 6.1 General Setting

⑦ Click Option and Select "Select Administrative Unit" or "Select Level"



The screenshot shows the PivotTable application interface. The browser address bar displays 'ards.kilimo.go.tz/api/apps/PTable-20/index.html'. The application title is 'PivotTable'. The interface includes a navigation bar with 'Update', 'Download', 'Layout', 'Options', 'Favorites', 'Update Indicators', and 'Map'. Below the navigation bar is a 'Home' button. The main content area is divided into two sections: 'Available (0)' and 'Selected (12)'. The 'Selected (12)' section lists months from July 2019 to June 2020. Below this is a 'Select Organisation Unit' section with an 'Options' dropdown menu. The 'Options' menu is open, showing three options: 'Select Administrative Unit' (checked), 'Select Level', and 'Select Group'. Below the options is a 'Select Administrative Unit' dropdown menu. The 'Select Administrative Unit' dropdown menu is open, showing a list of regions: Tanzania, Arusha, Dar es salaam, and Dodoma. A text box on the right side of the screenshot provides instructions for selecting an administrative unit and a level.

Select Administrative Unit: You should select administrative unit which you want to show the values of the data items selected.

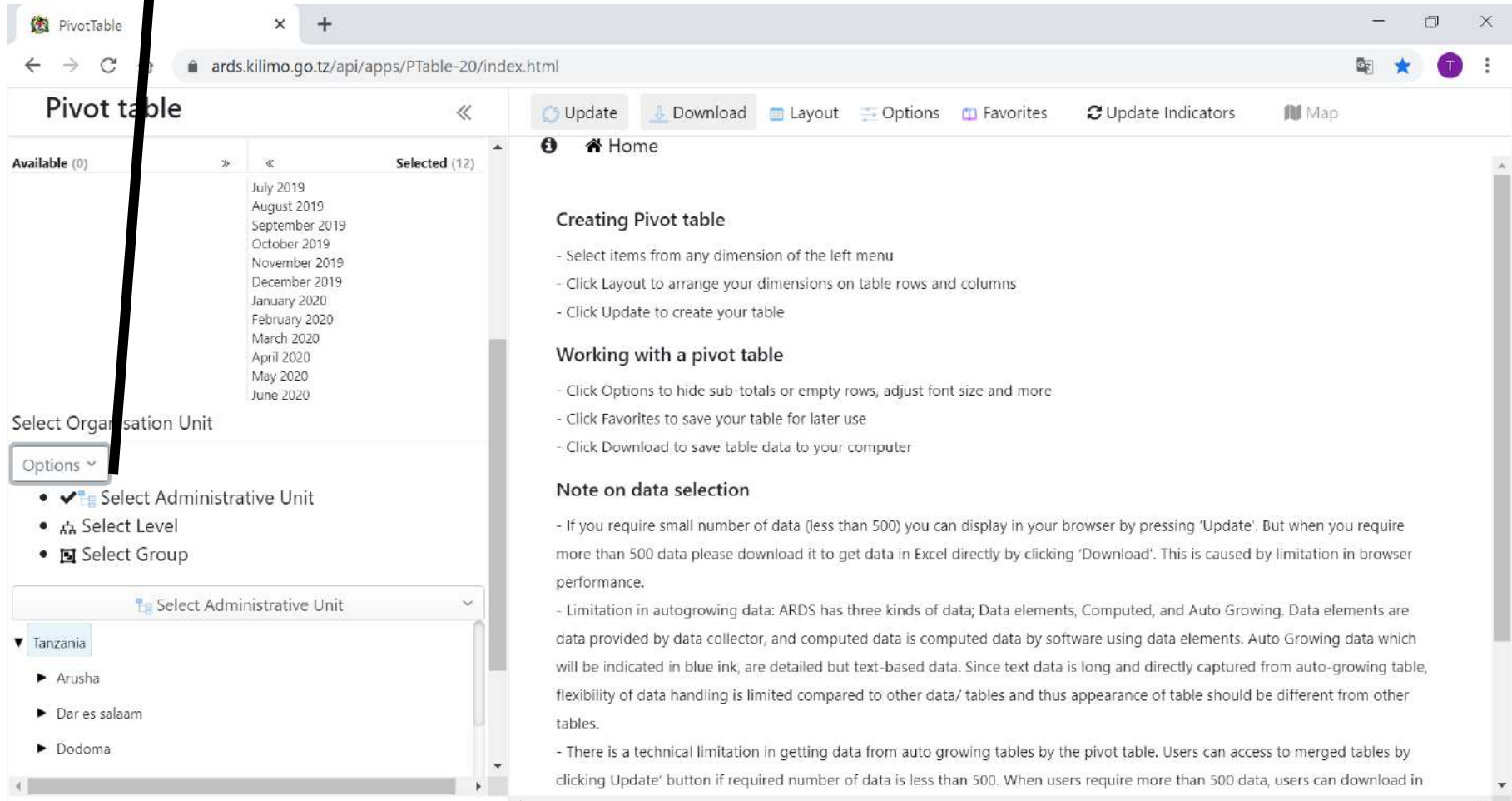
Select Level: You can select "regional", "district", and "ward". And then you select administrative unit. In that case, selected administrative unit's information are shown in selected level. For example, if "regional" and Tanzania is selected, the values of data items for all regions in Tanzania are shown.



# 6. Pivot Table

## 6.2 Select Administrative Unit

⑧ Click Option and Select “Select Administrative Unit”



The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application interface is titled "Pivot table" and includes a navigation bar with buttons for "Update", "Download", "Layout", "Options", "Favorites", "Update Indicators", and "Map".

On the left side, there is a "Select Organisation Unit" section with an "Options" dropdown menu. The "Options" menu is open, showing three options: "Select Administrative Unit" (checked), "Select Level", and "Select Group". Below the menu, a dropdown menu is open, showing "Tanzania" selected, with sub-items "Arusha", "Dar es salaam", and "Dodoma".

The main content area on the right is titled "Creating Pivot table" and contains the following instructions:

- Select items from any dimension of the left menu
- Click Layout to arrange your dimensions on table rows and columns
- Click Update to create your table

Below this, there is a section titled "Working with a pivot table" with the following instructions:

- Click Options to hide sub-totals or empty rows, adjust font size and more
- Click Favorites to save your table for later use
- Click Download to save table data to your computer

There is also a "Note on data selection" section with the following text:

- If you require small number of data (less than 500) you can display in your browser by pressing 'Update'. But when you require more than 500 data please download it to get data in Excel directly by clicking 'Download'. This is caused by limitation in browser performance.

- Limitation in autogrowing data: ARDS has three kinds of data; Data elements, Computed, and Auto Growing. Data elements are data provided by data collector, and computed data is computed data by software using data elements. Auto Growing data which will be indicated in blue ink, are detailed but text-based data. Since text data is long and directly captured from auto-growing table, flexibility of data handling is limited compared to other data/ tables and thus appearance of table should be different from other tables.

- There is a technical limitation in getting data from auto growing tables by the pivot table. Users can access to merged tables by clicking 'Update' button if required number of data is less than 500. When users require more than 500 data, users can download in

# 6. Pivot Table

## 6.2 Select Administrative Unit

⑨ Select Administrative Units you want to show

The screenshot shows a web application interface for a Pivot Table. The browser address bar is `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application has a top navigation bar with buttons for Update, Download, Layout, Options, Favorites, Update Indicators, and Map. Below this is a sub-navigation bar with Home and a Home icon. The main interface is divided into several sections:

- Available (0):** A list of months from July 2019 to June 2020.
- Selected (12):** A list of administrative units: Arusha Mjini, Arusha Vijijini, and Karatu.
- Options:** A dropdown menu for "Select Administrative Unit".
- Table:** A data table with columns for months (July 2019 to December 2019) and rows for administrative units (Arusha Karatu, Arusha Mjini, Arusha Vijijini). The table contains data for "WF01 2.1 Mavuno Mpunga[tani]" and a value of "24.0" for Arusha Vijijini in August 2019.
- Excel:** A button to download the table as an Excel file.

Annotations in the image point to the following elements:

- ⑩ Update: Points to the "Update" button in the top navigation bar.
- ⑪ Table is shown: Points to the data table.
- ⑫ Table can be downloaded in Excel: Points to the "Excel" button.

	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019
Arusha Karatu						
Arusha Mjini						
Arusha Vijijini		24.0				

# 6. Pivot Table

## 6.2 Select Administrative Unit

- If you require small number of data (less than 500) you can display in your browser by pressing 'Update'. But when you require more than 500 data please download it to get data in Excel directly by clicking 'Download'. This is caused by limitation in browser performance.
- However, there is a technical limitation in getting data from auto growing tables by the pivot table. Users can access to merged tables by clicking 'Update' button if required number of data is less than 500. When users require more than 500 data, users can download in Excel unmerged format directly by clicking 'Download'.

# 6. Pivot Table

## 6.2 Select Administrative Unit

⑬ Select Administrative Units you want to show

The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application interface includes a navigation bar with buttons for 'Update', 'Download', 'Layout', 'Options', 'Favorites', 'Update Indicators', and 'Map'. The 'Download' button is highlighted with a blue border and a black arrow pointing to it, labeled with '⑭ Download'. Below the navigation bar, there is a 'Home' button and a list of months from July 2019 to June 2020. A 'Select Administrative Unit' dropdown menu is open, showing a tree view of administrative units under 'Tanzania' > 'Arusha'. The units 'Arusha Mjini', 'Arusha Vijijini', and 'Karatu' are selected and highlighted in blue. Below the application, a file explorer window shows a file named 'file (91).xlsx'.

⑮ Table can be downloaded in Excel without showing it on the browser

# 6. Pivot Table

## 6.2 Select Administrative Unit

Even if administrative units are selected if something is selected in "Select Administrative Unit" the selection will be disregarded.

The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application interface includes a toolbar with buttons for 'Update', 'Download', 'Layout', 'Options', 'Favorites', 'Update Indicators', and 'Map'. Below the toolbar, there is a section for 'Pivot table' with 'Available (0)' and 'Selected (12)' items. A callout box with the number 17 points to the 'Update' and 'Download' buttons, containing the text 'Update or Download'. Below this, there are instructions: 'Select items from any dimension of the left menu', 'ns on table rows and columns', 'Click Options to hide sub-totals or empty rows, adjust font size and more', 'Click Favorites to save your table for later use', and 'Click Download to save table data to your computer'.

⑩ Select "User Admin Unit",  
"User sub-units", or "User sub x2-units"

The screenshot shows the 'Select Administrative Unit' dropdown menu. The menu is open, showing a list of options: 'User Admin Unit', 'User sub-units', and 'User sub-x2-units'. Under 'User sub-units', 'Arusha Vijijini' and 'Karatu' are selected and highlighted in blue. Other options include 'Longido' and 'Meru'. A vertical line is drawn through the 'User sub-units' section.

User Admin Unit: Tanzania Level information is shown  
User sub-units : Region Level information is shown  
User sub x2-units : District Level information is shown

- There is a technical limitation in getting data from auto growing tables by the pivot table. Users can access to merged tables by clicking 'Update' button if required number of data is less than 500. When users require more than 500 data, users can download in

# 6. Pivot Table

## 6.2 Select Administrative Unit

- ⑱ Values for all regions in Tanzania is shown in the table or downloaded. In this example, the data is updated and shown in the table.

The screenshot shows a web application interface for a Pivot Table. The browser address bar is `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The interface includes a sidebar with 'Available (0)' and 'Selected (12)' filters, a 'User sub-units' section, and a main table displaying data for Tanzania, Geita, and Dar es salaam across months from July to November 2019. A callout box points to an 'Excel' button, stating 'Table can be downloaded in Excel'.

			July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Geita	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	4,821.0	4,827.0	4,827.0	11,250.0	11,253.0
	Dar es salaam	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	69.5				
		WF01 2.1 Utekelezaji					

# 6. Pivot Table

## 6.3 Select Level

② Click Option and Select "Select Level"

Pivot table

Update Download Layout Options Favorites Update Indicators Map

Home

There are a changes in selections hit update to see the latest changes. Hide Update

Excel

			July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Geita	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	4,821.0	4,827.0	4,827.0	11,253.0	11,253.0
	Dar es salaam	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	69.5	86.2	98.7	168.4	191.8
		WF01 2.1					



# 6. Pivot Table

## 6.3 Select Level

21 Select Administrative Units you want to show

The screenshot shows a web application interface for a PivotTable. The browser address bar displays `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application title is "Pivot table". The interface includes a navigation menu with "Update", "Download", "Layout", "Options", "Favorites", "Update Indicators", and "Map". A notification states: "There are a changes in selections hit update to see the latest changes." with "Hide" and "Update" buttons. An "Excel" button is also present. The main data table has columns for months from July 2019 to November 2019. The left sidebar shows a tree view of administrative units, with "Arusha" selected. A vertical black line is drawn over the sidebar.

			July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Geita	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	4,821.0	4,827.0	4,827.0	11,253.0	11,253.0
	Dar es salaam	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	69.5	86.2	98.7	168.4	191.8
		WF01 2.1					



# 6. Pivot Table

## 6.3 Select Level

②② In "Select Admin units levels", Select "Region", "District", or "Ward". However, after the administrative unit is selected, the higher or same level is not shown. In this example, Arusha region is selected. Thus, "region" is not shown here.

②③ Update or Download

			July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Geita	Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	4,821.0	4,827.0	4,827.0	11,253.0	11,253.0
	Dar es salaam	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	69.5	86.2	98.7	168.4	191.8
		WF01 2.1					

# 6. Pivot Table

## 6.3 Select Level

- ②④ Values for all districts in Arusha is shown or downloaded in the table  
(In this example, the data is downloaded.)

The screenshot shows a web application interface for a PivotTable. The browser address bar is `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application has a navigation bar with buttons for Update, Download (highlighted), Layout, Options, Favorites, Update Indicators, and Map. Below the navigation bar, there is a Home button and a message: "There are a changes in selections hit update to see the latest changes." with Hide and Update buttons. An Excel icon is also present.

The PivotTable is set to "Monthly" with "Prev Year" and "Next Year" options. The "Available (0)" list is empty, and the "Selected (12)" list includes months from July 2019 to June 2020. The "Arusha x" filter is active, and the "Options" dropdown is set to "Select Admin.units levels". The table structure is as follows:

			July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Geita	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	4,821.0	4,827.0	4,827.0	11,253.0	11,253.0
	Dar es salaam	WF01 2.1 Utekelezaji Mkusanyiko Mavuno	69.5	86.2	98.7	168.4	191.8

The taskbar at the bottom shows a file named "file (93).xlsx" and a button labeled "すべて表示".

# 6. Pivot Table

## 6.4 Layout

25 Click Layout

The screenshot shows a web application interface for a PivotTable. The browser address bar shows the URL: `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application title is "Pivot table".

The interface includes a navigation bar with buttons: Update, Download, Layout, Options, Favorites, Update Indicators, and Map. Below this is a "Home" button and a message: "There are a changes in selections hit update to see the latest changes." with "Hide" and "Update" buttons.

The main content area displays a pivot table with the following data:

			July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Geita	WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	4,821.0	4,827.0	4,827.0	11,253.0	11,253.0
	Dar es salaam	WF01 2.1 Utekelezaji Mkusanyiko Mavuno	69.5	86.2	98.7	168.4	191.8

The interface also features a left sidebar with a "Monthly" dropdown, "Prev Year" and "Next Year" buttons, and a list of months from July 2019 to June 2020. Below this is a "Select Admin.units levels" dropdown menu with "Tanzania" and "Arusha" selected. The "Arusha" dropdown is expanded, showing "Arusha Mjini" and "Arusha Vijijini".

The bottom of the browser shows a file named "file (93).xlsx" and a "すべて表示" button.

# 6. Pivot Table

## 6.4 Layout

②⑥ Information items selected in rows are displayed vertically and Column are displayed horizontally. Upper item is displayed outside.

Table Layout

Filters

Column

Period

rows

Organisation Unit

Data

Update

Close

Arusha x

Options

②⑦ Update

Tanzania

- Arusha
  - Arusha Mjini
  - Arusha Vjijini

		July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Geita	4,821.0	4,827.0	4,827.0	11,253.0	11,253.0
	Dar es salaam	69.5	86.2	98.7	168.4	191.8

file (93).xlsx

すべて表示

# 6. Pivot Table

## 6.4 Layout

⑳ Values for data item selected in "Filters" show total value for organization unit.

Table Layout

Filters  
Organisation Unit

Column  
Period

rows  
Data

User sub-units Tanzania							
	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020
WF01 2.1 Utekelezaji Mkusanyiko Mavuno Mpunga[tani]	84,546.1	101,283.9	104,949.4	117,522.5	183,892.6	196,319.2	213,851

㉑ Update

User sub-units

Options

User sub-units x

- Tanzania
  - Arusha
    - Arusha Mjini
    - Arusha Vijijini

Totals of values from all organization units selected for WF01 2.1 Mavuno Mpunga[tani] and July 2019

# 6. Pivot Table

## 6.4 Layout

③⑩ You can reverse the column and row.

The screenshot illustrates the configuration of a pivot table in a web application. The 'Table Layout' window is open, showing the following configuration:

- Filters:** (Empty)
- Column:** Organisation Unit
- rows:** Data

The data table below shows the following structure:

Tanzania > Arusha	
WF01 2.1 Mavuno Mpunga[tani]	
July 2019	1,080.0
August 2019	226.0
September 2019	40.0
October 2019	20.0
November 2019	40.0
December 2019	572.0
January 2020	320.0

③⑪ Update

# 6. Pivot Table

## 6.5 Option

You can add or remove some information by selecting Option

③ Click Option

The screenshot shows a web application interface for a Pivot Table. The browser address bar is `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application has a navigation bar with buttons for 'Update', 'Download', 'Layout', 'Options', 'Favorites', 'Update Indicators', and 'Map'. The 'Options' button is highlighted, and an arrow points to it from the text '③ Click Option'. Below the navigation bar, there is a 'Home' button and a 'Monthly' dropdown menu. The main content area is divided into two sections: 'Available (0)' and 'Selected (12)'. The 'Selected' section shows a list of months from July 2019 to June 2020. Below this is a section for 'User sub-units' with a search box and a tree view showing 'Tanzania' expanded to show 'Arusha' and its sub-units. The main data table is titled 'User sub-units Tanzania' and shows data for 'WF01 2.1 Utekelezaji' across months from July 2019 to January 2020. An 'Excel' button is visible in the top right of the table area.

User sub-units Tanzania							
	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	Januar 2020
WF01 2.1 Utekelezaji							
Mkusanyiko	84,546.1	101,283.9	104,949.4	117,522.5	183,892.6	196,319.2	213,851
Mavuno							
Mpunga[tani]							

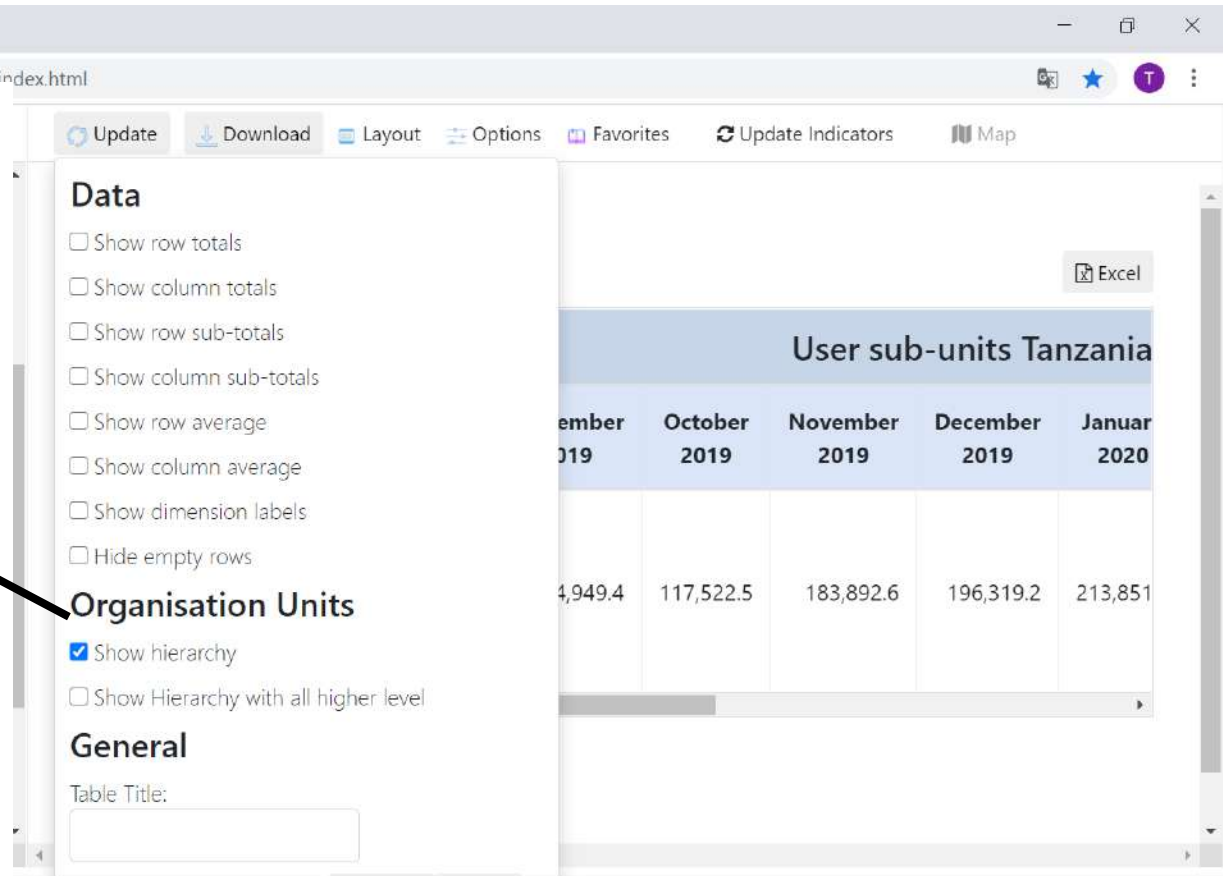
# 6. Pivot Table

## 6.5 Option

③③ Show hierarchy means not only selected level one level higher administrative unit also is shown. By default, this is selected.

Show Hierarchy with all higher level means in the the higher level administrative unit is always shown with lower level.

Mostly these two options are used.



The screenshot shows a web browser window with a PivotTable and its configuration options. The PivotTable is titled "User sub-units Tanzania" and displays data for the months of October 2019, November 2019, December 2019, and January 2020. The configuration options are organized into three sections: Data, Organisation Units, and General.

**Data**

- Show row totals
- Show column totals
- Show row sub-totals
- Show column sub-totals
- Show row average
- Show column average
- Show dimension labels
- Hide empty rows

**Organisation Units**

- Show hierarchy
- Show Hierarchy with all higher level

**General**

Table Title:

September 2019	October 2019	November 2019	December 2019	January 2020
4,949.4	117,522.5	183,892.6	196,319.2	213,851

すべて表示 ×



# 6. Pivot Table

## 6.5 Option

③④ Unselect

③⑤ Update

③④ Unselect

③⑤ Tanzania is removed

		July 2019	August 2019	September 2019	October 2019	November 2019	December 2019
Arusha	WF01 2.1 Mavuno Mpunga[tani]	1,080.0	226.0	40.0	20.0	40.0	572.0
Dar es salaam	WF01 2.1 Mavuno Mpunga[tani]	69.5	16.8	12.5	69.6	23.4	17.0
Dodoma	WF01 2.1 Mavuno Mpunga[tani]	161.2					
Geita	WF01 2.1 Mavuno	4,821.0	6.0		6,426.0	0.0	0.0

# 6. Pivot Table

## 6.5 Option

③② Select

**Data**

- Show row totals
- Show column totals
- Show row sub-totals
- Show column sub-totals

**Available**

- Show row average
- Show column average
- Show dimension labels

**Organisation Units**

- Show hierarchy
- Show Hierarchy with all higher level

**User General**

Opti Table Title:

- ▶ Dar es salaam
- ▶ Dodoma
- ▶ Geita
- ▶ Iringa
- ▶ Kagera

dex.html

			July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Arusha	WF01 2.1 Mavuno Mpunga[tani]	1,080.0	226.0	40.0	20.0	40.0
Tanzania	Dar es salaam	WF01 2.1 Mavuno Mpunga[tani]	69.5	16.8	12.5	69.6	23.4
Tanzania							
Tanzania	Geita	WF01 2.1 Mavuno	4,821.0	6.0		6,426.0	0.0

③③ Update

③⑥ Tanzania is always displayed in the left side of every region

# 6. Pivot Table

## 6.6 Favorites

Favorites is a function to save selected parameters such as information items, periods, administrative units, Layout and Options so that can be retrieved sooner later.

37 Click Favorites

Pivot table

Update Download Layout Options Favorites Update Indicators Map

Home

Available (0) Selected (12)

July 2019  
August 2019  
September 2019  
October 2019  
November 2019  
December 2019  
January 2020  
February 2020  
March 2020  
April 2020  
May 2020  
June 2020

User sub-units X clear all

Options

User sub-units x

			July 2019	August 2019	September 2019	October 2019	November 2019
Tanzania	Arusha	WF01 2.1 Mavuno Mpunga[tani]	1,080.0	226.0	40.0	20.0	40.0
Tanzania	Dar es salaam	WF01 2.1 Mavuno Mpunga[tani]	69.5	16.8	12.5	69.6	23.4
Tanzania	Dodoma	WF01 2.1 Mavuno Mpunga[tani]	161.2				
Tanzania	Geita	WF01 2.1 Mavuno	4,821.0	6.0		6,426.0	0.0

# 6. Pivot Table

## 6.6 Favorites

You can see favorites the user created or other one created and shared.

38 Click New

The screenshot shows a web application interface for PivotTable. The main window has a title bar with 'PivotTable' and a browser address bar with 'ards.kilimo.go.tz/api/apps/PTable-20/index.html'. The application has a top navigation bar with buttons for 'Update', 'Download', 'Layout', 'Options', 'Favorites', 'Update Indicators', and 'Map'. On the left, there is a 'Pivot table' section with 'Available (0)' and 'Selected (12)' tabs. The 'Selected' tab shows a list of months from July 2019 to June 2020. Below this is a search box containing 'Arusha' and a 'Select Administrative Unit' dropdown menu. The main area shows a 'Favorites' dialog box with a 'Loading favorites' message and a 'Close' button. A 'New' button is also visible in the dialog. At the bottom, a table of data is partially visible, showing months and numerical values.

Month	Value
September 2019	10.0
October 2019	20.0
November 2019	40.0
December 2019	572.0
January 2020	320.0

You can search favorite by typing key word

# 6. Pivot Table

## 6.6 Favorites

**39** Input Favorites Name

**40** Click Save

The screenshot shows a web application interface for a Pivot Table. The main window is titled "PivotTable" and the URL is "ards.kilimo.go.tz/api/apps/PTable-20/index.html". The interface includes a "Pivot table" section with "Available (0)" and "Selected (12)" lists. The "Selected" list contains months from July 2019 to June 2020. Below this is a filter for "Arusha" and an "Options" dropdown. A "Select Administrative Unit" dropdown is also present, with a list of regions including Tanzania, Arusha, Dar es salaam, Dodoma, Geita, Iringa, and Kagera. A "Favorites" dialog box is open, showing a text input field with "Toshi" and a "Save" button. A "Loading favorites" message is displayed below the input field. The background shows a table with columns for month and value, with data for October 2019 (20.0), November 2019 (40.0), December 2019 (572.0), and January 2020 (320.0).

Month	Value
October 2019	20.0
November 2019	40.0
December 2019	572.0
January 2020	320.0

# 6. Pivot Table

## 6.6 Favorites

The screenshot shows the PivotTable application interface. On the left, there is a sidebar with a list of months from July 2019 to June 2020, and a list of administrative units under Tanzania, with Arusha selected. The main area displays a table with columns for month and value. A 'Favorites' panel is open on the right, showing a list of favorite items with icons for delete, share, and update. Three annotations with arrows point to these icons: 'Delete the Favorite' points to the red trash icon, 'Share Favorites' points to the blue share icon, and 'Update the Favorite' points to the blue pencil icon. A circled number '41' is next to the text 'Favorites is saved' and a circled number '42' is next to the text 'Share Favorites'.

**41** Favorites is saved

**42** Share Favorites

Delete the Favorite

Update the Favorite

Month	Value
October 2019	20.0
November 2019	40.0
December 2019	572.0
January 2020	320.0

# 6. Pivot Table

## 6.6 Favorites

The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/api/apps/PTable-20/index.html`. The application interface includes a 'Pivot table' section on the left with a list of months from July 2019 to June 2020. Below this is a 'Select Administrative Unit' dropdown menu with 'Arusha' selected. On the right, there is a 'Favorites' panel with a 'New' button and a list of favorites. A modal window is open over the 'Favorites' panel, showing a search bar for 'Search User Group' and a list of user groups: 'All Users', 'Estimation Expert', and 'Testing Users'. Each user group has an eye icon and a pencil icon. A dropdown menu is open next to the 'Only You' user group, showing the same list of user groups. Two black arrows point to the dropdown menu and the user group list.

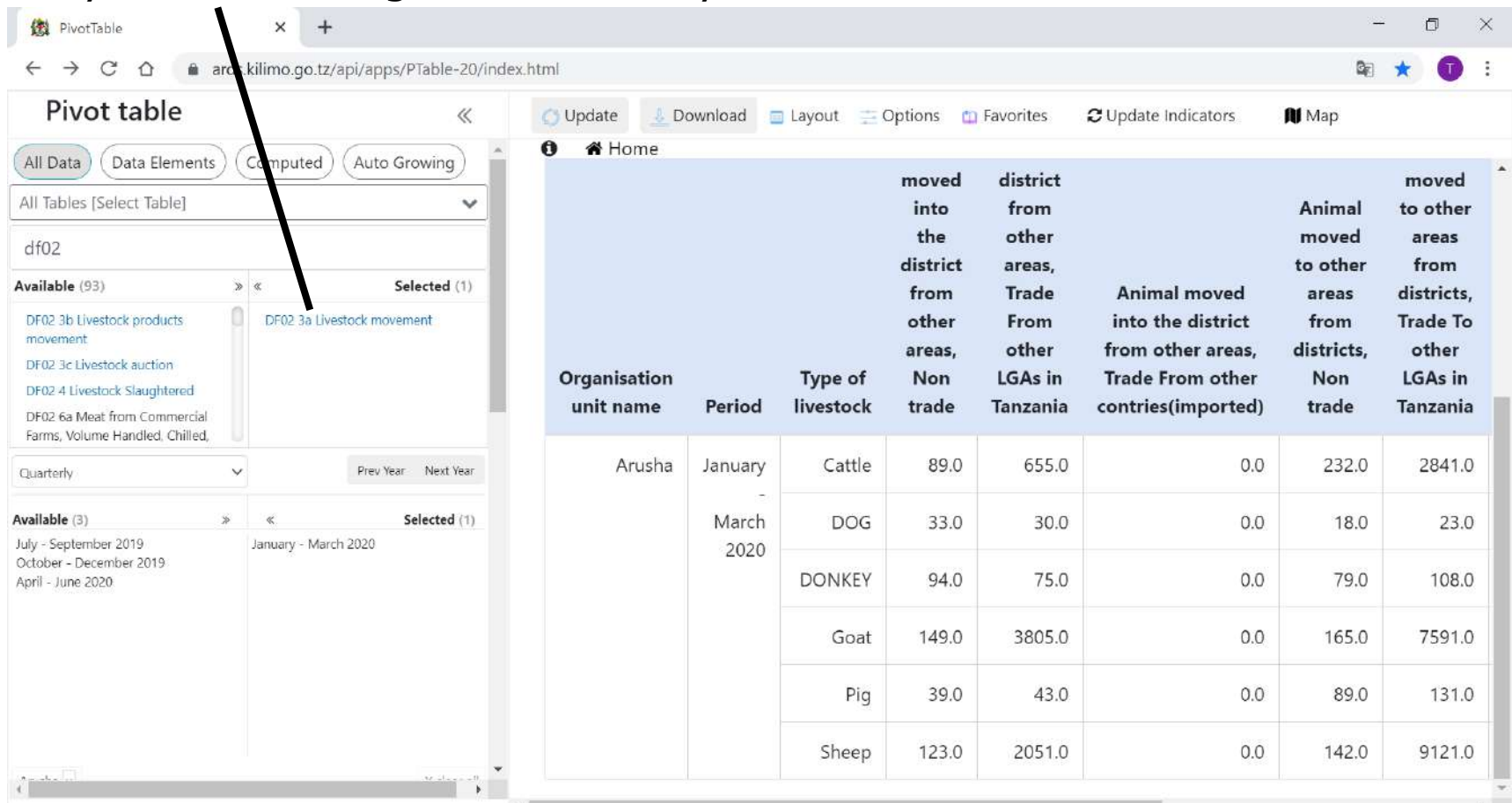
④④ You can share All users or Only You. Please disregard Estimate Expert or Testing User since it is created testing purpose. Click eye to give view authority and pencil to write authority

④③ Click

# 6. Pivot Table

## 6.7 Auto-Growing Information

Some information items are shown in blue. This is for auto-growing table or auto-growing part of the table which consists of fixed part + auto-growing part. Auto-growing information is shown in fixed layout and configuration in "Layout" does not work.



The screenshot shows a web application interface for a PivotTable. The browser address bar shows the URL: [arusha.kilimo.go.tz/api/apps/PTable-20/index.html](http://arusha.kilimo.go.tz/api/apps/PTable-20/index.html). The application title is "Pivot table". The interface includes a navigation menu with "Update", "Download", "Layout", "Options", "Favorites", "Update Indicators", and "Map". The main content area displays a table with the following columns: "Organisation unit name", "Period", "Type of livestock", "Non trade", "LGAs in Tanzania", "Animal moved into the district from other areas, Trade From other contries(imported)", "Animal moved to other areas from districts, Non trade", and "moved to other areas from districts, Trade To other LGAs in Tanzania". The table data is as follows:

Organisation unit name	Period	Type of livestock	Non trade	LGAs in Tanzania	Animal moved into the district from other areas, Trade From other contries(imported)	Animal moved to other areas from districts, Non trade	moved to other areas from districts, Trade To other LGAs in Tanzania
Arusha	January	Cattle	89.0	655.0	0.0	232.0	2841.0
	March 2020	DOG	33.0	30.0	0.0	18.0	23.0
		DONKEY	94.0	75.0	0.0	79.0	108.0
		Goat	149.0	3805.0	0.0	165.0	7591.0
		Pig	39.0	43.0	0.0	89.0	131.0
		Sheep	123.0	2051.0	0.0	142.0	9121.0

The table is partially highlighted in blue, indicating auto-growing information. A black arrow points to the "Auto Growing" button in the interface.



# 6. Pivot Table

## 6.8 Accumulative value and the data of the month for table 2.1 WF01

Liliopandwa, Liliovunwa, Uzalishaji/Tija and Mavuno[tani] in WF01 Table 2.1 have two options respectively.

Without Mkusanyiko: This is the data for the month

With Mkusanyiko: This is the accumulated data from the beginning of the Fiscal Year.

However, the data before and including FY2017/18 are different.

The screenshot shows a 'Pivot table' configuration window. At the top, there are four buttons: 'All Data' (highlighted), 'Data Elements', 'Computed', and 'Auto Growing'. Below these is a dropdown menu labeled 'All Tables [Select Table]' with a downward arrow. The selected table is 'wf01 2.1 ti mahindi'. Below this, there are two columns: 'Available (0)' and 'Selected (8)'. The 'Selected' column contains a list of items: 'WF01 2.1 Mavuno mahindi[tani]', 'WF01 2.1 Utekelezaji Mkusanyiko Mavuno mahindi[tani]', 'WF01 2.1 Utekelezaji mkusanyiko lililopandwa(ha) mahindi', and 'WF01 2.1 Utekelezaji mkusanyiko'. At the bottom, there are buttons for 'Monthl...', 'Prev Year', and 'Next Year'.

# 6. Pivot Table

## 6.9 Data before and including FY 2017/18

- Change in data submission rule in 2018/19 limits the use of pivot table data in Table 2.1, WF01 before and including FY 2017/18. If you use data before and including 2017/18, please use data without accumulative (mkusanyiko) so that table will present aggregated data as submitted by data collectors.
- Options with accumulative before and including 2017/18 (e.g. Eneo lilio pandwa mkusanyiko, eneo lilio vunwa mkusanyiko, uzalishaji/tija mkusanyiko, and Mavuno mkusanyiko) will return improper data in accumulative of previous month(s)

# 6. Pivot Table

## 6.10 Limitation of a number of data downloaded

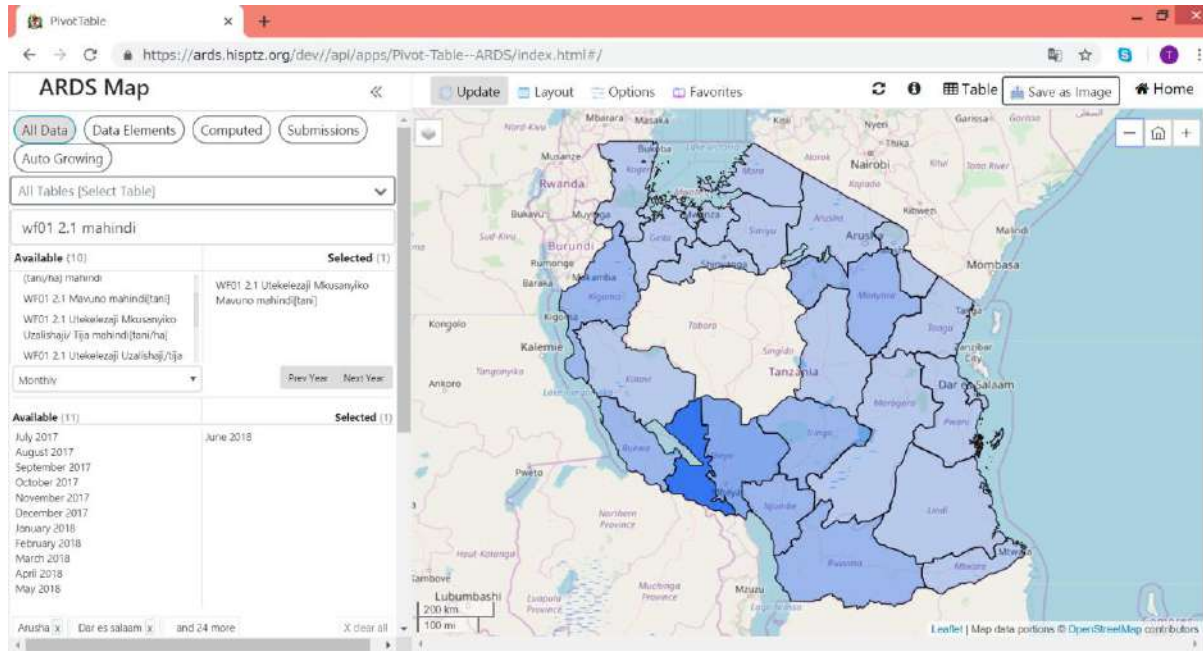
- Because of the limitation of browser performance in your computer, this pivot table handles less than 500 rows of data in table.
- Please request less than 500 rows data, otherwise, the user may see some problems such as partial downloaded data or improper order of administrative units.

# **7. Map**

**For All Users**

# 7. Map

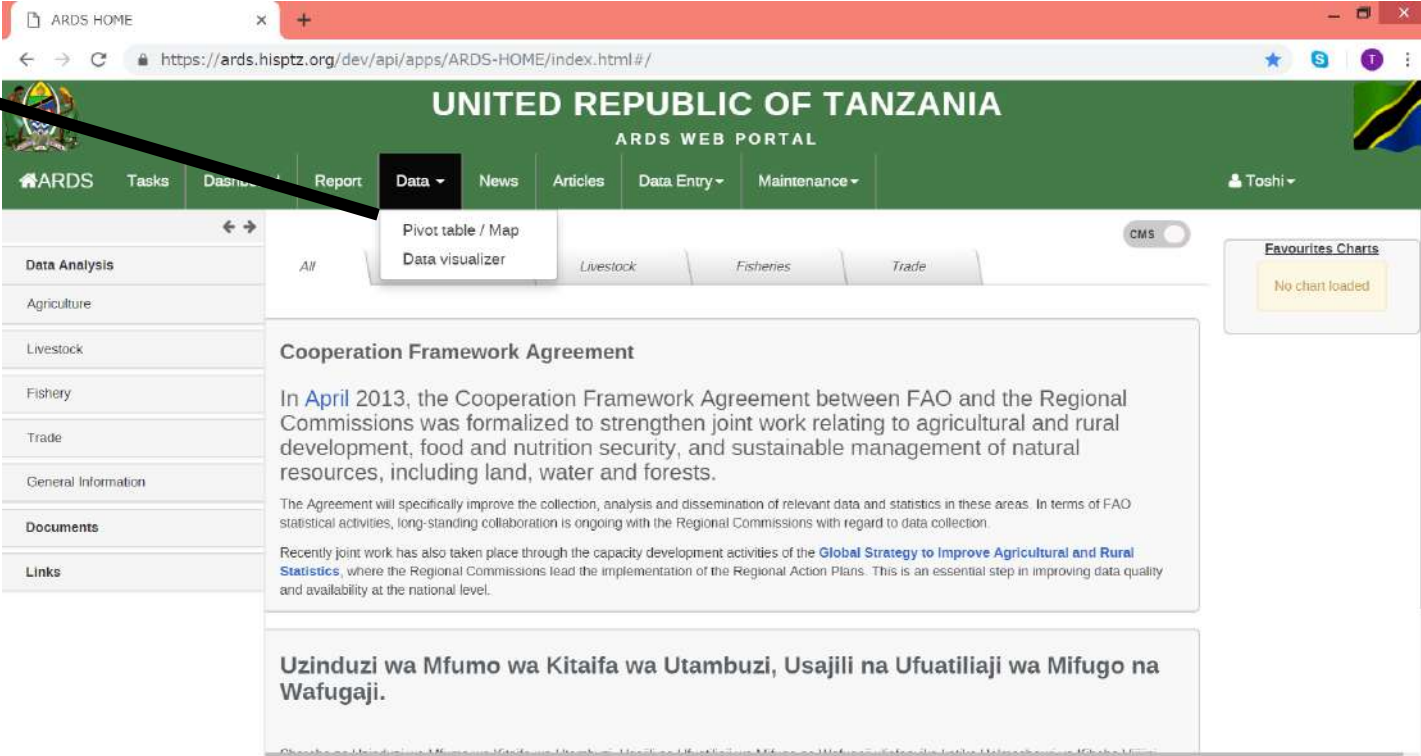
GIS is tool to **color Region** or **District** on Tanzanian Map by level of selected attribute.



EX Mahindi Production for June 2018 (Data is dummy)

# 7. Map

- ① Choose Data-Pivot table / Map



The screenshot shows the ARDS Web Portal for the United Republic of Tanzania. The page has a green header with the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The "Data" menu is open, showing two options: "Pivot table / Map" and "Data visualizer". A black arrow points from the text "Choose Data-Pivot table / Map" to the "Pivot table / Map" option in the menu. The main content area displays a news article titled "Cooperation Framework Agreement" with a sub-heading "Uzinduzi wa Mfumo wa Kitaifa wa Utambuzi, Usajili na Ufuatiliaji wa Mifugo na Wafugaji." The article text discusses a formalized agreement between FAO and the Regional Commissions in April 2013 to strengthen joint work in agricultural and rural development, food and nutrition security, and sustainable management of natural resources. A sidebar on the left contains a "Data Analysis" menu with categories like Agriculture, Livestock, Fishery, Trade, and General Information. A "Favourites Charts" box on the right shows "No chart loaded".

# 7. Map

② Select only 1 attribute to be shown

③ Select only 1 Period to be shown

The screenshot shows a web browser window titled 'PivotTable' with the URL <https://ards.hisptz.org/dev//api/apps/Pivot-Table--ARDS/index.html#/>. The application interface is divided into several sections:

- Left Sidebar:** Contains 'Available' and 'Selected' sections. The 'Available' section lists several attributes related to 'wf01 4 idadi' and 'waloohinjwa'. The 'Selected' section is currently empty.
- Center Panel:** Features a 'Monthly' dropdown menu and a 'Selected' section with a list of months from July 2017 to May 2018. Below this is a section for 'Options' with a dropdown menu set to 'Tanzania' and a list of administrative regions: Arusha, Dar es salaam, Dodoma, and Food Region. The 'Dar es salaam' region is highlighted.
- Right Panel:** Contains instructions for 'Creating Pivot table' and 'Working with a pivot table'. The 'Creating Pivot table' section lists steps: 'Select items from any dimension of the left menu', 'Click Layout to arrange your dimensions on table rows and columns', and 'Click Update to create your table'. The 'Working with a pivot table' section lists steps: 'Click Options to hide sub-totals or empty rows, adjust font size and more', 'Click Favorites to save your table for later use', and 'Click Download to save table data to your computer'.
- Top Right:** A navigation bar with icons for 'Map' and 'Home'. The 'Map' icon is highlighted with a black arrow.

⑤ Press Map

④ Select administrative boundary

# 7. Map

The screenshot shows a web browser window with the URL <https://ards.hisptz.org/dev//api/apps/Pivot-Table--ARDS/index.html#/>. The page title is "ARDS Map". The interface includes a navigation bar with "Update", "Layout", "Options", and "Favorites" buttons. A "Creating Map" panel on the right contains instructions: "- Select items in any dimension of the left menu" and "- Click Update to create your map". A large black arrow points from the "Update" button in the navigation bar to the "Update" text in the "Creating Map" panel. The left sidebar shows a list of available items under "Available (5)" and "Available (11)", with "Selected (1)" and "Selected (1)" items respectively. The "Options" section includes a "Select Administrative Unit" dropdown menu with a tree view showing "Tanzania" and its regions: "Arusha", "Dar es Salaam", "Dodoma", and "Food Region".

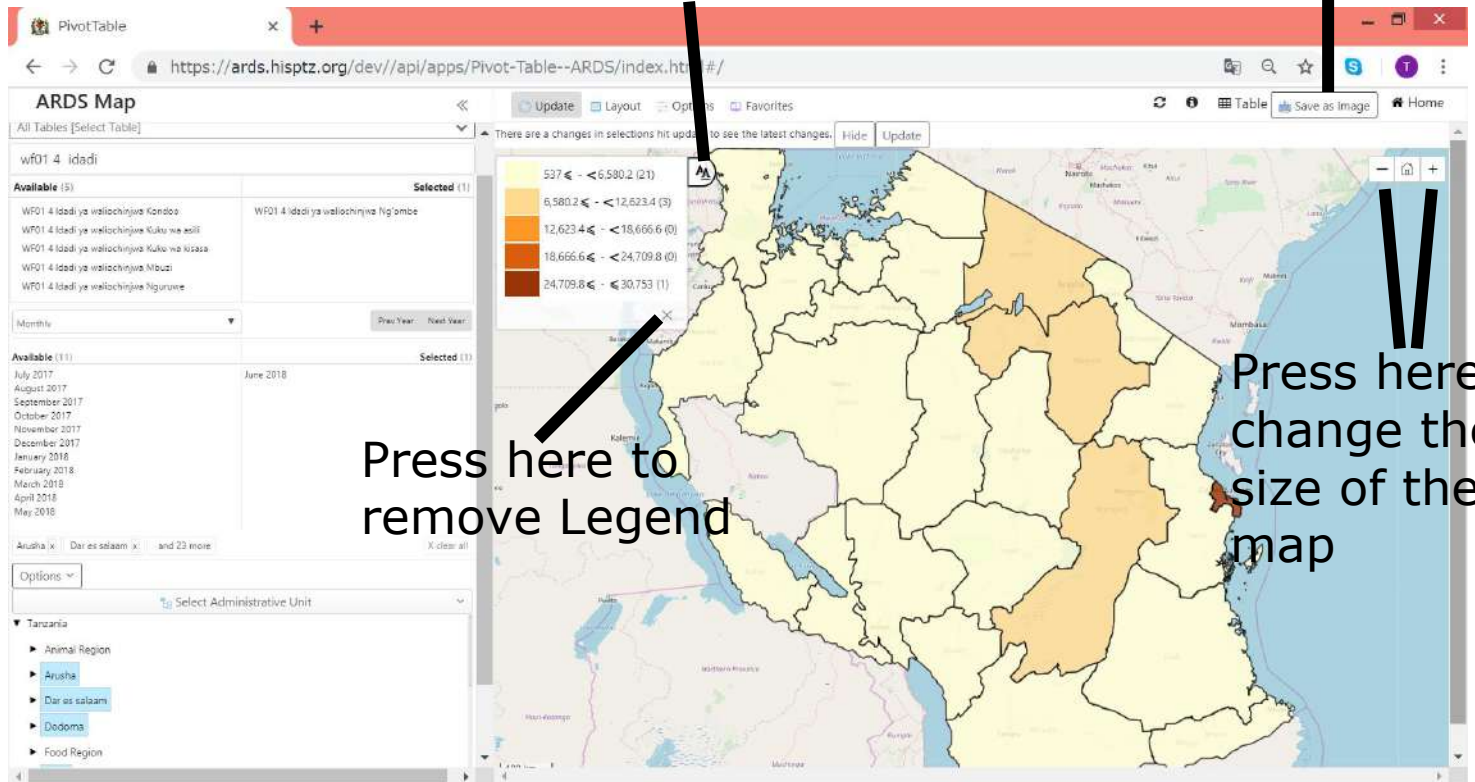
⑥ Update



# 7. Map

Press here to change category of coloring

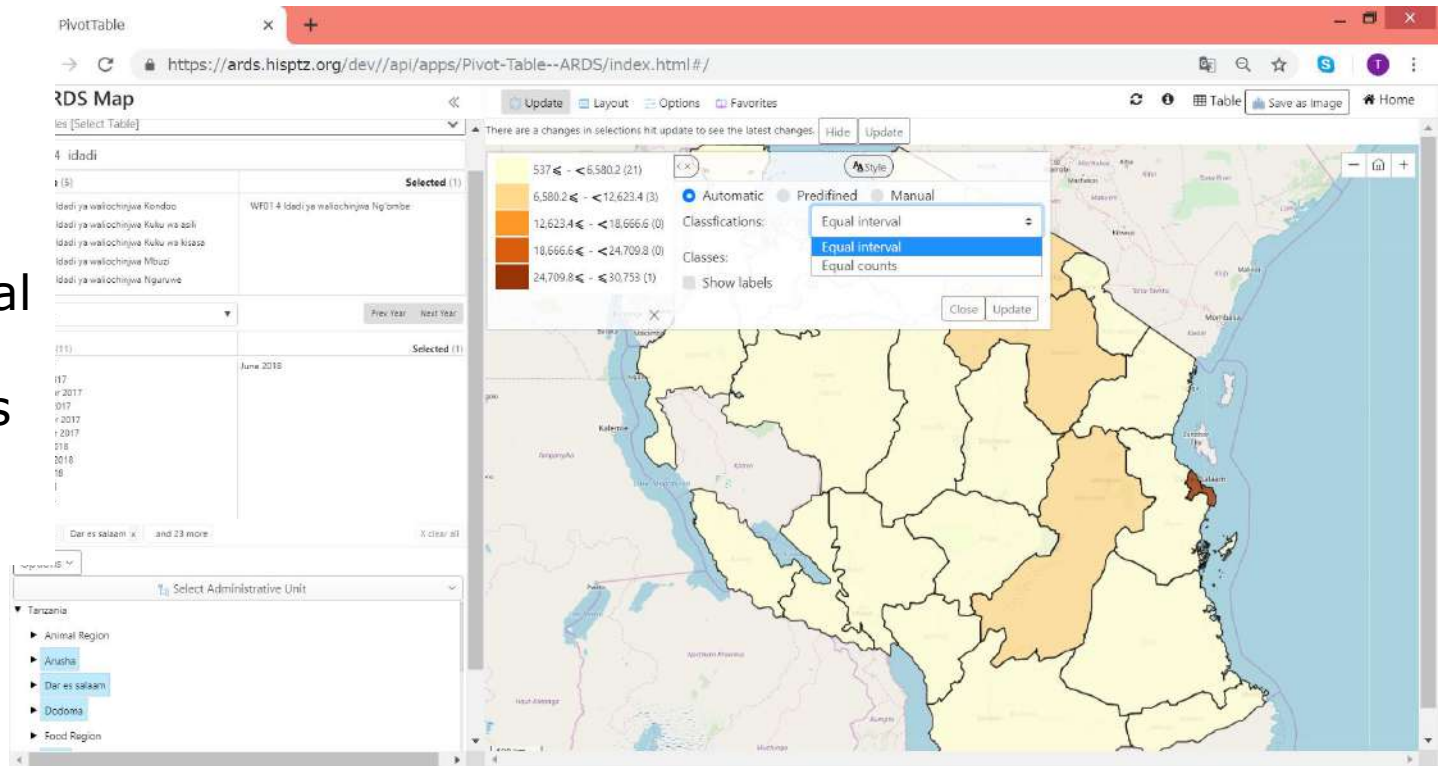
Press here to download the map



# 7. Map

ARDS Supports  
4 types of color  
categorization.

- 1) Automatic
  - Equal Interval
- 2) Automatic
  - Equal Counts
- 3) Predefined
- 4) Manual



# 7. Map

## 1) Automatic - Equal Interval

System takes minimum value and maximum value among the selected regions / districts for the selected attribute and makes **all the intervals of the category same**

# 7. Map

## 2) Automatic - Equal Counts

System adjusts interval of each category to make the number of counts of districts /regions for each interval roughly same.

# 7. Map

## 3) Predefined

System colors regions/districts based on pre-defined setting by Administrator.

# 7. Map

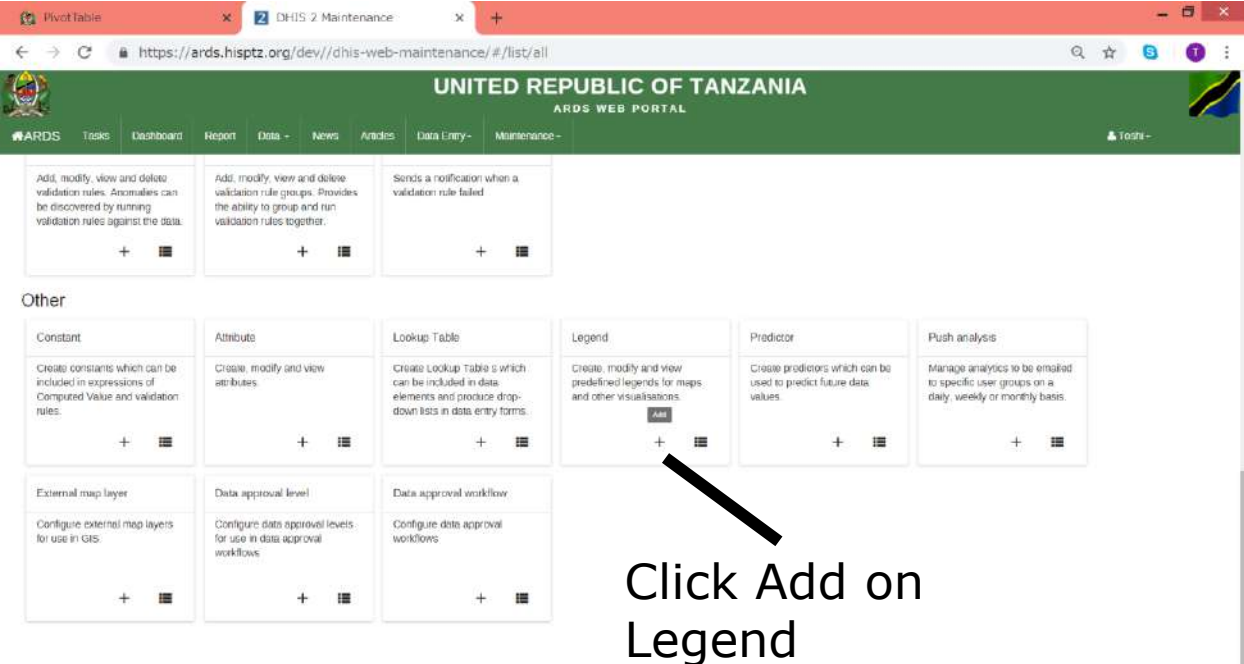
## 3) Predefined (Configuration by Administrator)

Go to  
Maintenance –  
Data Elements  
and Computer  
Values

The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The browser address bar displays <https://ards.hisptz.org/dev/api/apps/ARDS-HOME/index.html#/>. The page header includes the national emblem and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". A navigation menu contains items: ARDS, Tacks, Dashboard, Report, Data -, News, Articles, Data Entry -, and Maintenance -. The Maintenance - menu is open, showing a list of options: Data Administration, Data Elements and Computed values, Entry Form, Administrative Units, Settings, Users, CMS, and System usage statistics. A black arrow points from the text on the left to the "Data Elements and Computed values" option in the menu. The main content area features a "Cooperation Framework Agreement" section with text about agricultural data collection and a "Uzinduzi wa Mfumo wa Kitaifa wa Utambuzi, Usajili na Ufuatiliaji wa Mifugo na Wafugaji" section. A footer at the bottom shows the URL <https://ards.hisptz.org/dev/dhis-web-maintenance/>.

# 7. Map

## 3) Predefined (Configuration by Administrator)



The screenshot shows the ARDS Web Portal maintenance interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains: ARDS, Tools, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The main content area displays several configuration cards:

- Three cards at the top: "Add, modify, view and delete validation rules...", "Add, modify, view and delete validation rule groups...", and "Sends a notification when a validation rule failed".
- An "Other" section containing six cards: "Constant", "Attribute", "Lookup Table", "Legend", "Predictor", and "Push analysis".
- A third row of three cards: "External map layer", "Data approval level", and "Data approval workflow".

An arrow points to the "Add" button on the "Legend" card, with the text "Click Add on Legend" below it.

# 7. Map

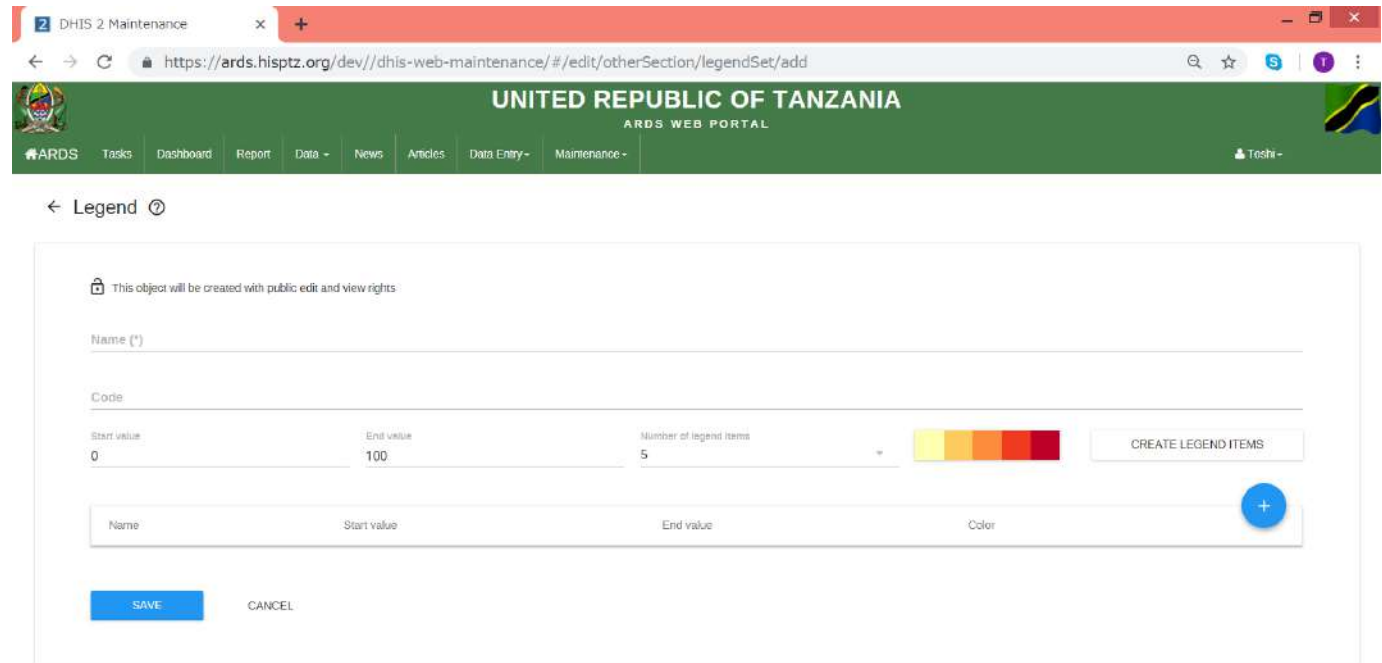
## 3) Predefined (Configuration by Administrator)

You can create "Pre defined" category definition either by

1. Putting Start Items and End Items, pressing CREATE LEGEND ITEMS and then modify each item.

or

2. Defining each category one by one



The screenshot shows a web browser window with the URL <https://ards.hispztz.org/dev//dhis-web-maintenance/#/edit/otherSection/legendSet/add>. The page header includes the United Republic of Tanzania ARDS Web Portal logo and navigation menu. The main content area is titled "Legend" and contains a form for creating a legend set. The form includes a lock icon and the text "This object will be created with public edit and view rights". The form fields are:

- Name (\*)
- Code
- Start value: 0
- End value: 100
- Number of legend items: 5
- Color selection: A color palette with yellow, orange, and red options.
- CREATE LEGEND ITEMS button
- Table with columns: Name, Start value, End value, Color. A blue plus button is next to the table.
- SAVE and CANCEL buttons.



# 7. Map

You can add legend item by pressing here

## 3) Predefined (Configuration by Administrator)

The screenshot shows the 'ARDS WEB PORTAL' for the 'UNITED REPUBLIC OF TANZANIA'. The page is titled 'Legend Set Configuration' and shows a form for editing a legend set named 'Cool\_Toshi'. The form includes fields for Name, Code, Start value (0), End value (50000000), and Number of legend items (5). A color palette is visible, and a table lists the legend items with their respective color codes. A blue plus button is used to add new items, and a 'SAVE' button is at the bottom.

Name	Start value	End value	Color
0 - 10000000	0	10000000	#ffff22
10000000 - 20000000	10000000	20000000	#ffcc5c
20000000 - 30000000	20000000	30000000	#ff8c5c
30000000 - 40000000	30000000	40000000	#ff3c20
40000000 - 50000000	40000000	50000000	#bd0020

You can edit each legend item by pressing here

Please save Predefined legend created

# 7. Map

## 4) Manual

System colors regions/districts based on setting by each User.

# 7. Map

## 4) Manual (Configuration by User)

Add legend items to cover every range of attribute selected  
Choose "color" or "pattern"

Select "color" or "pattern"

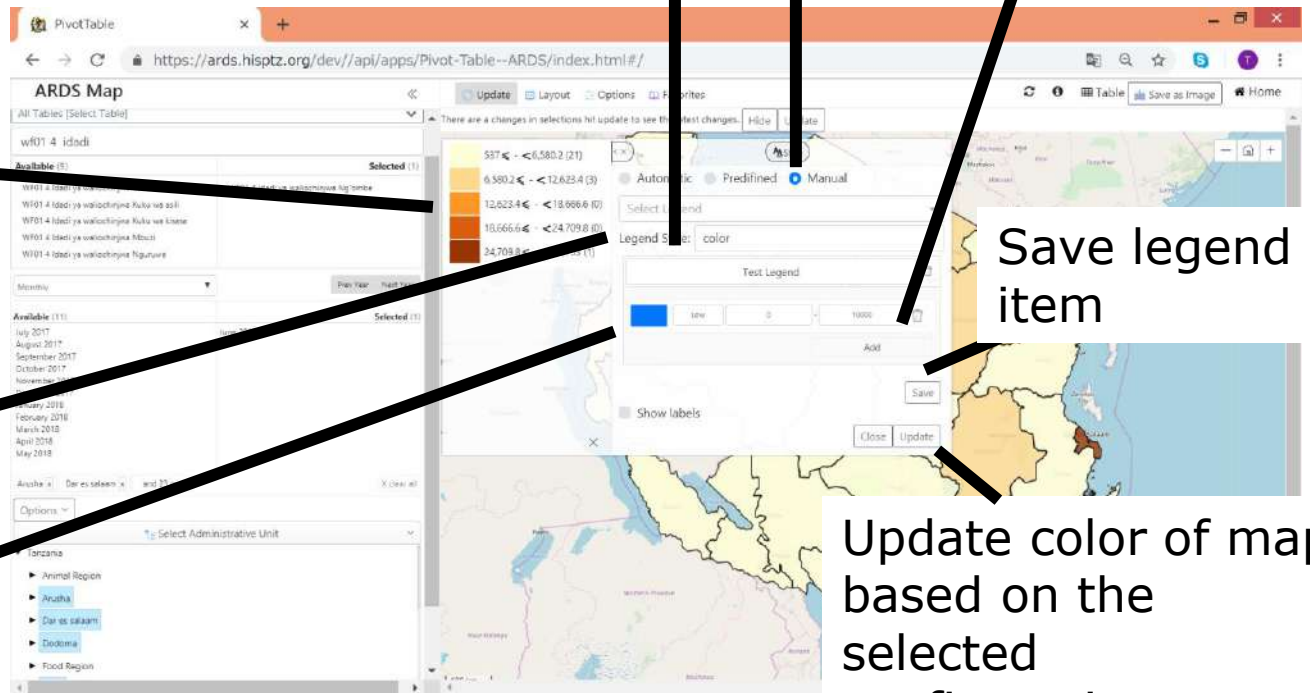
Input name of legend

Click Manual

Add legend item

Save legend item

Update color of map based on the selected configuration



# 7. Map

Color here will be the legend for the item

You can copy & paste this to copy the color to different items

The screenshot shows the ARDS Map application interface. On the left, there are two tables. The first table, titled 'wf01 4 idadi', has columns for 'Available (5)' and 'Selected (1)'. The second table, titled 'Month', has columns for 'Available (11)' and 'Selected (1)'. Below these tables is a 'Select Administrative Unit' dropdown menu showing a tree view of Tanzania's regions: Arusha, Dar es Salaam, Dodoma, and Food Region. The main area of the application is a map of Tanzania. A legend configuration panel is overlaid on the map, showing a color scale with five categories: 537.0 - < 6,580.2 (21), 6,580.2 - < 12,623.4 (3), 12,623.4 - < 18,666.6 (0), 18,666.6 - < 24,709.8 (0), and 24,709.8 - < 30,753 (1). The legend style is set to 'color'. A color picker dialog is open, showing a color selection tool with a color bar and a text input field containing the hex code '#0077fc'. Arrows point from the text annotations to the color picker and the legend categories.

Choose colors by selecting these three

# **8. Static Table**

**For All Users**

# 8. Static Table

ARDS Web Portal does not keep administrative boundary for the past fiscal Year

## Issues and Solution

① **Pivot table** analysis for past fiscal year is based on the latest administrative unit **not on the administrative unit by then.**

-> Static Table

② **Reports** which belong to **administrative unit removed are not obtainable.**

-> Archived Report

# 8. Static Table

## Issues and Solution

- ① **Pivot table** analysis for past fiscal year is based on the latest administrative unit **not on the administrative unit by then.**  
-> Static Table

Static Report is **the reports** to created at the end of fiscal year **based on the administrative units for the fiscal year.**

# 8. Static Table

The screenshot shows a web browser window with the URL `https://ards.hisptz.org/dev//api/apps/standardreport/index.html/#/`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile "Toshi" is visible in the top right.

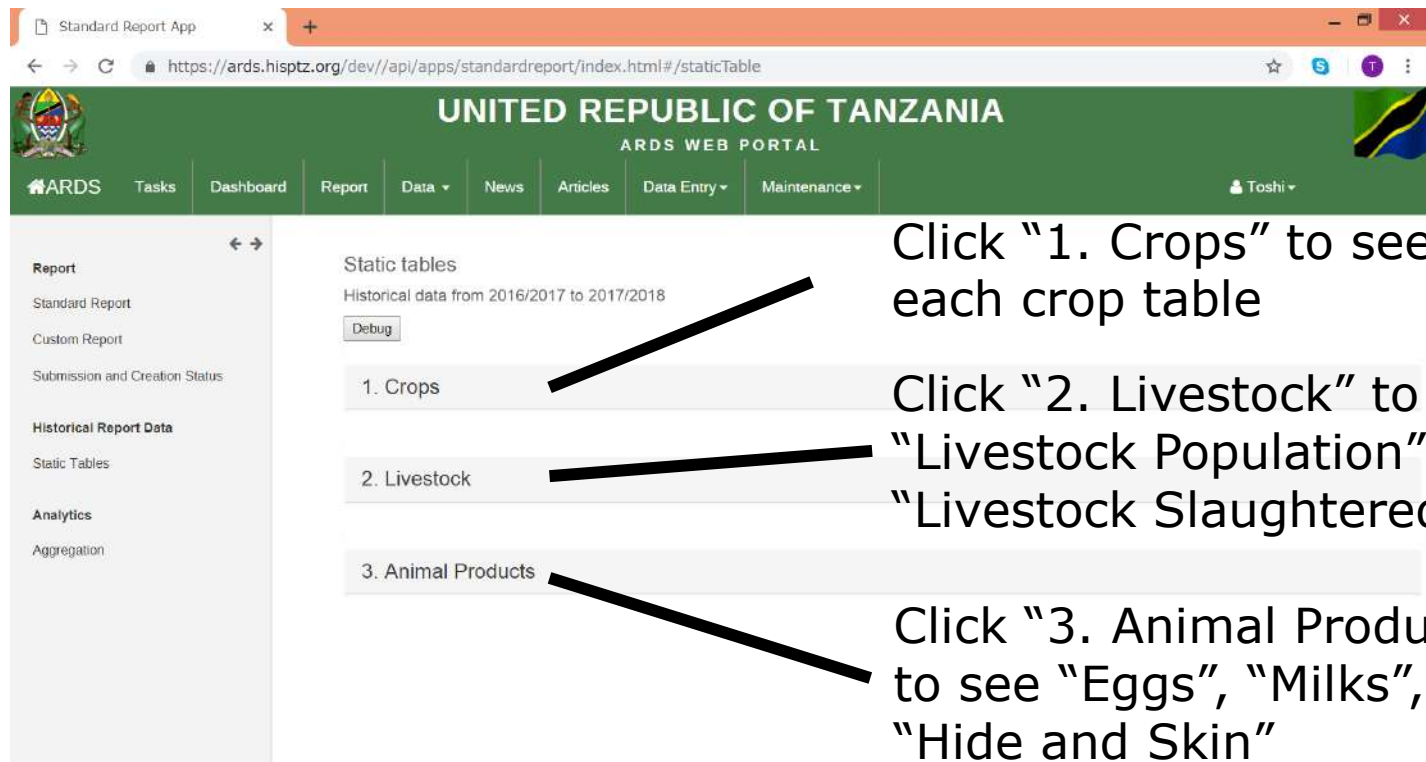
The main content area is titled "Reports" and contains four report options:

- Standard Report**: View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.
- Static Tables**: View static tables report. These reports are based on appended yearly generated reports for some chosen tables. This option is highlighted with a light blue background and a black arrow pointing to it from the text "Click Static Tables" below.
- Custom Report**: View and add reports based on the JasperReports library. These can be based on report tables and can be designed in iReport.
- Submission and Creation Status**: Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

A left sidebar menu is visible, containing sections: Report (with sub-items: Standard Report, Custom Report, Submission and Creation Status), Historical Report Data (with sub-item: Static Tables), and Analytics (with sub-item: Aggregation).





# 8. Static Table



Standard Report App x +

← → ↻ <https://ards.hisptz.org/dev//api/apps/standardreport/index.html#/staticTable> ☆ S T ⋮

 **UNITED REPUBLIC OF TANZANIA**  
ARDS WEB PORTAL 

🏠 ARDS Tasks Dashboard Report Data ▾ News Articles Data Entry ▾ Maintenance ▾ Toshi ▾

Report

- Standard Report
- Custom Report
- Submission and Creation Status

Historical Report Data

- Static Tables

Analytics

Aggregation

Static tables

Historical data from 2016/2017 to 2017/2018

Debug

1. Crops
2. Livestock
3. Animal Products

Click "1. Crops" to see each crop table

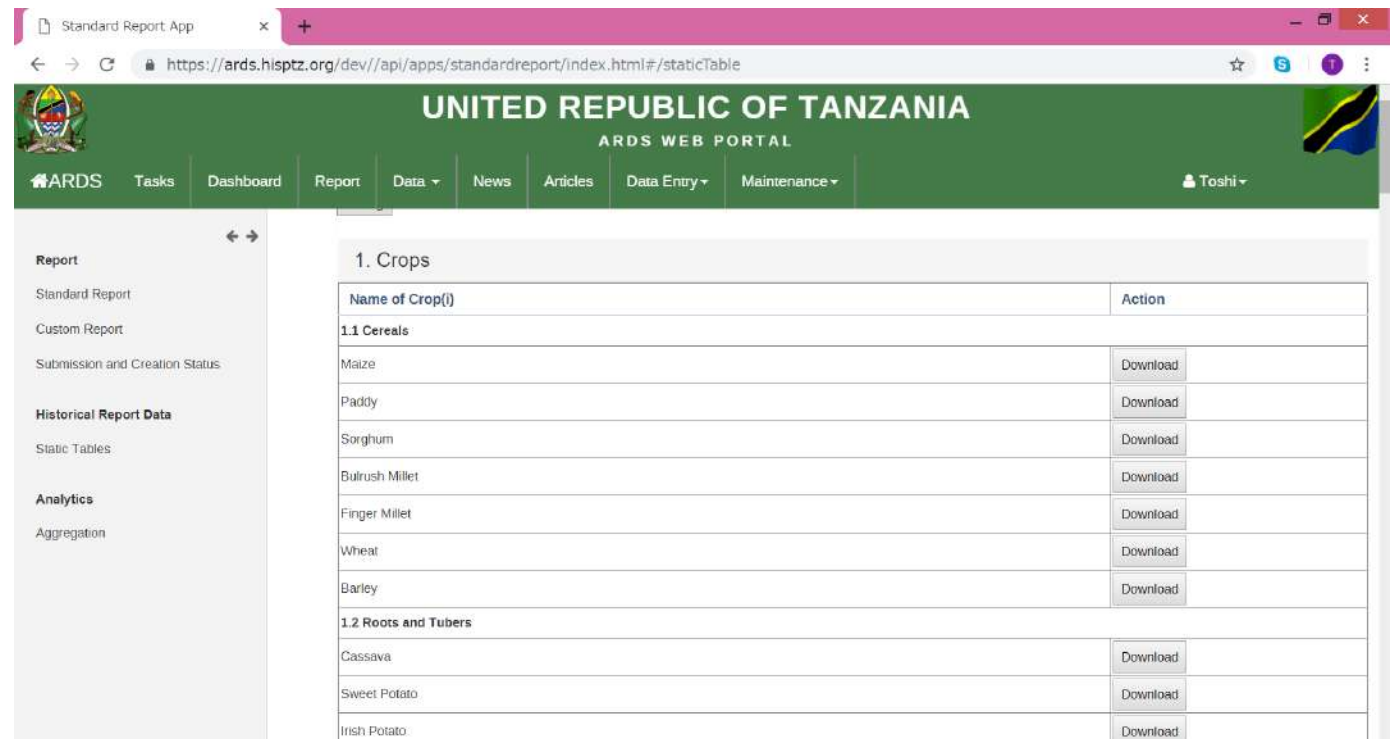
Click "2. Livestock" to see "Livestock Population" and "Livestock Slaughtered"

Click "3. Animal Products" to see "Eggs", "Milks", and "Hide and Skin"

# 8. Static Table

## 1. Crops

By clicking  
“Download”  
button you  
can get Excel  
report



The screenshot shows a web browser window displaying the ARDS Web Portal. The page title is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user is logged in as "Toshi".

The main content area displays a table titled "1. Crops". The table has two columns: "Name of Crop(i)" and "Action". The table is organized into two sections: "1.1 Cereals" and "1.2 Roots and Tubers".

Name of Crop(i)	Action
<b>1.1 Cereals</b>	
Maize	Download
Paddy	Download
Sorghum	Download
Bulrush Millet	Download
Finger Millet	Download
Wheat	Download
Barley	Download
<b>1.2 Roots and Tubers</b>	
Cassava	Download
Sweet Potato	Download
Irish Potato	Download

# 8. Static Table

## 2. Livestock and 3. Animal Products

By clicking  
“Download”  
button you  
can get Excel  
report



The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. The user profile "Toshi" is visible in the top right.

The main content area displays a search bar with "Rozella" and a "Download" button. Below this, there are two sections:

### 2. Livestock

Name of Crop(i)	Action
Livestock Population	Download
Livestock Slaughtered	Download

### 3. Animal Products

Name of Crop(i)	Action
Eggs	Download
Milk	Download
Hide and Skin	Download

# 8. Static Table

## Specification of Each Report

Table	Data Source	Trigger for creation
Crop Table	Last Quarter of Table 1 DIR02	NIR02 for the last quarter for the FY creation
Livestock Population	Table 9 DIR03 and Table 10 DIR03	NIR03 creation
Livestock Slaughtered	Last Quarter of Table 4 DIR02	NIR02 for the last quarter for the FY creation
Milk	Last Quarter of Table 6(b) DIR02	NIR02 for the last quarter for the FY creation
Egg	All Quarters for the FY of Table 6(b) DIR02	NIR02 for the last quarter for the FY creation
Hide and Skin	All Quarters for the FY of Table 6(c) DIR02	NIR02 for the last quarter for the FY creation

# 8. Static Table

## Common Requirement

- The data for the newly created regions/districts can be inserted while keeping blank for the data for the regions/districts for the past FY.
- If some regions or districts are removed, the data for the regions or districts are put as “-”.
- When the trigger file is removed, the information above also is removed.

# **9. Archived Report**

**For All Users**

# 9. Archived Report

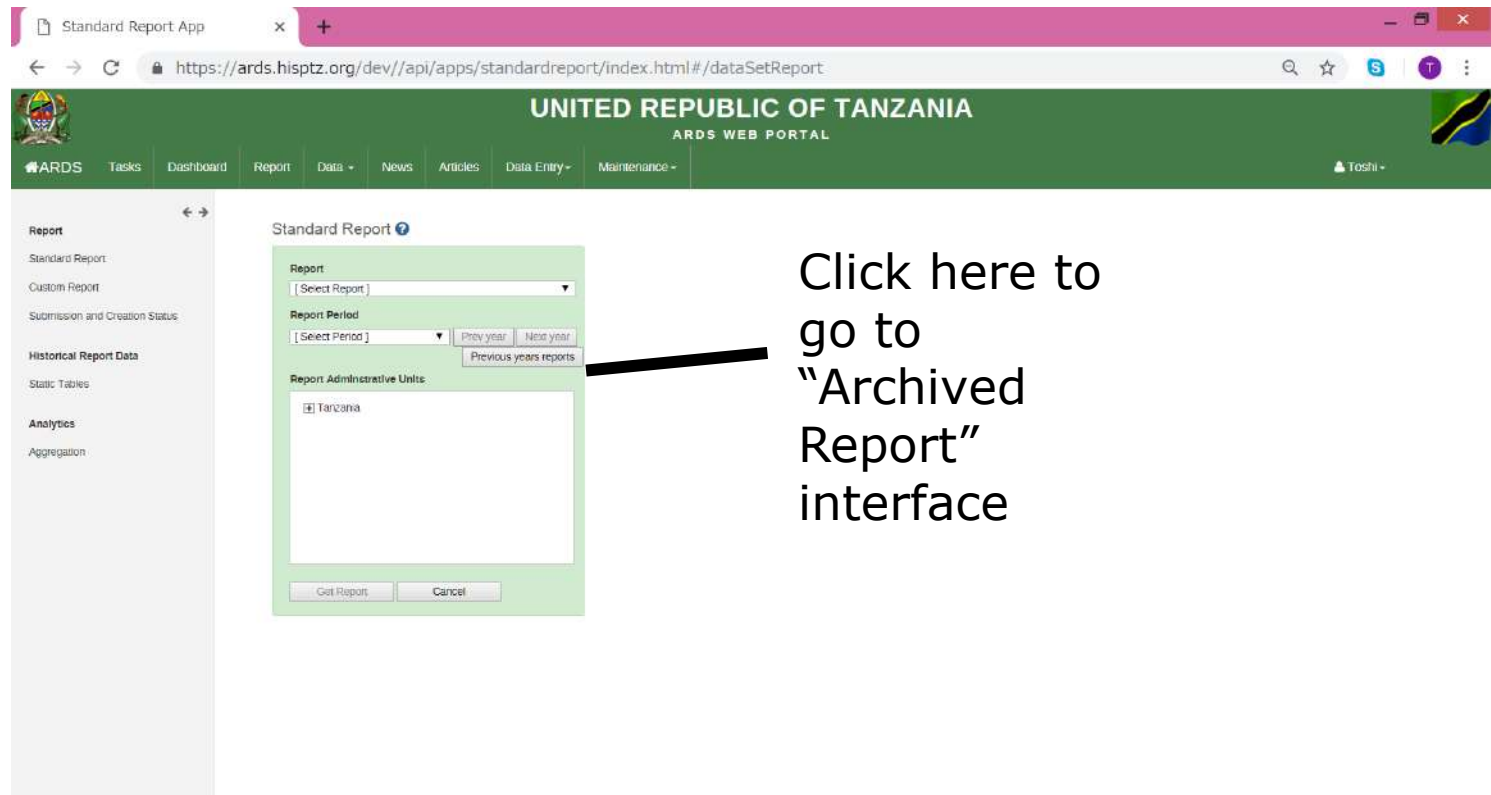
Issues and Solution

② **Reports** which belong to **administrative unit removed are not obtainable.**

-> Archived Report

Archived Report is **the interface to retrieve standard reports for administrative unit which existed before but removed already.**

# 9. Archived Report



The screenshot displays the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu contains "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A user profile for "Toshi" is visible in the top right. A left sidebar lists menu items under "Report", "Historical Report Data", "Static Tables", and "Analytics". A modal window titled "Standard Report" is open, featuring a "Report" dropdown menu, a "Report Period" dropdown menu, and buttons for "Prev year", "Next year", and "Previous years reports". The "Report Administrative Units" section shows a list with "Tanzania" selected. At the bottom of the modal are "Get Report" and "Cancel" buttons. A black arrow points from the text "Click here to go to 'Archived Report' interface" to the "Previous years reports" button.

Click here to go to "Archived Report" interface



# 9. Archived Report

ARDS - Archived Standard Report

https://ards.hispztz.org/dev//api/apps/archived-standard-report/index.html#/

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

Tasks Dashboard Report Data News Articles Data Entry Maintenance

Toshi

Report

Standard Report

Custom Report

Submission and Creation Status

Historical Report Data

Static Tables

Analytics

Aggregation

Change Fiscal Year: 2017-2018

Report

[ Select Data Set ]

Report Period: [ Select Period ] Current year reports

Report Administrative Units

Tanzania

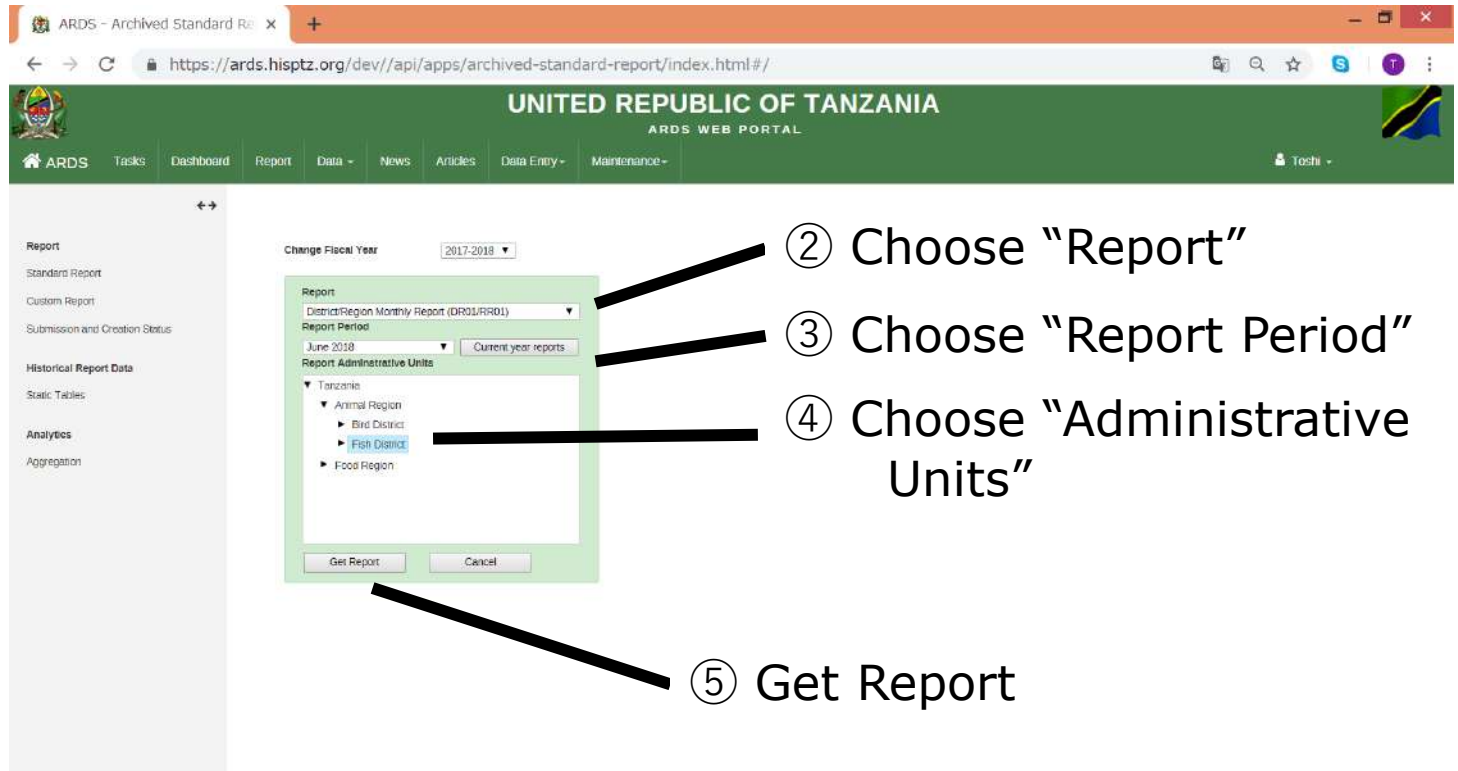
Get Report Cancel

① Select Fiscal Year

Corresponding "Periods" are loaded

Corresponding "Administrative Units" are loaded

# 9. Archived Report



ARDS - Archived Standard Re x +

https://ards.hisptz.org/dev/api/apps/archived-standard-report/index.html#/

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data - News Articles Data Entry - Maintenance - Toshi -

Report

Standards Report

Custom Report

Submission and Creation Status

Historical Report Data

Static Tables

Analytics

Aggregation

Change Fiscal Year 2017-2018

Report  
District/Region Monthly Report (DR01/RR01)

Report Period  
June 2018 Current year reports

Report Administrative Units

Tanzania

- Animal Region
- Bird District
- Fish District
- Food Region

Get Report Cancel

② Choose "Report"

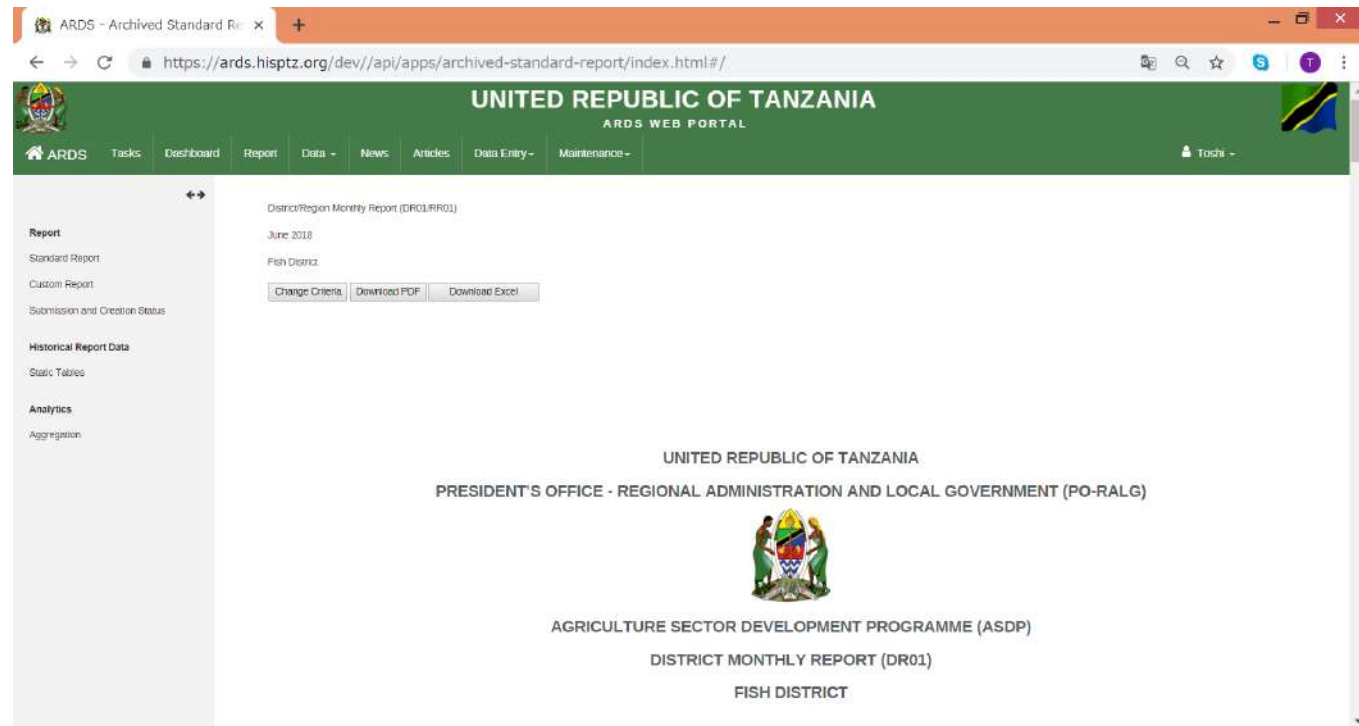
③ Choose "Report Period"

④ Choose "Administrative Units"

⑤ Get Report

# 9. Archived Report

Your can get selected standard report



The screenshot displays a web browser window with the URL <https://ards.hisptz.org/dev/api/apps/archived-standard-report/index.html#/>. The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". A navigation menu includes "ARDs", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". A sidebar on the left lists "Report" (with sub-items: Standard Report, Custom Report, Submission and Creation Status), "Historical Report Data" (with sub-item: Static Tables), and "Analytics" (with sub-item: Aggregation). The main content area shows "District/Region Monthly Report (DR01/RRO1)", "June 2018", and "Fish District". Below this, there are buttons for "Change Criteria", "Download PDF", and "Download Excel". The footer of the page contains the text: "UNITED REPUBLIC OF TANZANIA", "PRESIDENT'S OFFICE - REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT (PO-RALG)", the national coat of arms, "AGRICULTURE SECTOR DEVELOPMENT PROGRAMME (ASDP)", "DISTRICT MONTHLY REPORT (DR01)", and "FISH DISTRICT".

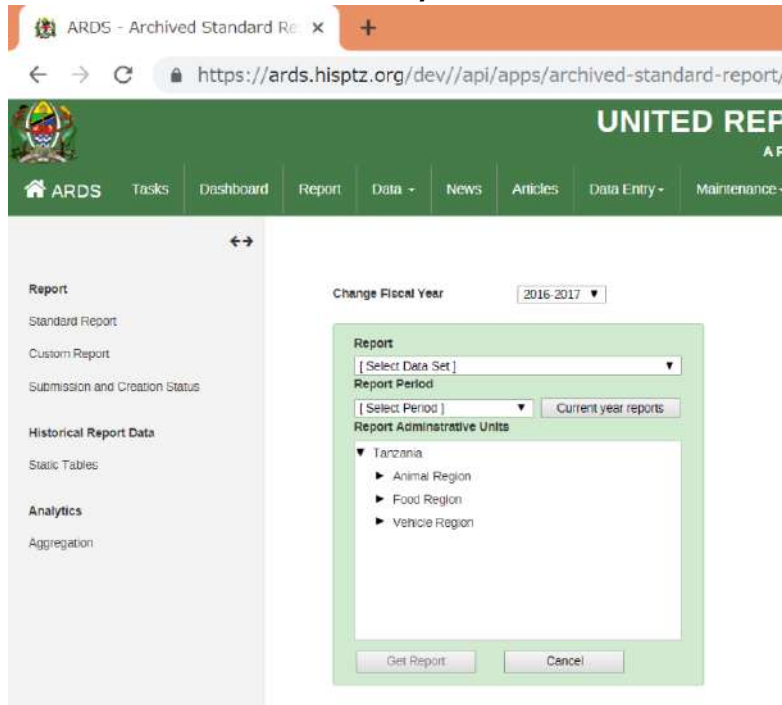
# 9. Archived Report

Administrative Units can be different depending on fiscal year.

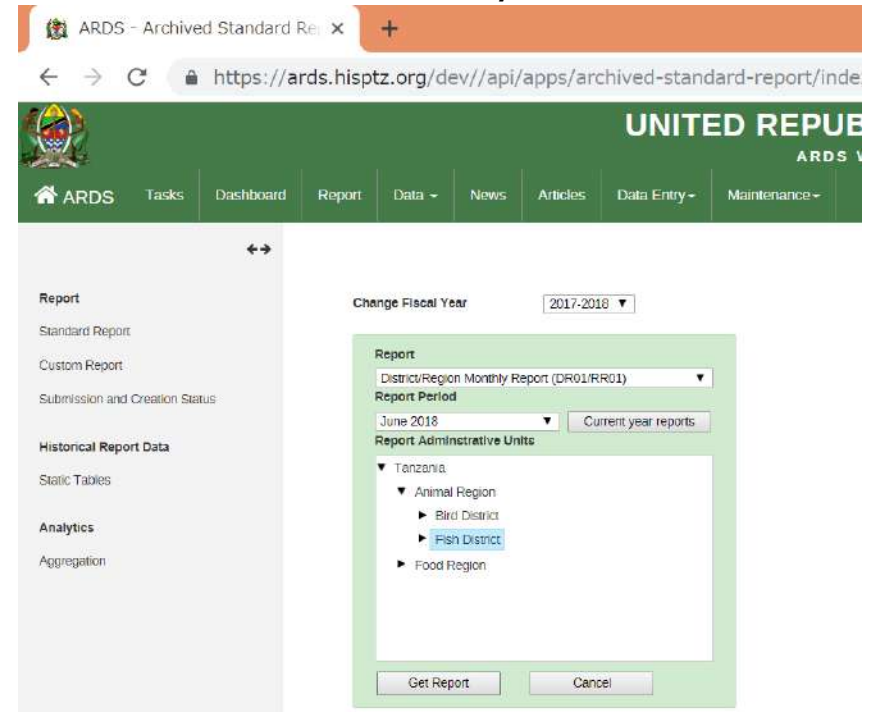
FY 2016/17

year.

FY 2017/18



The screenshot shows the ARDS Archived Standard Report interface for the fiscal year 2016-2017. The browser address bar displays the URL: <https://ards.hispitz.org/dev//api/apps/archived-standard-report/>. The page header includes the United Republic of Tanzania logo and navigation tabs: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A sidebar on the left lists menu items: Report, Standard Report, Custom Report, Submission and Creation Status, Historical Report Data, Static Tables, Analytics, and Aggregation. The main content area features a 'Change Fiscal Year' dropdown set to '2016-2017'. Below this is a report configuration box with the following fields: 'Report' (dropdown menu), 'Report Period' (dropdown menu with 'Current year reports' button), and 'Report Administrative Units' (tree view showing Tanzania with sub-items: Animal Region, Food Region, and Vehicle Region). 'Get Report' and 'Cancel' buttons are at the bottom.



The screenshot shows the ARDS Archived Standard Report interface for the fiscal year 2017-2018. The browser address bar displays the URL: <https://ards.hispitz.org/dev//api/apps/archived-standard-report/index>. The page header includes the United Republic of Tanzania logo and navigation tabs: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A sidebar on the left lists menu items: Report, Standard Report, Custom Report, Submission and Creation Status, Historical Report Data, Static Tables, Analytics, and Aggregation. The main content area features a 'Change Fiscal Year' dropdown set to '2017-2018'. Below this is a report configuration box with the following fields: 'Report' (dropdown menu showing 'District/Region Monthly Report (DR01/RR01)'), 'Report Period' (dropdown menu with 'Current year reports' button), and 'Report Administrative Units' (tree view showing Tanzania with sub-items: Animal Region, Bird District, Fish District, and Food Region). 'Get Report' and 'Cancel' buttons are at the bottom.

# 9. Archived Report

Administrative Unit is automatically archived at the end of Fiscal Year. Reports creation / approval in standard reports will be synchronized with archived report after that.

# **10. Task List**

**For District and Region Users**

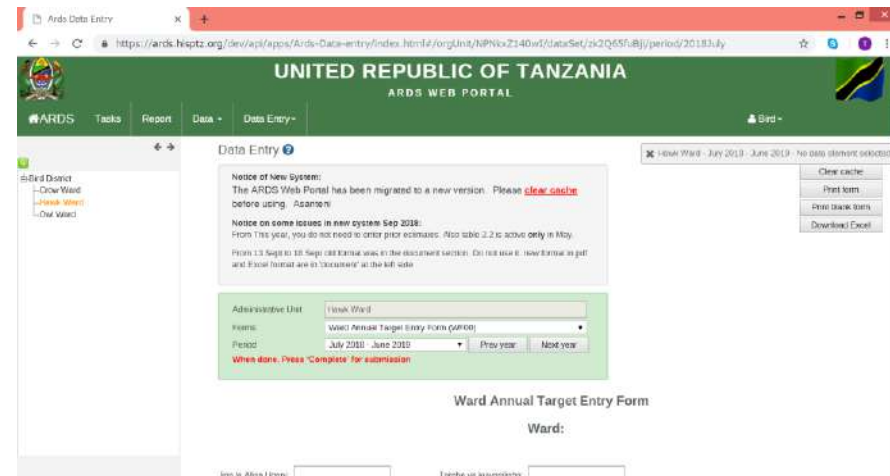
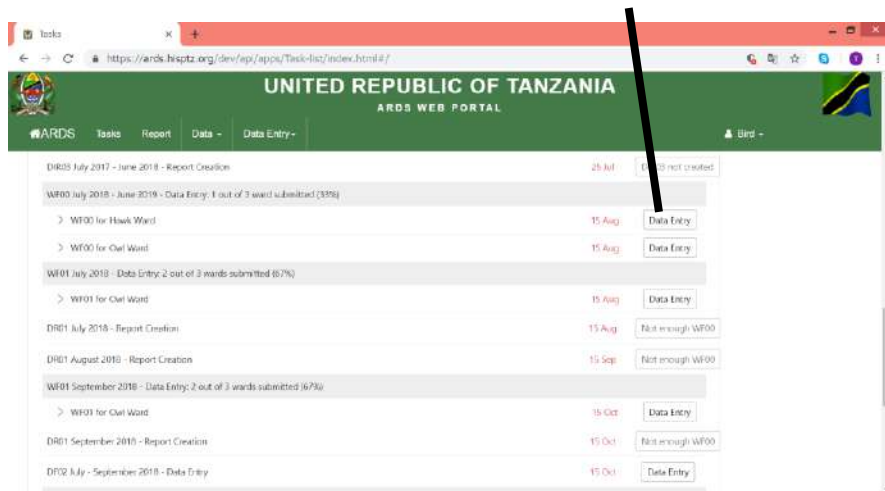
# 10. Task List

Task List shows **tasks for LGA officers and Region officers.**

After the task is clicked, **the screen shifts to the task.**

Click WF00 for 2018/19 task for Hawk Ward

WF00 for 2018/19 for Hawk Ward



# 10. Task List

Task Lists are different between LGA and Region since LGA and Region officers has different tasks.

## Task List for LGA officer



The screenshot shows the ARDS Web Portal interface for a Bird District. The header includes the United Republic of Tanzania logo and navigation links for ARDS, Tasks, Report, Data, and Data Entry. A notification box contains system migration notices. Below, a table lists tasks with columns for Notification, Deadline, and Action.

Notification	Deadline	Action
DR01 July 2017 - Approval by RS Not Yet Approved	25 Aug	<a href="#">View Report</a>
DR01 August 2017 - Approval by RS Not Yet Approved	25 Sep	<a href="#">View Report</a>
DR02 LGA - September 2017 - Data Entry	15 Oct	<a href="#">Data Entry</a>

## Task List for Region officer



The screenshot shows the ARDS Web Portal interface for an Animal Region. The header includes the United Republic of Tanzania logo and navigation links for ARDS, Tasks, Report, Data, News, Articles, and Data Entry. A notification box contains system migration notices. Below, a table lists tasks with columns for Notification, LGA Deadline, and Action.

Notification	LGA Deadline	Action
DR01 July 2017: 2 out of 2 districts created (100%) 0 approved (0%)		
> DR01 for Bird District: Not yet approved	15 Aug 25 Aug	<a href="#">View Report</a>
> DR01 for LGA: Not yet approved	15 Oct 18 Oct	<a href="#">View Report</a>



# 10. Task List

Task List is to remind tasks to do for LGA and Region officer. So, LGA and Region officers are responsible for making tasks in Task List empty.

# 10. Task List

Tasks for LGA officers and Region officers

LGA Officers	Region Officers
1. Data Entry Task 2. Report Creation Task 3. Report Approval Notification	4. Report Approval Task

# 10. Task List

## 1. Data Entry Task for LGA Officers (Status Change)

- The task begin to appear from “Start Showing” date.
- The **deadline** is **highlighted** with red from **the next day** of the deadline.
- The **tasks** will be **removed** after the entry forms are **submitted**, the **fiscal year** is **locked**, or the **related reports** are **created**.

# 10. Task List

## 2. Report Creation Task for LGA Officers (Status Change)

- The task begin to appear from “**Start Showing**” date.
- The **deadline** is **highlighted** with red from **the next day** of the deadline.
- The **tasks** are **removed** after the reports are created, or **the fiscal year** is **locked**.

# 10. Task List

## 2. Report Creation Task for LGA Officers (Status Change)

In addition, **messages** shown and **enable/disable of creation button** for DR01, DR02, DR03 are **different** depending on **dependency** situation

# 10. Task List

## 2. Report Creation Task for LGA Officers (Status Change)

Messages shown on DR01

Task	Dependency	Message
DR01	WF00 less than 90%	Not Enough WF00
	Enough WF00 WF01 less than 90%	Not Enough WF01
	Enough WF00 / WF01 Any previous months' DR01 in the fiscal year has not been created	Previous DR01 Not Yet Created
	Enough WF00 / WF01 All previous DR01 created	Create Report Button (DR01 can be created)

# 10. Task List

## 2. Report Creation Task for LGA Officers (Status Change) Messages shown on DR02, DR03

Task	Dependency	Message
DR02	WF02 less than 90%	Not Enough WF02
	Enough WF02	Create Report Button (DR02 can be created)
DR03	WF03 less than 90%	Not Enough WF03
	Enough WF03	Create Report Button (DR03 can be created)

# 10. Task List

3. Report Approval Notification for LGA Officers (Status Change)
  - DR01/DR02/DR03 Report Approval Notification appears after the report is created.
  - DIR02/DIR03 Report Approval Notification from "Start Showing" date.



# 10. Task List

## 3. Report Approval Notification for LGA Officers (Status Change)

- The **deadline** is **highlighted** with red from **the next day** of the deadline.
- The **tasks** are **removed** after the reports are approved by RS or **the fiscal year** is **locked**.

# 10. Task List

## 3. Report Approval Notification for LGA Officers (Status Change)

In addition, **messages** shown and **enable/disable of view** for DIR02, DIR03 are **different** depending on the **report creation** status

# 10. Task List

## 3. Report Approval Notification for LGA Officers (Status Change)

Task	Report Creation	Message
DIR02	DIR02 not created	DIR02 Not Created
	DIR02 created	View Report Button ( <a href="#">Linked to DIR02</a> )
DIR03	DIR03 not created	DIR03 Not Created
	DIR03 created	View Report Button ( <a href="#">Linked to DIR03</a> )

# 10. Task List

## 4. Report Approval Task for Region Officers (Status Change)

- DR01/DR02/DR03/ DIR02/DIR03 Report Approval Notification from “Start Showing” date.
- Both LGA deadline to create report and Deadline to approve the report for RS are shown.
- LGA deadline is highlighted with red from the next day of the deadline, If the report is not created.

# 10. Task List

## 4. Report Approval Task for Region Officers (Status Change)

- Deadline to approve the report for RS is **highlighted** with red from **the next day** of the deadline.
- The **tasks** are **removed** after the reports are approved by RS or **the fiscal year** is **locked**.

# 10. Task List

## 4. Report Approval Task for Region Officers (Status Change)

In addition, [messages](#) shown and [enable/disable of view](#) for DR01/DR02/DR03/DIR02/DIR03 are [different](#) depending on the [report creation](#) status

Not created: Not Available

Created: View Report Button (Linked to the report)

# 10. Task List

LGA

rev.2018-10-05

Report/ Data Entry Form			Task / Notification							
Code	Name	Period	Type	Start Showing Task/Notification	Dependencies (when to enable task)	Start of Reminder for Follow Up (Start Highlighting)	Task Deadline (Start Highlighting)	Stop Showing Task/Notification	Display Priority Order	
							Sort Priority 1		Sort Priority 2	
DIR02 Group	WF00	Ward Annual Target Data Entry Form	Annual	Task: Data Submission	Start of Fiscal Year: 16th of Jul. of the fiscal year	--	n/a	15th of Aug. of the fiscal year	When submitted or <del>DR01</del> -created or fiscal year locked	2
	WF01	Ward Monthly Data Entry Form	Monthly	Task: Data Submission	1st of the following month	--	n/a	15th of following month	When submitted or DR01 created or fiscal year locked	3
	DR01	District Monthly Report	Monthly	Task: Report Creation	1st of the following month	WF00: 90% submission, WF01: 90% submission, DR01: previous month	n/a	15th of following month	When created or fiscal year locked	4
				<i>Notification: Approval Status</i>	After DR01 creation	--	n/a	25th of following month	When approved by RS or fiscal year locked	5
	DF02	District Quarterly Data Entry Form	Quarterly	Task: Data Submission	1st of the month following the quarter	--	n/a	15th of the month following the quarter	When submitted or fiscal year locked	6
	DIR02	District Integrated Quarterly Report	Quarterly	<i>Notification: Approval Status</i>	1st of the month following the quarter	--	n/a	25th of the month following the quarter	When approved by RS or fiscal year locked	7
	DIR03 Group	WF02	Ward Quarterly Data Entry Form	Quarterly	Task: Data Submission	1st of the month following the quarter	--	n/a	15th of the month following the quarter	When submitted or DR02 created or fiscal year locked
DR02		District Quarterly Report	Quarterly	Task: Report Creation	1st of the month following the quarter	WF02: 90% submission, DR02: previous quarter	n/a	15th of the month following the quarter	When created or fiscal year locked	9
				<i>Notification: Approval Status</i>	After DR02 creation	--	n/a	25th of the month following the quarter	When approved by RS or fiscal year locked	10
WF03		Ward Annual Data Entry Form	Annual	Task: Data Submission	After Fiscal Year: 1st of Jul. following the fiscal year	--	n/a	15th of Jul. following the fiscal year	When submitted or DR03 created or fiscal year locked	11
DR03		District Annual Report	Annual	Task: Report Creation	1st of Jul. following the fiscal year	WF03: 90% submission	n/a	15th of Jul. following the fiscal year	When created or fiscal year locked	12
				<i>Notification: Approval Status</i>	After DR03 creation	--	n/a	25th of the month following the quarter	When approved by RS or fiscal year locked	13
DF03		District Annual Data Entry Form	Annual	Task: Data Submission	1st of Jul. following the fiscal year	--	n/a	15th of Jul. following the fiscal year	When submitted or fiscal year locked	14
DIR03	District Integrated Annual Report	Annual	<i>Notification: Approval Status</i>	1st of Jul. following the fiscal year	--	n/a	25th of Jul. following the fiscal year	When approved by RS or fiscal year locked	15	

# 10. Task List

Region

Report/ Data Entry Form			Task / Notification						
Code	Name	Period	Type	Start Showing Task/Notification	Dependencies (when to enable task)	Start of Reminder for Follow Up (Start Highlighting)	Task Deadline (Start Highlighting)	Stop Showing Task/Notification	Display Priority Order
							<a href="#">Sort Priority 1</a>		<a href="#">Sort Priority 2</a>
<b>DR01</b>	District Monthly Report	Monthly	Task: Report Approval	1st of the following month	DR01 created by LGA	16th of the following month	25th of following month	When approved	<b>1</b>
<b>DIR02</b>	District Integrated Quarterly Report	Quarterly	Task: Report Approval	1st of the month following the quarter	DIR02 becomes available	16th of the month following the quarter	25th of the month following the quarter	When approved	<b>2</b>
<b>DR02</b>	District Quarterly Report	Quarterly	Task: Report Approval	1st of the month following the quarter	<a href="#">DR02 created by LGA</a>	16th of the month following the quarter	25th of the month following the quarter	When approved	<b>3</b>
<b>DR03</b>	District Annual Report	Annual	Task: Report Approval	1st of Jul. following the fiscal year	<a href="#">DR03 created by LGA</a>	16th of Jul. following the fiscal year	25th of Jul. following the fiscal year	When approved	<b>4</b>
<b>DIR03</b>	District Integrated Annual Report	Annual	Task: Report Approval	1st of Jul. following the fiscal year	<a href="#">DIR03 becomes available</a>	16th of Jul. following the fiscal year	25th of Jul. following the fiscal year	When approved	<b>5</b>



# **11. Submission and Creation Status**

**For All Users**

# **11. Submission and Creation Status**

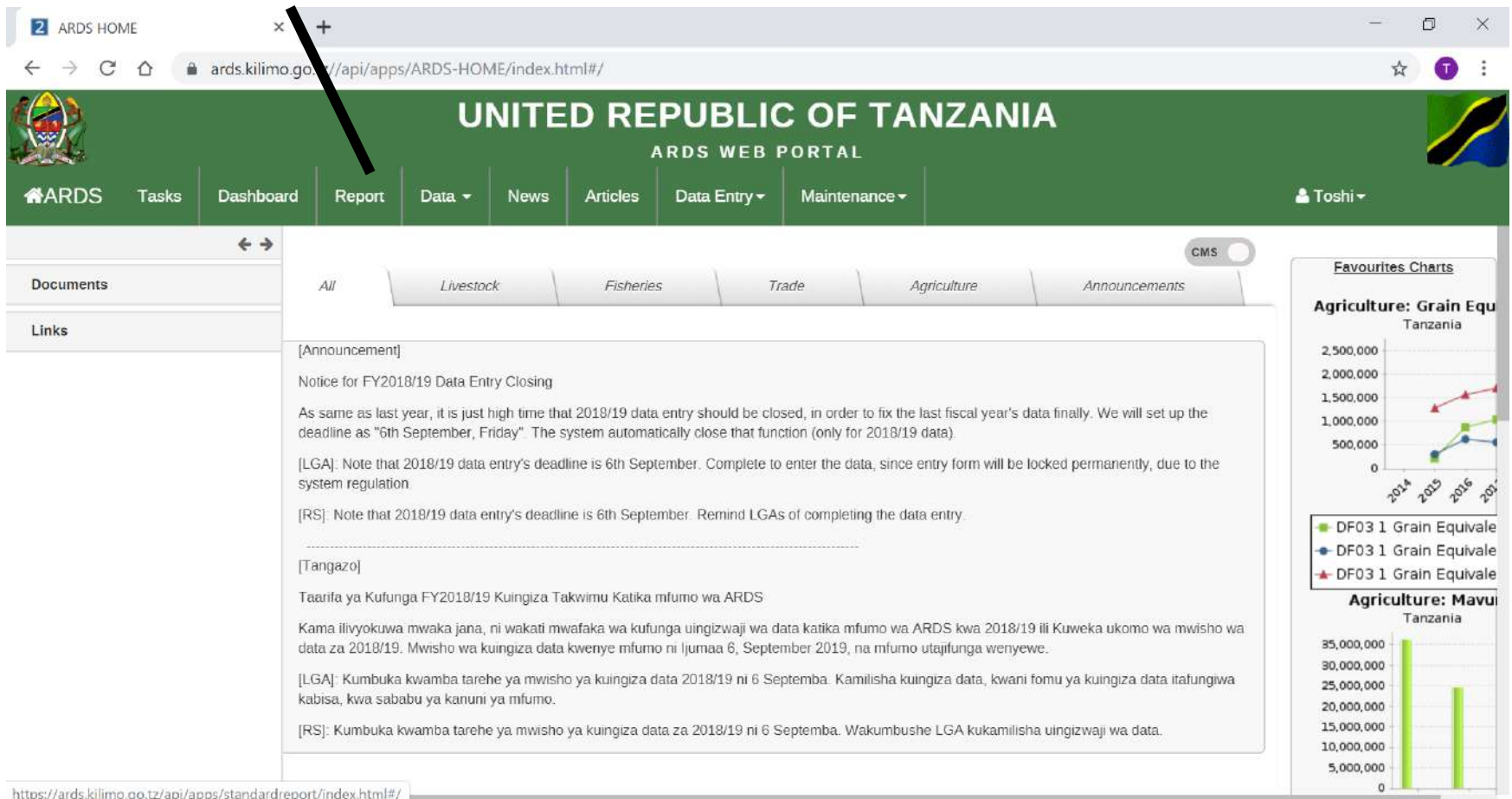
## **11.1 Standard Operation**

Submission and Creation Status is to show how many data entry forms are submitted and how many reports are created for each period and administrative unit. This function is used for central government users or region users to check progress of the data entry for report creation and to promote the progress. District users can check which data entry forms they submitted or which reports they already created.

# 11. Submission and Creation Status

## 11.1 Standard Operation

① Click Report

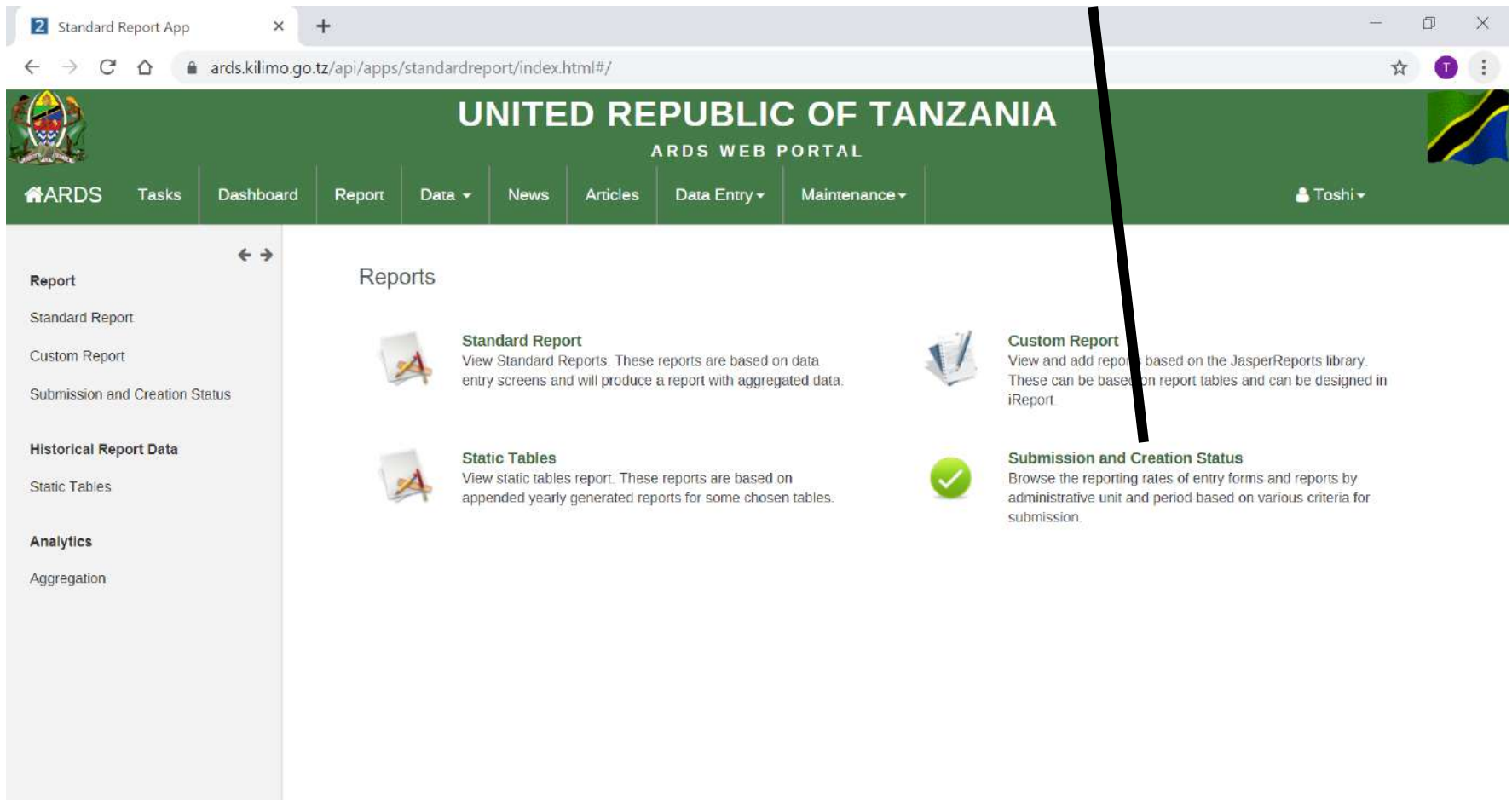


The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL: [ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html/](https://ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html/). The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The main navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The "Report" menu item is highlighted with a red arrow. Below the navigation menu, there are tabs for "Livestock", "Fisheries", "Trade", "Agriculture", and "Announcements". The main content area displays an announcement titled "[Announcement] Notice for FY2018/19 Data Entry Closing". The announcement text states: "As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as '6th September, Friday'. The system automatically close that function (only for 2018/19 data). [LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation [RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry." Below the announcement, there is a section titled "[Tangazo]" with the text: "Taanifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe. [LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani tomu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo. [RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data." On the right side of the page, there are two charts under the heading "Favourites Charts". The first chart is titled "Agriculture: Grain Equ Tanzania" and shows a line graph with data points for 2014, 2015, 2016, and 2017. The second chart is titled "Agriculture: Mavu Tanzania" and shows a bar chart with data points for 2014 and 2015. The URL at the bottom of the page is <https://ards.kilimo.go.tz/api/apps/standardreport/index.html/>.

# 11. Submission and Creation Status

## 11.1 Standard Operation

② Click Submission and Creation Status



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/?`. The header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The sidebar on the left is expanded to show the "Report" section, with "Submission and Creation Status" highlighted. The main content area, titled "Reports", lists four options: "Standard Report", "Static Tables", "Custom Report", and "Submission and Creation Status". A black arrow points from the text above to the "Submission and Creation Status" option in the sidebar.

**Report**

- Standard Report
- Custom Report
- Submission and Creation Status**

**Historical Report Data**

- Static Tables

**Analytics**

- Aggregation

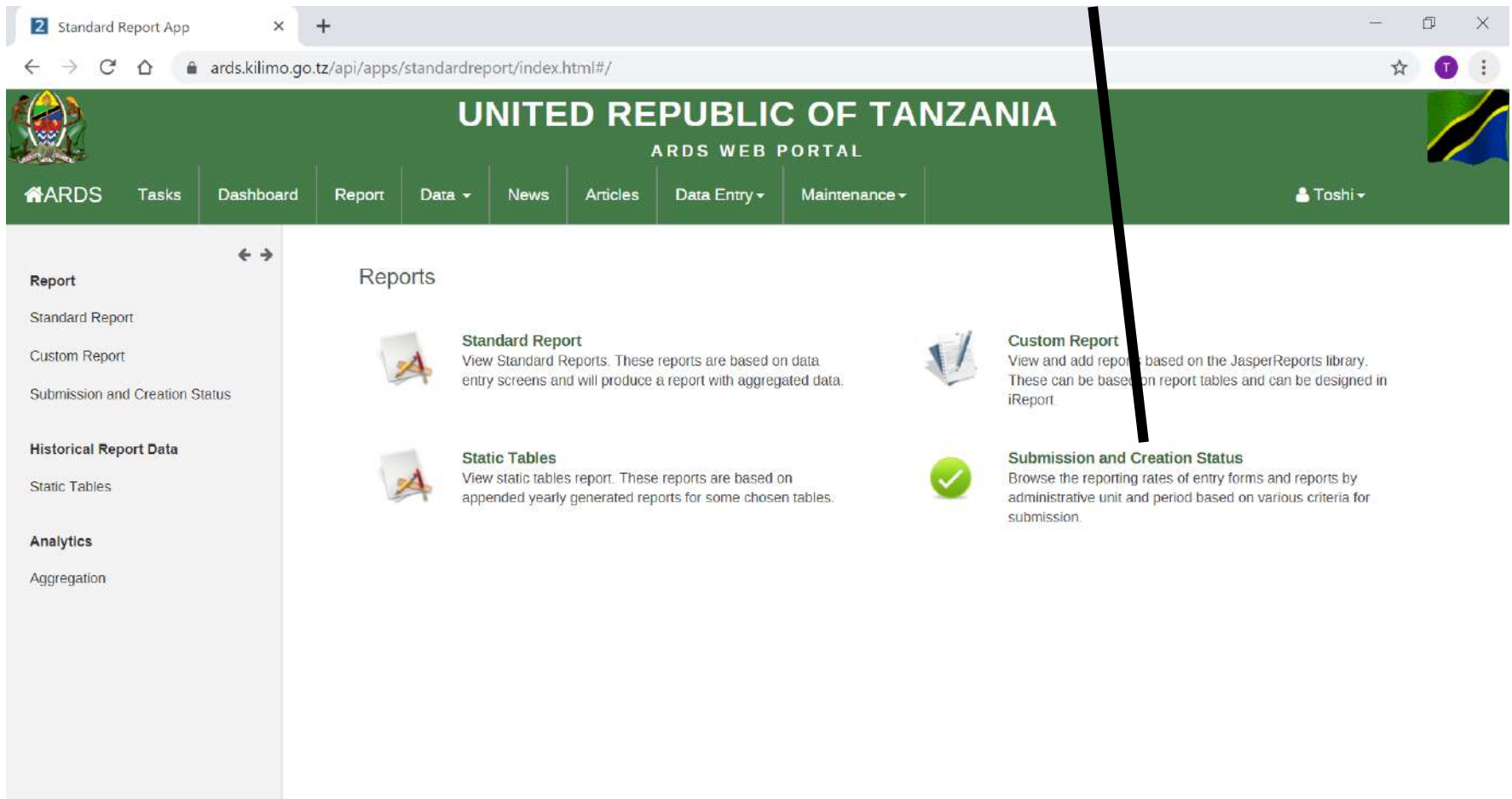
**Reports**

- Standard Report**  
View Standard Reports. These reports are based on data entry screens and will produce a report with aggregated data.
- Static Tables**  
View static tables report. These reports are based on appended yearly generated reports for some chosen tables.
- Custom Report**  
View and add reports based on the JasperReports library. These can be based on report tables and can be designed in iReport.
- Submission and Creation Status**  
Browse the reporting rates of entry forms and reports by administrative unit and period based on various criteria for submission.

# 11. Submission and Creation Status

## 11.1 Standard Operation

② Click Submission and Creation Status



The screenshot displays the ARDS Web Portal interface. The browser address bar shows the URL `ards.kilimo.go.tz/api/apps/standardreport/index.html#/?`. The header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right. The sidebar on the left lists the following options: "Report", "Standard Report", "Custom Report", "Submission and Creation Status", "Historical Report Data", "Static Tables", "Analytics", and "Aggregation". The main content area, titled "Reports", contains four items: "Standard Report" (with a bar chart icon), "Static Tables" (with a bar chart icon), "Custom Report" (with a document icon), and "Submission and Creation Status" (with a green checkmark icon). A black arrow points from the text above to the "Submission and Creation Status" option in the sidebar.

# 11. Submission and Creation Status

## 11.1 Standard Operation

③ Choose Administrative Unit

Submission and Creation status

ards.kilimo.go.tz/api/apps/Submission-and-Creation-status/index.html#

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance Tosh

Submission and Creation Status

Administrative unit

▼ Tanzania

- ▶ Arusha
- ▶ Dar es salaam
- ▶ Dodoma
- ▶ Geita
- ▶ Iringa

Show person in charge

Show Hierarchy

Administrative unit children

Show Districts

Entry form / Report

Ward Monthly Entry Form (WF01) Submission

Period

Monthly Prev Year Next Year

Date of report

July 2019 29 Sep 2019

④ Choose "Show Regions", "Show Districts", or "Show Wards"

⑤ Select "Data Entry Form" or "Standard Report" you want to check submission status or creation status

# 11. Submission and Creation Status

## 11.1 Standard Operation

The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The main content area is titled "Administrative unit" and contains a tree view of administrative units. The "Tanzania" unit is expanded, showing sub-units: Arusha, Dar es salaam, Dodoma, Geita, and Iringa. To the right of this tree are two checkboxes: "Show person in charge" (unchecked) and "Show Hierarchy" (checked). Below the tree is a dropdown menu labeled "Administrative unit children" with the text "Show Districts". Underneath is the "Entry form / Report" section, which has a dropdown menu currently showing "Ward Monthly Entry Form (WF01) Submission". Below this is the "Period" section, which includes a dropdown menu set to "Monthly", buttons for "Prev Year" and "Next Year", and a "Date of report" field set to "July 2019" with a calendar icon. At the bottom of the form is a "Get report" button and a PDF icon. A left sidebar contains a "Report" menu with options: "Standard Report", "Custom Report", "Submission and Creation Status", "Historical Report Data", "Static Tables", "Analytics", and "Aggregation". The top navigation bar includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", "Maintenance", and a user profile "Toshi".

⑥ Choose "Monthly", "Quarterly", or "Financial-July"

⑦ Choose Period

⑧ Get report

# 11. Submission and Creation Status

## 11.1 Standard Operation

⑨ Submission Rate appears

The screenshot shows the ARDS Web Portal interface. The main content area displays the title "Tanzania - Ward Monthly Entry Form" and "Submission Status as of Sep 29, 2019". A table below lists submission data for various wards in Arusha. Two callouts with arrows point to the "Actual Entry forms" and "Entry forms on time" columns, with text boxes explaining their significance: "Information on the current submission" and "Information on the submission by the deadline".

Parent	Name	Actual Entry forms	Expected Entry forms	Percent	Entry forms on time	Percent on time
Arusha	Arusha Mjini	25	25	100	23	92
	Arusha Vijijini	27	27	100	9	33.3
	Karatu	14	14	100	14	100
	Longido	18	18	100	5	27.8
	Meru	26	26	100	13	50
	Monduli	20	20	100	0	0
	Ngorongoro	28	28	100	28	100



# 11. Submission and Creation Status

## 11.2 Report Creation Status

### Report Creation Status (DR/RR01)

⑩ Click District/Region Monthly Report (DR01/RR01) Creation and Get Report

⑪ DR01/RR01 Creation Status is shown.

Tanzania - District/Region Monthly Report (DR01/RR01) Creation - June 2016  
Report Creation Status as of Aug 21, 2017

Region Monthly Report (RR01)						
Name	Actual Reports	Expected Reports	Percent	Reports on time	Percent on time	
ARDE Region	1	1	100	0	0	
Mara	1	1	100	0	0	
Rukwa	1	1	100	0	0	
Tanzania	3	3	100	0	0	

District Monthly Report (DR01)						
Name	Actual Reports	Expected Reports	Percent	Reports on time	Percent on time	
ARDE Region	2	2	100	2	100	
Mara	2	2	100	2	100	
Rukwa	4	4	100	4	100	
Tanzania	8	8	100	8	100	

# 11. Submission and Creation Status

## 11.2 Report Creation Status

Information on the current creation

Information on the creation by the deadline

Approval status (Only for district report)

Tanzania - District Monthly Report (DR01) - July 2019  
Report Creation Status as of Sep 29, 2019

Parent	Name	Actual Reports	Expected Reports	Percent	Reports on time	Percent on time	Approved reports	Percent approved
Arusha	Arusha Mjini	1	1	100	0	0	1	100
	Arusha Vijijini	1	1	100	0	0	1	100
	Karatu	1	1	100	0	0	1	100
	Longido	1	1	100	0	0	1	100
	Meru	1	1	100	0	0	1	100
	Monduli	1	1	100	0	0	1	100
	Ngorongoro	1	1	100	0	0	1	100
Ilala		1	1	100	1	100	1	100

# 11. Submission and

# Creation Status

## 11.3 Show District/Ward Submission Rate

⑫ Choose Show Districts or Show Wards

⑬ Submission rates for all districts or wards in Tanzania is shown

Name	Actual Entry forms	Expected Entry forms	Percent	Entry forms on time	Percent on time
Animal District	0	2	0	0	0
Fish District	0	1	0	0	0
Bunde Mjini	2	2	88.7	0	0
Bunde Vijijini	1	1	100	0	0
Kilimbo	18	23	82.6	11	47.8
Nyasi	18	26	69.2	18	69.2
Bumbaweinga Mjini	13	19	68.4	13	68.4
Bumbaweinga Vijijini	22	27	81.5	22	81.5
Tanzania	78	104	75.0	64	85.6

# 11. Submission and Creation Status

## 11.4 Past Submission Rate

⑭ Choose the date you want to see submission rate

⑮ Submission rates for the day is shown

Name	Actual Entry forms	Expected E	Percent	Entry forms on time	Percent on time
Arusha District	0	2	0	0	0
Fish District	0	1	0	0	0
Bunda Mjini	2	3	66.7	0	0
Bunda Vijijini	1	1	100	0	0
Kalambo	19	23	82.6	11	47.8
Nkasi	19	28	64.3	18	64.3
Sumbawanga Mjini	13	19	68.4	13	68.4
Sumbawanga Vijijini	22	27	81.5	22	81.5
Tanzania	76	104	72.1	54	61.5

# 11. Submission and Creation Status

## 11.5 Person in Charge

①⑥ Click "Show person in charge"

①⑦ Person in charge will appear

Parent	Name	Person in charge	Actual Entry forms	Expected Entry forms	Percent	Entry forms on time	Percent on time
	ARDS Region	Chache	0	0	0	0	0
Tanzania	Manyara	Piswika	0	4	75	0	0
	Rukwa		72	97	74.0	84	89.0
Tanzania			72	104	72.1	84	81.5

# 11. Submission and Creation Status

## 11.5 Person in Charge

18 Click "Show Hierarchy"

19 In addition to administrative unit level selected in "Administrative Units children", the one level higher level is shown in "Parent".

Parent	Name	Person in charge	Actual Entry forms	Expected Entry forms
	ARDS Region	Choche	0	3
Tanzania	Manyara	Pisotika	3	4
	Rukwa		72	97
Tanzania			75	104

# **12. Max and Min Value Setting**

**For District Users**

# **12. Max and Min Value Setting**

Sometimes, district officers input outliers into entry forms and it is causing the unsatisfactory data quality issue in ARDS Web Portal. To improve the quality of the data, a new function to configure maximum and minimum value was developed. This chapter explains the overview of the function and how district users set up these values. The function for the administrators will be explained in user manual.



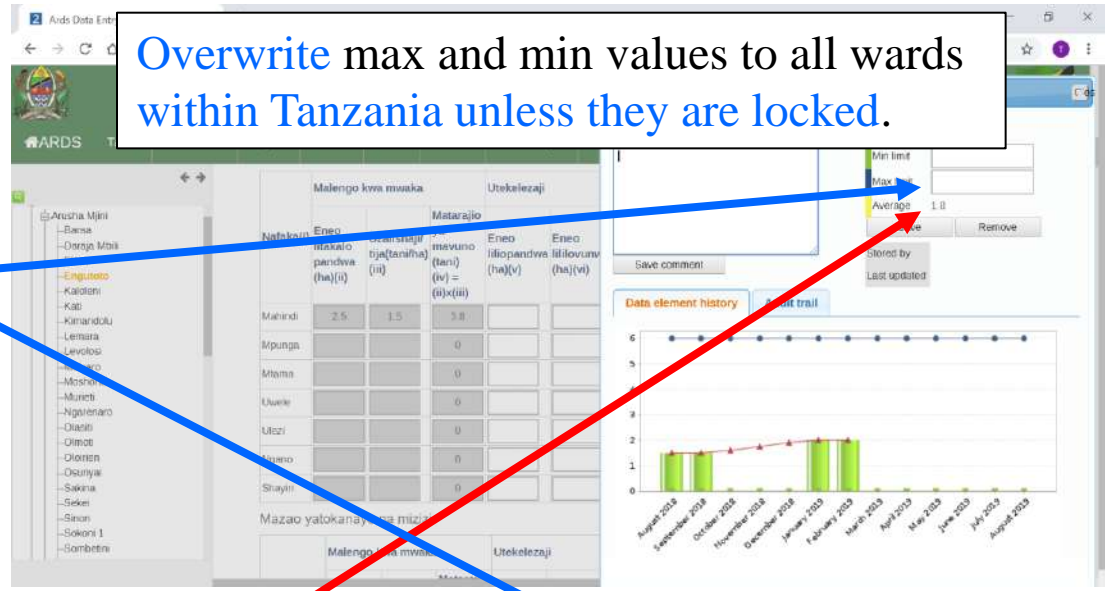
# 12. Max and Min Value Setting

## 12.1 Overview

Configure max and min values for Tanzania

**Administrator Screen**

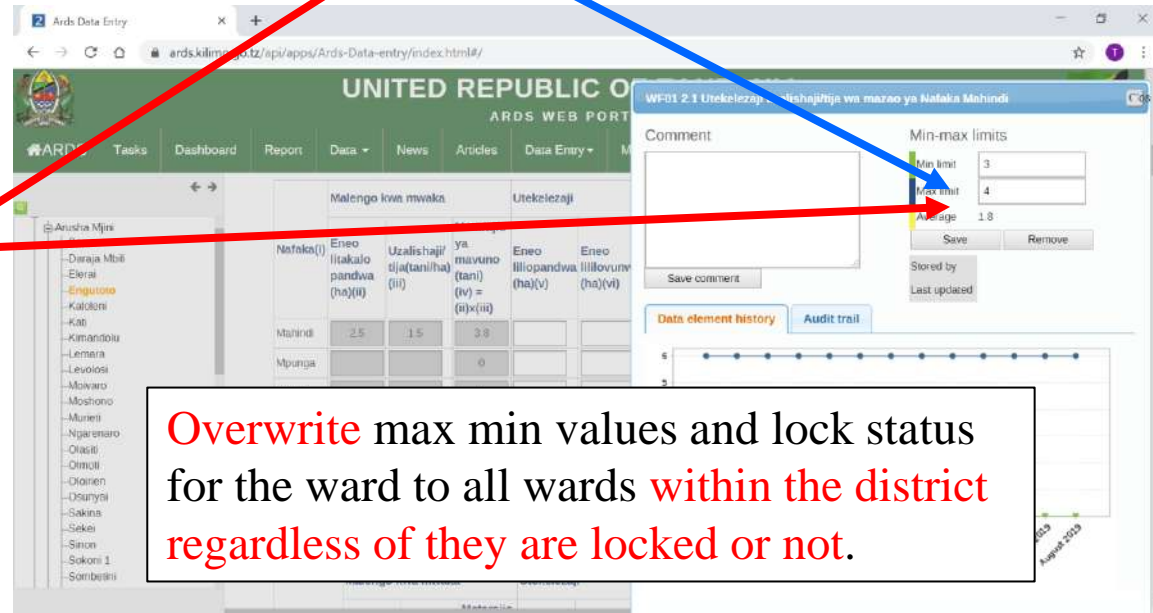
Explained in Maintenance Manual



Configure max and min values and lock/unlock for a ward. Then, the info can be applied all wards within the district.

**District Screen**

Explained in User Manual



# 12. Max and Min Value Setting

## 12.2 District Screen

① Choose Data Entry – Min & Max config



The screenshot shows the ARDS Web Portal interface. The browser address bar displays the URL: [ards.hisptz.org/dev/api/apps/ARDS-HOME/index.html#/](https://ards.hisptz.org/dev/api/apps/ARDS-HOME/index.html#/). The page header features the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Report", "Data", and "Data Entry". The "Data Entry" menu is expanded, showing options: "Data Entry", "Import Export", and "Min & Max config". The main content area displays a "Cooperation Framework Agreement" section, which includes text about the agreement between FAO and the Regional Commissions, dated April 2013. The text states: "In April 2013, the Cooperation Framework Agreement between FAO and the Regional Commissions was formalized to strengthen joint work relating to agricultural and rural development, food and nutrition security, and sustainable management of natural resources, including land, water and forests. The Agreement will specifically improve the collection, analysis and dissemination of relevant data and statistics in these areas. In terms of FAO statistical activities, long-standing collaboration is ongoing with the Regional Commissions with regard to data collection. Recently joint work has also taken place through the capacity development activities of the Global Strategy to Improve Agricultural and Rural Statistics, where the Regional Commissions lead the implementation of the Regional Action Plans. This is an essential step in improving data quality and availability at the national level." Below this, there is a section titled "Uzinduzi wa Mfumo wa Kitaifa wa Utambuzi, Usajili na Ufuatiliaji wa Mifugo na Wafugaji." with a sub-heading "Sherehe za Uzinduzi wa Mfumo wa Kitaifa wa Utambuzi, Usajili na Ufuatiliaji wa Mifugo na Wafugaji uliofanyika katika Halmashauri ya Kibaha Vijijini / 2014. Moeni rasmi Waziri wa Maendeleo wa Mifugo na Uvuvi Mhe. Dkt. Titus Mlengeya Kamani." A "Favourites\_Charts" sidebar on the right shows "No chart loaded".

# 12. Max and Min Value Setting

## 12.2 District Screen

② Click ">" to show wards under the district

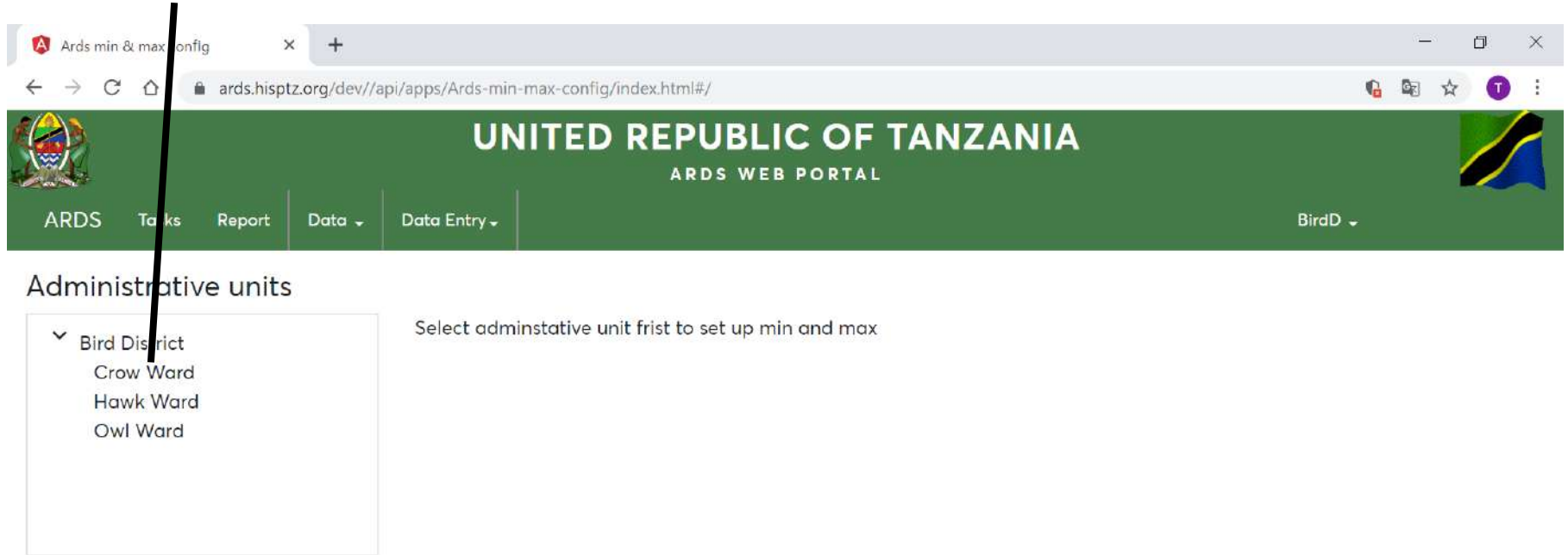


The screenshot shows a web browser window with the URL `ards.hisptz.org/dev//api/apps/Ards-min-max-config/index.html#`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation bar with links for "ARDS", "Tasks", "Report", "Data", "Data Entry", and "BirdD". The main content area is titled "Administrative units" and contains a dropdown menu with the option "> Bird District". To the right of the dropdown is the text "Select administrative unit first to set up min and max".

# 12. Max and Min Value Setting

## 12.2 District Screen

### ③ Select a ward



The screenshot shows a web browser window with the URL `ards.hisptz.org/dev//api/apps/Ards-min-max-config/index.html#`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with items: "ARDS", "Tasks", "Report", "Data", "Data Entry", and "BirdD". The main content area is titled "Administrative units" and features a dropdown menu. The dropdown menu is open, showing a list of options: "Bird District", "Crow Ward", "Hawk Ward", and "Owl Ward". To the right of the dropdown menu, there is a text prompt: "Select administrative unit first to set up min and max". A vertical black line is drawn over the dropdown menu, indicating the selection process.

Administrative units

- ▼ Bird District
  - Crow Ward
  - Hawk Ward
  - Owl Ward

Select administrative unit first to set up min and max

# 12. Max and Min Value Setting

## 12.2 District Screen

④ Input Max & Min Values for Crops for the selected ward

The screenshot shows a web browser window with the URL `ards.hisptz.org/dev//api/apps/Ards-min-max-config/index.html#`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with "ARDS", "Tasks", "Report", "Data", and "Data Entry" (with a dropdown arrow). On the right, there is a "BirdD" dropdown menu.

The main content area is divided into two sections. On the left, under "Administrative units", there is a dropdown menu showing "Bird District" (expanded) with sub-items: "Crow Ward" (highlighted in orange), "Hawk Ward", and "Owl Ward".

On the right, under "2.1 Utekelezaji wa malengo msimu", there is a table with columns for "Eneo liliopandwa", "Eneo lililovunwa", and "Uzalishaji/ tija(tani/ha)". Each of these columns has sub-columns for "Min" and "Max". The table rows are for "Mahindi", "Mpunga", "Mtama", "Uwele", "Ulezi", and "Naano". Each cell in the table contains a text input field with a number.

	Eneo liliopandwa		Eneo lililovunwa		Uzalishaji/ tija(tani/ha)	
	Min	Max	Min	Max	Min	Max
Mahindi	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="5"/>
Mpunga	<input type="text" value="6"/>	<input type="text" value="7"/>	<input type="text" value="8"/>	<input type="text" value="9"/>	<input type="text" value="0"/>	<input type="text" value="1"/>
Mtama	<input type="text" value="2"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="5"/>	<input type="text" value="6"/>	<input type="text" value="7"/>
Uwele	<input type="text" value="8"/>	<input type="text" value="9"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>
Ulezi	<input type="text" value="4"/>	<input type="text" value="5"/>	<input type="text" value="6"/>	<input type="text" value="7"/>	<input type="text" value="8"/>	<input type="text" value="9"/>
Naano	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="5"/>

# 12. Max and Min Value Setting

## 12.2 District Screen

⑤ Scroll Down and Input Max & Min Values for Maziwa for the selected ward

The screenshot shows a web browser window with the URL `ards.hispz.org/dev//api/apps/Ards-min-max-config/index.html#`. The page header is green with the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with "ARDS", "Tasks", "Report", "Data", and "Data Entry" (selected). A "BirdD" dropdown menu is also visible.

	6	7	8	9	0	1
Helianthus	<input type="text" value="2"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="5"/>	<input type="text" value="6"/>	<input type="text" value="7"/>
Choya (Rozella)	<input type="text" value="8"/>	<input type="text" value="9"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>

6.1 Maziwa

	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk -Indigeneous cattle (Lita)	<input type="text" value="4"/>	<input type="text" value="5"/>
Milk improved cattle (Lita)	<input type="text" value="6"/>	<input type="text" value="7"/>

Buttons: Save, Lock config, Apply min & Max to all wards

# 12. Max and Min Value Setting

## 12.2 District Screen

⑥ "Save" to apply changes to the selected ward

The screenshot shows the ARDS Web Portal interface for the United Republic of Tanzania. The page title is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Report", "Data", and "Data Entry". The "Data Entry" menu is expanded, showing a "BirdD" dropdown. The main content area displays a table of bird species with input fields for values. Below this, there is a section titled "6.1 Maziwa" with a table for setting minimum and maximum values for milk production. The "Save" button is highlighted with a red arrow.

	6	7	8	9	0	1
Helianthus	<input type="text" value="2"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="5"/>	<input type="text" value="6"/>	<input type="text" value="7"/>
Choya (Rozella)	<input type="text" value="8"/>	<input type="text" value="9"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>

6.1 Maziwa

	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk -Indigeneous cattle (Lita)	<input type="text" value="4"/>	<input type="text" value="5"/>
Milk improved cattle (Lita)	<input type="text" value="6"/>	<input type="text" value="7"/>

Save Lock config Apply min & Max to all wards



# 12. Max and Min Value Setting

## 12.2 District Screen

⑦ Click "Lock config" to lock max and min values for the selected ward

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Report", "Data", and "Data Entry". The main content area displays a table for bird species and a table for milk production.

Species	6	7	8	9	0	1
Helianthus	2	3	4	5	6	7
Choya (Rozella)	8	9	0	1	2	3

6.1 Maziwa

	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk-Indigeneous cattle (Lita)	4	5
Milk improved cattle (Lita)	6	7

At the bottom of the page, there are three buttons: "Save", "Lock config", and "Apply min & Max to all wards". A black arrow points from the instruction above to the "Lock config" button.



# 12. Max and Min Value Setting

## 12.2 District Screen

⑧ Click "Apply max & min to all wards" to copy max and min and lock status for selected the ward to all wards under the district regardless of the lock status of copied wards.

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Report Data Data Entry BirdD

	6	7	8	9	0	1
Singer						
Helianthus	2	3	4	5	6	7
Choya (Rozella)	8	9	0	1	2	3

6.1 Maziwa

	Kiasi cha uzalishaji maziwa kwa mfugo/siku	
	Min	Max
Milk -Indigeneous cattle (Lita)	4	5
Milk improved cattle (Lita)	6	7

Save Unlock config Apply min & Max to all wards

⑨ This button can unlock max& min for the selected ward.

# 12. Max and Min Value Setting

## 12.3 Alert Message

- ⑨ When the value less than min or more than max is entered in WF01, alert message is displayed.

The screenshot shows a web browser window with the URL `ards.hisptz.org/dev/api/apps/Ards-Data-entry/index.html#`. The application interface includes a navigation menu with 'ARDS', 'Tasks', 'Dashboard', 'Report', and 'Data'. A sidebar on the left shows a tree view of regions and wards, with 'Catfish Ward' selected. The main content area displays a table for data entry. An alert message is shown in the center, stating: 'The value of the following data element is greater than the specified maximum value.: 5' and 'WF01 2.1 Utekelezaji wa eneo lililo pandwa mazao ya viungo'. The alert has an 'OK' button. A black arrow points from the 'OK' button to a circled '7' and the text 'OK' on the right side of the image.

Viungo(i)	Malengo kwa mwaka			Utekelezaji			Bei ya soko Tsh/kg(ix)	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji /tija (tani/ha) (iii)	Matarajio ya mavuno (tani) (iv) = (ii)x(iii)	Eneo lililo pandwa (ha)(v)	Eneo liliovunwa (ha)(vi)	Uzalishaji /tija(tani /ha)(vii)		
Tangawizi			0	20			0	
Pilipili Manga			0				0	
Giligilani			0				0	
Mdalasini			0				0	
Binzari			0				0	
Vanilla			0				0	
Pilipili kali			0				0	

# 12. Max and Min Value Setting

## 12.3 Alert Message

⑩ Cell turns to red to alert.

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user profile "Toshi" is visible in the top right.

The main content area displays a data entry form for "Catfish Ward - September 2019 - WF01 2.1 Utekelezaji wa eneo lilio pandwa mazao ya viungo Tangawizi". The form includes a sidebar with a tree view of the administrative structure: Tanzania > Animal Region > Bird District > Crow Ward, Hawk Ward, Owl Ward > Fish District > Catfish Ward > Food Region.

The data entry table is titled "Viungo" and has the following columns: "Malengo kwa mwaka" (with sub-columns for Eneo litakalo pandwa (ha)(ii) and Uzalishaji /tija (tani/ha) (iii)), "Matajio ya mavuno (tani) (iv) = (ii)x(iii)", "Utekelezaji" (with sub-columns for Eneo lilio pandwa (ha)(v) and Eneo liliovunwa (ha)(vi)), "Uzalishaji /tija(tani /ha)(vii)", "Mavuno (tani) (viii)= (vi)x(vii)", "Bei ya soko Tsh/kg(ix)", and "Maelezo(Zisizidi herufi hamsini)(x)".

The table contains data for several wards, with the "Tangawizi" row highlighted in red, indicating an alert. The value in the "Utekelezaji" column for Tangawizi is 20.

Viungo(i)	Malengo kwa mwaka		Matajio ya mavuno (tani) (iv) = (ii)x(iii)	Utekelezaji		Uzalishaji /tija(tani /ha)(vii)	Mavuno (tani) (viii)= (vi)x(vii)	Bei ya soko Tsh/kg(ix)	Maelezo(Zisizidi herufi hamsini)(x)
	Eneo litakalo pandwa (ha)(ii)	Uzalishaji /tija (tani/ha) (iii)		Eneo lilio pandwa (ha)(v)	Eneo liliovunwa (ha)(vi)				
Tangawizi			0	20			0		
Pilipili Manga			0				0		
Giligilani			0				0		
Mdalasini			0				0		
Binzari			0				0		
Vanilla			0				0		
Pilipili kali			0				0		

# **12. Max and Min Value Setting**

## **12.4 Recommendation for setting**

Item	Recommendation for setting
Eneo liliopandwa Min	A district user should set 0.
Eneo liliopandwa Max	A district user should set its area.
Eneo lililovunwa Min	A district user should set 0.
Eneo lililovunwa Max	A district user should set its area.
Uzalishaji/ tija(tani/ha) Min	A district user should set 0.
Uzalishaji/ tija(tani/ha) Max	District user should values applicable for the district or each ward.
Milk -Indigeneous cattle (Lita) Min	A district user should set 0.
Milk -Indigeneous cattle (Lita) Max	District user should values applicable for the district or each ward.
Milk improved cattle (Lita) Min	A district user should set 0.
Milk improved cattle (Lita) Max	District user should values applicable for the district or each ward.

# **12. Max and Min Value Setting**

## **12.5 Specification for setting**

- Only Max or Min value cannot be configured.  
For each item, both Max and Min must be configured.
- However, you can keep both Max and Min blank.  
In that case, the validation for max and min will not work in WF01 and any data can be entered.
- Only integer can be configured in min or max.
- Max must be larger than min. Otherwise the cell frame turns to red to alert.
- If max or min value is entered in the corresponding item in WF01, it is accepted and alert message is not shown.

# **13. Password Change**

**For All Users**

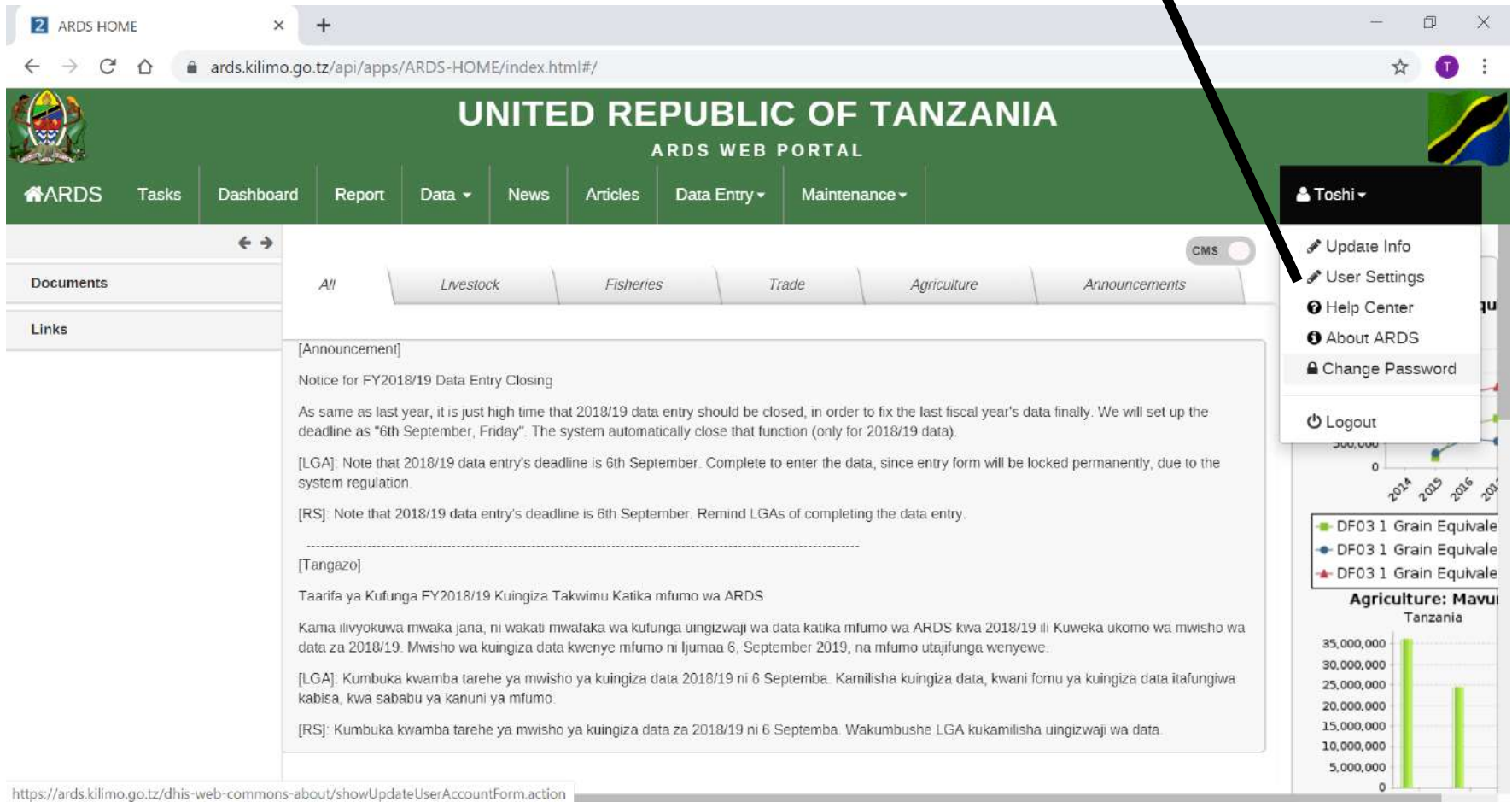
# 13. Password Change

Password change is used for each user to change password to login ARDS Web Portal. When an administrator create a new user on ARDS Web Portal, he/she assigns some temporally password for the ID. After that the user need to change the password which will not be shared with others. Also, it is desirable to change the password periodically to avoid security risk.

Password must have at least 8 characters, one upper case, and one special characters,

# 13. Password Change

① Click User Name and "Change Password"



The screenshot shows the ARDS Web Portal interface. The top navigation bar includes 'ARDS HOME', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user profile 'Toshi' is visible in the top right corner, with a dropdown menu containing 'Update Info', 'User Settings', 'Help Center', 'About ARDS', 'Change Password', and 'Logout'. A black arrow points from the text above to the 'Change Password' option in the user menu. The main content area displays an announcement regarding the FY2018/19 Data Entry Closing deadline of 6th September, 2019. A sidebar on the left contains 'Documents' and 'Links' sections. A chart titled 'Agriculture: Mavuu Tanzania' is visible in the bottom right corner, showing grain equivalence data for the years 2014, 2015, and 2016.

ARDS HOME

ards.kilimo.go.tz/api/apps/ARDS-HOME/index.html#/

UNITED REPUBLIC OF TANZANIA  
ARDS WEB PORTAL

ARDS Tasks Dashboard Report Data News Articles Data Entry Maintenance

Toshi

- Update Info
- User Settings
- Help Center
- About ARDS
- Change Password
- Logout

[Announcement]

Notice for FY2018/19 Data Entry Closing

As same as last year, it is just high time that 2018/19 data entry should be closed, in order to fix the last fiscal year's data finally. We will set up the deadline as "6th September, Friday". The system automatically close that function (only for 2018/19 data).

[LGA]: Note that 2018/19 data entry's deadline is 6th September. Complete to enter the data, since entry form will be locked permanently, due to the system regulation.

[RS]: Note that 2018/19 data entry's deadline is 6th September. Remind LGAs of completing the data entry.

[Tangazo]

Taarifa ya Kufunga FY2018/19 Kuingiza Takwimu Katika mfumo wa ARDS

Kama ilivyokuwa mwaka jana, ni wakati mwafaka wa kufunga uingizwaji wa data katika mfumo wa ARDS kwa 2018/19 ili Kuweka ukomo wa mwisho wa data za 2018/19. Mwisho wa kuingiza data kwenye mfumo ni Ijumaa 6, September 2019, na mfumo utajifunga wenyewe.

[LGA]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data 2018/19 ni 6 Septemba. Kamilisha kuingiza data, kwani formu ya kuingiza data itafungiwa kabisa, kwa sababu ya kanuni ya mfumo.

[RS]: Kumbuka kwamba tarehe ya mwisho ya kuingiza data za 2018/19 ni 6 Septemba. Wakumbushe LGA kukamilisha uingizwaji wa data.

https://ards.kilimo.go.tz/dhis-web-commons-about/showUpdateUserAccountForm.action

Agriculture: Mavuu Tanzania

Year	DF03 1 Grain Equivale
2014	35,000,000
2015	25,000,000
2016	20,000,000



# 13. Password Change

② Input current password

The screenshot shows a web browser window with the URL `ards.kilimo.go.tz/dhis-web-commons-about/showUpdateUserAccountForm.action`. The page header is green and contains the text "UNITED REPUBLIC OF TANZANIA" and "ARDS WEB PORTAL". Below the header is a navigation menu with items: ARDS, Tasks, Dashboard, Report, Data, News, Articles, Data Entry, and Maintenance. A user profile "Toshi" is visible in the top right. The main content area is titled "User account" and contains a "Details" section with the following fields: "Username" (suzuki), "Old password" (masked with dots), "New password", and "Retype new password". A "Save" button is located below the password fields. Four annotations with arrows point to specific elements: ② points to the "Old password" field, ③ points to the "New password" field, ④ points to the "Save" button, and an unlabeled arrow points to the "Retype new password" field.

③ Input new password

④ "Save"

Password will be changed from "the current password" to "the new password".

# **14. Clear Cache & Reload**

**For All Users**

It is necessary for users to do Clear Cache whenever ARDS server administrator update screens, programs, or dropdown lists. Otherwise users may see the screens cached which do not reflect these updates.

# 14. Clear Cache & Reload

## 14.1 Clear Browser Cache -On ARDS-

See right hand side of the Entry Screen (Do not select Forms or Periods)



# 14. Clear Cache & Reload

## 14.1 Clear Browser Cache -On ARDS-

ohs2.dashboard.current.region	<input type="checkbox"/>
ohs2.menu.ui.headerBar.link	<input type="checkbox"/>
ohs2.menu.ui.headerBar.logo	<input type="checkbox"/>
ohs2.menu.ui.headerBar.title	<input type="checkbox"/>
ohs2.menu.ui.headerBar.userStyle	<input type="checkbox"/>
tc.conversions	<input type="checkbox"/>
ou.roots	<input type="checkbox"/>
ou.username	<input type="checkbox"/>
ou.version	<input type="checkbox"/>

### IndexedDB

ohs2ou	<input type="checkbox"/>
ohs2ec	<input type="checkbox"/>
ohs2de	<input type="checkbox"/>
ohs2	<input type="checkbox"/>
ohs2ic	<input type="checkbox"/>

This clears selected items from your browser cache.

Click Select all  
And then Clear

# 14. Clear Cache & Reload

## 14.1 Clear Browser Cache -On ARDS-

Clearing cache

---

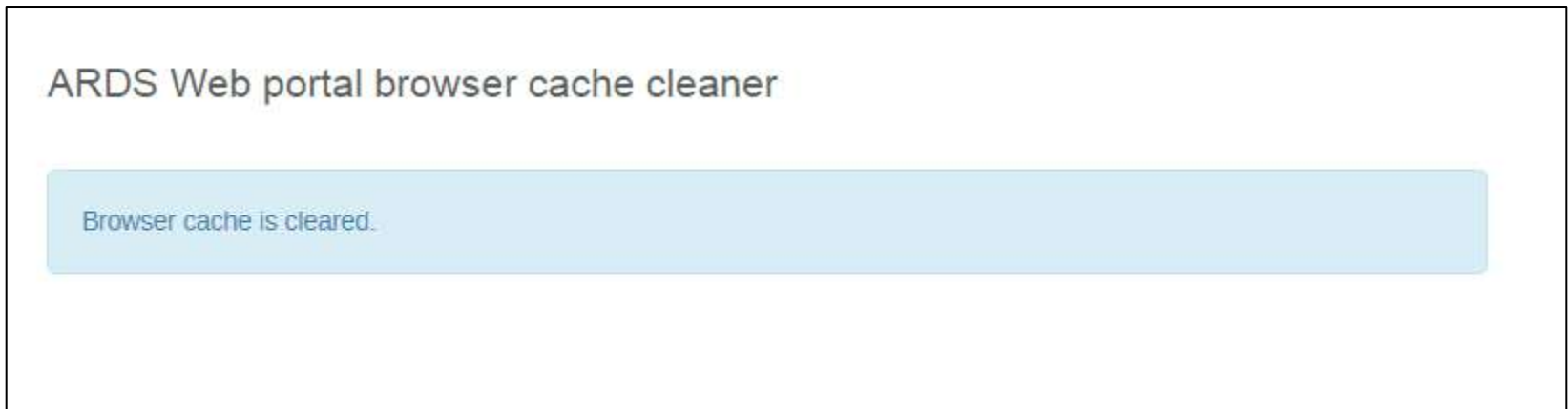
Are your sure you want to proceed with the cleaning?

---

Click

# 14. Clear Cache & Reload

## 14.1 Clear Browser Cache –On ARDS-

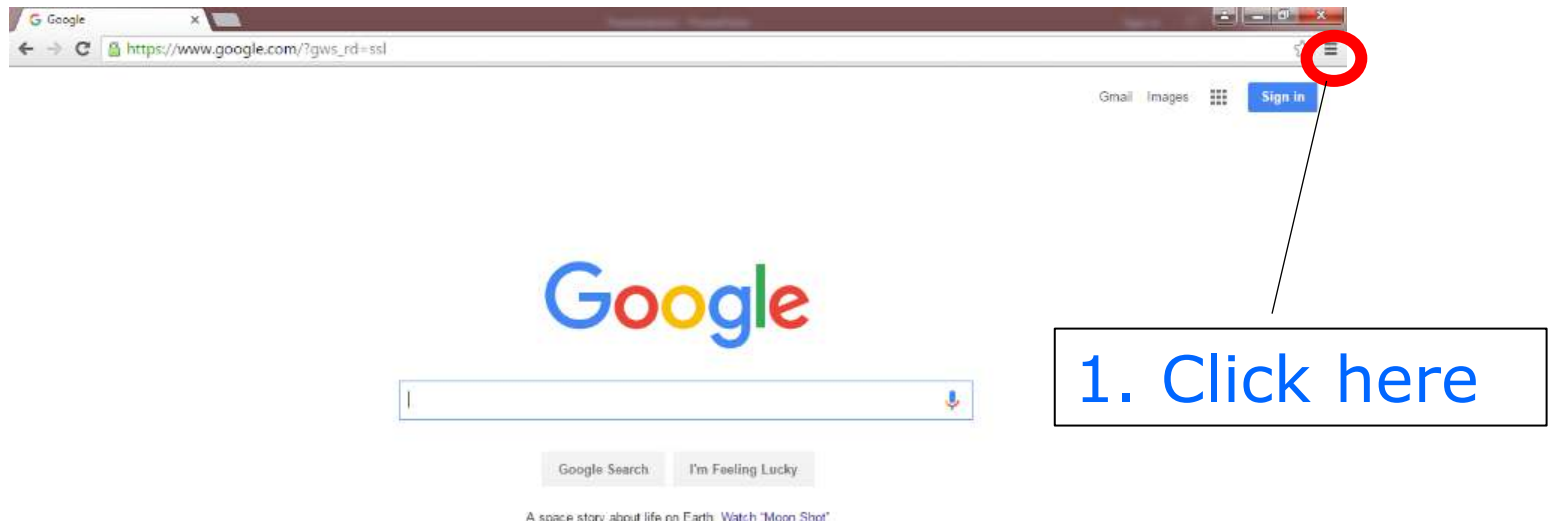


Cache is cleared.

Additionally, you need to clear cache of your browser explained in the following slides.

# 14. Clear Cache & Reload

## 14.2 Clear Browser Cache -Google Chrome-



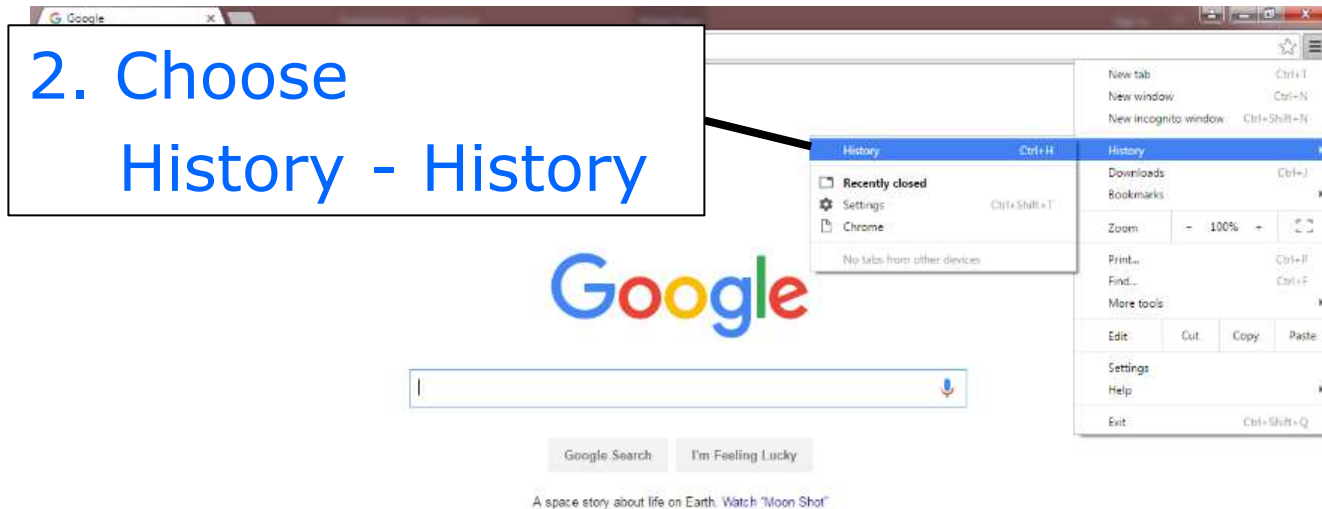
Please close every ARDS Screen before this operation.  
You can replace Step 1 & 2 with "Ctrl + Shift Delete"

---



# 14. Clear Cache & Reload

## 14.2 Clear Browser Cache -Google Chrome-

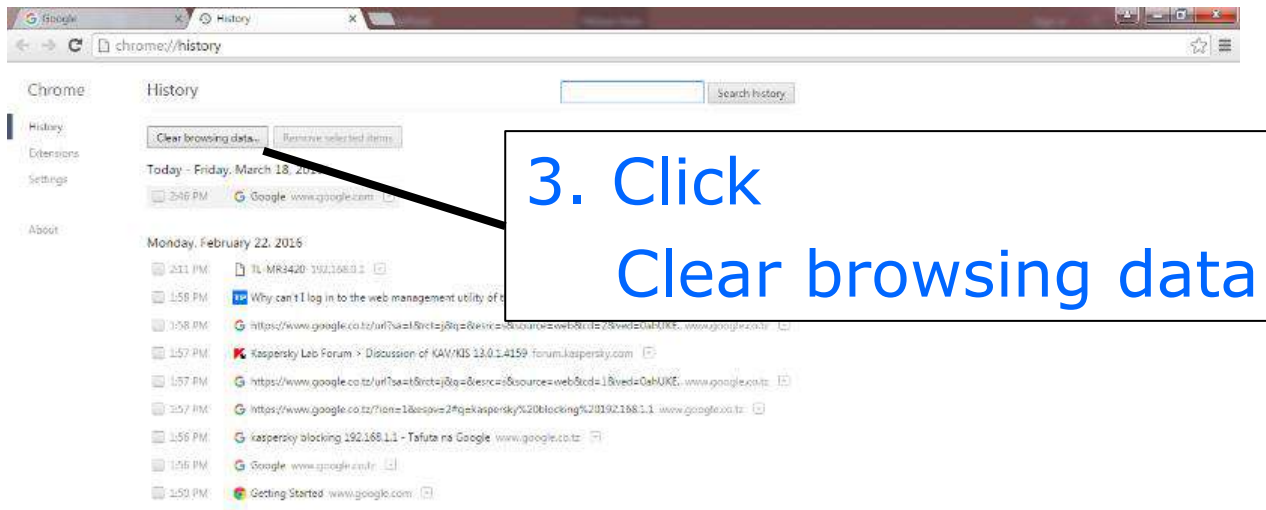


You can replace Step 1 & 2 with "Ctrl + Shift Delete"



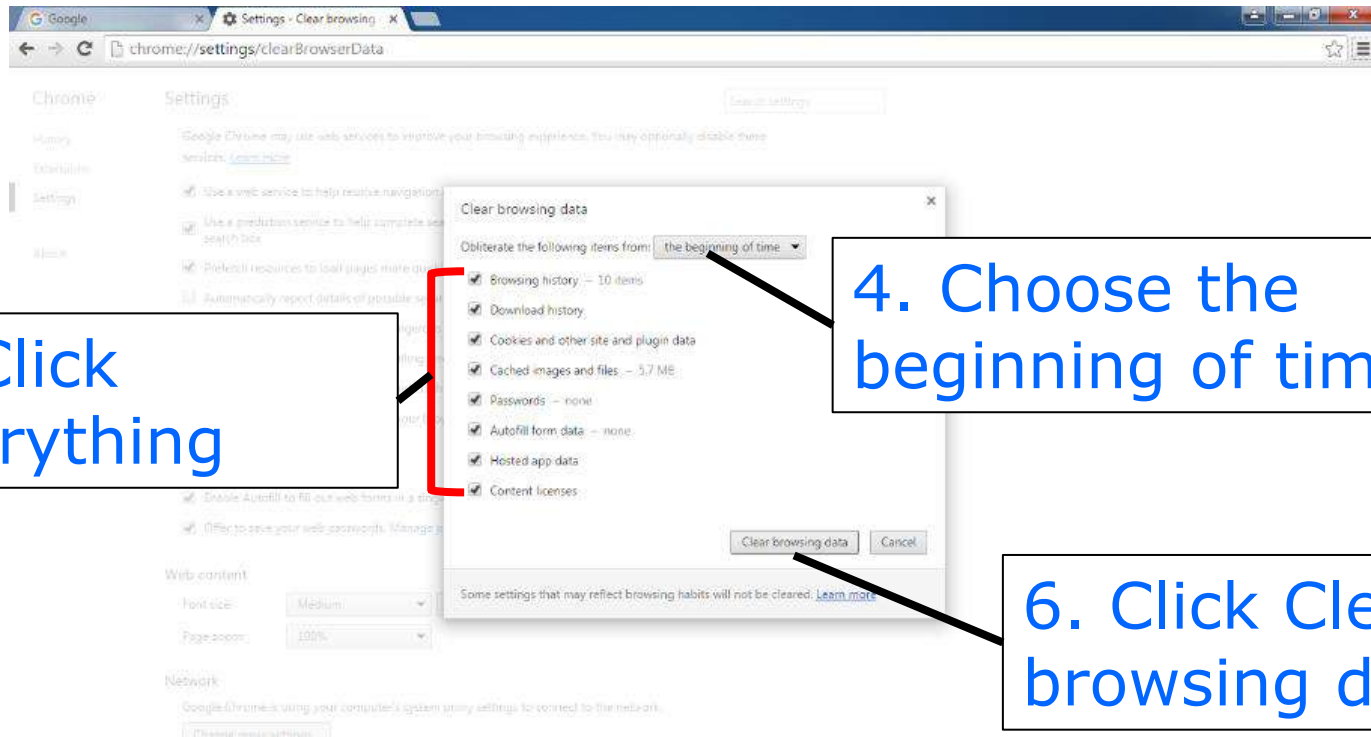
# 14. Clear Cache & Reload

## 14.2 Clear Browser Cache -Google Chrome-



# 14. Clear Cache & Reload

## 14.2 Clear Browser Cache -Google Chrome-



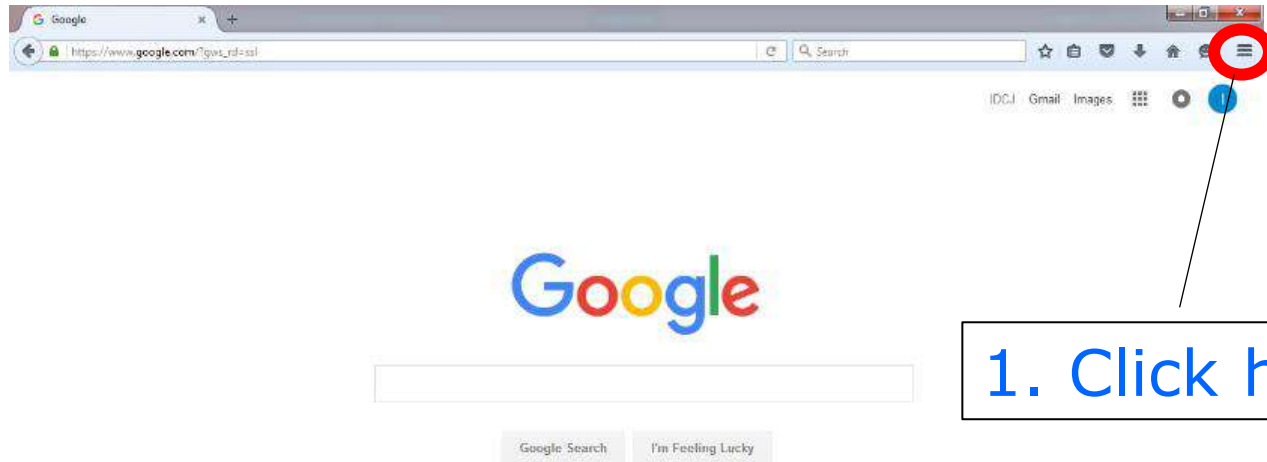
5. Click Everything

4. Choose the beginning of time

6. Click Clear browsing data

# 14. Clear Cache & Reload

## 14.3 Clear Browser Cache -Firefox-

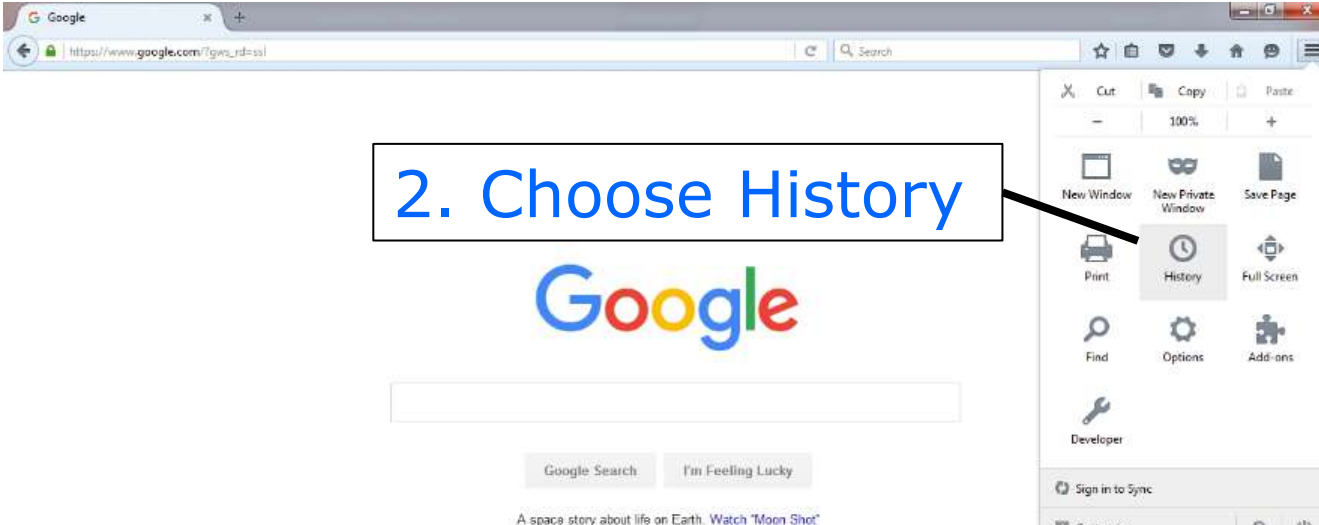


Please close every ARDS Screen before this operation.  
You can replace Step 1 & 2 with "Ctrl + Shift Delete"

---

# 14. Clear Cache & Reload

## 14.3 Clear Browser Cache -Firefox-



2. Choose History

Google

Google Search

I'm Feeling Lucky

A space story about life on Earth. Watch "Moon Shot"

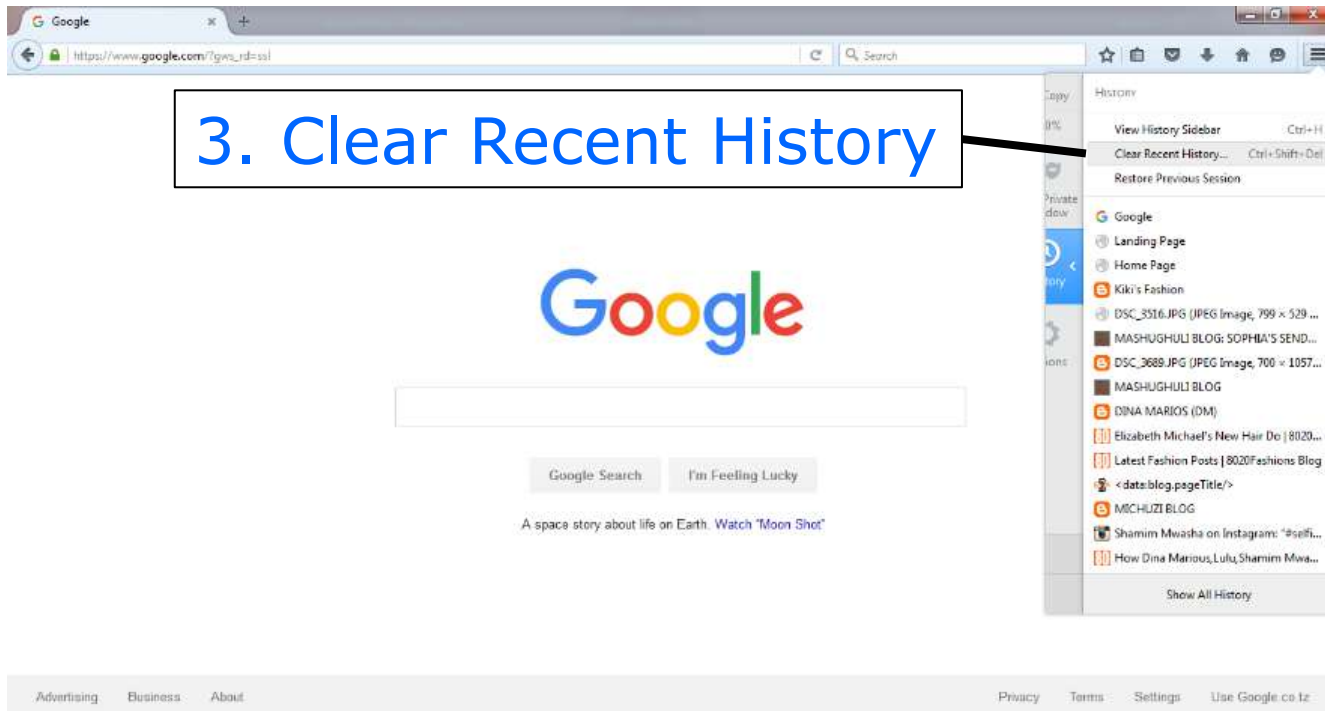
Advertising Business About

Privacy Terms Settings Use Google co lz

You can replace Step 1 & 2 with "Ctrl + Shift Delete"

# 14. Clear Cache & Reload

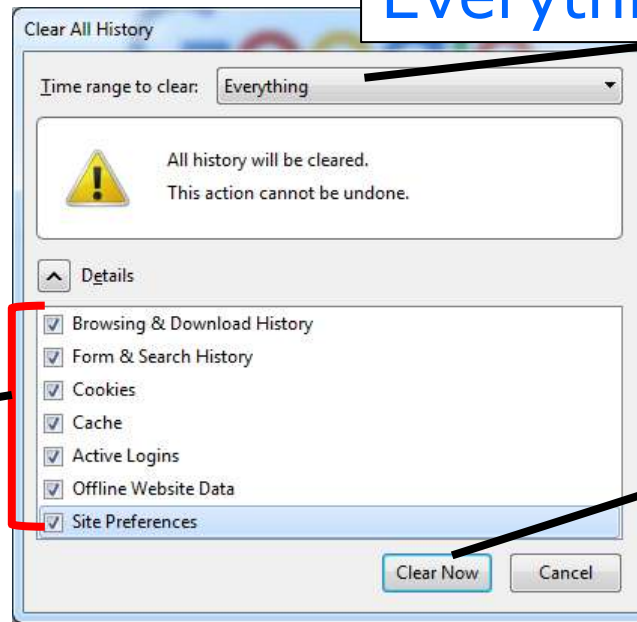
## 14.3 Clear Browser Cache -Firefox-



# 14. Clear Cache & Reload

## 14.3 Clear Browser Cache -Firefox-

4. Choose Everything



5. Click Everything

6. Click Clear Now

# **14. Clear Cache & Reload**

## **14.4 Reload**

**Slow Internet connectivity sometimes causes that users can not download whole screen data into browser and thus may causes irregular looking tables such as heading only table. By reloading, we may be able to download whole screen data.**



# 14. Clear Cache & Reload

## 14.4 Reload

Click here

The screenshot shows the ARDS Web Portal interface. At the top, the browser address bar displays the URL [www.ards.go.tz/dhis-web-dataentry/index.action](http://www.ards.go.tz/dhis-web-dataentry/index.action). A red circle highlights the 'Reload' button (a circular arrow icon) in the browser's navigation bar. A callout box with the text 'Click here' points to this button. The page header features the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. Below the header is a navigation menu with items: ARDS, Dashboard, Report, Analysis, Data, News, Articles, ARDS LGMD2, and Maintenance. The main content area is titled 'Data Entry' and contains a form with the following fields: 'Administrative Unit' (set to 'Tanzania'), 'Forms' (a dropdown menu showing '[ Select Form ]'), and 'Period' (a dropdown menu with 'Prev year' and 'Next year' buttons). To the right of the form are three buttons: 'Run validation', 'Print form', and 'Print blank form'. A notification box at the top right displays the message: 'Tanzania - No Period Selected - No Data Element Selected'. At the bottom right, a status bar indicates: 'Please wait, system is loading 31 Program of 38'.

# **FAQ for troubleshooting of ARDS Web Portal**

**Ver 1.0**

**October, 2019**

**JICA Project Team**

## What- Purpose

This brief shows how to solve issues which happens the most frequently. Some of the problems are software problems (bugs) which only the software developer, University of Dar es Salaam, can solve. However, the many issues can be solved without contacting them. This FAQ will list up those administrative problems and solutions for them.

## For Who- Audience

This reference is mainly for technicians (administrators- Admin) who take care of day-to-day management of ARDS Web Portal. Admin should have knowledge of how to solve the issues frequently happens. Also, this manual is useful for Technical Team and M&E TWG members as reference document.

## How to use

Admin need to confirm carefully the procedures of how to solve frequently happening issues.

# **FAQ 1 : Strange issue**

**Issue: ARDS Web Portal shows strange screen or behavior.**

**Solution: Whenever users see some issues in ARDS Web Portal, please request them to clear cache. please see "13. Clear Cache & Reload" in the "User Manual".**

## **FAQ 2 : ARDS Web Portal not accessible**

**Issue: Even if you initiate browser and type “ards.kilimo.go.tz”, the result shows error messages.**

### **Solution:**

**The cause of the error depends of the error message shown.**

#### **1. Server is not responding.**

**It is possible that power outage or network problem is happening in Kilimo 4 where the server is located. In case the LED is off on the server, please boot the server and UPS.**

# **FAQ 2 : ARDS Web Portal not accessible**

## **Solution:**

### **2. SQL Error**

**In case the error message shows data base error, it is possible that ARDS application is down while the server OS is on. In this case, please contact UDSM to re-start ARDS Web Application.**

**Henry: 0716-290-994, Tuzo: 0659-376-016**

### **3. Network Error or DNS Error**

**In case the error message shows Network Error or DNS Error, it is possible that user's network has problem. In this case, please ask the user to re-start the router or modem they are using. If not solved, please let them wait until the issue is solved.**

## **FAQ 3 : Data Lock**

**Issue: Data Entry forms cannot be unlocked and cannot modify the data.**

**District report cannot be uncreated and cannot unlock the data entry forms.**

**Solution: It is possible that the **higher level of reports** have been **created and approved**. To solve this issue, region officers need unapproved higher level of reports and district officers need to uncreate the higher level of reports. For the detail, please see "5. Lock / Unlock Data Entry / Report" in the "User Manual".**

## **FAQ 4 : Report creation button**

**Issue: Report creation button is not shown in the standard report screen, even if the district report is not created.**

**Solution: It is possible that the report creation is locked by the fiscal year end lock. Please see "7. Fiscal Year End Lock" in the "Maintenance Manual".**



## **FAQ 5 : No task in Task List**

**Issue: Tasks for the district or the region are not shown even if these tasks are not completed yet.**

**Solution: It is possible that the district or the region is not selected in the user setting. Please confirm the corresponding district or region is selected in “Data capture and maintenance organisation units” in user addition screen. Please see “1. User Addition” in the “Maintenance Manual”.**

## **FAQ 6 : Report creation after all entry forms submission**

**Issue: Even if 100% of ward entry forms(WF01, WF02, or WF03) are submitted, the corresponding district report(DR01, DR02, or DR03) is not created automatically.**

**Solution: This is not an issue. You needs to schedule the report creation manually even if 100% of ward entry forms are submitted.**

## **FAQ 7 : Report creation under 90% ward entry form submission**

**Issue:** Even if the submission rate of ward entry forms(WF01, WF02, or WF03) is less than 90%, the corresponding district report (DR01, DR02, or DF03) can be created.

**Solution:** District report can be created regardless of the submission rate of the corresponding ward entry forms. Even if it is 0%, the report can be created. 90% of the submission is the condition to show "Report Creation" button in the task list. However, even if it is not shown in the task list, the report creation can be scheduled in the standard report screen.

## **FAQ 8 : DIR03 Creation**

**Issue: Even if all DR03 is created, the corresponding DIR03 is not created.**

**Solution: This is not an issue. To create DIR03, not only DR03, all DR02s(July-September, October-December, January-March, April-June) for the fiscal year must be created and DF03 for the fiscal year must be submitted. Please check DR02 creation and DF03 submission status.**

## **FAQ 9 : Ward Report Creation Status**

**Issue:** In “Submission and Creation Status” screen, when a district is selected in “Administrative unit”, and “District/Region Monthly Report (DR01/RR01) Creation, “District/Region Quarterly Report (DR02/RR02) Creation, or “District/Region Annual Report (DR03/RR03) Creation is selected, report creation status for all wards shows 0%, even if the data is submitted.

**Solution:** This is not an issue. Report creation status for each ward is not ward entry form submission status. Since ward report is not defined in ARDS Web Portal, this always shows 0.

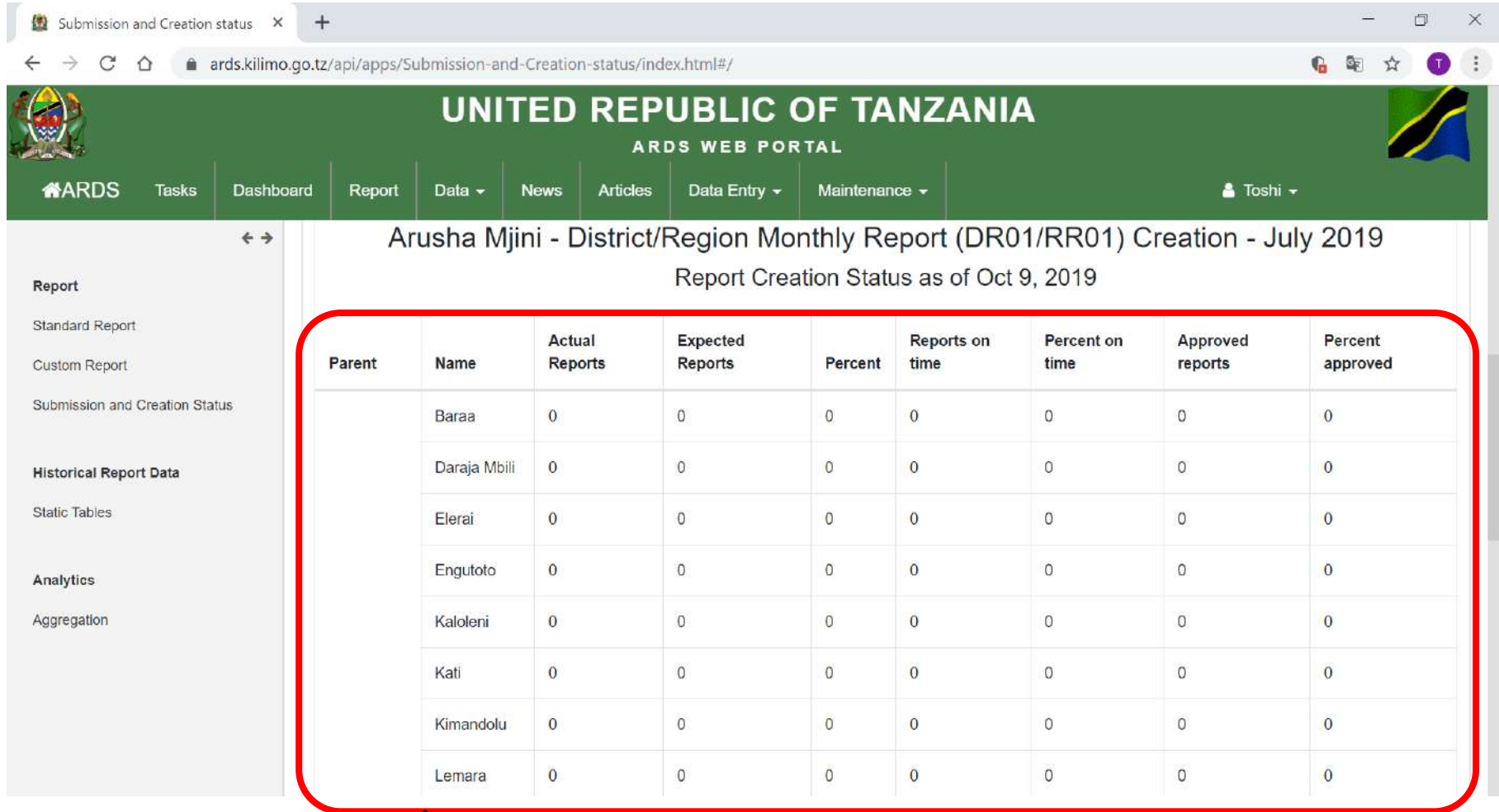
# FAQ 9 : Ward Report Creation Status

The screenshot shows the ARDS Web Portal interface. The header includes the United Republic of Tanzania logo and the text 'UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL'. The navigation menu contains 'ARDS', 'Tasks', 'Dashboard', 'Report', 'Data', 'News', 'Articles', 'Data Entry', and 'Maintenance'. The user 'Toshi' is logged in. The main content area is titled 'Submission and Creation Status' and contains several sections: 'Administrative unit' with a tree view showing 'Tanzania' > 'Arusha' > 'Arusha Mjini' selected; 'Administrative unit children' with a dropdown; 'Entry form / Report' with a dropdown menu showing 'District/Region Monthly Report (DR01/RR01) Creation'; and 'Period' with a dropdown for 'Monthly' and a date field for '09 Oct 2019'. Annotations with arrows point to 'Arusha Mjini' and the report type dropdown.

A district selected

DR01/RR01,  
DR02/RR02, or  
DR03/RR03 Creation

# FAQ 9 : Ward Report Creation Status



The screenshot shows the ARDS Web Portal interface. The main heading is "UNITED REPUBLIC OF TANZANIA ARDS WEB PORTAL". The navigation menu includes "ARDS", "Tasks", "Dashboard", "Report", "Data", "News", "Articles", "Data Entry", and "Maintenance". The user is logged in as "Toshi". The page title is "Arusha Mjini - District/Region Monthly Report (DR01/RR01) Creation - July 2019" and the subtitle is "Report Creation Status as of Oct 9, 2019". A table displays the status for various districts, with all values at 0%.

Parent	Name	Actual Reports	Expected Reports	Percent	Reports on time	Percent on time	Approved reports	Percent approved
	Baraa	0	0	0	0	0	0	0
	Daraja Mbili	0	0	0	0	0	0	0
	Elerai	0	0	0	0	0	0	0
	Engutoto	0	0	0	0	0	0	0
	Kaloleni	0	0	0	0	0	0	0
	Kati	0	0	0	0	0	0	0
	Kimandolu	0	0	0	0	0	0	0
	Lemara	0	0	0	0	0	0	0

**Report Creation Status shows 0%.**

## **FAQ 10 : ARDS Web Portal does not react long time after login**

**Issue:** ARDS Web Portal does not react long time after login. Even if RS or LGA try to move to standard report screen or data entry screen from another screen, it does not react.

**Solution:** Time out from ARDS Web Portal might cause this issue. Please request them to clear cache. please see "13. Clear Cache & Reload" in the "User Manual". After that, let them to login ARDS Web Portal again.



添付資料 12: VAEO/WAEO フォーマット

**OFISI YA RAIS - TAWALA ZA MIKOA NA SERIKALI ZA MITAA (OR-TAMISEMI)  
FOMU YA TAARIFA YA MWAKA YA MPANGO WA MAENDELEO YA KILIMO WA KIJIKI/KATA**

MWAKA

Toleo la Julai 2018

Jina la Kijiji/ Mtaa/ Kata: \_\_\_\_\_

Jina la Afisa Ugani: \_\_\_\_\_

Namba ya simu \_\_\_\_\_

Mwezi: \_\_\_\_\_ Mwaka wa Fedha: \_\_\_\_\_ Tarehe ya kuwasilisha: \_\_\_\_\_

(Iwasilishwe kwenye kata kabla ya mwisho wa mwaka kutoka kwenye kijiji, na wilayani mwisho wa wiki ya kwanza ya mwaka unaofuata kutoka kwenye kata)

**ANGALIZO**

- 1) Iwapo kitu kinachoulizwa hakipo kwenye kijiji/kata yako, andika "0" (sifuri).
- 2) Iwapo kitu kinachoulizwa kipo kwenye kijiji/kata yako, andika makadirio kwa takwimu/idadi.
- 3) Tumia vipimo vya kitaifa kwa kila jedwali vinapo hitajika.
- 4) Soma kwa makini maelezo katika kila jedwali kabla ya kuanza kujaza.

**1. Utangulizi, Taarifa za msingi za Kijiji/ Kata**

	Zinazoongozwa na wanaume	Zinazoongozwa na wanawake	Jumla	Zinazoshiriki kazi za kilimo mazao	Zinazoshiriki ufugaji mifugo	Zinazoshiriki ufugaji samaki
Idadi ya kaya						
	Wanaume	Wanawake	Jumla	Watu wanao shiriki kazi za kilimo mazao	Watu wanao shiriki ufugaji mifugo	Watu wanao shiriki ufugaji samaki
Idadi ya watu						

**2. Kilimo cha mkataba na makubaliano ya soko**

Aina ya shughuli	Mkataba wa soko (Contract farming) (i)			Makubaliano ya soko (Out-growers) (ii)		
	Idadi ya kaya zinazoshiriki (iii)	Idadi ya makampuni yaliyohusika (iv)	Zao kuu/ bidhaa (v)	Idadi ya kaya zinazoshiriki (vi)	Idadi ya makampuni yaliyohusika (vii)	Zao kuu/ bidhaa (viii)
Kilimo						
Ufugaji						
Uvuvi						

Maelezo: i) Mkataba wa soko unatafsiriwa kama makubaliano kati ya kaya/kikundi na kampuni katika kuzalisha mazao ya biashara kwa mkataba maalum wa kisheria.

ii) Makubaliano ya soko yanatafsiriwa kama makubaliano kati ya kaya/kikundi na kampuni ya kilimo katika kuzalisha mazao ya biashara ambayo hayahusishi mkataba.

Kampuni inaweza kutoa huduma kwa kaya/kikundi husika kama mikopo ya pembejeo, madawa ya kunyunyizia mimea na vifaa vya kuhifadha mavuno.

v), viii) Andika jina la zao kuu/bidhaa katika maelezo.

### 3. Umwagiliaji

#### 3.1 Skimu ya umwagiliaji

Jina la skimu (i)	Chanzo cha maji (mfano; mto rufiji) (ii)	Eneo linalofaa kwa umwagiliaji (ha) (iii)	Eneo lililomwagiliwa (ha) (iv)	Msimu wa umwagiliaji (1=muda wote, 2=masika/vuli, 3=kiangazi)	Hali ya skimu (1=nzuri, 2=inaridhisha, 3=inahitaji marekebisha, 4=haijulikani)	Idadi ya wanachama katika chama cha wamwagiliaji (IO)		Idadi ya wamwagiliaji (wanachama na wasiowanachama)	
						Wanaume	Wanawake	Wanaume	Wanawake
<b>Skimu iliyoendelezwa</b>									
<b>Skimu ya asili</b>									

Note: (iii) "Eneo linalofaa kwa umwagiliaji" ni eneo ambalo linalimwa au halilimwi lakini linafaa kwa kilimo cha umwagiliaji katika skimu inayohusika.

(iv) "Eneo lililomwagiliwa" ni eneo ambalo limeendelezwa kwa ajili ya kilimo cha umwagiliaji katika skimu iliyotajwa.

#### 4. Mashine, zana na vifaa vya kilimo/ ufugaji na uvuvi

Katika kipengele hiki, orodhesha mashine, zana au vifaa vinavyopatikana katika kijiji/ kata. Mashine, zana au vifaa ambavyo wakulima wameazima kutoka vijiji jirani havitahusika katika jedwali hili.

##### 4.1 Idadi ya mashine/vifaa vya kilimo, ufugaji na uvuvi

Aina ya mashine/ vifaa (i)	Nzima		Mbovu		Sababu ya ubovu wa mashine/kifaa (vi)
	Binafsi (ii)	Kikundi (iii)	Binafsi (iv)	Kikundi (v)	
Trekta (Tractor)					
Trekta la mkono (Power tiller)					
Mashine ya kuvunia (Combine harvester)					
Mashine ya kufyeka nyasi (Mower)					
Mashine ya kutengenezea nyasi (Bailer)					
Vifaa vya chakula (Feeder)					
Vifaa vya maji (Drinker)					
Mashine ya kukamulia maziwa (Milking machine)					
Mashine ya kupoozea (Chillers)					
Mashine ya umeme ya kukatia nyama (Electric meat cutter)					
Mitumbwi ya ulinzi yenye injini (Patrol boat)					
Mitumbwi ya uvuvi yenye injini (Fishing boat with engine)					
Mitumbwi ya uvuvi (Fishing boat without engine)					
Mengineyo (Taja)					

Maelezo: (i) Andika jina la mashine ambayo haijatajwa kwenye orodha iliyo kwenye jedwali juu.

(ii)-(v) Andika idadi ya mashine ambayo inamilikiwa na mtu binafsi au kikundi. Hesabu zile zinazomilikiwa na serikali au taasisi (kampuni binafsi) zihesabiwe katika orodha ya vikundi.

**4.2 Idadi ya zana za kilimo****a) Zana zinazokotwa na trekta/ trekta la mkono**

Aina ya zana	Nzima	
	Binafsi	Kikundi
Jembe la kusawazisha (Harrow)		
Mashine ya kupanda (Planter)		
Jembe la kulima (Disk plough)		
Jembe la kutifua (Sub-soiler)		
Jembe la kupalilia (Weeder)		
Mashine ya kupuliza dawa za mimea (Boom sprayer)		
Jembe la kukatua (Ripper)		
Reki ya kukusanyia nyasi (Rake for Hay Making)		
Tela (Trailer)		
Mengineyo (Taja)		

**b) Zana zinazokotwa na wanyamakazi**

Aina ya zana	Nzima	
	Binafsi	Kikundi
Jembe la kusawazisha (Harrow)		
Mashine ya kupanda (Planter)		
Jembe la kulima (Moldboard plough)		
Jembe la kutifua (Sub-soiler)		
Jembe la kupalilia (Weeder)		
Jembe la kukatua (Ripper)		
Jembe la matuta (Ridger)		
Mkokoteni (Cart)		
Mengineyo (taja)		

Maelezo: Andika jina la zana ambazo hazijatajwa kwenye orodha iliyo kwenye jedwali juu.

**4.3 Idadi ya vifaa vinavyotumiwa kwa mkono**

Majembe ya mkono	Pampu ya kupuliza dawa (mimea/mifugo)	Visu vya kuchunia	Nyavu za kuvulia	Vyuma vya kuwekea alama*	Nyingine (taja)		

Maelezo: \*Kwa ajili ya utambuzi wa mifugo

**4.4 Mashine za kusindika mazao ya Kilimo/ Mifugo/ Uvuvi**

Aina ya mashine (i)	Nzima		Mbovu		Sababu ya ubovu wa mashine (vi)
	Binafsi (ii)	Kikundi (iii)	Binafsi (iv)	Kikundi (v)	
Kusaga unga					
Kupukuchua					
Kukamulia mafuta					
Kupasua mbegu za mafuta					
Kubangulia (Pulperies)					
Kusindika pamba					
Kuondoa maganda (Shelling)					
Kutengenezea hei					
Kusindika mazao yatokanayo na maziwa					
Kutotoleshea vifaranga					
Kusindika nyama					
Kusindika ngozi					
Gari la kubebea nyama					
Gari la kubebea maziwa					
Kutengenezea barafu					
Kusindika mazao yatokanayo na samaki					
Mengineyo (Taja)					

Maelezo: Hesabu idadi ya mashine zilizopo kijijini/ kwenye kata.

(i) Andika jina la mashine kama haijatajwa kwenye orodha iliyopo juu kwenye jedwali.

(ii)-(v) Andika idadi ya mashine ambayo inamilikiwa na mtu binafsi au kikundi. Kwa zile zinazomilikiwa na serikali na taasisi (kampuni binafsi) ziwekwe katika umiliki wa vikundi.

## 5. Huduma za ugani.

## 5.1 Mafunzo ya wakulima kupitia shamba darasa

Lengo la shamba darasa (i)	Idadi ya shamba darasa (ii)	Idadi ya walioanza (iii)		Muda wa mafunzo (siku)	Idadi ya waliohitimu		Idadi ya vijiji vilivyohudumiwa	Idadi ya wakulima wanaotumia elimu ya mafunzo yaliyotolewa	Maelezo
		Wanaume	Wanawake		Wanaume	Wanawake			
<b>Mazao</b>									
<b>Ufugaji</b>									
<b>Uvuvi</b>									
<b>Masoko na Usindikaji</b>									
<b>Mengineyo</b>									

Maelezo: i) Orodhesha malengo ya mashamba darasa kwa kila sekta.

ii) Andika idadi ya mashamba darasa yaliyotumika kutimiza lengo husika.

iii) Andika idadi ya wakulima walioanza shamba darasa.

**6. Pembejeo****6.1 Mbolea za viwandani**

Aina ya mbolea	Mahitaji kwa mwaka (tani)	Matumizi kwa mwaka (tani)	Maelezo
SA			
CAN			
UREA			
TSP			
DAP			
NPK 10:10:10			
NPK 25:5:5			
NPK 6:20:18 / 10:18:24			
NPK 4:17:15			
NPK 17:17:17			
MRP (Minjingu Rock Phosphate)			
MOP			
Mengineyo (Taja)			

Maelezo: Pia kiasi cha mbolea inayotumika katika kuzalisha malisho ya mifugo ijumuishwe.

## 6.2 Viatilifu

Aina ya kiatilifu/ kiuadudu	Jina la kiatilifu/ kiuadudu *	Kipimo (kg/ lita)	Matumizi kwa mwaka	Maelezo
A: Viuadudu				
A: Viuadudu				
A: Viuadudu				
A: Viuadudu				
B: Viuakuvu				
B: Viuakuvu				
B: Viuakuvu				
B: Viuakuvu				
C: Viuapanya				
C: Viuapanya				
C: Viuapanya				
C: Viuapanya				
D: Viuapanya				
D: Viuapanya				
D: Viuapanya				
D: Viuapanya				
E: Viuandege				
E: Viuandege				
E: Viuandege				
E: Viuandege				
F: Viuaminyoo				
F: Viuaminyoo				
F: Viuaminyoo				
F: Viuaminyoo				

Maelezo: \* Andika jina la bidhaa.



## 6.3 Mbegu bora

Aina ya zao	Mahitaji kwa mwaka (kg)	Aina ya mbegu bora (Orodhesha)	Matumizi kwa mwaka (kg)		Maelezo
			Mbegu zenye ubora unaotambulika (Quality Declared Seed)	Mbegu zenye ubora uliothibitishwa (Certified seed)	
Mahindi					
Mahindi					
Mahindi					
Mahindi					
Mahindi					
Mpunga					
Mpunga					
Mpunga					
Mpunga					
Mpunga					
Maharage					
Maharage					
Maharage					
Maharage					
Maharage					
Mtama					
Mtama					
Mtama					
Ngano					
Ngano					
Ngano					
Alizeti					
Alizeti					
Alizeti					
Mengineyo (taja)					
Mengineyo (taja)					
Mengineyo (taja)					

## 7. Idadi ya mifugo

Aina ya mnyama	Idadi wa asili	Idadi wa kisasa		Jumla	Jumla ya waliosajiliwa
		Nyama	Maziwa		
<b>1. Ng'ombe</b>					
Ng'ombe dume*					
Ng'ombe jike**					
Maksai***					
Mtamba****					
Ndama dume					
Ndama jike					
Maksai wa kulima					
Haijulikani*****					
<b>Jumla ndogo ng'ombe</b>					
<b>2. Kondoo</b>					
Kondoo dume					
Kondoo Jike					
Haijulikani*****					
<b>Jumla ndogo kondoo</b>					
<b>3. Mbuzi</b>					
Mbuzi dume					
Mbuzi jike					
Haijulikani*****					
<b>Jumla ndogo mbuzi</b>					
<b>4. Mifugo Mingine</b>					
Nguruwe					
Nyati maji					
Punda					
Farasi					
Ngamia					
Mbwa					
Paka					
Sungura					
<b>5. Ndege</b>	Idadi ya wa asili	Wa nyama	Wa Mayai	Jumla	
Kuku					
Bata					
Bata mzinga					
Kanga					

Maelezo:

\* Ng'ombe dume ni ambaye hajahasiwa anatumiwa kwa kuzalisha mbegu.

\*\* Ng'ombe jike ni ambaye amewahi kuzaa angalau mara moja.

\*\*\* Maksai ni ng'ombe dume aliyehasiwa mwenye umri zaidi ya mwaka mmoja.

\*\*\*\* Mtamba ni ng'ombe jike mwenye umri wa miaka kati ya mmoja na mitatu ambaye hajazaa.

\*\*\*\*\* Kama ni vigumu kufahamu mchanganuo katika kundi la ng'ombe, kondoo na mbuzi, andika idadi ya jumla katika kila safu mlalo ya "Haijulikani".

Maelezo: Hesabu idadi ya wanyama wote kasoro inayomilikiwa na wakulima wakubwa (large scale farmers) ambao wanafuga ng'ombe zaidi ya 50, mbuzi/kondoo/nguruwe zaidi ya 100 kwa pamoja au mmojammoja, kuku/bata/bata mzinga/sungura zaidi ya 1000, wanaweza pia kuwa wenye makazi ya kudumu/shamba la kudumu, wanatumia mashine (mfano za kukamulia, kunyuweshea maji nk), na wanafanya ufugaji wa kibiashara (mbinu za kisasa katika ufugaji), na wana hati ya kumiliki ardhi.

**8. Miundombinu katika mifugo**

Aina ya miundombinu	Nzima	Mbovu	Mahitaji halisi	Idadi ya zilizosajiliwa	Sababu ya ubovu wa miundombinu
Karo (Slaughter Slab) *					
Bucha ya ng'ombe/mbuzi/kondoo					
Bucha ya nguruwe					
Bucha ya samaki					
Banda la ngozi					
Banio la kudumu (Permanent crush)					
Lambo					
Birika la kunywea maji (Water Trough)					
Josho la wanyama wakubwa (Ng'ombe, Punda)					
Josho la wanyama wadogo (Mbuzi, Kondoo, Mbwa)					
Sehemu ya kunyunyuzia dawa mifugo (Spray Race)					
Mengineyo (Taja)					

Maelezo: i) Andika jina la miundo mbinu kama ipo zaidi ya hiyo iliyotajwa hapo juu

\* Karo ni mahali pa kuchinjia wanyama, kwenye sakafu katika eneo la wazi

**9. Eneo la malisho (Grazing land)**

Aina ya mfugo (i)	Ukubwa wa eneo la kulishia wanyama kijijini/ kata (ha) (iii)	Eneo linalotumika (ha) (iv)	Ukubwa wa eneo lililopimwa kwa ajili ya malisho (Total Demarcated Area) (ha) (v)	Ukubwa wa eneo linalomilikiwa kisheria (Total Area Leased) (ha) (vi)
Ng'ombe				
Mbuzi				
Kondoo				
Punda				

Maelezo:

(iii) Eneo linalofaa na linajumlisha linalotumika na lisilotumika.

(iv) Eneo halisi ambalo linatumika kulishia wanyama.

(vi) Eneo lililopewa hati.

**10. Malisho ya mifugo****10.1 Malisho ya mifugo yaliyopandwa na kuendelezwa**

Idadi ya mashamba	Eneo (ha)	Uzalishaji wa mbevu (kg)	Idadi ya marobota/ bandali (bundle) yaliyozalishwa (Hei*)	Maelezo

\* Robota moja la hei lina uzito wa kilo 20.

**10.2 Masalia ya mazao**

Aina ya zao	Idadi ya marobota*/ bandali (bundle) yaliyozalishwa	Eneo la mashamba yaliyotumika kwa malisho (grazed in situ) (ha)	Maelezo

\* Robota moja lina uzito wa kilo 20.

**11. Njia mbalimbali za mawasiliano (TV, radio, simu, nk.)****11.1 TV na Radio**

Kituo cha TV kinachopatikana	Idadi ya vijiji vinavyofikiwa na huduma
TBC	
ITV	
Star TV	
Vituo vya TV vya kijamii, taja:	

Kituo cha Radio kinachopatikana	Idadi ya vijiji vinavyofikiwa na huduma
Radio 1	
TBC Taifa	
Radio Free Africa	
Vituo vya Radio vya kijamii, taja:	

Kama kituo cha TV / Radio cha **kijamii** kipo na kinarusha kipindi cha kilimo na ufugaji hewani, jaza jedwali hili.

Jina la chombo cha habari	Jina la kipindi	Mara ngapi kwa wiki	Aina ya taarifa

**11.2 Simu**

Jina la kampuni ya simu	Idadi ya vijiji vinavyofikiwa na huduma
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	
Mengineyo, taja	

**OFISI YA RAIS - TAWALA ZA MIKOA NA SERIKALI ZA MITAA (OR-TAMISEMI)  
FOMU YA TAARIFA YA ROBO MWAKA YA MPANGO WA MAENDELEO YA KILIMO WA KIJIKI/KATA**

ROBO MWAKA

Toleo la Julai 2018

Jina la Kijiji/ Mtaa/ Kata:

Jina la Afisa Ugani:

Namba ya simu \_\_\_\_\_

Robo: \_\_\_\_\_ (Mwezi: \_\_\_\_\_ mpaka \_\_\_\_\_) Mwaka wa Fedha: \_\_\_\_\_ Tarehe ya kuwasilisha: \_\_\_\_\_

(Iwasilishwe kwenye kata kabla ya mwisho wa robo mwaka kutoka kwenye kijiji, na wilayani mwisho wa wiki ya kwanza ya mwezi unaofuata kutoka kwenye kata)

**ANGALIZO**

- 1) Iwapo kitu kinachoulizwa hakipo kwenye kijiji/kata yako, andika "0" (sifuri).
- 2) Iwapo kitu kinachoulizwa kipo kwenye kijiji/kata yako, andika makadirio kwa takwimu/idadi.
- 3) Tumia vipimo vya kitaifa kwa kila jedwali vinapo hitajika.
- 4) Soma kwa makini maelezo katika kila jedwali kabla ya kuanza kujaza.

**1. Hali ya chakula kijiji/ kata**

	Weka alama	Maelezo
Nzuri		
Wastani		
Mbaya		

**Eleza hali ya upatikanaji wa chakula kwa kipindi cha robo mwaka.**

idadi ya kaya zisizokuwa na chakula	Idadi ya kaya zenye chakula pungufu	Idadi ya kaya zenye chakula cha kutosha	Idadi ya kaya zenye chakula na ziada

**2. Vikundi/Ushirika wa wakulima**

**2.1 Vyama vya kuweka na kukopa (SACCOs)**

Jedwali 2.1 Vyama vya kuweka na kukopa (SACCOs) huhamishwa

**2.2 Vikundi vingine vya wakulima**

Jedwali 2.2 Vikundi vingine vya wakulima wamehamia

## 3. Huduma za ugani.

## 3.1 Mafunzo kwa wakulima kwa kutumia njia mbalimbali nje ya shamba darasa

Mada ya mafunzo katika (i)	Idadi ya wakulima waliopata mafunzo		Idadi ya wakulima waliopata mafunzo kwa muda		Njia iliyotumika kutoa mafunzo	Mtoa mafunzo/ Mwezesaji wa mafunzo	Maelezo
	Wanaume	Wanawake	Sawa au pungufu ya wiki moja	Zaidi ya wiki moja			
<b>Mazao</b>							
<b>Ufugaji</b>							
<b>Uvuvi</b>							
<b>Masoko na Usindikaji</b>							
<b>Umwagiliaji</b>							

Maelezo: i) Orodhesha mada zilizofundishwa kwa wakulima.





**6. Mmomonyoko wa ardhi**

Aina ya mmomonyoko (i)	Jina la kijiji/ vijiji vilivyohusika	Eneo lililoharibiwa (ha)	Mbinu zilizotumika	Eneo lililokarabatiwa (ha)	Maelezo

i) Aina ya mmomonyoko iandikwe kwa lugha ya Kiingereza

**7. Eneo la uzalishaji katika kijiji/ kata na njia iliyotumika kulima****7.1 Vuli**

Eneo	Kwa trekta (ha) (i)	Kwa kutumia wanyamakazi (ha) (ii)	Kwa jembe la mkono/ mkono (ha) (iii)	Kupanda bila kulima (ha) (iv)	Jumla ya eneo (ha) (v) = (i)+(ii)+(iii)+(iv)
Lililolimwa					
Lililopandwa					
Lililopaliliwa					
Lililovunwa					

Maelezo: Usihesabu mara mbili kama ardhi ileile imelimwa zaidi ya mara moja katika msimu mmoja

**7.2 Masika**

Eneo	Kwa trekta (ha) (i)	Kwa kutumia wanyamakazi (ha) (ii)	Kwa jembe la mkono/ mkono (ha) (iii)	Kupanda bila kulima (ha) (iv)	Jumla ya eneo (ha) (v) = (i)+(ii)+(iii)+(iv)
Lililolimwa					
Lililopandwa					
Lililopaliliwa					
Lililovunwa					

Maelezo: Usihesabu mara mbili kama ardhi ileile imelimwa zaidi ya mara moja katika msimu mmoja

OFISI YA RAIS - TAWALA ZA MIKOA NA SERIKALI ZA MITAA (OR-TAMISEMI)  
FOMU YA TAARIFA YA MWEZI YA MPANGO WA MAENDELEO YA KILIMO WA KIJJI/KATA

MWEZI

Toleo la Julai 2018

Jina la Kijiji/ Mtaa/ Kata \_\_\_\_\_  
Jina la Afisa Ugani \_\_\_\_\_ Namba ya simu \_\_\_\_\_  
Mwezi \_\_\_\_\_ Mwaka wa Fedha \_\_\_\_\_  
(Wasilishwe kwenye kata kabla ya mwisho wa mwezi kutoka kwenye kijiji, na wilayani mwisho wa wiki ya kwanza ya mwezi unaofuata kutoka kwenye kata)

**ANGALIZO**

- 1) Iwapo kitu kinachoulizwa hakipo kwenye kijiji/kata yako, andika "0" (sifuri).
- 2) Iwapo kitu kinachoulizwa kipo kwenye kijiji/kata yako, andika makadirio kwa takwimu/idadi.
- 3) Tumia vipimo vya kitaifa kwa kila jedwali vinapo hitajika.
- 4) Soma kwa makini maelezo katika kila jedwali kabla ya kuanza kujaza.

**1. Utangulizi**

**1.1 (a) Hali ya hewa**

Mvua: Jaza idadi ya siku ambazo mvua imenyeshwa na kiasi cha milimita zilizokusanywa

Idadi ya siku	Kiasi cha mvua (milimita) (i)	Maelezo (Nyingi/ Wastani/ Kidogo/Hakuna) (ii)

- (i) Kama kijiji chako kina kipima mvua, jaza kiasi cha mvua (milimita) katika safu wima ya pili.  
(ii) Kama kijiji chako hakina kipima mvua, jaza idadi ya siku na safu wima ya tatu.

**1.2 Kazi zilizofanyika**

Tafadhali eleza shuguli za sekta ndogo za kilimo, mifugo na uvuvi zilizofanywa na afisa ugani katika kipindi cha mwezi huu.

--

**1.3 Mafanikio na Changamoto**

Tafadhali eleza kwa kifupi mafanikio na changamoto/matatizo katika sekta ya kilimo kwa mwezi huu.

Mafanikio:

Changamoto/ Matatizo:

**1.1(b) Matukio:**

Tafadhali eleza matukio muhimu (ukame, mafuriko, njaa, migogoro magonjwa ya mimea na mifugo n.k.) yaliyojitokeza kwa kipindi cha mwezi huu.

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**3. Afya ya mimea****3.1 Kuzuia/ kutibu/ kudhibiti magonjwa/ visumbufu kwa kutumia kemikali**

Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani, kidogo) (iii)	Eneo lililoathiriwa (ha) (iv)	Idadi ya vijiji vilivyoathirika (v)	Dawa iliyotumika (vi)	Kiasi kilichotumika (vii)	Kipimo (kg, lt) (viii)	Idadi ya vijiji vilivyo hudumiwa (ix)	Idadi ya kaya zilizohudumiwa (x)	Eneo lililookolewa (ha) (xi)	Maelezo (xii)
<b>Jumla</b>											

i) Andika jina la visumbufu vya mimea/magonjwa yaliyolipuka katika kipindi cha mwezi husika.

ii) Andika jina la zao lililoshambuliwa na visumbufu vya mimea/magonjwa. tumia mstari (row) moja kujaza zao moja

iii) Chagua ukubwa wa eneo lililoathirika na visumbufu vya mimea/magonjwa shambani; Ukubwa (kubwa kuliko asilimia 50) Wastani (asilimia10-50) au dogo (chini ya asilimia 10).

iv) Andika jina la dawa iliyotumika mara kwa mara katika kukabiliana na visumbufu vya mimea/magonjwa

v) Eneo lililookolewa linategemea na idadi ya kaya zilizopata huduma ya visumbufu vya mimea/magonjwa.

**4. Mifugo iliyochinjwa**

Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg (Tsh)
Ng'ombe		
Kondoo		
Mbuzi		
Nguruwe		
Kuku wa asili		
Kuku wa kisasa		
Mengineyo (Taja)		

**5. Ukaguzi wa nyama****5(a) Wanyama walioathirika**

Jina la machinjio/ukaguzi(i)	Aina ya mfugo (ii)	Idadi ya wanyama walioathirika (iii)

Maelezo: (i) Andika aina ya mifugo walioathirika(Ng'ombe,Kondoo,Mbuzi,Nguruwe n.k)

(ii) Hesabu kila mnyama mara kwa mara .Acha kisanduku kilichobaki wazi kwa mnyama wa aina moja

**5(b) Sehemu ya mnyama iliyoathirika**

Aina ya mfugo (i)	Kilichotupwa (ii)	Viungo vilivyotupwa (Mzoga mzima/ Moyo/ Mapafu/ Maini nk.)	
		Sababu ya kutupa viungo / mzoga mzima (iii)	Idadi ya matukio kwa kila sababu (iv)

Maelezo: i) Andika aina ya mfugo walioathirika (Ng'ombe, Kondoo, Mbuzi, Nguruwe n.k).

iii) Andika kila ugonjwa / hali moja iliyojitokeza kwa kila mstari (row).

iv) Andika idadi ya matukio kwa kila sababu.

**6. Mazao yatoakanayo na mifugo****6.1 Maziwa**

Aina ya mazao	Kiasi cha maziwa (Whole milk) na mazao yake kwa mwezi huu	Wastani wa maziwa yaliyozalishwa	Bei ya maziwa
Maziwa ya ng'ombe wa asili (lita)			
Maziwa ya ng'ombe wa kisasa (lita)			
Jibini (Cheese) (kg)			
Siagi (Butter) (kg)			
Samli (Ghee) (kg)			

Maelezo: Hesabu kiasi cha maziwa yaliyozalishwa kwa ajili ya kuuza tu. Matumizi ya nyumbani hayahusiani na takwimu hizi.

**6.2a Ngozi**

Aina ya mazao	Zisizosindikwa (vipande) kwa mwezi huu		Zilizosindikwa (vipande) kwa mwezi huu	Maelezo
	Ngozi zilizokaushwa kwa jua	Zilizokaushwa kwa chumvi	Wet Blue	
Ngozi za ng'ombe				
Ngozi za mbuzi				
Ngozi za kondoo				

**6.2b Bei ya ngozi**

Aina ya mazao	Bei ya wastani ya machinjioni		Bei ya wastani kiwandani
	Ngozi zilizokaushwa kwa jua	Zilizokaushwa kwa chumvi	Wet Blue
Ngozi za ng'ombe (Tsh/kg)			
Ngozi za mbuzi (Tsh/piece)			
Ngozi za kondoo (Tsh/piece)			

Maelezo: Ngozi za ng'ombe "Tsh/kg", Ngozi za mbuzi/ kondoo "Tsh/piece"

**6.3 Mayai**

Mayai	Kiasi cha mayai yaliyokusanywa kwa mwezi huu
Mayai ya kuku wa kienyeji	
Mayai ya kuku wa kisasa	
Jumla	

Maelezo: Andika mayai yaliyozalishwa kibiashara tu

Takwimu zinaweza kupatikana katika mashamba ya ufugaji wa kuku.

**7. Afya ya Mifugo****7.1 Tiba**

Aina ya mifugo	Aina ya ugonjwa/ hali	Idadi ya walioathirika	Idadi ya waliotibiwa	Idadi ya waliopona	Idadi ya waliokufa	Matibabu/ Dawa iliyotumika

Maelezo: Taarifa zifuatazo ziandikwe pia katika safu wima ya ii: utoaji kondo la nvuma (Distokia), utoaji qesi (Bloat), utokaji mimba (abortion), kuumwa nvoka (Snakebite) na milk fever.

**7.2 Uogeshaji, kunyunyizia, chanjo na kinga**

Aina ya mifugo	Idadi ya walioogeshwa	Dawa iliyotumika	Idadi ya walionyunyiziwa	Dawa iliyotumika	Idadi ya waliochanjwa	Chanjo/Kinga iliyotumika

**7.3 Huduma za mifugo**

Aina ya mifugo	Kukata kwato	Kuhasi	Kuhamilisha (AI)	Kukata pembe	Kuweka alama	Kukata mikia	Kukata meno	Kukata midomo	Hereni ya puani (Bull ring)	Upimaji wa mimba (Pregnancy diagnosis)	Sindano ya kuchochea joto	Sindano ya madini chuma (Iron injection)
Ng'ombe				Sindano ya kuchochea joto								
Mbuzi												
Kondoo												
Nguruwe												
Kuku												
Bata												

Maelezo: Utekelezaji kufikia mwezi huu



**8. Ufugaji wa samaki****8.1 Mfumo wa ufugaji**

Mfumo wa ufugaji	Idadi	Idadi yenye vifaranga	Eneo (M <sup>2</sup> )	Aina ya samaki pandwa	Samaki vuliwa		
					Uzito (Kg)	Bei (TSh/Kg)	Thamani (TSh)

Maelezo: Column ii idadi ya mabwawa yote (yaliyopandikizwa vifaranga na yasiyopandikizwa vifaranga) yaliyopo (mapya na ya zamani)

Taarifa za column iii, v, vi, vii na viii zinahusu mabwawa yaliyopandikizwa vifaranga tu. Column ya iv inahusu (yaliyopandikizwa vifaranga na yasiyopandikizwa vifaranga)

Mfumo wa ufugaji unaweza kuwa mabwawa, vizimba, matanki na chelezo

**9. Wageni waliotembelea kijiji/kata kwa shughuli za Kilimo au ufugaji**

Tarehe	Jina la mgeni	Anuani	Shughuli iliyomleta

添付資料 13: 普及員、県職員マニュアル

Appendix 2 of ARDS Operation Guide

**Extension Officer's Manual for  
Agricultural Routine Data System (ARDS)**

ASDP M&E Thematic Working Group

July 2018

## **[1] Introduction -----**

### **1.1 Purpose of the Extension Officers' Manual**

The purpose of this Extension Officers' Manual is to give clear instructions to Extension officers (VAEO/WAEOs) involved in data collection and on:

- To have common understanding on how to fill out the reporting form for village/ward agricultural extension officers (VAEO/WAEO).
- To show techniques to help VAEO/WAEO collect accurate data / information on the agricultural sector.
- To have quality and accurate data that will help the officers develop a good plan in the agricultural sector.
- To exchange ideas on the importance of data collection.
- How to collect data for the VAEO/WAEO form (Monthly, Quarterly and Annual), including the activities on how to fill the format.

In this document, the term “district” is used to refer to all districts, municipalities, towns and cities<sup>1</sup>.

### **1.2 Implementation steps for report preparation**

1) Data collection:

- The VAEO/WAEO form shows clearly what should be reported. So that extension officers are clear about what kinds of information to be reported although the form covers the whole agricultural sector including livestock, irrigation etc.
- It will be easy to fill out the form if extension officers keep a record on their activities every day in the agricultural diary.
- It should be noted that village and ward agricultural extension officers cooperate each other so that they organize themselves in data collection.
- It is also important to cooperate with village executive officers (VEO) in data collection, but sometimes they have uncooperative attitude towards providing data. In this case, it is suggested to communicate with hamlet leaders.

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<sup>1</sup> This is to avoid confusion by using the term “LGA” which includes ward and village, or the term “council” where some councils share one DAICO office.

## 2) Submission

- At the village level, the report is submitted to WAEO by the end of the month. In filling out the form, extension officers should use the data which were collected and recorded when they visited farmers.
- At the ward level, the report is submitted to district office within the first week of the following month. WAEO can work together with the VAEOs.

## [2] Monthly Report Format (WF01) -----

### 1. Introduction

Note that it is only WAEO that shall be required to fill in this part.

#### 1.1 (a) Weather Condition

Rainfall: Write the number of days it rained, and the amount of rainfall as following (1) or (2).

- (1) If there is a rain gauge in your station, please write amount of rainfall in milli meters in the second column.
- (2) If there is no rain gauge in your village, skip the second column and fill in the third column.

Number of days	Amount of rain (mm)	Comments (Much, Average, Little, no rain)

If there is a rain gauge station in your ward. You should communicate with the station to get the information. Fill in "0" in case there was no rain.

If there is no rain gauge in your village, leave it blank and skip this column.

According to your previous/past experience, choose one from "much, average, little or no rain" by your eye-observation, compared to the normal year.

### 1.1 (b) Disaster:

Please describe, if any, disaster (drought, flood, hunger, plant/livestock diseases etc.) occurred in this month.

At ward level, all the disasters in each village should be mentioned. If data are available, also write them.

You include specific statistics/information if any. For example, in case that there is a draught, you should report how many households are affected

### 1.2 Summary of Activities

Please summarize main activities conducted by extension officers in agricultural sector in this month.

You should include specific statistics to make it easy to analyse the reported data.

### 1.3 Achievement and Challenges

Achievement:

Challenges / Problems:

You should report not only the challenges, but also what you have done to solve these challenges and to positively impact beneficiaries.

## 2. Target, Implementation and Crop Prices

### 2.1(a) Target

Annual target for planted area should be set at the beginning of a fiscal year (in JULY).

According to the instruction from DAICO, WAEOs set the village level's target for only annual total "planted area" and productivity with consultation to VAEOs, and then aggregate all its target to get the ward level's one.

After DAICO finalize annual target, WAEOs make sure of informing both VAEO and VEO of each target's figures.

Name of the Crop	Annual Target		
	Expected Planted Area (ha) (i)	Productivity (ton/ha) (ii)	Expected Production Qty (ton) (iii)=(i)x(ii)
Maize			
Paddy			
Sorghum			
Bulrush millet			
Finger millet			
Wheat			
Cassava			
Sweet potatoes			
Irish potatoes			
Beans			
Cow pea			
Sweet Banana			
Cooking Banana			

Annual Targets are decided through consultation with DAICO's office. Based on experience and observation, VAEO/ WAEO can provide information on target planted area and target productivity but DAICO office may change it after consultation with RAA and other stakeholders.

DAICO add any other key crops produced in your LGA here, while instructing it to Extension Officers. List of applicable crops is attached to "District officer's manual".

## 2.1(b) Implementation

You visit farmers and then ask the information to be collected, while consulting with VEO at the same time. The detail operation is described on Page 6 and 7. Please read it carefully.

Name of the Crop	Implementation				Market price (Tsh / Kg) (ix)	Remarks (x)
	Planted Area (ha) (v)	Harvested Area (ha) (vi)	Productivity (ton/ha) (vii)	Production Qty (ton)(viii) =(vi)x(viii)		
Maize						
Paddy						
Sorghum						
Bulrush millet						
Finger millet						
Wheat						
Cassava						
Sweet potatoes						
Irish potatoes						
Beans						
Cow pea						
Sweet Banana						
Cooking Banana						

Crops listed here must be reported with their statistics.

In the case of mixed cropping, you estimate the percentages of each crop. Using the percentage for each crop, calculate the area for each crop from the remaining area.

Market price contains broad meanings. Market where crop prices are taken can be categorized into three groups: (1) purely rural, (2) mixture of both rural and urban and (3) purely urban. Crop prices from the (1) purely rural market are equivalent to farm gate prices, while crop prices in the other two categories (2) (3) are usually mixture of farm gate prices and retail prices.

In principle, the applicable price here is that received by farmers at the location of farm-gate or first-point-of-sale transactions when farmers participate in their capacity as sellers of their own products. Therefore, while you visit farmers to ask the price, you may also go to the selling point like local village market and ask the price to only farmers, not traders.

Also note that the price data here is defined as the most frequently answered price in this month. If you have several places and times, you calculate an average by the manner that you once sum up all figures of them and then divide it by the number of places and times.

Explain the stages of crop growth (e.g. weeding stage, blooming flower etc.) and also write the reasons why the production is more or less than the targets.

DAICO add any other key crops produced in your LGA here, while instructing it to Extension Officers. List of applicable crops is attached to "District officer's manual".



(Continued...)

Name of the Crop	Implementation				Market price	Remarks (x)
	Planted Area (ha) (v)	Harvested Area (ha) (vi)	Productivity (ton/ha) (vii)	Production Qty (ton)(viii) = (vi)x(viii)	(Tsh / Kg) (ix)	

\* Kipaumbele kikubwa ni zao la mahindi kwa kutumia njia hii. Kwa mazao mengine tumia makadirio.

**[Preparation: Data Sampling method for MAIZE production quantity]**

Before collecting data, you need to make preparations for harvested area and production QTY of maize\*,

- 1) Prepare a list of all farmers in the village. Don't include livestock keepers who don't cultivate farm in the list. In case that you are WAEO and there is no VAEO in your ward, contact VEOs and then ask them to provide a list of all farmers in the village.
- 2) Choose 10 farmers from the list using the following procedure;
  - i) Divide the number of farmers by 10 (e.g. 300/10=30).
  - ii) Choose a number between 1 and the number you get above (e.g. from 1 to 30).
  - iii) Add the number you get in i) to the first number you choose in ii) until you get 10 farmers. (e.g. if you start at 3, you will select 33, 63, 93, 123... and continue).
- 3) Before starting new fiscal year (June), visit farmers who are selected in the above procedure and explain the data to be collected.
- 4) Then every month regularly, as for harvested area (ha) and production QTY (ton), ask the 10 selected farmers about these figures of the crop.
- 5) It is suggested that you submit these data to VEO/WEO for cross-checking purposes before you submit it to DAICO.
- 6) In case that one of the selected samples disappear, you do carry on with remaining samples. Do not add new sample.

(Continued...)

## **[Data Collection]**

In order to collect data on planted area, harvested area, productivity and production QTY, detailed notes are as follows:

### **1. Village/Ward level Planted area**

- (1) Temporary/Annual Crop (including double cropping): Collect the data of additionally planted area as “Data of the month” every month
- (2) Permanent/Perennial Crop and Fruit Tree: (July) whole planted area, (the other months) newly and additionally planted area only [Measurement] By eye-observation, and then verify it through cross-checking with VEO

### **2. Village level Harvested area**

All crops including Permanent/Perennial Crop and fruit Tree except below: Collect the data as “Data of the month” every month  
Crops with seasonal multi harvests (e.g. some vegetables such as Tomato, Okura): Collect data at the end of harvesting month and report it [Measurement] By eye-observation, and then verify it through cross-checking with VEO

### **3. Ward level Harvested area**

Total ward harvested area is aggregated by summing all village harvested area, while missing data needs to be obtained through consultation with VEO.

### **4. Village level Production Qty**

By interview or observation, and then verify it through cross-checking with VEO.  
Crops with seasonal multi harvests (e.g. Tomato, Okura): Collect data at the end of harvesting month and report it.

#### **In the case of maize:**

- (1) You sum up all ten sample's production Qty, and then divide it by sample's total harvested area. This is the sample's productivity of the village.
- (2) Village Production Qty is calculated by Village Harvested area times the sample's productivity of the village.

### **5. Ward level Production Qty**

Ward Production QTY is aggregated by summing all Village Production QTY.

### **6. Village level Productivity (??)**

### **7. Ward level's Productivity**

Ward productivity is calculated by dividing the total Ward Production QTY by the total Ward harvested area.

(Continued...)

	Operation	
<b>Planted Area</b>	a) Temporary/Annual Crop (including double cropping): Data of the month b) Permanent/Perennial Crop and Fruit Tree: (i) in July: whole planted area (ii) the other months: newly and additionally planted area only	
	[Village Level] By eye-observation, and then verify it through cross-checking with VEO	[Ward Level] Total ward planted area is calculated by aggregating all Village planted area.
<b>Harvested Area</b>	Data of the month	
	[Village Level] By eye-observation, and then verify it through cross-checking with VEO	[Ward Level] Total ward harvested area is calculated by aggregating all village's harvested area, while missing data needs to be obtained through consultation with VEO.
<b>Productivity</b>	Data of the month	
	[Village Level] <b>-process(1)</b> a) Maize: 10 farmers sampling in June  <b>Sample Productivity = <math>\frac{\Sigma(\text{Sample P QTY})}{\Sigma(\text{Sample Harvested area})}</math></b> b) Others: No action	[Ward Level] <b>-process(4)</b> <i>Ward productivity is calculated manually with following way: Total Ward Production QTY divided by Total ward harvested area.</i>
<b>Production QTY</b>	Data of the month	
	[Village Level] <b>-process(2)</b> a) Maize: <i>Village Production QTY is Village Harvested Area multiplied by <u>sample Productivity</u>.</i>  <b>Village Production QTY = Village Harvested Area x Sample Productivity</b> b) Others: By <i>interview or observation</i> , and then verify it through cross-checking with VEO	[Ward Level] <b>-process(3)</b> Calculated manually with following way: <i>Ward Production QTY is calculated by aggregating all Village Production QTY</i>  <b>Ward Production QTY = <math>\Sigma(\text{Village Production QTY})</math></b>
<b>Remarks</b>	In case of Permanent/Perennial Crop and Fruit Tree, the accumulated value for Harvested Area in the reports can be more than planted area.	

(Continued...)

The ward total needs to be computed by summing up the village level data. However, if there are any VAEOs who have **not submitted** the filled-in forms, it is important to take actions to address it. At first you quickly contact with VAEO and VEO, then remind them of the submission. Nevertheless, in case of no response, you can apply the temporary measures shown in the Box 1 below.

**Box 1. Tips when there are VAEOs who have not submitted the filled-in form**

**<Instruction to WAEO> how to impute harvested area, productivity, and production QTY when their village data are missing.**

In case of missing some village data, estimate by following method:

(1) Tentative "*Ward productivity*" is calculated by available data with following way:

Available "*Ward Production QTY*" divided by available "*Total ward harvested area*".

(2) The data for missed village's "*harvested area*" is obtained through consultation with VEO.

(3) The missing village's "*production QTY*" is calculated by (2) the missed village "*harvest area*" **times** (1) tentative "*Ward productivity*".

**<Example>**

Suppose Ward Z has 3 villages. Both village A and B submitted data, but village C does not submit data.

	submission status	Harvested Area	Production Qty	Productivity
Village A	Submitted	2	6	
Village B	Submitted	3	10	
Village C	<i>Not-submitted</i>	<b>4</b>		<b><u>3.2</u></b>

(1) Village C's productivity is given by  $(6+10) / (2+3)$

(2) Suppose that harvested area in Village C is inquired, and then found out as '4ha'.

	submission status	Harvested Area	Production Qty	Productivity
Village A	Submitted	2	6	
Village B	Submitted	3	10	
Village C	<i>Not-submitted</i>	<b>4</b>	<b><u>12.8</u></b>	<b><u>3.2</u></b>

(3) Village C production is calculated by  $4 \times 3.2 = 12.8$

Finally, Ward Z's production Qty can be computed from available data.

$$6 \text{ (ton)} + 10 \text{ (ton)} + \mathbf{12.8} \text{ (ton)} = 28.2 \text{ (ton)}$$

## 2.2 Food Security Forecast

It means that data entry is conditioned by the same rule as other data of the May are (to be submitted by June 15<sup>th</sup>).

The data collection of forecast data will be based on the instruction provided by the department of food security.

Note that this is the exceptional table which appears only once a year for **May's data entry occasion**.

At the end of "May", you ask farmers the forecasts of total harvested area and total production quantity during the term from coming June to September as the end of agriculture year. You visit farmers, and then observe the situation and collect the information through interviews.

Name of the Crop	Forecasting for Food Security (Total from <u>June to September</u> )	
	Expected Harvested Area (ha)	Expected Production QTY (ton)
Maize		
Paddy		
Sorghum		
Bulrush millet		
Finger millet		
Wheat		
Cassava		
Sweet potatoes		
Irish potatoes		
Beans		
Cow pea		
Sweet Banana		
Cooking Banana		

These data are NOT actual figures but forecasted ones. Note that both of them are aggregation as the total amount of coming four months, *i.e.* June, July, August and September.

Expected Harvested area: By eye-observation.  
Expected Production QTY: By interview, and then verify it through cross-checking with VEO

### 3. Plant Health and Chemical Control

Data applicable here are the services provided not only by extension officers, but also by farmers themselves. Please write the relevant information of services of this month only.

Name of pests/Disease (i)	Name of the crop Affected (ii)	Severity (Large, Medium, Small) (iii)	Affected Area (iv)	Number of Villages Affected (v)	Pesticide Applied (vi)	Amount used (vii)	Unit (Kg or Litre) (viii)	Number of Villages served (ix)	Number of House hold served (x)	Area Rescued (ha) (xi)	Comments (xii)
<b>Total</b>											

Write the name of pest/disease that broke out during this particular month.

Write the name of a crop that has been attacked by pest/disease. (use one row for each crop).

Write the severity of the crop disease/insects based on the affected area (large: greater than **50% of TOTAL PLANTED AREA**, medium: 10%-50%, small: less than 10%)

Write the generic name of the pesticides that is applied. You need to record it properly.

The actual amount of pesticide used should be properly recorded. It should be measured by proper unit such as "kg" or "litre", not just the size of the bottle that the pesticide comes in.

Write the total area rescued out of affected area. Area rescued is estimated based on the number of households served.

Meanwhile, biological and natural/organic control measures should be reported in Table 4.1 of the quarterly report form (WF02).

#### 4. Livestock Slaughtered

Note that only the livestock slaughtered at formal slaughtering facilities or any other places where VAEO/WAEO inspect and record properly should be reported here. So that these data are available at the place where animal slaughters have been inspected and recorded officially. You visit there and make interview the operators to collect the data/information. No need to include those slaughtered and consumed at household.

WAEO in charge of the ward where the slaughter facility locates should report these information/data in a timely manner. Note that livestock farmers from some wards use slaughter facilities in their neighbouring wards.

Type of Livestock	Total number slaughtered (This Month)	Average price kg (Tsh)
Cattle		
Sheep		
Goat		
Pig		
Chicken (Local)		
Chicken (improved)		
Others		

“Average price” here is defined as the most frequently answered price in this month.

If you have several slaughtering facilities, you calculate an average by the manner that you once sum up all figures of the facilities and divide it by the number of facilities.



(Continued...)

The ward total needs to be computed by summing up the village level data. However, if there are VAEOs who have **not submitted** the filled-in formats, it is important to take actions to address it. At first you quickly contact with VAEO and VEO, then remind them of the submission right now. Nevertheless, in case of no response, you can apply the temporary measurement shown in the box 2 below.

**Box 2. Tips when there are VAEO who have not submitted the filled-in format**

**<Instruction to WAEO> how to impute “Total number slaughtered” and “Average price” of the village when the data are missing.**

In case of missing some village data, estimate by following method:

- (1) The missed village data of “Total number slaughtered” and “Average price” are obtained through consultation with VEOs.
- (2) If you cannot contact the VEO of missing data’s village or the VEO cannot answer it properly, you refer to the average of previous THREE months’ data which you had obtained, and then estimate the figure.
- (3) If there is no data in previous months, you check the other villages’ data of the month, and then estimate it. It is important to consider the proportion between estimated data and the other villages’ figures.

## 5. Meat Inspection

Note that only data from formal slaughter slabs or any other places where VAEO/WAEO inspect and record properly are reported here, as inspection report used to be provided there. So that these data are available both at the official slaughtering facilities and in the record that VAEO/WAEO have prepared. You visit there and make interviews to the operator to collect the data/information.

### 5(a) Animals affected

Note that TOTAL “number of animals condemned/affected” in column (iii) should be equal to or less than the TOTAL “number of case, condemnations” in column (iv) of the following table 5(b).

Here (ii) is the names of animals (e.g. cattle, sheep, goat, pigs) which were condemned.

Name of Place for Slaughter/ Inspection (i)	Type of Animal (ii)	Number of Animals condemned/affected (iii)

Column (iii) here is the number of animals condemned/affected corresponding to the type of animal in column (ii).

### 5(b) Part/Organ of the affected animal

Write the names of animals (e.g. cattle, sheep, goat, pigs) which were condemned.

Type of Animal (i)	Part/Organ name of meet condemned (ii)	Condemnations	
		Reasons for Condemnations (iii)	Number of cases (iv)

(iv) Write the number of cases for each reason of condemnations.

Put data in one row for each disease/condition in each animal type. If there are more than one reasons, use different rows and leave the preceding columns blank in paper base form. However, please repeat to enter data in every columns in case District officers enters data in ARDS Web Portal.

## 6. Livestock Products

### 6.1 Milk

Related to Data collection, you go to the milk collecting centre and/or reliable sources where these data are available.

This is total amount of whole production in this month. Please sum up all figures from each centre.

“Milk production per head per day” here is defined as the most frequently answered figure per day. If you have several time and place, you calculate an average.

“Price of milk” here is defined as the most frequently answered price in this month.

Type of product	Whole milk production (This Month)	Milk production per head per day	Price of milk (per litre)
Milk - Indigenous Cattle (litre)			
Milk Dairy Cattle (litre)			
Type of product	Production (This month)		
Cheese (kg)			
Butter (kg)			
Ghee (kg)			

If you have several milk collecting centres, you calculate an average by the manner that you once sum up all figures from each centre and then divide it by the number of centre.

### 6.2(a) Hides and Skin

Related to Data collection, you go to slaughtering points where these data are available.

Type of Product	Unprocessed (piece) (This Month)		Processed (piece) (This Month)	Remarks
	Dry suspended	Dry salted	Wet Blue	
Hide of cattle				
Skin of goat				
Skin of sheep				

### 6.2(b) Hides and Skin price

Related to Data collection, you go to slaughtering places, and make interviews with farm owners.

Type of Product	Average price of slaughter		Average price in factory
	Dry suspended	Dry salted	Wet Blue
Hide of cattle (Tsh / kg)			
Skin of goat (Tsh / piece)			
Skin of sheep (Tsh / piece)			

“Average Price” here is defined as the most frequently answered price in this month.

If you have several slaughtering points, you calculate an average by the manner that you once sum up all figures from each point and then divide it by the number of places.

Unit price of hides and skin: Tsh/kg for cattle, Tsh/piece for goat and sheep

### 6.3 Eggs

Only commercially produced eggs are applicable here. Related to Data collection, you go to poultry farms, and make interviews with farm owners.

Eggs	Total amount of eggs collected this month
Traditional chicken eggs	
Modern chicken eggs	
Total	

This is total amount of the month. Please sum up all figures from each farm.

## 7. Livestock Health

### 7.1 Medication

Related to data collection, you visit livestock owners, and then ask them with interview. In case of deworming, please only include cases when a livestock has been diagnosed with a worm-based disease. Meanwhile, for routine preventative deworming, it can be entered in Table 7.2 below. If many kind of medicines are used, please register one main medicine.

Type of livestock	Type of disease	Number Affected	Number Treated	Number Recovered	Number Died	Treatment/Medicine Applied

### 7.2 Dipping, Spraying, vaccination and deworming

Related to data collection, you visit VEO, and then ask them with interview. Use one row per type of livestock. If deworming is done preventatively, put it in this table here. You should report routine preventative deworming properly, regardless of their infections.

Type of Livestock	Number Dipped	Medicine Applied	Number Sprayed	Medicine Applied	Number vaccinated / dewormed	Vaccine Applied

**7.3 Livestock Service** (\*No new instruction for this table.)

Data applicable here are the services provided by not only extension officers but also farmers themselves. Please write the number of services to this month only.

Type of Livestock	Cutting hoof	Castration	AI	Cutting Horn	Branding	Cutting tail	Cutting teeth	Cutting bill/beak	Bull ring	Pregnancy diagnosis	Heat to stimulate heat	Iron mining needle
Cattle												
Goat												
Sheep												
Pig												
Chicken												
Duck												

## 8. Aquaculture

Aquaculture means the practice of breeding and raising aquatic organisms in a controlled aquatic environment.

Aquaculture consist of fresh water aquaculture and marine aquaculture. Fresh water aquaculture means fish farming in fresh water including culture of fresh water crustaceans, bivalves, other molluscs and other aqua animals. Meanwhile, marine aquaculture means fish farming in sea water including production of lobsters, shrimp, fish fry and fingerlings, as well as culture of crustaceans, bivalves, other molluscs and other aquatic animals in sea water.

### 8.1 Fish farming method

Fish farming is the principal form of aquaculture, while other methods may fall under marine culture. It involves raising fish commercially in tanks or enclosures, usually for food.

Related to both fresh water and marine aquaculture, VAEO/WAEO visit not only commercial fish farm but also small scale fish farm in the ward/village, and then collect the following data through an interview with farm owner. Commercial fish farm operates large scale of production with high capital geared towards maximizing returns on their investment. Meanwhile, small scale fish farm operates fish farming in implanted or non-implanted pond for stocking fingerlings etc, EXCEPT the informal private farming with the purpose for nutrition needs at their own household level.

Farming method: You can choose from “mabwawa”, “vizimba”, “matanki” or “chelezo”. Chelezo means an aquaculture using rafts, usually in marine water.

(ii) and (iv) be applied for both implanted and non-implanted fish pool.

In column (v) you can register single fish aquaculture as well as typical combination of fish (i.e. Kambamiti + Mwatiko, and Perege + Kambale). If you have other combination, please register under “others”.

Farming method (i)	Number of fish pond (ii)	Number of implanted fish pond (iii)	Area of farm (m <sup>2</sup> ) (iv)	Type/kind of fish kept (v)	Total weight of caught fish (Kg) (vi)	Unit Price of caught fish (TSh / Kg) (vii)	Total Output (TSh) (viii)

(iii) and (v)-(viii) be applied only implanted fish pond.

### 9. Visitors to a village/ward for agricultural or pastoral activities

This table is not data, just a memorandum for your duty. Please submit this information to district officer as paper-based.

Date	Guest's name	Address	Activity that brought him

### Conversion Table & Relevant and Referential Figures

[Weights and measures / Conversions]

1 hectare = 10,000 sq meters (100x100 meter) / 1 hectare = 2.47 acres

1 acre = 4,050 sq meters / 1 acre = 70 times 70 steps

1 step = 3 feet

1 foot = 30.48 centimetres

1 tonne = 1,000 kgs



### [3] Quarterly Report Format -----

#### 1. Village Food Situation

	Check one	Remarks
Good	<input type="checkbox"/>	
Average	<input type="checkbox"/>	
Bad	<input type="checkbox"/>	

VAEO can judge intuitively through your eye-observation. If food situation in your village/ward is as usual, select "average". Compared to the average year, select "Good" if the situation is better. And Select "bad" if it is worse than normal year.

VAEO judge the total food situation in your Ward comprehensively, based on information from VAEOs.

Explain the reason why you have chosen the status referring to food prices, amounts of emergency food consumed etc.

#### Describe food situation in this quarter

VAEOs collect data on food situation through interviews with hamlet leaders.

Each category is defined as follows:

- Household with no food: the household who does not have even one meal per day.
- Household with insufficient food: the household with fewer than three meals per day.
- Household with enough food: the household with three meals per day.
- Household with excess food: the household who has extra food in addition of three meals per day.

Number of household with no food	Number of household with insufficient food	Number of household with enough food	Number of household with excess food

### 3. Extension Services

Extension services provided by either government or private sector should be reported here.

#### 3.1 Training of farmers through the methods other than Farmers Field School (FFS)

The applicable trainings here include those provided by MATI, LITA, FETA and other institutes, NGOs, CBOs, VICOBA, Bank etc. or those provided by the district offices. And those are not related to FFS. VAEOs are required to leave the data of these trainings on record, whenever it has been held.

Topic of Training	Total number of farmers trained		Total number of Farmers Trained		Training method	Training providers	Remarks
	Male	Female	Equal or Less than one week	More than one week			
<b>Crop</b>							
<b>Livestock</b>							
<b>Fishery</b>							
<b>Marketing and Processing</b>							
<b>Irrigation</b>							

Write the topic of training for farmers.  
For example, the topics of training are such as “maize husbandry”, “preparation for planting” etc.

[Example]  
Training method: seminar, workshop, course, or study tour etc.  
Training providers: MATI, LITA, FETA, and other college, NGOs, CBOs, VICOBA etc.

## 4. Plant health

You obtain plant health information from extension officers who provided the service. If the farmers have dealt with the problems by themselves, you should also provide some advices to them.

### 4.1 Biological and natural/organic Control Measures

Report both biological and natural/organic control measurement. **Do not** write chemical control and pesticide treatments, which are applied for Table 3, Monthly Report Format.

Type of disease	Type of Crop	Control Measures	Area Controlled (ha)	Number of Households involved	Comments

Write the name of pest/disease which is managed by the relevant control measures in this quarter period.

Write the name of a crop that has been subject to the control measures for pest/disease. (use one row for each crop).

Write the total area controlled. You estimate the area, based on the number of households involved.

Examples of biological and natural/organic control measurement are followed:

1. Kuwatumia wadudu rafiki
2. Vimeleatilifu vitokanavyo na mimea asilia
3. Tumia mbegu bora zenye ukinzani.
4. Kupanda na kuvuna kwa wakati
5. Panda mazao kwa mzunguko
6. Palilia kwa wakati
7. Tifua udongo kwa kina
8. Ngoa na choma moto mimea iliyoathirika

## 5. Irrigation

### 5.1 Crops harvested under irrigation

**Irrigation scheme** is defined as the place where there are (improved or traditional) irrigation infrastructures for crop production.

You collect data on crop production under irrigation scheme for which irrigators organizations (IOs) exist. Those data are supposed to be available at the IO. Note that the irrigation scheme might cover wider area beyond the boundary of village where the VAEO has the obligation to carry out collecting data/information. In such a case, VAEO of the village where the IO locates will investigate the entire irrigation scheme's information, while asking irrigation scheme managers of the IO through interview.

Planted areas are accumulated areas for each Rainy or Dry seasons, namely Rainy season accumulated area and Dry season accumulated area. Production quantities are also accumulated values for each Rainy or Dry seasons.

Type of Crops harvested under irrigation	Planted area (ha) (i)		Yield (ton/ha) (ii)		Production (tons) (iii) = (i) x (ii)	
	Rainy season (iv)	Dry season (v)	Rainy season (vi)	Dry season (vii)	Rainy season (viii)	Dry season (ix)

Rainy season (iv) (vi) (viii) - For each crop harvested under irrigation during both long and short rainy seasons.

Dry season (v) (vii) (ix) - for each crop harvested under irrigation during dry season.

## 6. Soil Erosion

Write the names of soil erosion using an English term. You can report Gully erosion, Rill erosion or Sheet erosion

Type of Erosion (i)	Name of Village(s) Involved	Area Destroyed (ha)	Type of Control Measures	Area Controlled (ha)	Remarks

Write the measures applied to control the soil erosion.

## 7. Area Cultivated by Village/Ward and Means of Cultivation

Do not double-count if the same land is cultivated more than once in one season.

### 7.1 Short Rains Season (Vuli)

	By Tractors (ha) (i)	By Draught Animals (ha) (ii)	By hand hoes / hand (ha) (iii)	No tillage (ha) (iv)	Total Area (ha) (v) = (i)+(ii)+(iii)+(iv)
Cultivated					
Planted					
Weeded					
Harvested					

### 7.2 Rainy Season (Masika)

	By Tractors (ha) (i)	By Draught Animals (ha) (ii)	By hand hoes / hand (ha) (iii)	No tillage (ha) (iv)	Total Area (ha) (v) = (i)+(ii)+(iii)+(iv)
Cultivated					
Planted					
Weeded					
Harvested					

For harvested area, you can apply for other equipment not listed here in the table (e.g. combine harvester, knives).

You collect data available at the Village Government or from owners of tractor/ other machines.

You visit and see it by your eye-observation. And then verify it through cross-checking with VEO.

Write down the figure here in case that farmers use herbicide for weeding.

#### [4] Annual Report Format -----

##### 1. Introduction, Basic Information of Village/Ward

You go to Village Government Office, and then get the information. The procedure is as followed:

- 1) If the Village Government updates this information every year, use the information.
- 2) If the Village Government doesn't update the data, use the data from the Census. Don't estimate the number of population by own way.

Note that double counting for the same household/persons can be accepted and done. It means that its figure just shows the total number engaged respectively.



	Male headed household	Female headed household	Total	Number of household engaging in agriculture (crop production)	Number of household engaging in livestock	Number of household engaging in fishery
Number of Household						
	Male	Female	Total	Population engaging in agriculture (crop production)	Population engaging in livestock	Population engaging in fishery
Population						

## 2. Number of Smallholder Households Participating in Contracting Production and Out-growers Schemes

Smallholder household here means a farmer who has at least 25 m<sup>2</sup> of planted land and/or one head of cattle, 5 goats/sheep/pig, 50 chickens/ducks/guinea fowls/rabbits.

Contracting production is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products detailed in a formal contract.

Out-growers scheme is defined as a partnership that may NOT involve formal contracts.

You get information from the Village Government.

	Contracting Production (i)			Out-growers scheme (ii)		
	Number of household involved (iii)	Number of Contractors Involved (iv)	Major Products (v)	Number of household involved (vi)	Number of Contractors Involved (vii)	Major Products (viii)
Crop						
Livestock						
Fishery						

You write down the names of major products here.



### 3. Irrigation

#### 3.1 Irrigation scheme

**Irrigation scheme** is defined as the place where there are (improved or traditional) irrigation infrastructures for crop production.

You collect applicable data under irrigation scheme for which irrigators organizations (IOs) exist. Those data are supposed to be available at the IO. Note that the irrigation scheme might cover wider area beyond the boundary of village where the VAEO has the obligation to carry out collecting data/information.

In such a case, VAEO of the village where the IO locates will investigate the entire irrigation scheme's information, while asking irrigation scheme managers of the IO through interview.

Name of the Scheme (i)	Name of water source (e.g. Rufiji river) (ii)	Potential Area (ha) (iii)	Area under irrigation (ha) (iv)	Season irrigated (1=Both rainy and dry season, 2=Only rainy season, 3=Only dry season)	Status of the scheme (1=Good, 2=Acceptable, 3=Need repairment, 4=Not known)	Number of members in Irrigation Organisations (IO)		Number of farmers using irrigation infrastructures (both members and non members of IO)	
						Male	Female	Male	Female
<b>Improved scheme</b>									
<b>Traditional scheme</b>									

**Improved Irrigation** encompasses constructed structures/ canal, weir using cement or stones, etc. Do not count area where the irrigation infrastructures are not yet functioning.

**Traditional irrigation** encompasses unconstructed structures/ traditional temporary canal.

#### 4. Machines and other Agricultural, Livestock and Fishery machines

This section refers to the machines/implements which are basically stationed in your village. Note that the machines/implement which farmers rent from other villages are NOT included. You also go to Village Government, and then ask Village Executive Officer this information.

##### 4.1 Number of agricultural, livestock and fishery machines

Count all the machines which are owned by villagers only. Don't count machines which are used in the village/ward but come from other villages/wards.

Write the number of machines which are owned by either individual or group. Those owned by the Government or institutions (private companies) are regarded as group-owned.

Type of machines/Equipment	Working		Not Working		Reason for not working
	Individually-owned	Group-owned	Individually-owned	Group-owned	
Tractor					
Power Tiller					
Combine harvester					
Mower					
Bailer					
Feeder					
Drinker					
Milking Machine					
Chillers					
Electric Meat Cutter					
Patrol Boat					
Fishing Boat with Engine					
Fishing Boat without Engine					
Others					

Write the name of machine if there are other machines than these listed above.

## 4.2 Number of Agricultural Implements

You visit owners of these implements in your village, and then collect the data through interviews.

### a) Machinery Drawn (Tractors /Power Tillers)

Type of implement	Working	
	Individually-owned	Group-owned
Harrow		
Planter		
Disk plough		
Sub-soiler		
Weeder		
Boom Sprayer		
Ripper		
Rake for Hay Making		
Trailer		
Others		

Write the number of machines which are owned by either individual or group. Those owned by the Government or institutions (private companies) are regarded as group-owned.

### b) Animal Drawn (Draught Animals)

Type of Implement	Working	
	Individually-owned	Group-owned
Harrow		
Planter		
Moldboard plough		
Sub-soiler		
Weeder		
Ripper		
Ridger		
Cart		
Other		

### 4.3 Number of Hand Operated Implements

Hand hoes	Spray pump (Plant/ Livestock)	Flaying Knives	Flaying Nets	Branding Iron	Others(specify)

For livestock identification.

### 4.4 Number of Agro-processing Machines

You count the number of machines in only factory or plant in your village.

Type of Machine	Working		Not Working		Reason for not working
	Individually-owned	Group-owned	Individually-owned	Group-owned	
Milling Machines					
Dehulling Machines					
Oil Extractor					
Kernel Opening					
Pulperies					
Ginneries					
Shelling					
Hay Making Machines					
Dairy Products Processing Machines					
Hatching Machines					
Meat Processing Machines					
Hides and Skins Processing Machines					
Meat Vans					
Milk Vans					
Ice Making Machines					
Fish Product Processing Machines					
Others (specify)					

Write the name of machine if there are machines other than those listed above.

## 5. Extension Services

### 5.1 Farmers Field School (FFS)

Extension services provided by either government or private sector should be reported here.

Purpose of FFS (i)	Number of Field School	Number of Farmers Started		Average Duration (days)	Number of Farmers Completed		Number of Villages Covered	Number of Farmers who applied the techniques learned	Remarks
		Male	Female		Male	Female			
<b>Crop</b>									
<b>Livestock</b>									
<b>Fishery</b>									
<b>Marketing and Processing</b>									
<b>Others</b>									

The purpose of the FFS can be broad e.g. good practise of maize husbandry, which includes usage of improved seeds, preparation of the farm, fertilize application, etc.

The completed farmers are those who attended at least 75% of the training.  
Only those training that were completed in that particular year should be reported in this table.

The number of farmers those who actually practised the technique should be reported

## 6. Input Use

### 6.1 Inorganic Fertilizer

You include the amount of fertilizer used for pasture.

Type of Fertilizer	Annual requirement (ton)	Amount used per year (ton)	Remarks
SA			
CAN			
UREA	<p>This Annual requirement (targets) is for the reporting year, <u>NOT</u> for the coming year.</p> <p>Firstly, you should set this figure at the beginning of a fiscal year, collaborating with farmers and livestock keepers in the village. And then you write the figure here at the year end for a fact.</p>	<p>Data on the amount used are available at stockist in the village/ward or based on the services provided by Extension Officers.</p>	
TSP			
DAP			
NPK 10:10:10			
NPK 25:5:5			
NPK 6:20:18 / 10:18:24			
NPK 4:17:15			
NPK 17:17:17			
MRP (Minjingu Rock Phosphate)			
MOP			
Others (specify)			

## 6.2 Pesticides

Write the most common brand (trade) names in each category.

Write the unit of chemicals either kg or litre.

Data on the amount used are available at stockist in the village/ward or based on the services provided by Extension Officers.

Type of Pesticides	Name of Pesticides	Unit (kg/ litre)	Amount used per year	Remarks
A: INSECTICIDES				
A: INSECTICIDES				
B: FUNGICIDES				
B: FUNGICIDES				
C: HERBICIDES				
C: HERBICIDES				
D: RODENTICIDES				
D: RODENTICIDES				
E: AVICIDES				
E: AVICIDES				
F: Nematicides				
F: Nematicides				
G: Others				
G: Others				

### 6.3 Improved Seeds

Data on the amount used are available at stockist in the village/ward or based on the services provided by Extension Officers.

Type of Crops	Annual Requirement for the reporting year (kg)	Name of Improved Variety	Amount used in the reporting year (kg)		Remarks
			Quality Declared Seed	Certified seed	
Maize					
Maize					
Maize					
Paddy					
Paddy					
Paddy					
Beans					
Beans					
Beans					
Sorghum					
Sorghum					
Sorghum					
Wheat					
Wheat					
Wheat					
Sunflower					
Sunflower					
Sunflower					
Others (Specify)					

This Annual requirement (targets) is for the reporting year, NOT for the coming year.

Firstly, you should set this figure at the beginning of fiscal year, collaborating with farmers and livestock keepers in the village. And then you write the figure here after the year ends for a fact.

Write the names of the most common varieties of improved seeds for each crop.

QDS are defined as the seeds produced by farmers who are trained and allowed to sell seeds within the ward.

Certified seeds are defined as those which are produced by agricultural research institutes (e.g. ASA).



## 7. Livestock population

These data are available at the village government and livestock keepers.

Count all livestock population EXCEPT those owned by large scale farmers.

Large scale farm is defined as the farm which has more than 50 heads of cattle, and/or more than 100 heads of sheep/ goats/pigs, and/or more than 1000 chickens/turkeys/ ducks/ rabbits, and which have permanent stations/farm, uses machines such as milking machine, drinker, etc., practices commercial farming (with modern facilities) and usually has title of the land they own.

Bull is sexually mature uncastrated male cattle used for breeding.

Cow is mature female cattle that has given birth at least once.

Steer is castrated male cattle over 1 year of age.

Heifer is young female cattle which has not yet had a calf.

Calf is sexually immature young cattle under 1 year of age.

Type of Animal	Number of indigenous	Number of Improved		Total	Total Registered
		Meat	Dairy		
<b>1. Cattle</b>					
Bull					
Cow					
Steer					
Heifer					
Male Calf					
Female Calf					
Ox					
Unknown					
<b>Sub Total Cattle</b>					

Type of Animal	Number of indigenous	Number of Improved		Total	Total Registered
		Meat	Dairy		
<b>2. Sheep</b>					
Male Sheep					
Female sheep					
Unknown					
<b>Sub total Sheep</b>					
<b>3. Goat</b>					
Male Goat					
Female Goat					
Unknown					
<b>Sub Total Goat</b>					
<b>4. Others</b>					
Pig					
Water Buffalo					
Donkey					
Horse					
Camel					
Dog					
Cat					
Rabbit					
<b>5. Avian</b>	Number of Indigenous	Broiler	Layer	Total	
Chicken					
Duck					
Turkey					
Guinea Fowl	39				

## 8. Livestock Infrastructures

You estimate the number of requirement for this livestock infrastructure. Discussing with VEO, estimate the realistic figures based on current circumstances.

Type of Infrastructure	Working	Not working	Number Required	Number of Registered	Reasons for not working
Slaughter Slab					
Butcher for cattle and goat					
Butcher for pig					
Butcher for fish					
Hide and Skin Banda					
Permanent Crash					
Charco (malambo)					
Water Trough					
Cattle Dip					
Dog Dip					
Spray Race					
Others (specify)					

Slaughter slab is defined as a flat concrete floor where animals are slaughtered in an open air.

Charcos are usually excavated and smaller than dams.

Write the name of infrastructure if there are infrastructure other than those listed above.

## 9. Grazing land

These data are available at the village government because land shall be registered. If the information cannot be obtained, you estimate the figure by eye-observation.

Type of Animals (i)	Total Grazing Land in the Village (ha) (iii)	Utilized land (ha) (iv)	Total Demarcated Area (ha) (v)	Total Area Leased (ha) (vi)
Cattle				
Goat				
Sheep				
Donkey				

Total area available for grazing.

Area actually used for grazing.

Area officially leased to individuals or groups by village and certified by Ministry of Land.

## 10. Pasture

### 10.1 Improved Pasture

Data can be available from livestock keepers in the village. You visit them, and then ask this information with interview.

Number of farms / plots	Area (ha)	Seed Production (kg)	Amount of Hay Bales/Bundles produced (Hay)	Remarks

Total area for improved pasture in the village.

One bale of hay is about 20kg.

### 10.2 Crop Residue

Data are available from livestock keepers in the village. You visit them, and then ask this information with interview.

Type of crop	Amount of Hay Bales/Bundles produced (Hay)	Area of Farms/ Plots Grazed in Situ (ha)	Remarks

## 11. Dissemination of Agricultural Information (TV, radio and telecommunication)

### 11.1 TV and Radio station

Kituo cha TV kinachopatikana	Idadi ya vijiji vinavyofikiwa na huduma
TBC	
ITV	
Star TV	
Vituo vya TV vya kijamii, taja:	

Kituo cha Radio kinachopatikana	Idadi ya vijiji vinavyofikiwa na huduma
Radio 1	
TBC Taifa	
Radio Free Africa	
Vituo vya Radio vya kijamii, taja:	

If the LOCAL radio or TV station air any program on agriculture/ livestock, please write.

Name of station	Name of program	Frequency (time in a week)	Type of information

### 11.2 Telecommunication

Name of telecommunication company	Number of villages covered
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	
Others, specify	

Write name of program of agriculture, livestock and fisheries which is aired by local radio and TV station if you can listen/ watch in your village/ward.

[End]

**Kiambatisho Na. 2 cha utendaji kazi wa MUTAKI (ARDS)**

**Mwongozo wa Wagani**

**Mfumo wa Ukusanyaji Takwimu za Kilimo  
(ARDS)**

Kikundi Kazi cha Ufuatiliaji na Tathmini cha Programu ya Kuendeleza Sekta ya Kilimo

July 2018

## [1] Utangulizi -----

### 1.1 Lengo la mwongozo wa wagani

Lengo la mwongozo ni kutoa maelekezo kwa maafisa ugani wa vijiji na kata katika ukusanyaji wa takwimu za kilimo na mifugo kama ifuatavyo:

- Kuwa na uelewa wa pamoja wa jinsi ya kujaza taarifa za vijiji na kata
- Kuwaonyesha mbinu mbalimbali za jinsi ya kukusanya kwa ubora takwimu na taarifa za sekta ya kilimo
- Kuwezesha kuwa na takwimu zenye ubora ili zitumike katika kupanga mipango bora ya sekta ya kilimo
- Kuwezesha kubadilishana mawazo kuhusu umuhimu wa takwimu
- Kuonyesha jinsi ya kukusanya taarifa (za mwezi, robo mwaka na mwaka) ikiwa ni pamoja na maelekezo ya namna ya kujaza fomu husika

\*Katika mwongozo huu, neno “Wilaya” limetumika kumaanisha wilaya zote, miji, manispaa na majiji<sup>1</sup>

### 1.2 Hatua za kuandaa taarifa

1) Ukusanyaji wa Takwimu:

- Fomu za ngazi ya vijiji/kata zinaonyesha kwa usahihi aina ya taarifa zinazotakiwa kukusanywa. Hivyo basi wagani wana ufahamu wa taarifa zinazohitajika pamoja na kuwa fomu zina taarifa ya sekta nzima ya kilimo pamoja na mifugo, imwagiliaji n.k.
- Wagani watajaza takwimu hizi kwa urahisi kama wanaweka kumbukumbu ya shughuli zao za kila siku wanapowatembelea wakulima.
- Inategewewa wagani wa vijiji na kata watashirikiana kwa pamoja katika kutekeleza ukusanyaji wa takwimu.

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<sup>1</sup> Hii ni kuondoa mkanganyiko wa kutumia neon “Mamlaka ya Serikali za Mitaa” inayojumuisha kata na vijiji, au neon “halmashauri” ambapo halmashauri zaidi ya moja kwa pamoja zinakuwa na Afisa Kilimo mmoja.



- Ni vyema pia kuwashirikisha na Watendaji wa vijiji, ushirikiano ukiwa si wa kuridhisha, inashauriwa kuwatumia wenyeviti wa vitongoji

## 2) Uwasilishaji wa taarifa

- Kwa ngazi ya kijiji, taarifa zitawasilishwa kwa mgani wa kata wiki ya mwisho ya mwezi husika. Kujaza taarifa hizi, mgani atatumia kumbukumbu alizokusanya wakati anatembelea wakulima.
- Kwa ngazi ya kata, taarifa itawasilishwa wilayani ndani ya wiki ya kwanza ya mwezi unaofuata. Ni muhimu vilevile wagani wa kata washirikiane na wale wa vijijini kuandaa taarifa.

## [2] Fomu ya Taarifa ya Mwezi (WF01) -----

### 1. Utangulizi

#### 1.1 (a) Hali ya hewa

Mvua: Andika idadi ya siku mvua ilinyesha, au kiasi cha mvua kama ilivyoelezwa hapa chini (1) or (2).

(1) Kama kijiji chako kina kipima mvua, jaza kiasi cha mvua (milimita) katika safu wima ya pili.

(2) Kama kijiji chako hakina kipima mvua, jaza idadi ya siku na safu wima ya tatu.

Idadi ya siku	Kiasi cha mvua (milimita)	Maelezo (Nyingi/ Wastani/ Kidogo/Hakuna)

Kama kuna kipima mvua katika kata yako, itabidi kuwasilina na kituo hicho ili kupata takwimu ya mvua iliyonyesha. Jaza sifuri "0" iwapo hakuna mvua iliyonyesha.

Kama kijijini hakuna kipima mvua, acha kisanduku wazi, na uruke kabisa safu wima hii.

Kwa mujibu wa uzoefu wako wa zamani, chagua "nyingi", "wastani", "kidogo" au "hakuna mvua", kwa jinsi wewe unavyoona kwa uchunguzi wa jicho lako, unaweza kuwa unafananisha hali iliyopo sasa na mwaka uliokuwa na mvua za kawaida tu.

### 1.1 (b) Matukio:

Tafadhali eleza matukio, kama yapo, mfano (ukame, mafuriko, njaa, mlipuko wa magonjwa ya mimea/mifugo n.k.) yaliyojitokeza mwezi huu.

Kwa ngazi ya kata, utaje hapa majanga yote yaliyotokea katika kila kijiji. Kama takwimu zinapatika pia ziambatanishe.

Kwa mfano, kama kuna ukame, ripoti ieleze ni kiasi gani cha kaya zimepata madhara kutokana na ukame.

### 1.2 Kazi zilizofanyika

Tafadhali ainisha shughuli kuu zilizotekelezwa na afisa ugani kwa sekta ya kilimo/mifugo kwa mwezi huu.

Unatakiwa uweke na takwimu ili pawe na urahisi wa kuchambua taarifa husika.

### 1.3 Mafanikio na Changamoto

Mafanikio:	
Changamoto/ Matatizo:	

Usitoe ripoti ya changamoto tu bali pia ueleze nini kimefanyika kutatua changamoto husika kupelekea mshindi chanya kwa walengwa.

## 2. Malengo, Utekelezaji na Bei za Mazao

### 2.1(a) Malengo

Malengo ya mwaka ya eneo litakalopandwa yaandaliwe mwanzo wa mwaka wa fedha (JULAI). Kwa mujibu wa maelekezo ya Afisa Kilimo wa Wilaya, afisa ugani wa kata atatarisha malengo ya ngazi ya kijiji kwa eneo litakalopandwa na tija kwa kushauriana na wagani wa vijiji na ataunganisha malengo ya vijiji vyote kupata malengo ya kata yake. Baada ya Afisa Kilimo kuridhia malengo kwa kila kata, mgani wa kata atawafahamisha wagani na watendaji katika vijiji vyote haya malengo mapya.

Aina ya mazao	Malengo kwa mwaka		
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)
Mahindi			
Mpunga			
Mtama			
Uwele			
Ulezi			
Ngano			
Mihogo			
Viazi vitamu			
Viazi mviringo			
Kunde			
Maharage			
Ndizi mbivu (Sweet Banana)			
Ndizi mbichi (Plantain)			

Malengo ya mwaka yanatayarishwa kwa mashirikiano kati ya maafisa ugani na Afisa Kilimo wa Wilaya kutokana na uzoefu na/au uchunguzi. Afisa ugani wa kata/kijiji anaweza kupendekeza malengo ya eneo litakalopandwa na tija, hata hivyo Afisa Kilimo wa Wilaya anaweza kubadilisha mapendekezo hayo baada ya kushauriana na Afisa Kilimo wa Mkoa au wadau wengine wa kilimo.

## 2.1(b) Utekelezaji katika msimu wa Kilimo

Tembelea wakulima na kuwaelewesha taarifa za kukusanywa, ukimshirikisha mtendaji wa kijiji. Utaratibu kwa kina umeelezwa katika ukurasa wa 5 na 6. Tafadhali soma kwa uangalifu.

Mazao kwenye orodha hii takwimu zake zijazwe hapa.	Utekelezaji				Bei ya soko (Tsh / Kg) (vi)	Maelezo (Zisizidi herufi hamsini) (vii)
	Eneo lililopandwa (ha) (ii)	Eneo lililovunwa(ha) (iii)	Uzalishaji/ tija (tani/ha) (iv)	Mavuno (tani) (v=iii*iv)		
Mahindi						
Mpunga						
Mtama						
Uwele						
Ulezi						
Ngano						
Mihogo						
Viazi vitamu						
Viazi mviringo						
Kunde						
Maharage						
Ndizi mbivu (Sweet Banana)						
Ndizi mbichi (Plantain)						

Kwa eneo lenye mazao yaliyopandwa kwa mchanganyiko, kadiria asilimia za kila zao na kwa kutumia asilimia hizo kokotoa kwa uangalifu mkubwa eneo la kila zao,

Bei ya soko imebeba maana ya pamoja. Masoko bei zinapopatikana yamegawanyika makundi matatu: (1) bei za vijijini, (2) zilichanganyika, za mjini na bei za kijijini na (3) bei za mijini. Bei za mazao kutoka (1) bei za masoko ya vijijini ni sawa na bei ya shambani, bei za mazao kwa eneo la (2) na (3) ni mchanganyika wa bei ya shambani na bei za rejareja.

Kwa ujumla, bei inayotakiwa ni ile anayopokea mkulima katika eneo la shamba au bei mkulima anauza mazao yake kama muuzaji wa kwanza kabisa. Hivyo basi, wakati ukimtembelea mkulima ulizia bei aliyouzia mazao, pia unaweza kutembelea magulio na kuuliza bei mkulima amepokea, usiulize wafanyabiashara.

Pia ieleweka kabisa kwamba bei inayokusanywa ni ile ambayo imejitokeza kwa mara nyingi zaidi kwa mwezi husika. Kama magulio yapo mengi katika eneo hilo, kokotoa bei ya wastani kwa kujumlisha tarakimu za bei na kugawanya kwa idadi ya magulio au idadi ya mara ambazo magulio yanafanyika.

Eleza hatua ambayo mazao yamefikia (mfano: wakati wa kupalilia, mazao kutoa maua na pia andika sababu ya mazao kuwa mengi au pungufu ya malengo.

Afisa Kilimo wa Wilaya ataongeza mazao mengine muhimu katika orodha kama yanajitokeza katika Wilaya yake na kuwafahamisha maafisa ugani. Orodha ya mazao imeambathishwa katika mwondozo wa uendeshaji wa MUTAKI wa Wilaya

(Inaendelea...)

Aina ya mazao (i)	Utekelezaji				Bei ya soko	Maelezo (Zisizidi herufi hamsini) (vii)
	Eneo lililopandwa (ha) (ii)	Eneo lililovunwa(ha) (iii)	Uzalishaji/ tija (tani/ha) (iv)	Mavuno (tani) (v)	(Tsh / Kg) (vi)	

\* Kipaumbele kikubwa ni zao la mahindi kwa kutumia njia hii. Kwa mazao mengine tumia makadirio.

**[Matayarisho: Kutumia njia ya Sampuli kwa takwimu ya Mavuno ya MAHINDI]**

Kabla ya kukusanya takwimu, unatakiwa utambue eneo litakalovunwa na kiasi cha mavuno ya mahindi\*,

- 1) Tayarisha orodha ya wakulima wote katika kijiji. Kwenye orodha usiweke wafugaji wasiokuwa na mashamba ya mazao. Kama wewe ni afisa ughani wa kata na hakuna maafisa ughani wa kijiji, wasiliana na watendaji wa vijiji na watake wakupatie orodha ya wakulima wote katika kijiji.
- 2) Chagua wakulima 10 kutoka orodha ya wakulima kama ifuatavyo:-
  - i) Gawanya idadi ya wakulima kwa 10 (mfano  $300/10=30$ ).
  - ii) Chagua namba ya kuanzia kati ya moja na namba uliyopata hapo juu (mfano: 1 hadi 30).
  - iii) Chagua mkulima mmoja kila baada ya namba uliyopata (ii) hapo juu (mfano ukianza na namba 3, utachagua 33, 63, 93, 123...na kuendelea).
- 3) Kabla kuanza msimu mpya (June), tembelea wakulima waliochaguliwa kwa utaratibu hapo juu na ueleze aina ya takwimu ambazo utahitaji kukusanya.
- 4) Kila mwezi, uliza hawa wakulima 10 kupata takwimu ya eneo lililovunwa (ha) na kiasi cha uzalishaji (Tani).
- 5) Inashauriwa kuhakiki hizi takwimu ulizopata kwa mtendaji wa kijiji/kata kabla ya kuwasilisha kwa Afisa Kilimo wa Wilaya.
- 6) Ikitokea mmoja katika sampuli shamba lake au yeye mwenyewe akapotea, unaendelea na wakulima waliobakia katika sampuli. Usiongeze mwingine kutoka nje ya sampuli iliyopo.

(Inaendelea...)

## **[Ukusanyaji wa Takwimu]**

Ili kukusanya takwimu za eneo lililopandwa, eneo lililovunwa, tija na kiasi cha uzalishaji, ufafanuzi ni kama ifuatavyo:

### **1. Eneo la kijiji/kata lililolimwa**

- (1) Mazao ya Muda/Mazao ya Mwaka (pamoja na Misimu Miwili): Kusanya takwimu ya eneo linaloongezeka na uwasilishe kama takwimu ya mwezi huo.
- (2) Mazao ya Kudumu na Miti ya Matunda: (Julai) eneo lote lililopandwa, (Miezi Mingine) eneo jipya na ongezeko la eneo lililopandwa tu [Kipimo] Jinsi unavyoona kwa uchunguzi wa jicho/kuona kwa jicho lako, na kuthibitisha kwa kumshirikisha mtendaji wa kijiji

### **2. Eneo la Kijiji Lililovunwa**

Mazao yote ya kudumu na miti ya Matunda isipokuwa mazao hapo chini: Kusanya takwimu kwa kila mwezi kama takwimu ya mwezi. Mazao yenye kuvunwa mara zaid ya moja kwa msimu (mfano mbogamboga kama nyanya, bamia): takwimu ikusanywe mwezi ule ambao shughuli ya kuvuna imekamilika. [Kipimo] Jinsi unavyoona kwa uchunguzi wa jicho/kuona kwa jicho lako, na kuthibitisha kwa kumshirikisha mtendaji wa kijiji

### **3. Eneo la Kata Lililovunwa**

Jumla ya eneo la kata lililovunwa linapatikana kwa kujumlisha eneo lililovunwa kwa kila kijiji, na kijiji ambacho hakikuwasilisha takwimu yake ipatikane kwa kumshirikisha mtendaji wa kijiji.

### **4. Kiasi cha Uzalishaji katika Kijiji**

Kwa mahojiano au kudodosa, na kuthibitisha takwimu kwa kumshirikisha mtendaji wa kijiji. Kwa mazao yenye kuvunwa mara zaidi ya moja kwa msimu (mfano nyanya, bamia): Kusanya na wasilisha takwimu ya mwezi ule ambao uvunaji umekamilika.

#### **Kwa zao la Mahindi:**

- (1) Unajumlisha kiasi cha uzalishaji kwa wakulima wote 10 wa sampuli na unaigawanya kwa jumla ya eneo la sampuli lililovunwa. Hii itakusaidia kupata tija ya sampuli katika kijiji.
- (2) Uzalishaji wa kijiji utapatikana kwa kukokotoa eneo la kijiji lililovunwa kwa kuzidisha na tija ya sampuli katika kijiji.

### **5. Kiasi cha Uzalishaji katika Kata**

Uzalishaji katika Kata unapatikana kwa kujumlisha kiasi cha Uzalishaji kwa vijiji vyote.

### **6. Tija katika ngazi ya Kijiji [inapatikana kwa kugawa jumla ya uzalishaji (Tani) na jumla ya eneo lililovunwa (Ha)]**

### **7. Tija ya Kata**

Tija kwa ngazi ya kata inakotolewa kwa kugawa jumla ya uzalishaji kwa kata (Tani) kwa jumla ya eneo lililovunwa (Ha).

(Inaendelea...)

	<b>Muhtasari</b>	
<b>Eneo Lililopandwa</b>	a) Mazao ya Muda/Mazao ya Mwaka (pamoja na Misimu Miwili): Takwimu ya mwezi huo. b) Mazao ya Kudumu na Miti ya Matunda: (i) Julai: eneo lote lililopandwa, (ii) miezi mingine: <u>eneo jipya na ongezeko la eneo litakalopandwa tu</u>	
	[Ngazi ya Kijiji] Uchunguzi wa jicho/kuona kwa jicho, na kuthibitisha kwa kumshirikisha mtendaji wa kijiji	[Ngazi ya Kata] Jumla ya eneo la kata lililopandwa ni kukokotoa kwa kujumlisha maeneo yaliyopandwa katika kila kijiji.
<b>Eneo Lililovunwa</b>	Takwimu ya Mwezi huo	
	[Ngazi ya kijiji] Uchunguzi wa jicho/kuona kwa jicho, na kuthibitisha kwa kumshirikisha mtendaji wa kijiji	[Ngazi ya Kata] Jumla ya eneo la kata lililovunwa ni kukokotoa kwa kujumlisha maeneo yaliyovunwa katika kila kijiji, takwimu ya kijiji ambacho hakikuwasilisha ipatikane kwa mashauriano na mtendaji wa kijiji.
<b>Tija</b>	Takwimu ya Mwezi huo	
	[[Ngazi ya Kijiji]- <b>hatua(1)</b> a) Mahindi: Sampuli ya wakulima 10 (Juni)  <b>Tija ya Sampuli = <math>\frac{\Sigma(\text{Uzalishaji wa Sampuli})}{\Sigma(\text{Eneo la Sampuli lililovunwa})}</math></b> b) Mazao mengine: Hakuna sampuli	[Ngazi ya Kata]- <b>hatua(4)</b> <i>Tija ya kata inakotolewa kwa njia ifuatayo:</i>  <i>Jumla ya Uzalishaji gawanya kwa Jumla ya eneo lililovunwa</i>
<b>Kiasi cha Uzalishaji</b>	Takwimu ya Mwezi huo	
	[[Ngazi ya Kijiji]- <b>hatua(2)</b> a) Mahindi: Uzalishaji wa Kijiji unapatikana kwa kuzidisha Eneo la Kijiji Lililovunwa na <b>Tija ya Sampuli</b> (ya wakulima 10)  <b>Kiasi cha Uzalishaji kwa kijiji = Eneo la Kijiji Lililovunwa x Tija ya Sampuli</b> b) Mazao mengine: Kwa mahojiano au kuona kwa jicho na kuhakiki kwa kumshirikisha mtendaji wa kijiji	[Ngazi ya Kata]- <b>hatua(3)</b> Kokotoa kwa njia ifuatayo: Kiasi cha Uzalishaji ni jumala ya Uzalishaji wa vijiji vyote katika  <b>Uzalishaji wa Kata = <math>\Sigma(\text{Uzalishaji wa Vijiji})</math></b>
<b>Maelezo</b>	Kwa Mazao ya Kudumu na Miti ya Matunda; kwenye ripoti, kiasi cha mkusanyiko kwa Eneo Lililovunwa inaweza kuwa kubwa zaidi ya Eneo Lililopandwa.	

(Inaendelea...)

Jumla katika kata inapatikana kwa kujumlisha takwimu za ngazi ya kijiji.

Hata hivyo, kama kuna mgani wa kijiji **hakuwasilisha** fomu zilizojazwa, afisa ugani wa kata lazima achukue hatua za haraka. Kwanza awasiliane na mgani na mtendaji wa kijiji husika, akiwataka wawasilishe taarifa hiyo mara moja. Ikitokea hakuna majibu ya kuridhisha, tumia utaratibu wa dharura kama ilivyoonyeshwa kwenye Kisanduku Na. 1 hapo chini.

### **Kisanduku Na 1. Vidokezo kama Mgani wa Kijiji hakuwasilisha fomu iliyojazwa takwimu**

**<Maagizo kwa Mgani wa Kata> namna ya kujaza eneo lililovunwa, tija na kiasi cha uzalishaji kama tawimu za kijiji husika haikujazwa.**

Kama kuna takwimu za kijiji haikujazwa, kadiria kwa njia zifuatazo:

(1) Tija ya awali ya kata itakokotolewa kwa kiasi cha takwimu zilizopo kama ifuatavyo:

Takwimu zilizopo za “kiasi cha Uzalishaji” gawanya kwa “Jumla ya eneo la kata lililovunwa”.

(2) Takwimu za “eneo la kijiji lililovunwa” zitapatikana kwa mashirikiano na mtendaji wa kijiji.

(3) Takwimu ya kijiji ya kiasi cha uzalishaji itakokotolewa kwa (2) “eneo la kijiji lililovunwa” ambalo halikuwasilishwa **zidisha** kwa “Tija ya awali” ya kata.



**<Mfano>**

Tuseme Kata Z ina vijiji (3) vitatu. Kijiji A and B wamewasilisha takwimu, lakini kijiji C hakijawasilisha.

	Hali ya Uwasilishaji	Eneo Lililovunwa	Kiasi cha Uzalishaji	Tija
<i>Kijiji A</i>	Wamewasilisha	2	6	
<i>Kijiji B</i>	Wamewasilisha	3	10	
<i>Kijiji C</i>	<i>Hawajawasilisha</i>	<b>4</b>		<b><u>3.2</u></b>

(1) Tija ya Kijiji C inapatikana kwa  $(6+10) / (2+3)$

(2) Tuseme eneo la Kijiji C Lililovunwa tumeulizia na kuambiwa ni kiasa cha jumla Heka 4 (4ha).

	Hali ya Uwasilishaji	Eneo Lililovunwa	Kiasi cha Uzalishaji	Tija
<i>Kijiji A</i>	Wamewasilisha	2	6	
<i>Kijiji B</i>	Wamewasilisha	3	10	
<i>Kijiji C</i>	<i>Hawajawasilisha</i>	<b>4</b>	<b><u>12.8</u></b>	<b><u>3.2</u></b>

(3) Uzalishaji wa Kijiji C unakokotoa kwa  $4 \times 3.2 = 12.8$

Mwisho, uzalishaji wa Kata Z unakokotolewa kama

$$6 \text{ (ton)} + 10 \text{ (ton)} + \mathbf{12.8} \text{ (ton)} = 28.2 \text{ (ton)}$$

## 2.2 Utabiri wa usalama wa chakula

Kwa jedwali hii utaratibu wa kawaida kama takwimu zingine utafuatwa. Kwa mfano, kama ilivyo kwa takwimu zingine, takwimu hizi pia lazima ziwasilishwe kufikia tarehe 15th Juni.

Ukusanyaji wa takwimu za utabiri wa hali ya chakula utazingatia maelekezo yanayotolewa na idara ya usalama wa chakula.

Kumbuka hili ni jedwali la kipekee litakaloonekana tu mara moja kwa mwaka hasa **mwezi Mei kipindi cha kuingiza takwimu hizo**.

Mwisho wa mwezi “Mei”, unatengeneza muhtasari wa takwimu za utabiri ulizowauliza wakulima jumla ya eneo litakalovunwa na kiasi cha uzalishaji unaotarajiwa kwa kipindi cha kuanzia mwezi Juni hadi Septemba kwa kufuata mfumo wa mwaka wa kilimo. Kwa kipindi hicho, utatakiwa kuwatembelea wakulima, na utaona hali ya chakula na utakusanya takwimu baada ya majadiliano na wahusika.

Aina ya mazao	Utabiri wa Usalama wa Chakula (Jumla <u>Juni hadi Septemba</u> )	
	Matarajio eneo lililopandwa (ha)	Matarajio ya mavuno (tani)
Mahindi		
Mpunga		
Mtama		
Uwele		
Ulezi		
Ngano		
Mihogo		
Viazi vitamu (Sweet potatoes)		
Viazi mviringo (Irish potatoes)		
Kunde (Cow pea)		
Maharage		
Ndizi mbivu (Sweet Banana)		
Ndizi mbichi (Cooking Banana)		

Takwimu hizi sio halisia ni utabiri. Ikumbukwe kuwa takwimu hizi zinajumuisha kiasi cha jumla kwa miezi minne (4) ya mbele yaani mwezi Juni, Julai, Agosti and Septemba.

Matarajio eneo lililopandwa: Uchunguzi wa jicho/kuona kwa jicho

Matarajio ya Kiasi cha Uzalishaji: Kwa mahojiano au kudodosa, na kuthibitisha takwimu kwa kumshirikisha

### 3. Afya ya mimea

#### 3.1 Kuzuia/ kutibu/ kudhibiti magonjwa/ visumbufu kwa kutumia kemikali.

Takwimu zinazotakiwa kutolewa hapa sio zile huduma zitolewazo na Afisa ugani tu, bali hata zili zilizotolewa na wakulima wenyewe. Tafadhali andika taarifa husika za mwezi huu tu.

Andika jina la kisumbufu/ugonjwa ulioliipuka katika kipindi cha mwezi husika.	Andika jina la zao lililoshambuliwa na kisumbufu /ugonjwa, (tumia safu mlalo moja kwa kila zao.	Andika kiasi cha uharibifu wa kisumbufu/ugonjwa kwa kuzingatia eneo la shamba ililoathirika (kubwa: ni ukubwa wa zaidi ya 50% ya <b>ENEO LILILOPANDWA</b> , wastani: 10%-50%, dogo: chini ya 10%	Andika jina la kisayansi la kiuadudu kilichotumia. Kumbuka kuchagua kwa usahihi	Kiasi halisi cha kiuadudu kilichotumika kiandikwe kwa usahihi. Kipimwe kwa kuzingatia viwango vya kimataifa mfano” kg” au “lita” na sio kutumia ukubwa tu wa chupa ambamo dawa imewekwa.							
Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani, kidogo) (iii)	Eneo lililoathiriwa (ha) (iv)	Idadi ya vijiji vilivyoathirika (v)	Dawa iliyotumika (vi)	Kiasi kilichotumika (vii)	Kipimo (kg, lt) (viii)	Idadi ya vijiji vilivyo hudumiwa (ix)	Idadi ya kaya zilizohudumiwa (x)	Eneo lililookolewa (ha) (xi)	Maelezo (xii)
<b>Jumla</b>											

Andika jumla ya eneo lililookolewa kati ya eneo lililoathirika. Eneo lililookolewa likadiriwe kwa kuzingatia idadi ya kaya zilizohudumiwa.

**Kumbuka**, nija za kibiolojia/asili zitaripotiwa katika taarifa ya robo jedwali Na. 4.1 (WF02).

#### 4. Mifugo iliyochinjwa

Kumbuka takwimu inayoandikwa hapa ni ya mifugo tu iliyochinjwa katika machinjio rasmi au sehemu vyingine ambayo mgani wa kata/kijiji amekagua mifugo iliyochinjwa na kuweka kumbukumbu kwa usahihi. Kwa maana nyingine, takwimu hii ni rasmi kutoka kwenye machinjio au ukaguzi umefanyika. Mgani atatembelea eneo husika na kufanya mahojiano na wahusika ili kupata taarifa. Usijumuishe takwimu za mifugo iliyochinjwa na kuliwa katika kaya na ukaguzi haukufanyika.

Mgani wa kata ambayo machinjio ipo au ukaguzi umefanyika ndio tu atawajibika kuandika takwimu hii katika jedwali hii. Kumbuka kuna wafugaji wanatumia machinjio za kata za jirani.

Aina ya mifugo	Idadi ya waliochinjwa (mwezi huu)	Bei ya wastani kwa Kg (Tsh)
Ng'ombe		
Kondoo		
Mbuzi		
Nguruwe		
Kuku wa asili		
Kuku wa kisasa		
Mengineyo (Taja)		

“Bei ya wastani” hapa inamaanisha bei iliyotumika mara nyingi zaidi mwezi huu.  
Kama kuna maeneo mengine ya machinjio, kokotoa wastani kwa kujumlisha bei za maeneo yote na kugawanya kwa idadi ya maeneo.

(Inaendelea...)

Jumla ya kata inapatikana kwa kujumlisha takwimu za ngazi ya kijiji.

Kama taarifa ya kijiji haijawaasilishwa fanya kama inavyoonyeshwa kwenye kisanduku kifuatacho (Namba 2)

Hata hivyo, kama kuna afisa ugani wa kijiji **hajawasilisha** fomu iliyojazwa, afisa ugani wa kata lazima achukue hatua za haraka. Kwanza awasiliane na mgani na mtendaji wa kijiji husika, akiwataka wawasilishe taarifa hiyo mara moja. Ikitokea hakuna majibu ya kuridhisha, tumia utaratibu wa dharura wa kukadiria takwimu hizo kama ilivyoonyeshwa kwenye Kisanduku Na. 2 hapo chini.

### **Kisanduku Na 2. Vidokezo kama Mgani wa Kijiji hakuwasilisha fomu iliyojazwa takwimu**

**<Maagizo kwa Mgani wa Kata> namna ya kujaza “Jumla ya wanyama waliochinjwa” na “Wastani wa bei” kama takwimu za kijiji husika hazikujazwa.**

Kama kuna takwimu ya kijiji haikujazwa, kadiria kwa njia zifuatazo:

- (1) “Jumla ya wanyama waliochinjwa” na “wastani wa bei” ipatikane kwa kumshirikisha mtendaji wa kijiji.
- (2) Ikiwa ni vigumu kuwasiliana na mtendaji wa kijiji kuulizia takwimu, au majibu ya mtendaji sio ya kuridhisha, tafadhali kadiria takwimu kwa kuchukua wastani wa miezi mitatu (3) iliyopita kwa taarifa ambazo ziliwasilishwa awali.
- (3) Kama hakuna takwimu zilizowasilishwa miezi iliyopita, kadiria takwimu za mwezi huo kwa kuangalia takwimu zilizowasilishwa na kijiji cha jirani. Ni muhimu kufikiria uwiano wa takwimu kati ya taarifa uliyokadiria na takwimu za kijiji cha jirani.

## 5. Ukaguzi wa Nyama

Kumbuka takwimu inayoandikwa hapa ni ya mifugo tu iliyochinjiwa katika machinjio rasmi au sehemu vyingine ambayo mgani wa kata/kijiji amekagua mifugo iliyochinjwa na kuweka kumbukumbu kwa usahihi. Mgani atatembelea eneo husika na kufanya mahojiano na wahusika ili kupata taarifa.

### 5(a) Wanyama Walioathirika

Kumbuka mifugo iliyoathirika katika safu wima ya (iii) [jedwali 5(a)] inatakiwa kuwa sawa au kidogo ukilinganisha na “JUMLA ya matukio” ya safu wima ya (iv) katika jedwali [5(b)].

Hapa (ii) andika aina ya mfugo ulioathirika (mfano: ngo'mbe, kondoo, mbuzi, au nguruwe)

Jina la machinjio/ukaguzi (i)	Aina ya mfugo (ii)	Idadi ya wanyama walioathirika (iii)

Safu wima hii (iii) andika idadi ya mifugo iliyoathirika kulingana na aina ya mfugo katika safu wima (ii).

### 5(b) Sehemu ya mnyama iliyoathirika

Andika aina ya mfugo ulioathirika (mfano: ngo'mbe, kondoo, mbuzi, au nguruwe)

Aina ya mfugo (i)	Kilichotupwa (ii)	Kilichotupwa	
		Sababu ya kutupa viungo / mzoga mzima (iii)	Idadi ya matukio kwa kila sababu (iv)

iv) Andika idadi ya matukio kwa kila sababu ya kutupa kiungo au mnyama mzima.

Jaza takwimu kwa safu ulalo moja kwa kila ugonjwa/hali na kwa aina moja ya mfugo. Kama kuna sababu zaidi ya moja, tumia safu ulalo ingine, na uache wazi safu wima zilizoitangulia safu wima hii. Hii ni katika ujazaji kwenye fomu. Wakati wa kuingiza katika ARDS Web-portal, afisa wa Wilaya atatakiwa kurudia kuingiza takwimu kwa safu wima zote.

## 6. Mazao yatokanayo na mifugo

### 6.1 Maziwa

Kwa ukusanyaji wa takwimu hii, tembelea sehemu za kukusanyia maziwa, na/au upate takwimu kutoka vyanzo vingine vya kuaminika.

Hiki ni kiasi cha jumla ya maziwa yaliyozalishwa kwa mwezi huu. Tafadhali jumlisha takwimu kutoka vtuo vyote vya kukusanyia maziwa.

“Kiasi cha uzalishaji maziwa kwa mfugo/siku” hapa inamaanisha ni kiasi kile kimetajwa mara nyingi zaidi kwa siku. Kokotoa wastani kama kuna maeneo mengi na viwango vya tofauti vingi.

“Bei ya wastani” hapa inamaanisha ni bei iliyotumika kununulia ngozi mara nyingi zaidi mwezi huu.

Kama kuna maeneo mengi ya kukusanyia maziwa, kokotoa wastani kwa kujumlisha bei za maeneo yote na kugawanya kwa idadi ya maeneo.

Aina ya mazao	Kiasi cha maziwa (Whole milk) Mwezi huu	Wastani wa maziwa yaliyozalishwa (kwa mfugo/siku)	Bei ya maziwa (kwa lita)
Maziwa ya ng'ombe wa asili (lita)			
Maziwa ya ng'ombe wa kisasa (lita)			
Aina ya bidhaa	Uzalishaji (mwezi huu)		
Jibini (Cheese) (kg)			
Siagi (Butter) (kg)			
Samli (Ghee) (kg)			

## 6.2(a) Ngozi

Kwa ukusanyaji wa takwimu hii, tembelea sehemu za machinjio, na ufanye mahojiano na wahusika.

Aina ya Mazao	Zisizosindikwa (vipande) kwa mwezi huu		Zilizosindikwa (vipande) kwa mwezi huu	Maelezo
	Ngozi zilizokaushwa kwa jua	Zilizokaushwa kwa chumvi	Wet Blue	
Ngozi za ng'ombe				
Ngozi za mbuzi				
Ngozi za kondoo				



### 6.2(b) Bei ya Ngozi

Kwa ukusanyaji wa takwimu hii, tembelea machinjio, na ufanye mahojiano na wahusika.

“Bei ya wastani” hapa inamaanisha ni bei iliyotumika kununulia ngozi mara nyingi zaidi mwezi huu.

Kama kuna maeneo mengine ya machinjio, kokotoa wastani kwa kujumlisha bei za maeneo yote na kugawanya kwa idadi ya maeneo.

Aina ya Mazao	Bei ya wastani ya machinjioni		Bei ya wastani ya kiwandani
	Ngozi zilizokaushwa kwa jua	Zilizokaushwa kwa chumvi	Wet Blue
Ngozi za ng'ombe (Tsh / kg)			
Ngozi za Mbuzi (Tsh / kipande)			
Ngozi za kondoo (Tsh / kipande)			

Kipimo cha bei za ngozi: kwa ng'ombe ni Tsh/kg, na mbuzi/kondoo ni Tsh/ngozi moja.

### 6.3 Mayai

Takwimu ya kujaza hapa ni ile ya mayai ambayo yamezalishwa kwa ajili ya soko tu. Kwa ukusanyaji wa takwimu hii, tembelea mashamba ya ufugaji wa kuku wa mayai, na ufanye mahojiano kupata takwimu.

Mayai	Kiasi cha mayai yaliyokusanywa kwa mwezi huu
Mayai ya kuku wa kienyeji	
Mayai ya kuku wa kisasa	
Jumla	

Hii ni jumla ya mayai kwa mwezi husika. Tafadhali jumlisha takwimu zote kutoka kwa wazalishaji.

## 7. Afya ya Mifugo

### 7.1 Tiba

Kwa ukusanyaji wa takwimu hii, tembelea wamiliki wa mifugo, na ufanye mahojiano. Kama ni hatua ya kuzuia minyoo (deworming), tafadhali chukulia tukio la mfugo kufanyiwa uchunguzi wa ugonjwa unaohusiana na minyoo. Hata hivyo kwa huduma za kawaida za kila siku za kukinga minyoo kwenye mifugo, takwimu yake itaingizwa katika jedwali Na. 7.2 hapo chini.

Angalizo: kama dawa nyingi tofauti zinatumiwa, tafadhali andika dawa ambayo imetumiwa zaidi.

Aina ya mifugo	Aina ya ugonjwa/ hali	Idadi ya walioathirika	Idadi ya waliotibiwa	Idadi ya waliopona	Idadi ya waliokufa	Matibabu/ Dawa iliyotumiwa

### 7.2 Uogeshaji, Kunyunyizia, Chanjo and Kinga

Kwa ukusanyaji wa takwimu hii, tembelea mtendaji wa kijiji, na ufanye mahojiano. Tumia safu mlalo moja kwa aina moja ya mfugo. Kama huduma ya kuuza minyoo imefanyika kama kinga, jaza takwimu katika jedwali hii. Toa ripoti ya kawaida ya kinga kwa usahihi, bila kujali kiasi cha maambukizi.

Aina ya mfugo	Idadi walioogeshwa	Dawa iliyotumiwa	Idadi walionyunyiziwa	Dawa iliyotumiwa	Idadi waliochanjwa/ / kingwa	Chanjo/kinga iliyotumiwa

### 7.3 Huduma za Mifugo

Takwimu zinazotakiwa hapa ni kwa huduma zilizotolewa sio na maafisa ugani tu bali hata huduma ambayo mkulima mwenyewe ametoa. Tafadhali andika idadi ya huduma kwa mwezi husika.

Aina ya mifugo	Kukata kwato	Kuhasi	Kuhamilisha (AI)	Kukata pembe	Kuweka alama	Kukata mikia	Kukata meno	Kukata midomo	Hereni ya puani (Bull ring)	Upimaji wa mimba (Pregnancy diagnosis)	Sindano ya kuchochea joto	Sindano ya madini chuma (Iron injection)
Ng'ombe				Sindano ya kuchochea joto								
Mbuzi												
Kondoo												
Nguruwe												
Kuku												
Bata												

## 8. Ufugaji wa Samaki

Kilimo cha kwenye maji ni kitendo cha kuruhusu viumbe kuzaliana katika mazingira ya maji yaliyodhibitiwa.

Kilimo-majini kinahusisha ufugaji wa samaki wa maji baridi na wa baharini. Kilimo cha maji baridi ni ufugaji wa samaki katika maji baridi ikiwa ni pamoja na *crustaceans* wa maji baridi, *bivalves*, na makolusi (*molluscs*) wengine na viumbe wengine wa maji baridi. Wakati huohuo, kilimo cha baharini ni ufugaji wa samaki katika bahari, hii ni pamoja na uzalishaji wa *lobsters*, *shrimp*, *fish fry* na vifaranga vya samaki, pia ufugaji wa *crustaceans*, *bivalves*, jamiii ya *molluscs* na viumbe wengine wa baharini.

### 8.1 Mfumo wa ufugaji

Ufugaji wa samaki ni aina kuu ya kilimo-majini hasa kwa maji baridi, wakati njia zingine zipo katika kundi la ufugaji wa baharini. Hii inahusisha uzalishaji wa samaki kibiashara katika matanki au sehemu zilizofungwa, mara nyingi ni kwa ajili ya chakula.

Njia zinahusisha ufugaji katika maji baridi na maji ya bahari, Afisa ugani wa kata/kijiji atatembelea wafugaji wadogo wadogo na wanaofuga kibiashara katika kata/kijiji, na kukusanya takwimu za jedwali hii kwa kufanya mahojiano na wamiliki wa mashamba. Wafugaji wa kibiashara wanaendesha ufugaji wa kiwango kikubwa kwa kutumia mitaji mikubwa kwa ajili kupata faida kubwa kutokana na uwekezaji unaofanyika. Wakati ambapo, wafugaji wadogo wadogo ni wanaendesha mabwawa ambayo yameingiziwa au hayajaingizwa vifaranga. Takwimu ya wale watu binafsi ambao wanafuga tu kwa ajili ya kupata lishe kwa familia zao haitaingizwa hapa.

Njia ya ufugaji: Chagua njia mojawapo kati ya hizi; “mabwawa”, “vizimba”, “matanki” or “chelezo”. Chelezo ni njia ya ufugaji wa samaki kwa kutumia makingio (*rafts*) mara nyingi hii hufanyika kwenye maji ya baharini.

(ii) na (iv) inahusisha mabwawa yaliyoingizwa vifaranga na ambayo hayajaingizwa.

Katika safu wima ya (v) unaweza kutaja aina moja ya samaki au aina mbili kwa pamoja kama wanafungwa kwenye bwawa moja (mfano: kambamiti na mwatiko; perege na kambale). Kama kwenye eneo lako kuna aina za pamoja zaidi ya hizi andika katika wengineo.

Njia ya ufugaji (i)	Idadi ya mabwawa (ii)	Idadi yenye vifaranga (iii)	Ukubwa eneo la mashamba (m <sup>2</sup> ) (iv)	Aina ya samaki pandwa (v)	Uzito wa samaki vuliwa (Kg) (vi)	Bei ya samaki vuliwa (TSh / Kg) (vii)	Thamani (TSh) (viii)

(iii) na (viii) inahusiana tu na mabwawa yaliyopandwa samaki.

## 9. Wageni waliotembelea Kijiji/Kata kwa shughuli za kilimo au ufugaji

Jedwali hii siyo takwimu bali ni kumbukumbu ya kazi zako za kila siku. Tafadhali wasilisha taarifa hizi kwa afisa wa wilaya kama sehemu ya uwajibikaji.

Tarehe	Jina la Mgeni	Anuani	Shughuli iliyomleta

### Jedwali ya kusaidia kubadilisha vipimo na kufanyia nukuu muhimu za takwimu

[Vipimo vya Uzito na Urefu]

Hekta 1 = mita za mraba 10,000 (mita100x100) / hekta 1 = ekari 2.47

Ekari 1 = mita za mraba 4,050 / ekari 1 = hatua 70 mara 70

Hatua 1 = futi 3

Mguu 1 = sentimita 30.48

Tani 1 = kilogramu (kg) 1,000

### [3] Taarifa za Robo Mwaka -----

#### 1. Hali ya Chaula Kijijini/ Kata

	Weka alama	Maelezo
Nzuri		
Wastani		
Mbaya		

Afisa ugani wa kijiji kukadiria hali ya chakula kwa uchunguzi wa kuona. Kama hali ya chakula kijijini ni ya kawaida tu, chagua “wastani”. Kama hali ya chakula ni nzuri ukilinganisha na mwaka wa kawaida chagua “nzuri”, na chagua mbaya kama hali ni mbaya zaidi ya mwaka wa kawaida.

Afisa ugani wa kata atakadiria hali ya chakula kwa kuangalia ujumla wa hali ya chakula iliyoripotiwa katika vijiji vyote.

#### Elezea hali ya upatikanaji wa chakula kipindi cha kwa robo mwaka hii

Eleza sababu ya kuchagua hali ya chakula kwa kuhusisha na bei za vyakula, kiasi cha chakula cha msaada kilichotumika n.k.

Afisa ugani wa kijiji anakusanya takwimu ya hali ya chakula kwa mahojiano na viongozi wa vitongoji.

Maana ya kila kundi imefafanuliwa kama ifuatavyo:

- Kaya isiyo na chakula: kaya ambayo haiwezi kumudu hata mlo mmoja kwa siku.
- Kaya yenye chakula kisichotosheleza: kaya ambayo bado haijaweza kumudu milo mitatu kwa siku.
- Kaya yenye chakula cha kutosha: kaya yenye chakula kukidhi milo mitatu kwa siku.
- Kaya yenye chakula cha ziada: kaya inayoweza kumudu milo mitatu kwa siku na zaidi

Kaya isiyo na chakula	Kaya yenye chakula hafifu-hakitoshi	Kaya yenye chakula cha kutosha	Kaya yenye chakula cha ziada

### 3. Huduma za ugani

Jaza hapa takwimu ya huduma za ugani zinatolewa na serikali na zile zinatolewa watu au taasisi binafsi.

#### 3.1 Mafunzo kwa wakulima kwa kutumia njia mbalimbali nje ya shamba darasa

Andika hapa mafunzo yanayotolewa na MATI, LITI, FETA na taasisi zingine, NGOs, CBOs, VICOBA, Benk n.k. au mafunzo yaliyotolewa na ofisi ya wilaya na hayahusiani na shamba darasa. Afisa ugani wa kijiji anatakiwa aweke kukmbukumbu katika kitabu chake pale mafunzo kama haya yanapofanyika.

Mada ya mafunzo katika (i)	Idadi ya wakulima waliopata mafunzo		Idadi ya wakulima waliopata mafunzo kwa muda		Njia iliyotumika kutoa mafunzo	Mtoa mafunzo/ Mwezesaji wa mafunzo	Maelezo
	Wanaume	Wanawake	Sawa au pungufu ya wiki moja	Zaidi ya wiki moja			
<b>Mazao</b>							
<b>Ufugaji</b>							
<b>Uvuvi</b>							
<b>Masoko na Usindikaji</b>							
<b>Umwagiliaji</b>							

Andika mada iliyofundishwa kwa wakulima.  
Kwa mfano, mada za mafunzo ni kama “kilimo bora cha mahindi” “utayarishaji wa shamba” n.k.

[Mfano]  
Njia ya kufundishia: semina, waksha, kozi, au ziara ya mafunzo n.k.  
Mtoa mafunzo: MATI, LITI, FETA, na vyuo vingine, NGOs, CBOs, VICOBA n.k.

#### 4. Afya ya mimea

Takwimu ya afya ya mimea inapatikana kwa maafisa ugani ambao wametoa huduma au hata kama mkulima ameshughulikia tatizo mwenyewe, na afisa ugani atakuwa amesaidia kutoa ushauri.

#### 4.1 Kuzuia magonjwa/visumbufu kwa njia za kibaiologia/ njia za asili

Toa taarifa ya njia za kibaiologia au za asili ambazo zimetumika kudhibiti magonjwa. **Usiandike** njia za kikemikali katika jedwali hii. Njia za kudhibiti magonjwa kwa kutumia kikemikali itajazwa katika jedwali Na. 3 ya Taarifa ya mwezi, sio hapa.

Aina ya ugonjwa/ kisumbufu	Aina ya zao	Njia zilizotumika	Eneo lililodhibitiwa (ha)	Kaya zilizohusika	Maelezo

Andika jina la mdudu/ugonjwa ambao umedhibitiwa kwa robo hii

Andika eneo lote lililookolewa. Kadiri eneo hapa kwa kuzingatia idadi kaya zilizohusika

Andika jina la zao ambalo ugonjwa uliojitokeza kwake unadhhibitiwa (tumia safu ulalo moja kwa zao moja).

Mfano wa njia za kibaiologia au asili za kudhibiti magonjwa au wadudu ni hizi zifuatazo:

1. Kuwatumia wadudu rafiki
2. Vimeleatilifu vitokanavyo na mimea asilia
3. Tumia mbegu bora zenye ukinzani.
4. Kupanda na kuvuna kwa wakati
5. Panda mazao kwa mzunguko
6. Palilia kwa wakati
7. Tifua udongo kwa kina
8. Ngoa na choma moto mimea iliyoathirika



## 5.Umwagiliaji

### 5.1 Mazao yanayolimwa katika eneo la umwagiliaji

**Skimu** ni eneo lenye miundombinu ya umwagiliaji (kisasa au asili) na linalotumika kwa shughuli za umwagiliaji ili kuzalisha mazao.

Kusanya takwimu ya uzalishaji wa mazao kwenye skimu ambayo kuna umoja wa wamwagiliaji (IO). Takwimu zinapatikana katika umoja wa wamwagiliaji (IO). Kumbuka skimu inaweza kuwa eneo kubwa hadi nje ya mipaka ya kijiji ambapo afisa ugani anayo mamlaka ya kukusanya takwimu. Kwa mazingira kama haya, afisa ugani wa kijiji ambapo umoja wa wamwagiliaji upo atalazimika kukusanya takwimu ya skimu nzima, kwa kufanya mahojiano na meneja wa skimu au uongozi husika.

Maeneo yaliyolimwa ni mkusanyiko wa maeneo kwa msimu wa mvua au kiangazi, kumaanisha mkusanyiko wa eneo msimu wa mvua na mkusanyiko wa eneo msimu wa kiangazi. Kiasi cha uzalishaji pia ni mkusanyiko kwa msimu wa mvua na kiangazi.

Aina ya mazao	Eneo lililopandwa (ha) (i)		Uzalishaji/Tija (tani/ha) (ii)		Mavuno (tani) (iii) = (i) x (ii)	
	Masika/vuli (iv)	Kiangazi (v)	Masika/vuli (vi)	Kiangaz (vii)	Masika/vuli (viii)	Kiangaz (ix)

Msimu wa mvua (iv) (vi) (viii) – Ni kwa kila zao lililovunwa kupitia umwagiliaji kwa kipindi cha msimu wa mvua ndefu (masika) na msimu wa mvua fupi (vuli).

Msimu wa kiangazi (v) (vii) (ix) – Ni kwa kila zao lililovunwa kupitia umwagiliaji kipindi cha kiangazi.

## 6. Mmomonyoka wa ardhi

Andika majina ya mmomonyoko lugha kwa kiingereza. Unaweza kuandika Gully erosion, Rill erosion au Sheet erosion.

Aina ya mmomonyoko (i)	Jina la kijiji/vijiji vilivyhusika	Eneo lililoharibiwa (ha)	Mbinu zilizotumika	Eneo lililokarabatiwa (ha)	Maelezo

Andika njia iliyotumika kudhibiti mmomonyoko

## 7. Eneo la uzalishaji katika kijiji/kata na njia iliyotumika kulima

Usihesabu mara mbili kama ardhi ileile imelimwa zaidi ya mara moja katika msimu.

### 7.1 Vuli

Eneo	Kwa trekta (ha) (i)	Kwa kutumia wanyamakazi (ha) (ii)	Kwa jembe la mkono/ mkono (ha) (iii)	Kupanda bila kulima (ha) (iv)	Jumla ya eneo (ha) (v) = (i)+(ii)+(iii)+(iv)
Lililolimwa					
Lililopandwa					
Lililopaliliwa					
Lililovunwa					

### 7.2 Masika

Eneo	Kwa trekta (ha) (i)	Kwa kutumia wanyamakazi (ha) (ii)	Kwa jembe la mkono/ mkono (ha) (iii)	Kupanda bila kulima (ha) (iv)	Jumla ya eneo (ha) (v) = (i)+(ii)+(iii)+(iv)
Lililolimwa					
Lililopandwa					
Lililopaliliwa					
Lililovunwa					

Eneo lililovunwa linaweza kutumia vifaa zaidi ya vilivyotajwa, mfano combine harvester, kisu nk.

Takwimu hizi zinapatikana kutoka kwenye Serikali ya Kijiji na baadhi kutoka kwa wamiliki wa trekta na vifaa vingine.

Unatembelea na kuona kwa jicho na baadae kuthibitisha kwa mtendaji wa kijiji.

Andika takwimu kama wakulima wanatumia viua-gugu kama mbadala wa kupalilia.

#### [4] Taarifa za Mwaka -----

##### 1. Utangulizi, Taarifa za Msingi za Kijiji/ Kata

Unatembelea ofisi ya Serikali ya Kijiji, na kukusanya takwimu hii. Fuata utaratibu ufuatao:

- 1) Kama Serika ya Kijiji inasasisha (*update*) takwimu hizi kila mwaka, tumia taarifa hiyo.
- 2) Kama Serikali ya Kijiji hawana utaratibu wa kusasisha takwimu hizi, tumia takwimu za sense ya hivi karibuni. Usikadirie idadi ya watu kwa kutumia njia zako binafsi.

Kumbuka inaruhusiwa kuhesabu mara mbili kwa kaya/ mtu yuleyule. Hii inamaanisha takwimu inaonyesha tu jumla wanaoshiriki kwa mtiririko huo.

	Zinazoongozwa na wanaume	Zinazoongozwa na wanawake	Jumla	Zinazoshiriki kazi za kilimo mazao	Zinazoshiriki ufugaji mifugo	Zinazoshiriki ufugaji samaki
Idadi ya kaya						
	Wanaume	Wanawake	Jumla	Watu wanao shiriki kazi za kilimo mazao	Watu wanao shiriki ufugaji mifugo	Watu wanao shiriki ufugaji samaki
Idadi ya watu						

## 2. Idadi ya kaya za wakulima wadogo zinazoshiriki Kilimo cha Mkatoba wa Soko na Makubaliano ya Soko

Mkulima mdogo hapa ni yule angalau mwenye shamba lenye ardhi iliyolimwa yenye ukubwa wa 25 m<sup>2</sup> na/ au ngo'mbe mmoja (1), mbuzi/kondoo/nguruwe watano (5), kuku/bata/njiwa/sungura 50.

Takwimu hii inapatikana katika serikali ya kijiji.

Mkatoba wa soko unatafsiriwa kama makubaliano kati ya kaya/ kikundi na kampuni katika kuzalisha mazao ya biashara kwa mkatoba maalum wa kisheria. Makubaliano ya soko yanatafsiriwa kama makubaliano kati ya kaya/ kikundi na kampuni ya kilimo katika kuzalisha mazao ya biashara ambayo HAYAHUSISHI mkatoba.

Aina ya shughuli	Mkatoba wa soko (Contract farming) (i)		Makubaliano ya soko (Out-growers) (ii)			
	Idadi ya kaya zinazoshiriki (iii)	Idadi ya makampuni yaliyohusika (iv)	Zao kuu/ bidhaa (v)	Idadi ya kaya zinazoshiriki (vi)	Idadi ya makampuni yaliyohusika (vii)	Zao kuu/ bidhaa (viii)
Kilimo						
Ufugaji						
Uvuvi						

Andika jina la zao kuu hapa

### 3. Umwagiliaji

#### 3.1 Skimu ya umwagiliaji

**Skimu** ni eneo lenye miundombinu ya umwagiliaji (kisasa na asili) na linatumika kwa shughuli za umwagiliaji ili kuzalisha mazao.

Kusanya takwimu ya uzalishaji wa mazao kwenye skimu ambayo kuna umoja wa wamwagiliaji (IO). Takwimu zinapatikana katika umoja wa wamwagiliaji (IO). Kumbuka skimu inaweza kuwa eneo kubwa hadi nje ya mipaka ya kijiji ambapo afisa ugani anayo mamlaka ya kukusanya takwimu.

Kwa mazingira kama haya, afisa ugani wa kijiji ambapo umoja wa wamwagiliaji upo atalazimika kukusanya takwimu ya skimu nzima, kwa kufanya mahojiano na meneja au uongozi wa skimu.

Jina la skimu (i)	Chanzo cha maji (mfano; mto rufiji) (ii)	Eneo linalofaa kwa umwagiliaji (ha) (iii)	Eneo lililomwagiliwa (ha) (iv)	Msimu wa umwagiliaji (1=muda wote, 2=masika/vuli, 3=kiangazi)	Hali ya skimu (1=nzuri, 2=inaridhisha, 3=inahitaji marekebisho, 4=hajjulikani)	Idadi ya wanachama katika chama cha wamwagiliaji (IO)		Idadi ya wamwagiliaji (wanachama na wasiowanachama)	
						Wanaume	Wanawake	Wanaume	Wanawake
<b>Skimu iliyoendelezwa</b>									
<b>Skimu ya asili</b>									

Skimu ya umwagiliaji **iliyoendelezwa** inahusisha miundombinu ya kisasa iliyojengwa kama mifereji, banio kwa kutumia sementi au mawe n.k. Usihesabu eneo ambalo miundombinu ya umwagiliaji haijakamilika.

Skimu ya umwagiliaji ya **asili** ni ile ambayo miundo mbinu yake imetengenezwa kiasili zaidi, kwa mfano kutumia mifereji isiyo ya kudumu.

#### 4. Mashine, zana na vifaa vya kilimo, ufugaji na uvuvi

Hapa mashine/vifaa ni vile vinapatikana katika kijiji husika. Kumbuka mashine/vifaa vimekodishwa kutoka kijiji jirani havihusiki na jedwali hii. Kupata takwimu hii, unatembelea serikali ya kijiji, na kumwuliza afisa mtendaji wa kijiji.

##### 4.1 Idadi ya mashine/vifaa vya kilimo, ufugaji na uvuvi

Hesabu mashine zote zinazomilikiwa na wanakijiji tu. Usihesabu mashine zinazotumika kijijini au katani lakini zinakuja kutoka vijiji au kata za jirani.

Andika mashine zinazomilikiwa na watu binafsi au vikundi. Zile zinamilikiwa na serikali au taasisi (kampuni binafsi) ziandikwe kwenye umiliki wa vikundi.

Aina ya mashine/ vifaa (i)	Nzima		Mbovu		Sababu ya ubovu wa mashine/kifaa (vi)
	Binafsi (ii)	Kikundi (iii)	Binafsi (iv)	Kikundi (v)	
Trekta (Tractor)					
Trekta la mkono (Power tiller)					
Mashine ya kuvunia (Combine harvester)					
Mashine ya kufyeka nyasi (Mower)					
Mashine ya kutengenezea nyasi (Bailer)					
Vifaa vya chakula (Feeder)					
Vifaa vya maji (Drinker)					
Mashine ya kukamulia maziwa (Milking machine)					
Mashine ya kupoozea (Chillers)					
Mashine ya umeme ya kukatia nyama (Electric meat cutter)					
Mitumbwi ya ulinzi yenye injini (Patrol boat)					
Mitumbwi ya uvuvi yenye injini (Fishing boat with engine)					
Mitumbwi ya uvuvi (Fishing boat without engine)					
Mengineyo (Taja)					

Andika jina la mashine inapatikana kijijini lakini haijatajwa katika orodha kwenye jedwali hii.

## 4.2 Idadi ya zana za kilimo

Tembelea mmiliki wa zana katika kijiji, na ufanye mahojiano ili kupata takwimu.

a) Zana zinazokotwa na trekta/ trekta la mkono

Aina ya zana	Nzima	
	Binafsi	Kikundi
Jembe la kusawazisha (Harrow)		
Mashine ya kupanda (Planter)		
Jembe la kulima (Disk plough)		
Jembe la kutifua (Sub-soiler)		
Jembe la kupalilia (Weeder)		
Mashine ya kupuliza dawa za mimea (Boom sprayer)		
Jembe la kukatua (Ripper)		
Reki ya kukusanyia nyasi (Rake for Hay Making)		
Tela (Trailer)		
Mengineyo (Taja)		

Andika mashine zinazomilikiwa na watu binafsi au vikundi. Zile zinamilikiwa na serikali au taasisi (kampuni binafsi) ziandikwe kwenye umiliki wa vikundi.

b) Zana zinazokotwa na wanyamakazi

Aina ya zana	Nzima	
	Binafsi	Kikundi
Jembe la kusawazisha (Harrow)		
Mashine ya kupanda (Planter)		
Jembe la kulima (Moldboard plough)		
Jembe la kutifua (Sub-soiler)		
Jembe la kupalilia (Weeder)		
Jembe la kukatua (Ripper)		
Jembe la matuta (Ridger)		
Mkokoteni (Cart)		
Mengineyo (taja)		



### 4.3 Idadi ya vifaa vinavyotumiwa kwa mkono

Jembo la mkono	Pampu ya kupulizia dawa (mimea/mifugo)	Visu vya kuchunia	Nyavu za kuvulia	Vyuma vya kuwekea alama	Njia nyingine (taja)

Hiki ni kifaa cha kuwekea chapa mifugo kwa ajili ya utambuzi.

### 4.4 Mashine za kusindika mazao ya kilimo/ mifugo/ uvuvi

Hesabu idadi ya mashine katika kiwanda au mtambo katika kijiji chako tu.

Aina ya mashine (i)	Nzima		Mbovu		Sababu ya ubovu wa mashine (vi)
	Binafsi (ii)	Kikundi (iii)	Binafsi (iv)	Kikundi (v)	
Kusaga unga					
Kupukuchua					
Kukamulia mafuta					
Kupasua mbegu za mafuta					
Kubangulia (Pulperies)					
Kusindika pamba					
Kuondoa maganda (Shelling)					
Kutengenezea hei					
Kusindika mazao yatokanayo na maziwa					
Kutotoleshea vifaranga					
Kusindika nyama					
Kusindika ngozi					
Gari la kubebea nyama					
Gari la kubebea maziwa					
Kutengenezea barafu					
Kusindika mazao yatokanayo na samaki					
Mengineyo (Taja)					

Andika jina la mashine inapatikana kijijini lakini haijatajwa katika orodha kwenye jedwali hii.

## 5. Huduma za ugani

Huduma za ugani zile zinazotolewa na serikali au sekta binafsi **ziandikwe hapa**

### 5.1 Mafunzo ya wakulima kupita shamba darasa (FFS)

Lengo la shamba darasa (i)	Idadi ya shamba darasa (ii)	Idadi ya walioanza (iii)		Muda wa mafunzo (siku)	Idadi ya waliohitimu		Idadi ya vijiji vilivyohudumiwa	Idadi ya wakulima wanaotumia elimu ya mafunzo yaliyotolewa	Maelezo
		Wanaume	Wanawake		Wanaume	Wanawake			
<b>Mazao</b>									
<b>Ufugaji</b>									
<b>Uvuvi</b>									
<b>Masoko na Usindikaji</b>									
<b>Mengineyo</b>									

Lengo la shamba darasa liwe pana mfano “kilimo bora cha mahindi” ikihusisha matumizi ya mbegu bora, kuandaa shamba, matumizi ya mbolea, n.k.

Wakulima waliohitimu ni wale ambao walihudhuria mafunzo angalau kwa 75%  
Mafunzo yaliyofanyika na kukamilika mwaka huo tu ndio ripoti yake iandikwe hapa.

Idadi ya wakulima wanaotumia elimu ya mafunzo, yaani wanaotumia elimu katika shughuli zao za kilimo waandikwe hapa.

## 6. Pembejeo

### 6.1 Mbolea za viwandani

Andika hapa mbolea iliyotumika kuzalisha nyasi za malisho kwa mifugo.

Aina ya mbolea	Mahitaji kwa mwaka (tani)	Matumizi kwa mwaka (tani)	Maelezo	
SA				
CAN				
UREA	<p>Mahitaji kwa mwaka (malengo) ni kwa mwaka huu wa taarifa, <u>SIO ya mwaka unaokuja</u>.</p> <p>Awali ya yote, tengeneza malengo haya mwanzo wa mwaka wa fedha, hapo kijijini shirikiana na wakulima na wafugaji wakati wa kuandaa malengo. Andika takwimu hapa mwisho wa mwaka wakati ukijaza fomu hii.</p>	<p>Takwimu za kiasi cha matumizi zinapatikana kwa wauzaji wa mbolea kijijini au kumbukumbu ya huduma ambayo mgani alitoa.</p>		
TSP				
DAP				
NPK 10:10:10				
NPK 25:5:5				
NPK 6:20:18 / 10:18:24				
NPK 4:17:15				
NPK 17:17:17				
MRP (Minjingu Rock Phosphate)				
MOP				
Nyingine (taja)				

## 6.2 Viuadudu

Andika aina (brand) au jina la kibiashara linalotumika zaidi kwa kila kundi (category).

Andika kipimo cha kemikali kama ni kg au lita.

Takwimu za kiasi cha matumizi zinapatikana kwa wauzaji wa mbolea kijijini au kumbukumbu ya huduma mgani alitoa.

Aina ya kiatilifu/ kiuadudu	Jina la kiatilifu/ kiuadudu *	Kipimo (kg/ lita)	Matumizi kwa mwaka	Maelezo
A: Viuadudu				
A: Viuadudu				
B: Viuakuvu				
B: Viuakuvu				
C: Viuapanya				
C: Viuapanya				
D: Viuapanya				
D: Viuapanya				
E: Viuandege				
E: Viuandege				
F: Viuaminyoo				
F: Viuaminyoo				

### 6.3 Mbegu bora

Takwimu za kiasi cha matumizi zinapatikana kwa wauzaji wa mbolea kijijini au kumbukumbu ya huduma mgani ametoa.

Aina ya zao	Mahitaji kwa mwaka (kg)	Aina ya mbegu bora (Orodhesha)	Matumizi kwa mwaka (kg)		Maelezo
			Mbegu zenye ubora unaotambulika (Quality Declared Seed)	Mbegu zenye ubora uliothibitishwa (Certified seed)	
Mahindi	<p>Mahitaji kwa mwaka (malengo) ni kwa mwaka huu wa taarifa, <u>SIO ya mwaka unaokuja</u>.</p> <p>Awali ya yote, tengeneza malengo haya mwanzo wa mwaka wa fedha, hapo kijijini shirikiana na wakulima na wafugaji wakati wa kuandaa malengo. Andika takwimu hapa mwisho wa mwaka wakati ukijaza fomu hii.</p>				
Mahindi					
Mahindi					
Mpunga					
Mpunga					
Mpunga					
Maharage					
Maharage					
Maharage					
Mtama					
Mtama					
Mtama					
Ngano	<p>Andika jina la aina ya mbegu bora inatumika zaidi kwa kila zao.</p>				<p><b>Mbegu zenye ubora unaotambulika (QDS)</b> zinazalishwa na wakulima waliopata mafunzo na kuruhusiwa kuzalisha na kuuza ndani ya kata.</p> <p><b>Mbegu zenye ubora uliothibitishwa</b> ni zile zinazozalishwa na taasisi za utafiti wa kilimo (kwa mfano ASA).</p>
Ngano					
Ngano					
Alizeti					
Alizeti					
Alizeti					
Mengineyo (taja)					

## 7. Idadi ya mifugo

Takwimu zinapatikana Serikali ya Kijiji na baadhi kutoka kwa wafugaji.

Hesabu mifugo yote ISIPOKUWA inayomilikiwa na wakulima wakubwa.

Mkulima mkubwa anatafsiriwa kama mkulima mwenye zaidi ya ng'ombe 50, na/ au zaidi ya kondoo/mbuzi/nguruwe 100, na/ au zaidi ya kuku/bata/njiwa/sungura 1000, na ana shamba la kudumu, anatumia mashine/vifaa kama mashine ya kukamulia maziwa, n.k. anaendesha ufugaji wa kibiashara (kwa mashine za kisasa) na mara nyingi anamiliki ardhi kisheria.

Ng'ombe dume ni ambaye hajahasiwa na anatumika kuzalisha mbegu

Ng'ombe jike ni ambaye amewahi kuzaa angalau mara moja.

Ng'ombe dume aliyehasiwa mwenye umri wa zaidi ya mwaka mmoja.

Mtamba ni ng'ombe jike mwenye umri miaka kati ya mmoja na miwili ambaye hajazaa.

Ndama dume ni ng'ombe chini ya mwaka mmoja ambaye bado hawezi kuzalisha mbegu

Aina ya mifugo	Idadi wa asili	Idadi wa kisasa		Jumla	Jumla waliosajiliwa
		Nyama	Maziwa		
<b>1. Ng'ombe</b>					
Ng'ombe dume*					
Ng'ombe jike**					
Maksai***					
Mtamba****					
Ndama dume*****					
Ndama jike					
Maksai wa kulima					
Haijulikani					
<b>Jumla ndogo ng'ombe</b>					

Aina ya mnyama	Idadi wa asili	Idadi wa kisasa		Jumla	Jumla ya waliosajiliwa
		Nyama	Maziwa		
<b>2. Kondoo</b>					
Kondoo dume					
Kondoo Jike					
Haijulikani*****					
<b>Jumla ndogo kondoo</b>					
<b>3. Mbuzi</b>					
Mbuzi dume					
Mbuzi jike					
Haijulikani*****					
<b>Jumla ndogo mbuzi</b>					
<b>4. Mifugo Mingine</b>					
Nguruwe					
Nyati maji					
Punda					
Farasi					
Ngamia					
Mbwa					
Paka					
Sungura					
<b>5. Ndege</b>	Idadi ya wa asili	Wa nyama	Wa Mayai	Jumla	
Kuku					
Bata					
Bata mzinga					
Kanga					

## 8. Miundombinu katika kilimo na mifugo

Kadiria hapa mahitaji ya miundombinu ya mifugo. Jadiliana na afisa mtendaji wa kijiji ili ujaribu kukadiria takwimu za uhalisia kulingana na mazingira yaliyopo sasa.

Aina ya miundombinu	Nzima	Mbovu	Mahitaji halisi	Idadi ya zilizosajiliwa	Sababu ya ubovu wa miundombinu
Karo (Slaughter Slab)					
Bucha ya ng'ombe/mbuzi/kondoo					
Bucha ya nguruwe					
Bucha ya samaki					
Banda la ngozi					
Banio la kudumu (Permanent crush)					
Lambo					
Birika la kunywea maji (Water Trough)					
Josho la wanyama wakubwa (Ng'ombe, Punda)					
Josho la wanyama wadogo (Mbuzi, Kondoo, Mbwa)					
Sehemu ya kunyunyuzia dawa mifugo (Spray Race)					
Mengineyo (Taja)					

Karo linatafsiriwa kama mahali pa kuchinjia wanyama kwenye sakafu katika eneo la wazi.

Lambo ni sehemu iliyochimbwa lakini ni ndogo ukilinganisha na bwawa.

Andika jina la miundombinu kama ipo mingine zaidi ya iliyotajwa kwenye orodha



## 9. Eneo la malisho

Takwimu hii inapatika serikali ya kijiji kwa kuwa ndio wenye jukumu la kusajili ardhi. Kama takwimu haitaweza kuipatikana, tafadhali kadiria kwa kutumia uchunguzi wa jicho au kuona kwa jicho.

Aina ya mfugo (i)	Jumla ya eneo la kulishia lililopo	Kiasi cha eneo linalotumiaka kulishaia	Ukubwa wa eneo lililopimwa kwa ajili ya malisho (ha) (v)	Eneo rasmi la kijiji lililokodishwa kwa watu bonafisi au vikundi na kuthibitishwa na Wizara ya Ardhi.
	Ukubwa wa eneo la kulishia wanyama kijijini/ kata (ha) (iii)	Eneo linalotumika (ha) (iv)		Ukubwa wa eneo linalomilikiwa kisheria (ha) (vi)
Ng'ombe				
Mbuzi				
Kondoo				
Punda				

## 10. Malisho ya Mifugo

### 10.1 Malisho ya mifugo yaliyopandwa na kuendelezwa

Takwimu inapatikana kijijini kwa wafugaji, tembelea wafugaji, na fanya mahojiano ili kupata takwimu hii.

Idadi ya mashamba	Eneo (ha)	Uzalishaji wa mbegu (kg)	Idadi ya marobota au bandali (Bundles) zilizozalishwa (Hei)	Maelezo

Jumla ya eneo la kijiji lililoendelezwa kuzalisha malisho ya mifugo.

Robota moja linakadiriwa kuwa na uzito wa 20kg.

### 10.2 Masalia ya mazao

Takwimu inapatikana kijijini kwa wafugaji, tembelea wafugaji, na fanya mahojiano ili kupata takwimu hii.

Aina ya zao	Idadi ya marobota au bandali (Bundles) zilizozalishwa (Hei)	Eneo la mashamba yaliyotumika kwa malisho (grazed in situ) (ha)	Maelezo

## 11. Njia mbalimbali za mawasiliano (TV, radio na simu)

### 11.1 TV and radio

Kituo cha TV kinachopatikana	Idadi ya vijiji vinavyofikiwa na huduma
TBC	
ITV	
Star TV	
Vituo vya TV vya kijamii, taja:	

Kituo cha Radio kinachopatikana	Idadi ya vijiji vinavyofikiwa na huduma
Radio 1	
TBC Taifa	
Radio Free Africa	
Vituo vya Radio vya kijamii, taja:	

Kama kijijini au katani kuna kituo cha TV au Radio cha kijamii kinachorusha vipindi vya kilimo au mifugo, tafadhali andika takwimu hapa.

Jina la chombo cha habari	Jina la kipindi	Mara ngapi kwa wiki	Aina ya taarifa

### 11.2 Simu

Jina la kampuni ya simu	Idadi ya vijiji vinavyofikiwa na huduma
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	
Nyingine, taja.	

Andika jina la kipindi cha kilimo, mifugo na uvuvi kilichorushwa na TV au radio ya kijamii kama unaweza kuangalia au kusikiliza kijijini au katani kwako.

[Mwisho]

# **District Officer's Manual for Agricultural Routine Data System (ARDS)**

ASDP M&E Thematic Working Group

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# 1. Introduction

## 1.1 Purpose of the District Officers' Manual

The purpose of this District Officers' Manual is to give clear instructions to district officers involved in data collection and entry, particularly to both District Statisticians (DS) and M&E Officers (DMEO), on:

- How to prepare for VAEO/WAEO Form (WF00/WF01) before its distribution,
- How to collect and input data for District Entry Form (Quarterly and Annual),

In this document, the term “district” is used to refer to all districts, municipalities, towns and cities<sup>1</sup>.

There is another important document “Extension Officer’s Manual for ARDS”, related to the activities on how to fill the VAEO/WAEO forms. DS/DMEO are recommended to refer to both Manuals. National and Regional officers can also utilize these documents for data check and feedback at their levels.

## 1.2 Role of District Officers

At all levels of administration, including village, ward, district, region, and national, agricultural data is important for understanding the situation on the ground, making decisions, and taking necessary actions. In the data flow of the Agricultural Routine Data System (ARDS), the role of district is particularly important because districts oversee data collection at village and ward levels, while WAEO consolidate the data collected from VAEO.

District officers' role is not limited to data collection and provision. Followings are six major roles DS/DMEO need to play.

1. VAEO/WAEO Form's Distribution and Collection
2. Data check and revision
3. Data input to the Web Portal system
4. Give feedback to WAEO on collected data
5. The refresher training/workshop provided for experienced extension officers as well as newly recruited ones
6. Sharing information within/between DAICO and DLFO Office

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<sup>1</sup> This is to avoid confusion by using the term “LGA” which includes ward and village, or the term “council” where some councils share one DAICO office.

## 2. Preparation for VAEO/WAEO Report Format (WF00/WF01)

### 1. Setting up “Key Crops” [WF00/01 Table2.1]

The 13 crops highlighted in the list below are “key crops”. You have to collect data for all of them. In addition, DAICO can add any other crops produced in your district. Choose any additional crops from the list. Then give the direction/instruction to Extension officers.

Na.	Sub category	Items											
1	Nafaka	<b>Mahindi</b>	<b>Mpunga</b>	<b>Mtama</b>	<b>Uwele</b>	<b>Ulezi</b>	<b>Ngano</b>	Shayiri					
2	Mazao yatokanayo na mizizi	<b>Mihogo</b>	<b>Viazi vitamu</b>	<b>Viazi mviringo</b>	Viazi vikuu	Gimbi							
3	Mazao ya viwandani	Pamba	Tumbaku	Kahawa	Chai	Pareto	Kakao	Mpira	Miwati (Wattle)	Miwa	Jute	Katani	Korosho
4	Mazao ya mafuta	Alizeti	Ufuta	Karanga	Mawese	Nazi	Maharage ya Soya	Mbegu za Nyonyo	Mibono				
5	Mazao ya jamii ya kunde	<b>Kunde</b>	Mbaazi	Choroko	Njegere	Dengu	Njugu mawe	<b>Maharage</b>					
6	Viungo	Tangawizi	Pilipili manga	Giligiliani	Mdalasini	Binzari	Vanilla	Pilipili kali	Karafuu	Vitunguu swaumu	Iliki	Paprika	
7	Mbogamboga	Matango	Uyoga	Cauliflower	Kabichi	Mchicha	Spinachi	Kabichi china (Chinese cabbage)	Nyanya	Biringanya	Vitunguu	Pilipili hoho	Karoti
		Nyanya chungu	Mnafu	Figiri	Leek	Saladi	Bamia						
8	Matunda	<b>Ndizi mbivu (Sweet Banana)</b>	<b>Ndizi mbich (Plantain)</b>	Embe	Papai	Chungwa	Chenza	Pera	Apple	Nanasi	Parachichi	Tikiti maji	Limau
		Ndimu	Tunda damu	Mapeasi (Pear)	Mapesheni (Passion fruit)								
9	Maua	Waridi (Rose)	Chrysanthemum	Carnation	Aster	Gypsophylla	Ginger rose	Helianthus					
10	Mengineyo	Choya (Rozella)											

District Officers need to make sure VAEO/WAEO fill the data for these 13 crops highlighted here.

## 2. Setting up “Target” for Key Crops and Other Added Crops [WF00]

DAICO have to set Annual Target for all of 13 “key crops” and any other crops added on table 2. The timing for setting the target is at the beginning of fiscal year (in JULY). Note that Annual Target is NOT a forecast, but a goal to be achieved in the year.

In preparing annual target, the steps for setting the key crops’ figures is as follows:

Step 1: DAICO consults with Regional Agriculture Adviser (RAA), and then take their guidance into account.

Step 2: DAICO should check previous data in last agricultural year and the past, based on ward level. Especially, DAICO should be **aware of annual ward level productivity in June.**

Step 3: DAICO makes WAEO set the village level target for only annual total “planted area”. DAICO should also make WAEO set the target for all villages. then request to aggregate all the targets to the ward level target.

Step 4: DAICO, receiving ward level targets, finalizes the annual target of the district as well as ward level, then gives the instructions to WAEOs as well as DS/DMEO. So that WAEO inform both VAEO and VEO of each target’s figures.

Annual Target		
Planted Area (ha) (i)	Productivity (ton/ha) (ii)	Expected Production Qty (ton) (iii)=(i)x(ii)

DAICO should provide the figures to DS/DMEO on both annual planted area and annual productivity of key crops/any other crops added, in order to enter the target data for each ward. DS/DMEO calculate Expected Production Qty based on both figures, and then enter the data to Web Portal system.



### 3. Method for Estimating Missing Ward Data [WF01 Table2.1, 4]

District total needs to be computed by summing up the ward level data.

However, if there are WAEOs who have **not submitted** the filled-in forms, it is important to take actions to address it. At first you quickly contact with WAEO and WEO, then remind them of submitting data right now. Nevertheless, in case of no response, you can apply the temporary measures shown in the box 1 below.

#### **Box 1. Tips when there are *WARDS* which have not submitted the filled-in form**

**<Instruction for Table2> how to impute harvested area, productivity, and production QTY when their ward data are missing.**

In case of missing ward data, estimate by following method:

- (1) The missing ward's harvested area is obtained through consultation with WAEO, acting WAEO or WEO of the concerned ward.
- (2) You ask the nearest neighbouring ward's WAEO the productivity of the month there.
- (3) The missing ward's production QTY is calculated by the ward harvested area obtained through the inquiry or consultation times neighbouring ward productivity.

**<Instruction for Table4> how to impute "Total number slaughtered" and "Average price" when the ward data are missing.**

In case of missing ward data, estimate by following method:

- (1) The missed data of ward's "Total number slaughtered" and "Average price" are obtained through inquiry or consultation to WAEO, acting WAEO or WEO of the concerned ward.
- (2) If you cannot contact the WAEO/WEO of missing data's ward or they cannot answer it properly, you refer to the average of previous 3 months' data which you had obtained, and then estimate the figure.
- (3) If there is no data in previous months, you check the other neighbouring wards' data of the month, and then estimate it. It is important to consider the proportion between estimated data and the other wards' figures.

#### **4. Keeping consistency between ARDS and “National Account Data of NBS”, and “Early Warning with Crop Forecasting Data” [WF01 Table 2.1, 2.2, 4]**

##### **(1) ARDS and National Accounts [WF01 Table 2.1, and Table 4]**

The National Bureau of Statistics (NBS), Department of Agriculture has its own form to collect data on agricultural production for the National Accounts. Data is collected by the monthly production figures for each district and the average producer prices (as a proxy of the farmgate prices) for each quarter, as it is applicable for the crops and livestock productions used in the National Accounts. The form is filled by the VAEOs/WAEOs directly, and then aggregated at District level to allow for data editing and supplementation. After that, they are sent to the Regional Statistical Managers (RSMs) of NBS to complete. The RSMs send the questionnaire with data to NBS, Department of Agriculture.

However, the district officers (*i.e.* DAICOs, DS and/or DMEO) responsible for data collection and the operation of the ARDS system, report this National Accounts’ information to the district office, but often do not do so to the Ministry. As a result, there is a concern that data inconsistency between ARDS and National Accounts could take place. The district officers should make sure that both data are mutually consistent. It means that, at least, crops and livestock production data of both ARDS and NBS’s National Accounts must be the same in figure.

##### **(2) ARDS and Early Warning with Crop Forecasting [WF01 Table 2.1 and Table 2.2]**

The Ministry of Agriculture, Division of National Food Security and Nutrition, Crop Monitoring and Early Warning (CMEW) Section, is responsible for providing a forecast of crop production for Tanzania Mainland. CMEW section operates its own data collection method (*i.e.* forms of WRS 1-5 and RRS1) which uses the same reporting procedure to be relied on VAEOs/WAEOs for data collection, while responsibility for completion of the forms is borne by the DAICOs. The data to complete the form comes from the VAEOs/WAEOs and is compiled by DAICOs. This compiled report for each district is sent to the Ministry’s CMEW section through Regional Agriculture Advisor. District officers should assure that data between ARDS and Early Warning with Crop Forecasting are mutually consistent. It means that both data must be same in figure. So that district officers have to avoid discrepancies.

Meanwhile, one of the main products of Early Warning with Crop Forecasting data is the “Preliminary Forecast of Food Crop Production” issued in June. This report provides actual crop production data based on the situation up to the end of May. The Food Security forecast data is calculated by using the data from previous-year October to the immediate May, and by estimating the production during the subsequent months from June to September. Table 2.2 of WF01 “Food Security Forecast” is specifically inserted in the VAEO/WAEO Format of ARDS for this purpose. Note that these data are NOT actual production figures but forecasting ones, as figures are total amount of the four months, *i.e.* June, July, August and September.

### 3. District Data Entry

#### 3.1 District Quarterly Data Entry Form (DF02)

Note that there are no specific data forms for the district data collection. If forms are necessary, please print out from the ARDS Web Portal. Otherwise, collect data and record them on any types of paper, then enter them to the Web Portal.

SUMMARY 1 below shows data source for tables of the District Quarterly Data Entry Form in ARDS Web Portal system whose data are to be collected by district (not by VAEO/WAEO). Data of other tables are generated by the system based on the data from ward.

SUMMARY 1: Table of District Quarterly Data Entry Form and Data/ Information Source

Table Name (Number and Title)	Data/ Information Source
3. Livestock Products Movement, (a) Livestock Movement (c) Livestock Auction	DLFO
6. Marketing of Livestock Products, (a). Meat from Commercial Farms	DLFO
7 (a). Animal Feeds, Acaricides, Vaccines and Treatment 7 (b). Inputs for reproduction of improved livestock	DLFO
9. Farmers groups/associations, (a) SACCOs (b) Other Farmer groups	DAICO / DLFO / DCDO

### 3. Livestock/ Products Movement

#### 3 (a) Livestock Movement

You write the number of animals down here. It is defined as the number of official “permissions/authorizations” issued by DLFO in the quarter.

The term of “Non-trade” (ii), (v) and (viii) is defined as non-commercial transaction such as gifts, inheritance or dowry *etc*, included the movement of animals looking for pasture/ranch.

Both column (viii) and (ix) are applied to the movement of animals from one place to another in the same district only.

Type of Livestock	Animals moved into the district from other areas (number)		Animals moved to other areas from the districts (number)		Animals translocated within the district (number)	
	Non-trade	Trade	Non-trade	Trade	Non-trade	Trade
(i)	(ii)	From other LGAs in Tanzania (iii)	(iv)	To other LGAs in Tanzania (v)	(vi)	(vii)
Cattle						
Sheep						
Goat						
Pig						
Other (specify)						

DLFO can decide to add any other livestock supervised in your district office. Note that column (i) should be entered by only capital letter, due to data aggregation manner.

### 3 (c) Livestock Auction

You visit major auction markets in your district, and then collect data/information from auction dealers through interviews.

Auction name	Type of livestock	Number of livestock brought	Number of livestock sold	Average price (Tsh)

“Average price” here is defined as the most frequently answered price in the auction during this quarter.

If one auction has traded different type of animals (e.g. cattle and sheep), you have to repeat entering auction name in the next row. Otherwise it will not be aggregated in report. Remember to enter the auction names in CAPITAL letters.

### 6. Marketing of Livestock Products

#### 6 (a) Meat from Commercial Farms

Type of Product	Volume Handled			Comments
	Warm	Chilled	Frozen	
(i)	This Quarter (ii)	This Quarter (iv)	This Quarter (vi)	(viii)
Beef (kg)				
Goat Meat (kg)				
Mutton (kg)				
Pork (kg)				
Indigenous Chicken Meat (kg)				
Improved Chicken Meat (kg)				

Commercial farm here is defined as the farm which is officially licensed and registered for LGA. DLFO should keep and provide such a farm list.

## 7 (a) Animal Feeds, Acaricides, Vaccines and Treatment

Generic Name (i)	Source (ii)	Measurement Unit (iii)	Quarterly Requirement (iv)	Quarterly Amount Used (v)	Low Price (vi)	High Price (vii)	Remarks (viii)
Animal Feeds							
		Kg					
		Kg					
Acaricides							
		Litre					
		Litre					
Vaccines							
		Dose					
		Dose					
Treatment (Drugs)							
		Dose					
		Dose					

(i) You write the generic names in each category. Animal feeds include hay, silage, concentrates etc. Enter the name in all capital letters (e.g. HAY).

(ii) Source: You choose either “government subsidy” or “privately acquired”. If you fill (ii), (iii) row, do not leave (i) blank. You need to repeat entry in row (i).

(iii) Measurement Unit: You must use standard unit – “kg”, “litre” or “dose” etc.

(v) You estimate the amount used, based on subsidies and VAEO/WAEO Monthly report, table 7.1~7.2 for Livestock Health.

(vi)~(vii) Low and high prices are based on retail prices per measurement unit. You check it up with procurement officer, and then collect the data.

This quarterly requirement is for the reporting quarter period, NOT for the coming quarter.

Firstly, you should set these figures at the beginning of the period, while you estimate the requirement based on the respective amount of the last four quarters.

## 7 (b). Inputs for reproduction of improved livestock

You fill in the number of doses for semen of (i), and just the numbers for bulls and heifer of (i).

Type of input (i)	Breed (ii)	Amount required in the quarter (doses or number) (iii)	Amount available in the quarter (doses or number) (iv)	Remarks (v)
Semen				
Bulls				
Heifer				

This amount required is for the reporting quarter period, NOT coming one.

Firstly, you should set these figures at the beginning of the period, while you estimate the requirement based on the amount of the last four quarter's records respectively.

## 9. Farmers groups/Associations

You go to Cooperative officers in your district offices and get these data from them.

### 9 (a) SACCOs

Number of SACCOs	Number of Members				Amount of Loans (Tsh)				
	Individual members		Group	Total	Crop	Livestock	Fishery	Marketing	Total
	Male	Female							

One group should be counted as one.

“Amount of loans” is defined as the total of initial loan given for running business in the following agricultural sub sectors.

### 9 (b) Other Farmer groups

Type of Associations/Groups		Number of Associations/Groups	Number of Members			Total number Registered	Total number with Bank Account
			male	Female	Total		
Crop	Production						
	Processing						
	Marketing						
Livestock	Production						
	Processing						
	Marketing						
Fisheries	Production						
	Processing						
	Marketing						

You write the number of Associations and Groups which are registered by either the Ministry of Home Affairs or districts.



### 3.2 Annual Data Entry Form (DF03)

Note that there is no specific data forms for the district data collection. If forms are necessary, please print out from the ARDS Web Portal. Otherwise, collect data and record them on any types of paper, then enter them to the Web Portal.

SUMMARY 2 below shows data source for tables of the District Annual Data Entry Form in ARDS Web Portal system whose data are to be collected by district (not by VAEO/WAEO). Data of other tables are generated by the system based on the data from ward.

SUMMARY 2: Table of District Annual Data Entry Form and Data/ Information Source

Table Name (Number and Title)	Data/ Information Source
1. Food Situation	DAICO
3. Agricultural Mechanization, (g) Number of Oxenization Centres and Tractor Hiring Services	DAICO
5. Extension Services, (a) Number of Extension Officers (b) Level of Education (c) Working Facilities / Equipment (e) Number of Extension Officers Trained (h) Non-Government Agricultural Extension Service Providers	DAICO / DLFO
9. Livestock Population (Large scale farmers)	DLFO
11. Livestock Products Processing Plants / Units	DLFO
12. Livestock Infrastructure and Status	DLFO
13. Grazing land	DLFO
14. Pasture, (b) Crop residues	DAICO / DLFO
16. Number of Ward Agricultural Resource Centres	DAICO

Population should be brought from projected population for the following year. Because SSR is for the next year, while the production is for the current year. Please read “Sub-Divisional Population Projection based on 2012 Population and Housing Census”, which issued by National Bureau of Statistics. It can be downloaded from NBS Web site.

## 1. Food Situation

District's projected population: [ \_\_\_\_\_ ]

You should refer this figure in the column of “Implementation / Aggregated Production QTY (ton)” of the same crop in table 2, District Monthly Report (DR01)

Food type	Food crops	Total production(ton)	Factor	Grain Equivalent (Ton)	Other uses (%)	Grain Equivalent for other uses(Ton) = (v)x(vi)	Grain equivalent available for human consumption (Ton)	Total grain equivalent for human consumption (Ton)	Requirement of Grain Equivalent (Ton)	Surplus /Deficit	SSR
(i)	(ii)	(iii)	(iv)	(v)=(iii)x(iv)	(vi)	(vii)	(viii)=(v)-(vii)	(ix)=sum of (viii)	(x)	(xi)=(ix)-(x)	(xii)=(ix)/(x)x100
Cereal	Maize		1		16.4						
	Paddy		0.65		6.8						
	Sorghum		1		10.6						
	Millet		1		10.6						
Non Cereal	Banana		1/3		0						
	Cassava		1/3		0						
	Potatoes		1/3		0						
	Pulses		1		10						

Surplus/Deficit is calculated by (ix) – (x)

Millet includes both finger and bulrush millet. Total production of millet is the sum of both finger millet and bulrush millet

Banana includes both sweet and cooking banana.

Potato includes both sweet potatoes and Irish potatoes.

Maize: 16.4 (seeds =1.3, feed=2, losses=8.7, trade=4.4)

Paddy:6.8 (seeds=2.5, feed=0, losses=2.5, trade=1.8)

Sorghum:10.6 (seeds=1.5, feed=0.6, losses=8.5, trade=0)

Millet:10.6 (seeds=2.3, feed=0.6, losses=7.7, trade=0)

Pulses:10 (seeds=5, feed=0, losses=2.5, trade=2.5)

Banana, Cassava, and potatoes =0

Grain equivalent is calculated by: Total production x factor

Total grain equivalent for human consumption (Ton) is the sum of the grain equivalent available for human consumption (Ton) of each food crop

Requirement of grain equivalent (Ton) is calculated by 0.65 x population x365/1000

Self Sufficiency Ratio (SSR) is expressed in percent.

### 3. Agricultural Mechanization

#### 3 (g) Number of Oxenization Centres and Tractor Hiring Services (\*No new instruction for this table.)

Type of Centres (i)	Working (ii)	Not working (iii)	Reasons for not working (iv)
Oxenization Centre			
Tractor Hiring Service			

### 5 Extension Services

#### 5 (a) Number of Extension Officers

Area of Specialization (i)	Number of Extension Officers Available						Total (viii)	Total Registered/ Enlisted (ix)
	District HQ		Wards		Villages			
	Male (ii)	Female (iii)	Male (iv)	Female (v)	Male (vi)	Female (vii)		
<b>Crop</b>								
- Crop Production								
- Land Use								
- Irrigation								
- Nutrition								
- Horticulture								
- Agro Mechanization								
- Others (Specify)								
<b>Livestock</b>								
- Animal Production								
- Animal Health								
- Veterinarians								
- Livestock officers								
- Others (Specify)								
<b>Agro Vet</b>								
<b>Cooperatives</b>								
<b>Fishery</b>								
Total								

Report number of officers in specialization.  
If LGA has other specialization, please report it under others for both Crop and Livestock sector

You do not need to report this.

**5 (b) Level of Education** (\*No new instruction for this table.)

Level of Education (i)	Number of Extension Officers						Total (viii)
	District HQ		Ward		Village		
	Male (ii)	Female (iii)	Male (iv)	Female (v)	Male (vi)	Female (vii)	
Non-Certificate							
Certificate							
Diploma							
1 <sup>st</sup> Degree							
2 <sup>nd</sup> Degree							
Ph D							

**5 (c) Working Facilities/ Equipment**

Note: You write the number of "available" facilities/equipment which are "in operation" or "not in operation but repairable".

Station (i)	Vehicle		Motorcycle		Bicycle		Housing	
	Required (ii)	Available (iii)	Required (iv)	Available (v)	Required (vi)	Available (vii)	Required (viii)	Available (ix)
District HQ								
Ward								
Village								
Total								
Station (i)	Extension Kit		Photocopier		Computer		Other (specify )	
	Required (ii)	Available (iii)	Required (iv)	Available (v)	Required (vi)	Available (vii)	Required (viii)	Available (ix)
District HQ								
Ward								
Village								
Total								

You estimate the total number of "Required" facilities/equipment including "Available", related to the extension services activities. DAICO, discussing with DLFO, fix the realistic figures based on the minimum requirement for WAEO/VAEOs.

### 5 (e) Number of Extension Officers Trained

i) Total number of extension officers who attended at least one training: [  ]

Do not double count the same officers.

ii) Number of extension officers trained

Only training held in this fiscal year is applicable. Both short and long courses are included.

Training method includes study tour, workshop, courses at agricultural colleges, etc.

You write the names of training providers.

Topic of Training (i)	Total Number of Officers Trained			Number of Officers Trained for		Training methods (vii)	Training providers (viii)	Remarks (ix)
	Male (ii)	Female (iii)	Total (iv)	Equal to or Less than Six Month (v)	More than Six Month (vi)			
<b>Crop</b>								
<b>Livestock</b>								
<b>Fishery</b>								
<b>Marketing and Processing</b>								
<b>Irrigation</b>								
<b>Others</b>								

### 5 (h) Non-Government Agricultural Extension Service Providers

Name of Service Provider (i)	Type of Service Providers (ii)	Type of Service (iii)	Number of Villages Served by Providers (iv)

You write the number of villages which received extension service from service providers

Type of service providers: You write “NGOs”, “Religious organizations”, “Private companies”, or “Individuals (e.g. stockist)” etc.

Type of service: You write “Crop”, “Livestock”, “Cooperatives”, or “Financial services” etc.

## 9. Livestock Population (Large Scale Farmers) (on June 30th)

Large scale farmers should fulfil all of the following four conditions:

- 1) Greater part of the produce should go to the market,
- 2) Operation of farm should be continuous,
- 3) There should be an application of machinery/implements on the farm,
- 4) Should have at least one permanent employee.

In addition to this, they should fulfil at least one following requirement:

- 1) minimum 20 hectares of cultivated land,
- 2) minimum 50 heads of cattle,
- 3) more than 100 heads of sheep/ goats/pigs,
- 4) more than 1,000 chickens.

The type of ownership: You write "Public", "CBO", "NGO", "Individual", or "Private".

If there are important livestock other than listed here, please write their names in Remarks.

Name of Farm /Farmer (i)	Type of Ownership (ii)	Registration Number (iii)	Number of Livestock						Remarks (x)
			Cattle (iv)	Sheep (v)	Goats (vi)	Pigs (vii)	Layers (viii)	Broilers (ix)	

## 11. Livestock Products Processing Plants / Units

Livestock Products Processing Plants / Units are defined as factories for processing the products such as milk, meat, hide/skin or animal feed.

DLFOs visit such plants/units, and then ask these question through interview.

Write the registration number of national livestock registry for traceability.

If there are more than one product, please use one row for each product.

In such case, please make sure to fill column (i).

Name of Business/ Owner (i)	Registration Number (ii)	Type of Product (iii)	Measurement unit (piece, kg, litre, ton, number etc. ) (iv)	Installed Production Capacity per year (v)	Utilized Production Capacity per year (vi)
<b>Milk and Milk Product</b>					
<b>Meat and Meat Product</b>					
<b>Hide and Skin</b>					
<b>Animal Feed</b>					

Installed Production Capacity means the maximum plants/units capacity. Utilized Production Capacity does the actual capacity to be operated this year.



## 12. Livestock Infrastructure and Status (Short listed Indicator OP1 b,c, OP2a,c)

Hatchery includes a facility for producing one day chicks of any size.

You estimate the number of requirement for this livestock infrastructure. DLFO, discussing with DAICO, fix the realistic figures based on current circumstances.

This figure is applied for

Type of Infrastructure (i)	Number of infrastructure		Number Required (iv)	Number of Registered (v)	Reasons for not working (vi)
	Working (ii)	Not working (iii)			
Slaughter House					
Hatchery					
Milk Collection Centre					
Auction Market					
Godown (Ghala)					
Abattoirs					
Veterinary Centre					
Veterinary Clinic					
Veterinary Laboratory					
Veterinary Hospital					
Check Point					
Holding Ground					
Quarantine Station					
Stock Route					
Primary Market					
Secondary Market					
Border Market					
Feeder Road (km)					
Dam					
Livestock Input Shop					

Veterinary centre: an establishment or premise operated under supervision of veterinarian to offer animal health services including dispensing of medicines.

Veterinary clinic: is an establishment whereby animal patients are admitted for examination, diagnosis, treatment and carrying out of medical and surgical procedures that require use of general anaesthesia under the care of registered Veterinarian(s).

Veterinary laboratory: a premise providing testing for infectious agent's toxins and other causes in animal operated and supervised by a registered veterinarian, veterinary laboratory technologists or veterinary laboratory technicians.

Veterinary hospital: is an institution suitably located, constructed, organized, and managed by Veterinarians or veterinary specialists to supply scientifically, economically, efficiently all or part of requirements for the prevention diagnosis and treatment of medical and surgical conditions.

Stock route is illegal as of 2018/19. You do not need to report this.

Artificial Insemination Centre					
Artificial Insemination kit (AI kit)					
Meat Processing Facility/ Plant					
Milk Processing Facility/ Plant					
Fish Processing Facility/ Plant					



添付資料 14: 作物カレンダー



**THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF AGRICULTURE**

**Key Crop Calendar  
(Maize, Paddy, Cassava, Beans and  
Sunflower)**

**Regional and District Data**

**Dodoma  
August, 2020**

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## PREFACE

This document is meant to be used as a reference for routine works in the Ministry of Agriculture, Monitoring and Evaluation and Statistics (MES) Section of Department of Policy and Planning. The production calendar for key crops under all regions and districts (LGAs) in Tanzania Mainland was compiled in collaboration with the Department of Crop Development. The focus is on Maize, Paddy, Cassava, Beans and Sunflower.

The calendar is a valuable source that provides information on when we can expect planting and harvest for each crop in a specific area. That information is disaggregated into district level to facilitate monitoring of production process at both regional and district levels. This version of the calendar is improvement of the previous one that used to be on only region-by-region basis. Therefore, it can support many central and local officials to do monitoring of crop production data in detail, as well as agriculture extension officers to collect production data for the said crops. Furthermore, the calendar will be helpful for current and potential growers, traders as well as investors.

I would like to express my sincere gratitude to everybody who contributed to make this reference successful, especially Japan International Cooperation Agency-JICA through ARDS project who technically and financially supported this task.

I hope that this document would be widely used and helpful for your dedicated routine works.



**Gerald M. Kusaya**  
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**August, 2020**

## METHODOLOGY

The data of calendar were collected using questionnaires designed specifically for the purpose at the occasion of the National Training for Agriculture Routine Data System (ARDS) carried out in July 2019. For further verification and addition, data were again collected through questionnaires which were sent to LGA to be filled by DAICO and returned to MES section, MoA for data compilation in January 2020.

In the contents of calendar, the black coloured cells are the indication of specific agriculture activities (*i.e.* planting and harvesting) in a particular month. The calendar is prepared for maize, paddy, cassava, beans and sunflower by each region and district (LGAs).

With respect to the column of regions, coloured cells indicate that more than two districts in the region are practising activities for that crop.

Note that the contents published here are pertinent to a general year. It may not be applicable to any specific year. Also, there might be some time lag depending on the weather condition of the year.



# **CHAPTER 1: MAIZE (MAHINDI)**

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Arusha Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Arusha CC	Plant												
		Hearvest												
2	Arusha DC	Plant												
		Hearvest												
3	Karatu DC	Plant												
		Hearvest												
4	Longido DC	Plant												
		Hearvest												
5	Meru DC	Plant												
		Hearvest												
6	Monduli DC	Plant												
		Hearvest												
7	Ngorongoro DC	Plant												
		Hearvest												

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Dar es Salaam Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	Black	White
1	Ilala MC	Plant	Black	Black	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	Black	White
2	Kigamboni MC	Plant	White	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	White
3	Kinondoni MC	Plant	Black	White	White	White	White	Black	White	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	White	White
4	Temeke MC	Plant	Black	Black	White	White	White	Black	White	White	White	White	White
		Hearvest	White	White	Black	Black	White	White	White	White	Black	White	White
5	Ubungo MC	Plant	Black	Black	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	White	Black	Black

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Dodoma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bahi DC	Plant												
		Hearvest												
2	Chamwino DC	Plant												
		Hearvest												
3	Chemba DC	Plant												
		Hearvest												
4	Dodoma MC	Plant												
		Hearvest												
5	Kondoa DC	Plant												
		Hearvest												
6	Kondoa TC	Plant												
		Hearvest												
7	Kongwa DC	Plant												
		Hearvest												
8	Mpwapwa DC	Plant												
		Hearvest												

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Geita Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	White	Black	Black	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	Black	Black	Black	White	White	White	White
1	Bukombe DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	Black	Black	Black	White	White	White
2	Chato DC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	White	Black	Black	Black	White	White	White	White
3	Geita DC	Plant	Black	Black	Black	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	Black	Black	Black	White	White	White	White
4	Geita TC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	Black	Black	White	White	White	White	White
5	Mbogwe DC	Plant	White	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	White	White	White	White	White	White
6	Nyang'hwale DC	Plant	Black	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Iringa Region (in case of more than two LGAs applicable)	Plant		■	■	■	■	■						
		Hearvest							■	■	■	■		
1	Iringa DC	Plant	■	■	■	■	■							
		Hearvest							■	■	■	■		
2	Iringa MC	Plant			■	■	■							
		Hearvest							■	■	■	■		
3	Kilolo DC	Plant					■	■						
		Hearvest									■	■	■	
4	Mafinga TC	Plant		■	■	■								
		Hearvest									■	■		
5	Mufindi DC	Plant			■	■	■							
		Hearvest			■	■	■				■	■		

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kagera Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	White	Black	Black	White	White	White	White	White	Black
		Hearvest	White	White	Black	Black	Black	Black	Black	Black	Black	Black	Black	White
1	Biharamulo DC	Plant	Black	Black	Black	White	White	White	White	White	White	White	White	Black
		Hearvest	White	White	White	White	White	Black	Black	Black	Black	Black	White	White
2	Bukoba DC	Plant	Black	White	White	White	Black	Black	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	White	White	Black	Black	Black	White	White	White
3	Bukoba MC	Plant	Black	White	White	White	Black	Black	White	White	White	White	White	Black
		Hearvest	White	White	Black	Black	Black	White	White	White	Black	Black	White	White
4	Karagwe DC	Plant	White	White	White	White	Black	Black	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	White	White	White	Black	Black	Black	White	White
5	Kyerwa DC	Plant	Black	White	White	White	Black	Black	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	White	White	White	Black	Black	Black	White	White
6	Misenyi DC	Plant	Black	White	White	White	Black	Black	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	White	White	Black	Black	White	White	White
7	Muleba DC	Plant	Black	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	Black	Black	Black	Black	Black	Black	Black	Black	Black	White
8	Ngara DC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	Black
		Hearvest	Black	Black	Black	White	White	White	White	White	White	White	White	White

# Key Crop Calender on Mahindi production

As of January 2019

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Katavi Region (in case of more than two LGAs applicable)	Plant		■	■	■	■				■			
		Hearvest								■	■			
1	Mlele DC	Plant		■	■	■	■							
		Hearvest								■	■			
2	Mpanda DC	Plant		■	■	■								
		Hearvest							■	■	■			
3	Mpanda TC	Plant									■			
		Hearvest												
4	Mpinbwe DC	Plant		■	■	■	■							
		Hearvest								■	■	■	■	
5	Nsimbo DC	Plant		■	■	■					■			
		Hearvest								■	■	■		



## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kigoma Region (in case of more than two LGAs applicable)	Plant	Black	Black										
		Hearvest					Black	Black	Black	Black				
1	Buhigwe DC	Plant	Black	Black	Black									
		Hearvest								Black	Black			
2	Kakonko DC	Plant	Black	Black										
		Hearvest							Black	Black				
3	Kasulu DC	Plant	Black	Black										
		Hearvest						Black	Black	Black	Black			
4	Kasulu TC	Plant	Black	Black										
		Hearvest						Black	Black	Black	Black			
5	Kibondo DC	Plant		Black										
		Hearvest						Black						
6	Kibondo TC	Plant		Black										
		Hearvest							Black	Black	Black	Black		
7	Kigoma DC	Plant	Black	Black							Black			
		Hearvest					Black	Black	Black	Black				
8	Kigoma MC	Plant	Black	Black										
		Hearvest					Black	Black	Black					
9	Uvinza DC	Plant	Black	Black										
		Hearvest							Black	Black	Black			

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Kilimanjaro Region (in case of more than two LGAs applicable)	Plant	Black	White	White	White	Black	Black	White	White	Black	White	White
		Hearvest	Black	Black	White	Black	White	White	White	White	Black	White	Black
1	Hai DC	Plant	White	White	White	White	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	White
2	Moshi DC	Plant	White	White	White	White	White	Black	Black	White	Black	Black	White
		Hearvest	Black	Black	White	White	White	White	White	White	White	Black	Black
3	Moshi MC	Plant	White	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black
4	Mwanga DC	Plant	White	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	White
5	Rombo DC	Plant	Black	White	White	White	White	Black	White	White	White	Black	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White
6	Same DC	Plant	Black	White	White	White	White	Black	White	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	White	White
7	Siha DC	Plant	Black	Black	White	White	Black	Black	Black	White	White	White	White
		Hearvest	White	Black	White	Black	Black	White	White	White	White	White	Black

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Lindi Region (in case of more than two LGAs applicable)	Plant		■	■	■	■							
		Hearvest							■	■	■	■		
1	Kilwa DC	Plant			■	■	■							
		Hearvest							■	■	■	■		
2	Lindi DC	Plant		■	■	■	■							
		Hearvest							■	■	■	■		
3	Lindi MC	Plant			■	■	■							
		Hearvest								■	■	■		
4	Liwale DC	Plant			■	■	■							
		Hearvest							■	■	■	■		
5	Nachingwea DC	Plant			■	■	■							
		Hearvest								■	■	■		
6	Ruangwa DC	Plant		■	■	■	■							
		Hearvest							■	■	■	■		

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Manyara Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Babati DC	Plant												
		Hearvest												
2	Babati TC	Plant												
		Hearvest												
3	Hanang DC	Plant												
		Hearvest												
4	Kiteto DC	Plant												
		Hearvest												
5	Mbulu DC	Plant												
		Hearvest												
6	Mbulu TC	Plant												
		Hearvest												
7	Simanjiro DC	Plant												
		Hearvest												

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mara Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	Black	Black	Black	White	White	White	Black	Black	Black	White
1	Bunda DC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	Black
		Hearvest	White	White	Black	Black	White	White	White	Black	Black	Black	White	White
2	Bunda TC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	White	White	White
3	Butiama DC	Plant	Black	White	White	White	White	Black	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	White	Black	Black	White
4	Musoma DC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	Black	Black	White	White
5	Musoma MC	Plant	Black	White	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	Black	Black	White	White
6	Rorya DC	Plant	Black	White	White	White	White	Black	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	Black	Black	White	White
7	Serengeti DC	Plant	Black	White	Black	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	White	White	White
8	Tarime DC	Plant	White	White	White	White	Black	Black	White	White	White	White	Black	Black
		Hearvest	White	White	White	Black	Black	White	White	White	White	Black	Black	White
9	Tarime TC	Plant	Black	White	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	Black	Black	Black	White

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year												
			10	11	12	1	2	3	4	5	6	7	8	9	
	Mbeya Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	Black	White	White	White	White	Black	Black	White	White
		Hearvest	White	Black	White	White	Black	Black	Black	Black	Black	White	White	Black	White
1	Busokelo DC	Plant	White	Black	Black	Black	White	White	White	White	Black	Black	White	White	White
		Hearvest	White	Black	White	White	Black	Black	Black	Black	Black	White	White	Black	White
2	Chunya DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White	White
3	Kyela DC	Plant	Black	Black	Black	White	White	White	White	White	Black	White	White	White	White
		Hearvest	White	Black	White	White	White	Black	White	White	White	White	White	White	White
4	Mbarali DC	Plant	White	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	Black	Black	Black	White	White	White	White
5	Mbeya CC	Plant	White	Black	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	Black	Black	White
6	Mbeya DC	Plant	White	Black	Black	White	White	White	White	White	White	White	Black	Black	Black
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	Black	White	White
7	Rungwe DC	Plant	Black	Black	Black	White	White	White	White	White	White	Black	Black	Black	Black
		Hearvest	White	White	White	White	Black	Black	Black	Black	White	White	White	White	White

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Morogoro Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	Black	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	Black	Black
1	Gairo DC	Plant	White	White	Black	Black	Black	Black	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	Black	
2	Ifakara TC	Plant	White	White	Black	Black	Black	Black	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	
3	Kilombero DC	Plant	White	White	Black	Black	White	Black	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	Black	Black	White	White	
4	Kilosa DC	Plant	White	Black	Black	Black	Black	Black	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	Black	
5	Malinyi DC	Plant	White	White	Black	Black	Black	Black	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	Black	Black	Black	Black	Black	
6	Morogoro DC	Plant	White	White	White	White	Black	Black	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	White	Black	White	White	
7	Morogoro MC	Plant	Black	Black	White	White	Black	Black	White	White	White	White	White	
		Hearvest	White	White	White	Black	White	White	White	White	Black	Black	White	
8	Mvomero DC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	
9	Ulanga DC	Plant	Black	Black	Black	Black	Black	Black	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	Black	Black	Black	Black	White	

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mtwara Region (in case of more than two LGAs applicable)	Plant		■	■	■	■	■						
		Hearvest								■	■	■		
1	Masasi DC	Plant		■	■	■	■	■						
		Hearvest								■	■	■		
2	Masasi TC	Plant			■	■	■							
		Hearvest							■	■	■			
3	Mtwara DC	Plant		■	■	■	■							
		Hearvest								■	■	■		
4	Mtwara MC (Mikindani)	Plant			■	■	■							
		Hearvest								■	■	■		
5	Nanyamba TC	Plant		■	■	■	■							
		Hearvest								■	■	■		
6	Nanyumbu DC	Plant			■	■	■							
		Hearvest								■	■	■		
7	Newala DC	Plant		■	■	■	■							
		Hearvest								■	■	■		
8	Newala TC	Plant		■	■	■	■							
		Hearvest								■	■	■		
9	Tandahimba DC	Plant			■	■	■							
		Hearvest								■	■	■		



## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mwanza Region (in case of more than two LGAs applicable)	Plant	Black											
		Hearvest												
1	Buchosa DC	Plant												
		Hearvest												
2	Ilemela MC	Plant	Black											
		Hearvest												
3	Kwimba DC	Plant	Black											
		Hearvest												
4	Magu DC	Plant	Black											
		Hearvest												
5	Misungwi DC	Plant												
		Hearvest												
6	Mwanza (Nyamagana) CC	Plant	Black											
		Hearvest												
7	Sengerema DC	Plant												
		Hearvest												
8	Ukerewe DC	Plant												
		Hearvest												

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Njombe Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	Black	Black	White	White
1	Ludewa DC	Plant	White	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	Black	White	White
2	Makambako TC	Plant	White	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	Black	Black
3	Makete DC	Plant	Black	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	White	White	White
4	Njombe DC	Plant	White	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	White	White
5	Njombe TC	Plant	Black	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	White	White
6	Wanging'ombe DC	Plant	White	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	Black	Black	Black	White	White	White

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Pwani Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	Black	White	White
1	Bagamoyo DC	Plant	Black	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	Black	Black	White	White	White	Black	Black	White	White	White
2	Chalinze DC	Plant	Black	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	Black	Black	White	White	White	Black	Black	Black	White	White
3	Kibaha DC	Plant	Black	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	Black	Black	White	White	White	White	Black	Black	White	White
4	Kibaha TC	Plant	Black	White	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	Black	Black	2	White	White	White	Black	Black	White	White
5	Kibiti DC	Plant	Black	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	Black	Black	White	White
6	Kisarawe DC	Plant	Black	Grey	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	Black	Black	White	White	White	White	Black	Black	White	White
7	Mafia DC	Plant	White	White	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	White	White
8	Mkuranga DC	Plant	Black	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	Black	Black	White	White	White	White	White	Black	Black	White
9	Rufiji DC	Plant	White	Black	Black	White	White	Black	White	White	Black	Black	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	Black	Black	White	Black

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agriculture Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Rukwa Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	White	White	White	Black	Black	Black	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
1	Kalambo DC	Plant	Black	Black	Black	Black	White	White	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
2	Nkasi DC	Plant	White	Black	Black	Black	White	White	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
3	Sumbawanga DC	Plant	White	Black	Black	Black	White	White	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
4	Sumbawanga MC	Plant	White	Black	Black	Black	White	White	White	White	White	White	White	
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Ruvuma Region (in case of more than two LGAs applicable)	Plant		■	■	■	■							
		Hearvest								■	■	■	■	
1	Madaba DC	Plant		■	■	■	■							
		Hearvest									■	■	■	
2	Mbinga DC	Plant		■	■	■	■							
		Hearvest							■	■	■	■		
3	Mbinga TC	Plant		■	■	■						■	■	
		Hearvest								■	■	■	■	
4	Namtumbo DC	Plant			■	■	■							
		Hearvest									■	■	■	
5	Nyasa DC	Plant		■	■	■	■							
		Hearvest									■	■	■	
6	Songea DC	Plant			■	■	■							
		Hearvest								■	■	■	■	
7	Songea MC	Plant		■	■	■	■							
		Hearvest								■	■	■	■	
8	Tunduru DC	Plant			■	■	■							
		Hearvest								■	■	■	■	

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Shinyanga Region (in case of more than two LGAs applicable)	Plant		■	■	■	■							
		Hearvest						■	■	■	■			
1	Kahama TC	Plant		■	■	■	■							
		Hearvest						■	■	■	■			
2	Kishapu DC	Plant		■										
		Hearvest						■	■	■				
3	Msalala DC	Plant	■	■										
		Hearvest						■	■	■				
4	Shinyanga DC	Plant		■	■	■	■							
		Hearvest							■	■	■			
5	Shinyanga MC	Plant		■										
		Hearvest								■	■			
6	Ushetu DC	Plant		■	■	■	■							
		Hearvest						■	■	■	■	■		

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Simiyu Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	Black	Black	Black	Black	White	White
1	Bariadi DC	Plant	Black	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	Black	Black	Black	Black	White	White
2	Bariadi TC	Plant	Black	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	Black	Black	Black	Black	White	White
3	Busega DC	Plant	Black	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	Black	Black	Black	Black	White	White
4	Itilima DC	Plant	Black	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	Black	Black	Black	Black	White	White
5	Maswa DC	Plant	Black	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	Black	Black	Black	Black	White	White
6	Meatu DC	Plant	White	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	Black	Black	Black	Black	White	White

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Singida Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ikungi DC	Plant												
		Hearvest												
2	Iramba DC	Plant												
		Hearvest												
3	Itigi DC	Plant												
		Hearvest												
4	Manyoni DC	Plant												
		Hearvest												
5	Mkalama DC	Plant												
		Hearvest												
6	Singida DC	Plant												
		Hearvest												
7	Singida MC	Plant												
		Hearvest												



## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Songwe Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ileje DC	Plant												
		Hearvest												
2	Mbozi DC	Plant												
		Hearvest												
3	Momba DC	Plant												
		Hearvest												
4	Songwe DC	Plant												
		Hearvest												
5	Tunduma TC	Plant												
		Hearvest												

# Key Crop Calender on Mahindi production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Tabora Region (in case of more than two LGAs applicable)	Plant		■	■									
		Hearvest							■	■	■			
1	Igunga DC	Plant		■	■									
		Hearvest							■	■	■			
2	Kaliua DC	Plant		■	■									
		Hearvest							■	■	■			
3	Nzega DC	Plant		■	■									
		Hearvest							■	■	■			
4	Nzega TC	Plant		■	■									
		Hearvest							■	■	■			
5	Sikonge DC	Plant		■	■									
		Hearvest							■	■	■			
6	Tabora DC (Uyui)	Plant		■	■									
		Hearvest							■	■	■			
7	Tabora MC	Plant		■	■									
		Hearvest							■	■	■			
8	Urambo DC	Plant		■	■	■								
		Hearvest							■	■	■			

## Key Crop Calender on Mahindi production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Tanga Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	Black	Black	White	White	White	White	White
		Hearvest	Black	White	White	Black	Black	White	White	White	White	White	Black
1	Bumbuli DC	Plant	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	White
2	Handeni DC	Plant	Black	Black	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	White	White	White
3	Handeni TC	Plant	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	White	Black	White
4	Kilindi DC	Plant	White	White	Black	Black	Black	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	Black	Black	Black	Black	White
5	Korogwe DC	Plant	White	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	Black	Black	White	White	White	White	White	White	White	White	White
6	Korogwe TC	Plant	White	White	White	White	White	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White
7	Lushoto DC	Plant	White	Black	Black	White	White	White	Black	Black	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	Black	White
8	Mkinga DC	Plant	Black	White	White	White	Black	Black	White	White	White	White	White
		Hearvest	Black	White	White	White	Black	White	White	White	White	White	White
9	Muheza DC	Plant	White	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black
10	Pangani DC	Plant	Black	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	White	Black	White	White	White	White	Black	Black
11	Tanga CC	Plant	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	Black	White	White	White	White	White	White	White	White	White

# **CHAPTER 2: PADDY (MPUNGA)**

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Arusha Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Arusha CC	Plant												
		Hearvest												
2	Arusha DC	Plant												
		Hearvest												
3	Karatu DC	Plant												
		Hearvest												
4	Longido DC	Plant												
		Hearvest												
5	Meru DC	Plant												
		Hearvest												
6	Monduli DC	Plant												
		Hearvest												
7	Ngorongoro DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Dar es Salaam Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ilala MC	Plant												
		Hearvest												
2	Kigamboni MC	Plant												
		Hearvest												
3	Kinondoni MC	Plant												
		Hearvest												
4	Temeke MC	Plant												
		Hearvest												
5	Ubungo MC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Dodoma Region (in case of more than two LGAs applicable)	Plant											
		Hearvest											
1	Bahi DC	Plant											
		Hearvest											
2	Chamwino DC	Plant											
		Hearvest											
3	Chemba DC	Plant											
		Hearvest											
4	Dodoma MC	Plant											
		Hearvest											
5	Kondoa DC	Plant											
		Hearvest											
6	Kondoa TC	Plant											
		Hearvest											
7	Kongwa DC	Plant											
		Hearvest											
8	Mpwapwa DC	Plant											
		Hearvest											

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Geita Region (in case of more than two LGAs applicable)	Plant		■	■	■	■	■						
		Hearvest								■	■			
1	Bukombe DC	Plant			■	■								
		Hearvest								■	■			
2	Chato DC	Plant	■	■			■	■						
		Hearvest								■	■			
3	Geita DC	Plant												
		Hearvest								■	■			
4	Geita TC	Plant			■	■	■							
		Hearvest						■	■	■	■			
5	Mbogwe DC	Plant		■	■									
		Hearvest								■	■			
6	Nyang'hwale DC	Plant			■	■	■							
		Hearvest								■	■	■		



## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Iringa Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Iringa DC	Plant												
		Hearvest												
2	Iringa MC	Plant												
		Hearvest												
3	Kilolo DC	Plant												
		Hearvest												
4	Mafinga TC	Plant												
		Hearvest												
5	Mufindi DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Kagera Region (in case of more than two LGAs applicable)	Plant											
		Hearvest											
1	Biharamulo DC	Plant											
		Hearvest											
2	Bukoba DC	Plant											
		Hearvest											
3	Bukoba MC	Plant											
		Hearvest											
4	Karagwe DC	Plant											
		Hearvest											
5	Kyerwa DC	Plant											
		Hearvest											
6	Misenyi DC	Plant											
		Hearvest											
7	Muleba DC	Plant											
		Hearvest											
8	Ngara DC	Plant											
		Hearvest											

## Key Crop Calender on Mpunga production

As of January 2019

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Katavi Region (in case of more than two LGAs applicable)	Plant		■	■	■	■							
		Hearvest							■	■	■	■		
1	Mlele DC	Plant			■	■	■							
		Hearvest							■	■	■	■		
2	Mpanda DC	Plant		■	■	■	■							
		Hearvest							■	■	■	■		
3	Mpanda TC	Plant										■		
		Hearvest												
4	Mpinbwe DC	Plant		■	■	■	■							
		Hearvest							■	■	■	■		
5	Nsimbo DC	Plant		■	■					■	■			
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kigoma Region (in case of more than two LGAs applicable)	Plant		■	■	■	■							
		Hearvest							■	■	■	■		
1	Buhigwe DC	Plant		■	■	■	■							
		Hearvest									■			
2	Kakonko DC	Plant		■	■	■	■							■
		Hearvest								■	■	■		
3	Kasulu DC	Plant		■	■	■	■							
		Hearvest							■	■	■			
4	Kasulu TC	Plant		■	■	■	■							
		Hearvest								■	■	■		
5	Kibondo DC	Plant			■	■	■							
		Hearvest									■	■	■	
6	Kibondo TC	Plant			■	■	■							
		Hearvest									■	■	■	
7	Kigoma DC	Plant		■	■	■	■							
		Hearvest							■	■	■	■		
8	Kigoma MC	Plant			■	■	■							
		Hearvest								■	■	■		
9	Uvinza DC	Plant		■	■	■	■					■	■	
		Hearvest	■	■						■	■	■		

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kilimanjaro Region (in case of more than two LGAs applicable)	Plant						■				■		
		Hearvest		■	■	■	■				■	■	■	
1	Hai DC	Plant						■						
		Hearvest			■	■	■				■	■	■	
2	Moshi DC	Plant				■	■					■	■	
		Hearvest		■	■	■					■	■	■	
3	Moshi MC	Plant		■	■							■		
		Hearvest		■	■						■	■		
4	Mwanga DC	Plant								■				
		Hearvest		■							■	■		
5	Rombo DC	Plant												
		Hearvest												
6	Same DC	Plant	■					■						
		Hearvest				■					■	■		
7	Siha DC	Plant												
		Hearvest												

# Key Crop Calender on Mpunga production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Lindi Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Kilwa DC	Plant												
		Hearvest												
2	Lindi DC	Plant												
		Hearvest												
3	Lindi MC	Plant												
		Hearvest												
4	Liwale DC	Plant												
		Hearvest												
5	Nachingwea DC	Plant												
		Hearvest												
6	Ruangwa DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Manyara Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Babati DC	Plant												
		Hearvest												
2	Babati TC	Plant												
		Hearvest												
3	Hanang DC	Plant												
		Hearvest												
4	Kiteto DC	Plant												
		Hearvest												
5	Mbulu DC	Plant												
		Hearvest												
6	Mbulu TC	Plant												
		Hearvest												
7	Simanjiro DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mara Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	White	Black	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
1	Bunda DC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
2	Bunda TC	Plant	White	White	Black	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	White	White	Black	White	White	White
3	Butiama DC	Plant	White	White	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	White	White	White
4	Musoma DC	Plant	White	Black	Black	White	Black	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
5	Musoma MC	Plant	Black	Black	Black	White	White	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	Black	White	White
6	Rorya DC	Plant	White	White	Black	Black	Black	Black	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	Black	White
7	Serengeti DC	Plant	Black	White	White	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	White	White	White
8	Tarime DC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
9	Tarime TC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White



## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mbeya Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Busokelo DC	Plant												
		Hearvest												
2	Chunya DC	Plant												
		Hearvest												
3	Kyela DC	Plant												
		Hearvest												
4	Mbarali DC	Plant												
		Hearvest												
5	Mbeya CC	Plant												
		Hearvest												
6	Mbeya DC	Plant												
		Hearvest												
7	Rungwe DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Morogoro Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Gairo DC	Plant												
		Hearvest												
2	Ifakara TC	Plant												
		Hearvest												
3	Kilombero DC	Plant												
		Hearvest												
4	Kilosa DC	Plant												
		Hearvest												
5	Malinyi DC	Plant												
		Hearvest												
6	Morogoro DC	Plant												
		Hearvest												
7	Morogoro MC	Plant												
		Hearvest												
8	Mvomero DC	Plant												
		Hearvest												
9	Ulanga DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mtwara Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Masasi DC	Plant												
		Hearvest												
2	Masasi TC	Plant												
		Hearvest												
3	Mtwara DC	Plant												
		Hearvest												
4	Mtwara MC (Mikindani)	Plant												
		Hearvest												
5	Nanyamba TC	Plant												
		Hearvest												
6	Nanyumbu DC	Plant												
		Hearvest												
7	Newala DC	Plant												
		Hearvest												
8	Newala TC	Plant												
		Hearvest												
9	Tandahimba DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mwanza Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Buchosa DC	Plant												
		Hearvest												
2	Ilemela MC	Plant												
		Hearvest												
3	Kwimba DC	Plant												
		Hearvest												
4	Magu DC	Plant												
		Hearvest												
5	Misungwi DC	Plant												
		Hearvest												
6	Mwanza (Nyamagana) CC	Plant												
		Hearvest												
7	Sengerema DC	Plant												
		Hearvest												
8	Ukerewe DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Njombe Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ludewa DC	Plant												
		Hearvest												
2	Makambako TC	Plant												
		Hearvest												
3	Makete DC	Plant												
		Hearvest												
4	Njombe DC	Plant												
		Hearvest												
5	Njombe TC	Plant												
		Hearvest												
6	Wanging'ombe DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Pwani Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bagamoyo DC	Plant												
		Hearvest												
2	Chalinze DC	Plant												
		Hearvest												
3	Kibaha DC	Plant												
		Hearvest												
4	Kibaha TC	Plant												
		Hearvest												
5	Kibiti DC	Plant												
		Hearvest												
6	Kisarawe DC	Plant												
		Hearvest												
7	Mafia DC	Plant												
		Hearvest												
8	Mkuranga DC	Plant												
		Hearvest												
9	Rufiji DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year												
			10	11	12	1	2	3	4	5	6	7	8	9	
	Rukwa Region (in case of more than two LGAs applicable)	Plant													
		Hearvest													
1	Kalambo DC	Plant													
		Hearvest													
2	Nkasi DC	Plant													
		Hearvest													
3	Sumbawanga DC	Plant													
		Hearvest													
4	Sumbawanga MC	Plant													
		Hearvest													

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Ruvuma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Madaba DC	Plant												
		Hearvest												
2	Mbinga DC	Plant												
		Hearvest												
3	Mbinga TC	Plant												
		Hearvest												
4	Namtumbo DC	Plant												
		Hearvest												
5	Nyasa DC	Plant												
		Hearvest												
6	Songea DC	Plant												
		Hearvest												
7	Songea MC	Plant												
		Hearvest												
8	Tunduru DC	Plant												
		Hearvest												



# Key Crop Calender on Mpunga production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Shinyanga Region (in case of more than two LGAs applicable)	Plant			■	■	■	■						
		Hearvest							■	■	■	■		
1	Kahama TC	Plant			■	■	■	■						
		Hearvest							■	■	■	■		
2	Kishapu DC	Plant		■										
		Hearvest							■	■	■			
3	Msalala DC	Plant			■	■	■							
		Hearvest								■	■	■		
4	Shinyanga DC	Plant			■	■	■							
		Hearvest							■	■	■			
5	Shinyanga MC	Plant						■						
		Hearvest									■	■		
6	Ushetu DC	Plant			■	■	■	■						
		Hearvest								■	■	■		

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Simiyu Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bariadi DC	Plant												
		Hearvest												
2	Bariadi TC	Plant												
		Hearvest												
3	Busega DC	Plant												
		Hearvest												
4	Itilima DC	Plant												
		Hearvest												
5	Maswa DC	Plant												
		Hearvest												
6	Meatu DC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Singida Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ikungi DC	Plant												
		Hearvest												
2	Iramba DC	Plant												
		Hearvest												
3	Itigi DC	Plant												
		Hearvest												
4	Manyoni DC	Plant												
		Hearvest												
5	Mkalama DC	Plant												
		Hearvest												
6	Singida DC	Plant												
		Hearvest												
7	Singida MC	Plant												
		Hearvest												

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Songwe Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ileje DC	Plant												
		Hearvest												
2	Mbozi DC	Plant												
		Hearvest												
3	Momba DC	Plant												
		Hearvest												
4	Songwe DC	Plant												
		Hearvest												
5	Tunduma TC	Plant												
		Hearvest												

# Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Tabora Region (in case of more than two LGAs applicable)	Plant		■	■	■								
		Hearvest							■	■	■			
1	Igunga DC	Plant		■	■	■	■							
		Hearvest							■	■	■			
2	Kaliua DC	Plant			■	■	■							
		Hearvest							■	■	■			
3	Nzega DC	Plant		■	■	■								
		Hearvest							■	■	■			
4	Nzega TC	Plant		■	■	■								
		Hearvest							■	■	■			
5	Sikonge DC	Plant		■	■	■								
		Hearvest							■	■	■			
6	Tabora DC (Uyui)	Plant	■	■	■	■								
		Hearvest							■	■	■			
7	Tabora MC	Plant		■	■	■								
		Hearvest							■	■	■			
8	Urambo DC	Plant			■	■								
		Hearvest							■	■	■			

## Key Crop Calender on Mpunga production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Tanga Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bumbuli DC	Plant												
		Hearvest												
2	Handeni DC	Plant												
		Hearvest												
3	Handeni TC	Plant												
		Hearvest												
4	Kilindi DC	Plant												
		Hearvest												
5	Korogwe DC	Plant												
		Hearvest												
6	Korogwe TC	Plant												
		Hearvest												
7	Lushoto DC	Plant												
		Hearvest												
8	Mkinga DC	Plant												
		Hearvest												
9	Muheza DC	Plant												
		Hearvest												
10	Pangani DC	Plant												
		Hearvest												
11	Tanga CC	Plant												
		Hearvest												

# **CHAPTER 3: CASSAVA (MIHOGO)**

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Arusha Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Arusha CC	Plant												
		Hearvest												
2	Arusha DC	Plant												
		Hearvest												
3	Karatu DC	Plant												
		Hearvest												
4	Longido DC	Plant												
		Hearvest												
5	Meru DC	Plant												
		Hearvest												
6	Monduli DC	Plant												
		Hearvest												
7	Ngorongoro DC	Plant												
		Hearvest												



## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Dar es Salaam Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	White	White	White	Black	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	Black	Black	Black
1	Ilala MC	Plant	Black	Black	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	Black	Black	Black	White	White	White	Black	Black	Black	Black
2	Kigamboni MC	Plant	Black	Black	White	White	White	White	White	Black	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	White	White
3	Kinondoni MC	Plant	White	White	White	White	White	White	White	White	Black	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	Black	Black	Black
4	Temeke MC	Plant	Black	Black	White	White	White	White	White	Black	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	Black	Black
5	Ubungo MC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	Black
		Hearvest	White	White	White	White	White	Black	Black	White	White	White	White	White

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Dodoma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bahi DC	Plant												
		Hearvest												
2	Chamwino DC	Plant												
		Hearvest												
3	Chemba DC	Plant												
		Hearvest												
4	Dodoma MC	Plant												
		Hearvest												
5	Kondoa DC	Plant												
		Hearvest												
6	Kondoa TC	Plant												
		Hearvest												
7	Kongwa DC	Plant												
		Hearvest												
8	Mpwapwa DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Geita Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	Black	Black	White	White	White	White	White	White
		Hearvest	Black	Black	White	White	White	White	Black	Black	Black	Black	White	White
1	Bukombe DC	Plant	White	White	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	White	White	White
2	Chato DC	Plant	Black	Black	Black	White	Black	Black	Black	White	White	White	White	White
		Hearvest	Black	Black	Black	Black	Black	Black	Black	Black	Black	White	White	White
3	Geita DC	Plant	Black	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
4	Geita TC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	White	White	White
5	Mbogwe DC	Plant	White	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	White	White
6	Nyang'hwale DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	Black	Black	White	White	White	White	Black	Black	Black	Black	Black	Black

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Iringa Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Iringa DC	Plant												
		Hearvest												
2	Iringa MC	Plant												
		Hearvest												
3	Kilolo DC	Plant												
		Hearvest												
4	Mafinga TC	Plant												
		Hearvest												
5	Mufindi DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kagera Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Biharamulo DC	Plant												
		Hearvest												
2	Bukoba DC	Plant												
		Hearvest												
3	Bukoba MC	Plant												
		Hearvest												
4	Karagwe DC	Plant												
		Hearvest												
5	Kyerwa DC	Plant												
		Hearvest												
6	Misenyi DC	Plant												
		Hearvest												
7	Muleba DC	Plant												
		Hearvest												
8	Ngara DC	Plant												
		Hearvest												

# Key Crop Calender on Mihogo production

As of January 2019

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Katavi Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Mlele DC	Plant												
		Hearvest												
2	Mpanda DC	Plant												
		Hearvest												
3	Mpanda TC	Plant												
		Hearvest												
4	Mpinwe DC	Plant												
		Hearvest												
5	Nsimbo DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kigoma Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	Black	Black	Black	Black	Black
1	Buhigwe DC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	Black	Black	Black	White	White
2	Kakonko DC	Plant	White	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	Black	Black
3	Kasulu DC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	Black	White
4	Kasulu TC	Plant	White	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	White	White	White
5	Kibondo DC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
6	Kibondo TC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
7	Kigoma DC	Plant	Black	Black	Black	Black	Black	Black	White	White	White	White	White	White
		Hearvest	Black	Black	Black	Black	Black	Black	Black	Black	Black	Black	Black	Black
8	Kigoma MC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	Black	Black	White	White	White
9	Uvinza DC	Plant	White	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	Black	Black

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kilimanjaro Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Hai DC	Plant												
		Hearvest												
2	Moshi DC	Plant												
		Hearvest												
3	Moshi MC	Plant												
		Hearvest												
4	Mwanga DC	Plant												
		Hearvest												
5	Rombo DC	Plant												
		Hearvest												
6	Same DC	Plant												
		Hearvest												
7	Siha DC	Plant												
		Hearvest												



## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Lindi Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Kilwa DC	Plant												
		Hearvest												
2	Lindi DC	Plant												
		Hearvest												
3	Lindi MC	Plant												
		Hearvest												
4	Liwale DC	Plant												
		Hearvest												
5	Nachingwea DC	Plant												
		Hearvest												
6	Ruangwa DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Manyara Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Babati DC	Plant												
		Hearvest												
2	Babati TC	Plant												
		Hearvest												
3	Hanang DC	Plant												
		Hearvest												
4	Kiteto DC	Plant												
		Hearvest												
5	Mbulu DC	Plant												
		Hearvest												
6	Mbulu TC	Plant												
		Hearvest												
7	Simanjiro DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Mara Region (in case of more than two LGAs applicable)	Plant											
		Hearvest											
1	Bunda DC	Plant											
		Hearvest											
2	Bunda TC	Plant											
		Hearvest											
3	Butiama DC	Plant											
		Hearvest											
4	Musoma DC	Plant											
		Hearvest											
5	Musoma MC	Plant											
		Hearvest											
6	Rorya DC	Plant											
		Hearvest											
7	Serengeti DC	Plant											
		Hearvest											
8	Tarime DC	Plant											
		Hearvest											
9	Tarime TC	Plant											
		Hearvest											

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mbeya Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Busokelo DC	Plant												
		Hearvest												
2	Chunya DC	Plant												
		Hearvest												
3	Kyela DC	Plant												
		Hearvest												
4	Mbarali DC	Plant												
		Hearvest												
5	Mbeya CC	Plant												
		Hearvest												
6	Mbeya DC	Plant												
		Hearvest												
7	Rungwe DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Morogoro Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Gairo DC	Plant												
		Hearvest												
2	Ifakara TC	Plant												
		Hearvest												
3	Kilombero DC	Plant												
		Hearvest												
4	Kilosa DC	Plant												
		Hearvest												
5	Malinyi DC	Plant												
		Hearvest												
6	Morogoro DC	Plant												
		Hearvest												
7	Morogoro MC	Plant												
		Hearvest												
8	Mvomero DC	Plant												
		Hearvest												
9	Ulanga DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mtwara Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
1	Masasi DC	Plant	White	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
2	Masasi TC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
3	Mtwara DC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
4	Mtwara MC (Mikindani)	Plant	White	White	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
5	Nanyamba TC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
6	Nanyumbu DC	Plant	White	White	Black	Black	Black	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
7	Newala DC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
8	Newala TC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
9	Tandahimba DC	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mwanza Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
1	Buchosa DC	Plant	White	White	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
2	Ilemela MC	Plant	White	White	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
3	Kwimba DC	Plant	Black	White	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
4	Magu DC	Plant	Black	White	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
5	Misungwi DC	Plant	Black	Black	Black	Black	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
6	Mwanza (Nyamagana) CC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
7	Sengerema DC	Plant	White	White	White	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
8	Ukerewe DC	Plant	White	White	Black	Black	Black	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	Black	Black	Black

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Njombe Region (in case of more than two LGAs applicable)	Plant	Black	White	Black	Black	Black	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	Black	Black	Black	White	White	White
1	Ludewa DC	Plant	Black	Black	Black	Black	Black	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	Black	Black	Black	White	White	White
2	Makambako TC	Plant	White	White	White	Black	Black	Black	Black	White	White	White	White	White
		Hearvest	Black	Black	Black	Black	Black	Black	Black	Black	Black	Black	Black	Black
3	Makete DC	Plant	Black	White	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	White	White	White
4	Njombe DC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
5	Njombe TC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
6	Wanging'ombe DC	Plant	White	White	Black	Black	Black	Black	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	Black	White	White	White	White	White



## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Pwani Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	Black	White	White	Black	Black	White	White	White	White	White	White	White
1	Bagamoyo DC	Plant	White	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	White	Black	Black	Black
2	Chalinze DC	Plant	White	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	White	Black	Black	Black
3	Kibaha DC	Plant	White	White	Black	White	White	White	White	White	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	Black	Black
4	Kibaha TC	Plant	Black	White	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	Black	Black
5	Kibiti DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	White	White
6	Kisarawe DC	Plant	Black	Black	White	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	Black
7	Mafia DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White
8	Mkuranga DC	Plant	Black	Black	White	White	White	Black	Black	White	White	White	White	White
		Hearvest	Black	White	White	Black	Black	White	White	White	White	White	White	Black
9	Rufiji DC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Rukwa Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Kalambo DC	Plant												
		Hearvest												
2	Nkasi DC	Plant												
		Hearvest												
3	Sumbawanga DC	Plant												
		Hearvest												
4	Sumbawanga MC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Ruvuma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Madaba DC	Plant												
		Hearvest												
2	Mbinga DC	Plant												
		Hearvest												
3	Mbinga TC	Plant												
		Hearvest												
4	Namtumbo DC	Plant												
		Hearvest												
5	Nyasa DC	Plant												
		Hearvest												
6	Songea DC	Plant												
		Hearvest												
7	Songea MC	Plant												
		Hearvest												
8	Tunduru DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Shinyanga Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Kahama TC	Plant												
		Hearvest												
2	Kishapu DC	Plant												
		Hearvest												
3	Msalala DC	Plant												
		Hearvest												
4	Shinyanga DC	Plant												
		Hearvest												
5	Shinyanga MC	Plant												
		Hearvest												
6	Ushetu DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Simiyu Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bariadi DC	Plant												
		Hearvest												
2	Bariadi TC	Plant												
		Hearvest												
3	Busega DC	Plant												
		Hearvest												
4	Itilima DC	Plant												
		Hearvest												
5	Maswa DC	Plant												
		Hearvest												
6	Meatu DC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Singida Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ikungi DC	Plant												
		Hearvest												
2	Iramba DC	Plant												
		Hearvest												
3	Itigi DC	Plant												
		Hearvest												
4	Manyoni DC	Plant												
		Hearvest												
5	Mkalama DC	Plant												
		Hearvest												
6	Singida DC	Plant												
		Hearvest												
7	Singida MC	Plant												
		Hearvest												

## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Songwe Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ileje DC	Plant												
		Hearvest												
2	Mbozi DC	Plant												
		Hearvest												
3	Momba DC	Plant												
		Hearvest												
4	Songwe DC	Plant												
		Hearvest												
5	Tunduma TC	Plant												
		Hearvest												

# Key Crop Calender on Mihogo production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Tabora Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Igunga DC	Plant												
		Hearvest												
2	Kaliua DC	Plant												
		Hearvest												
3	Nzega DC	Plant												
		Hearvest												
4	Nzega TC	Plant												
		Hearvest												
5	Sikonge DC	Plant												
		Hearvest												
6	Tabora DC (Uyui)	Plant												
		Hearvest												
7	Tabora MC	Plant												
		Hearvest												
8	Urambo DC	Plant												
		Hearvest												



## Key Crop Calender on Mihogo production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Tanga Region (in case of more than two LGAs applicable)	Plant											
		Hearvest											
1	Bumbuli DC	Plant											
		Hearvest											
2	Handeni DC	Plant											
		Hearvest											
3	Handeni TC	Plant											
		Hearvest											
4	Kilindi DC	Plant											
		Hearvest											
5	Korogwe DC	Plant											
		Hearvest											
6	Korogwe TC	Plant											
		Hearvest											
7	Lushoto DC	Plant											
		Hearvest											
8	Mkinga DC	Plant											
		Hearvest											
9	Muheza DC	Plant											
		Hearvest											
10	Pangani DC	Plant											
		Hearvest											
11	Tanga CC	Plant											
		Hearvest											

# **CHAPTER 4: BEANS (MAHARAGE)**

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Arusha Region (in case of more than two LGAs applicable)	Plant											
		Hearvest											
1	Arusha CC	Plant											
		Hearvest											
2	Arusha DC	Plant											
		Hearvest											
3	Karatu DC	Plant											
		Hearvest											
4	Longido DC	Plant											
		Hearvest											
5	Meru DC	Plant											
		Hearvest											
6	Monduli DC	Plant											
		Hearvest											
7	Ngorongoro DC	Plant											
		Hearvest											

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Dar es Salaam Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ilala MC	Plant												
		Hearvest												
2	Kigamboni MC	Plant												
		Hearvest												
3	Kinondoni MC	Plant												
		Hearvest												
4	Temeke MC	Plant												
		Hearvest												
5	Ubungo MC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Dodoma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bahi DC	Plant												
		Hearvest												
2	Chamwino DC	Plant												
		Hearvest												
3	Chemba DC	Plant												
		Hearvest												
4	Dodoma MC	Plant												
		Hearvest												
5	Kondoa DC	Plant												
		Hearvest												
6	Kondoa TC	Plant												
		Hearvest												
7	Kongwa DC	Plant												
		Hearvest												
8	Mpwapwa DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Geita Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	Black	Black	White	White	White
1	Bukombe DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	White	White	White	White	White
2	Chato DC	Plant	Black	Black	Black	White	White	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	Black	Black	Black	White	White	White
3	Geita DC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
4	Geita TC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	White	White	White	White
5	Mbogwe DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	White	White	White	White	White	White	White
6	Nyang'hwale DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White	White

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Iringa Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Iringa DC	Plant												
		Hearvest												
2	Iringa MC	Plant												
		Hearvest												
3	Kilolo DC	Plant												
		Hearvest												
4	Mafinga TC	Plant												
		Hearvest												
5	Mufindi DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Kagera Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	White	Black	Black	White	White	White	White	Black
		Hearvest	White	White	Black	Black	Black	White	White	Black	White	White	White
1	Biharamulo DC	Plant	Black	Black	Black	White	Black	Black	White	White	White	White	Black
		Hearvest	White	White	Black	Black	Black	White	White	Black	White	White	White
2	Bukoba DC	Plant	White	White	White	White	Black	Black	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White
3	Bukoba MC	Plant	Black	White	White	White	Black	Black	White	White	White	White	Black
		Hearvest	White	Black	Black	Black	White	White	White	Black	White	White	White
4	Karagwe DC	Plant	White	White	White	White	Black	Black	White	White	White	White	Black
		Hearvest	White	White	Black	Black	White	White	Black	Black	White	White	White
5	Kyerwa DC	Plant	White	White	White	White	Black	Black	White	White	White	White	Black
		Hearvest	White	White	Black	Black	White	White	White	Black	White	White	White
6	Misenyi DC	Plant	Black	White	White	White	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	Black	White	White	White
7	Muleba DC	Plant	White	Black	Black	Black	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	Black	Black	White	White	White	White
8	Ngara DC	Plant	Black	White	White	White	White	White	White	White	White	White	Black
		Hearvest	White	White	Black	Black	Black	White	White	White	White	White	White



## Key Crop Calender on Maharage production

As of January 2019

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Katavi Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Mlele DC	Plant												
		Hearvest												
2	Mpanda DC	Plant												
		Hearvest												
3	Mpanda TC	Plant												
		Hearvest												
4	Mpinwe DC	Plant												
		Hearvest												
5	Nsimbo DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kigoma Region (in case of more than two LGAs applicable)	Plant	Black	Black	Black	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	Black	White	Black	Black	White	White	White
1	Buhigwe DC	Plant	White	Black	Black	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
2	Kakonko DC	Plant	Black	Black	Black	White	White	Black	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	Black	White	White	White
3	Kasulu DC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	White	White	White	White	White
4	Kasulu TC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	White	White	White	White	White
5	Kibondo DC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
6	Kibondo TC	Plant	White	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	White	White	White	White	White
7	Kigoma DC	Plant	Black	Black	Black	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
8	Kigoma MC	Plant	Black	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	White	White	White	White	White
9	Uvinza DC	Plant	White	Black	Black	White	White	White	White	Black	Black	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	White	White	White	Black	Black

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kilimanjaro Region (in case of more than two LGAs applicable)	Plant	Black					Black	Black					
		Hearvest				Black					Black			
1	Hai DC	Plant						Black	Black					
		Hearvest											Black	
2	Moshi DC	Plant												
		Hearvest												
3	Moshi MC	Plant						Black	Black					
		Hearvest									Black			
4	Mwanga DC	Plant								Black	Black			
		Hearvest												
5	Rombo DC	Plant	Black					Black						
		Hearvest				Black				Black	Black			
6	Same DC	Plant							Black					
		Hearvest									Black			
7	Siha DC	Plant	Black	Black					Black	Black				
		Hearvest				Black	Black					Black	Black	

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Lindi Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Kilwa DC	Plant												
		Hearvest												
2	Lindi DC	Plant												
		Hearvest												
3	Lindi MC	Plant												
		Hearvest												
4	Liwale DC	Plant												
		Hearvest												
5	Nachingwea DC	Plant												
		Hearvest												
6	Ruangwa DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Manyara Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Babati DC	Plant												
		Hearvest												
2	Babati TC	Plant												
		Hearvest												
3	Hanang DC	Plant												
		Hearvest												
4	Kiteto DC	Plant												
		Hearvest												
5	Mbulu DC	Plant												
		Hearvest												
6	Mbulu TC	Plant												
		Hearvest												
7	Simanjiro DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Mara Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	Black	Black	White	White	White	White	Black
		Hearvest	White	White	Black	Black	Black	White	White	Black	Black	White	White
1	Bunda DC	Plant	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	Black	White
2	Bunda TC	Plant	Black	Black	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	Black	Black	Black	White	White	Black	Black	White	White
3	Butiama DC	Plant	Black	Black	White	White	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	White	Black	White
4	Musoma DC	Plant	Black	Black	White	White	Black	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	Black	White
5	Musoma MC	Plant	Black	Black	White	White	Black	Black	White	White	White	White	Black
		Hearvest	White	Black	Black	White	Black	White	Black	White	White	White	White
6	Rorya DC	Plant	Black	White	White	White	White	Black	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	White	Black	White	White
7	Serengeti DC	Plant	Black	White	Black	White	Black	White	White	White	White	White	White
		Hearvest	White	White	Black	Black	Black	White	White	White	Black	White	White
8	Tarime DC	Plant	White	White	White	White	Black	Black	White	White	White	White	Black
		Hearvest	White	White	Black	Black	White	White	White	Black	Black	White	White
9	Tarime TC	Plant	Black	White	White	White	Black	Black	White	White	White	White	Black
		Hearvest	White	White	Black	Black	White	White	White	Black	Black	White	White

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mbeya Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Busokelo DC	Plant												
		Hearvest												
2	Chunya DC	Plant												
		Hearvest												
3	Kyela DC	Plant												
		Hearvest												
4	Mbarali DC	Plant												
		Hearvest												
5	Mbeya CC	Plant												
		Hearvest												
6	Mbeya DC	Plant												
		Hearvest												
7	Rungwe DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Morogoro Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	Black	Black	Black	White	White	White	White
		Hearvest	White	White	Black	Black	White	White	White	Black	Black	Black	White
1	Gairo DC	Plant	Black	White	White	White	Black	Black	Black	White	White	White	White
		Hearvest	White	White	Black	White	Black	White	White	Black	Black	White	White
2	Ifakara TC	Plant	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White
3	Kilombero DC	Plant	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White
4	Kilosa DC	Plant	Black	White	White	White	Black	Black	Black	White	White	White	Black
		Hearvest	White	White	Black	Black	White	White	Black	Black	Black	White	White
5	Malinyi DC	Plant	White	White	Black	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	Black	Black	White	White
6	Morogoro DC	Plant	White	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	White
7	Morogoro MC	Plant	White	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	Black
8	Mvomero DC	Plant	Black	Black	White	White	Black	Black	White	White	White	White	White
		Hearvest	White	White	Black	Black	White	White	White	White	Black	Black	White
9	Ulanga DC	Plant	Black	Black	White	White	White	Black	Black	White	White	White	White
		Hearvest	Black	Black	Black	White	White	White	White	White	Black	Black	White



## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mtwara Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Masasi DC	Plant												
		Hearvest												
2	Masasi TC	Plant												
		Hearvest												
3	Mtwara DC	Plant												
		Hearvest												
4	Mtwara MC (Mikindani)	Plant												
		Hearvest												
5	Nanyamba TC	Plant												
		Hearvest												
6	Nanyumbu DC	Plant												
		Hearvest												
7	Newala DC	Plant												
		Hearvest												
8	Newala TC	Plant												
		Hearvest												
9	Tandahimba DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mwanza Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	White	White	White	White
1	Buchosa DC	Plant	White	White	White	White	White	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	White	White	White	White	White	White	White	White
2	Ilemela MC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
3	Kwimba DC	Plant	Black	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	White	White	White	White	White	White	White
4	Magu DC	Plant	Black	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	White	White	White
5	Misungwi DC	Plant	White	Black	Black	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	Black	Black	White	White	White	White	White
6	Mwanza (Nyamagana) CC	Plant	White	Black	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	Black	White	White	White	White	White	White
7	Sengerema DC	Plant	Black	White	White	White	White	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	White	White	White	White
8	Ukerewe DC	Plant	Black	White	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	Black	White	White	White	White	Black	White	White	White	White

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Njombe Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ludewa DC	Plant												
		Hearvest												
2	Makambako TC	Plant												
		Hearvest												
3	Makete DC	Plant												
		Hearvest												
4	Njombe DC	Plant												
		Hearvest												
5	Njombe TC	Plant												
		Hearvest												
6	Wanging'ombe DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Pwani Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bagamoyo DC	Plant												
		Hearvest												
2	Chalinze DC	Plant												
		Hearvest												
3	Kibaha DC	Plant												
		Hearvest												
4	Kibaha TC	Plant												
		Hearvest												
5	Kibiti DC	Plant												
		Hearvest												
6	Kisarawe DC	Plant												
		Hearvest												
7	Mafia DC	Plant												
		Hearvest												
8	Mkuranga DC	Plant												
		Hearvest												
9	Rufiji DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Rukwa Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Kalambo DC	Plant												
		Hearvest												
2	Nkasi DC	Plant												
		Hearvest												
3	Sumbawanga DC	Plant												
		Hearvest												
4	Sumbawanga MC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Ruvuma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Madaba DC	Plant												
		Hearvest												
2	Mbinga DC	Plant												
		Hearvest												
3	Mbinga TC	Plant												
		Hearvest												
4	Namtumbo DC	Plant												
		Hearvest												
5	Nyasa DC	Plant												
		Hearvest												
6	Songea DC	Plant												
		Hearvest												
7	Songea MC	Plant												
		Hearvest												
8	Tunduru DC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Shinyanga Region (in case of more than two LGAs applicable)	Plant		■	■	■	■							
		Hearvest					■	■	■					
1	Kahama TC	Plant		■	■	■	■							
		Hearvest				■	■	■						
2	Kishapu DC	Plant												
		Hearvest												
3	Msalala DC	Plant	■	■	■									
		Hearvest					■	■	■					
4	Shinyanga DC	Plant												
		Hearvest												
5	Shinyanga MC	Plant												
		Hearvest												
6	Ushetu DC	Plant		■	■	■	■							
		Hearvest						■	■	■				

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Simiyu Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bariadi DC	Plant												
		Hearvest												
2	Bariadi TC	Plant												
		Hearvest												
3	Busega DC	Plant												
		Hearvest												
4	Itilima DC	Plant												
		Hearvest												
5	Maswa DC	Plant												
		Hearvest												
6	Meatu DC	Plant												
		Hearvest												



# Key Crop Calender on Maharage production

As of January 2020

Legend: Applicable (Black) Not applicable (White)

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Singida Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ikungi DC	Plant												
		Hearvest												
2	Iramba DC	Plant												
		Hearvest												
3	Itigi DC	Plant												
		Hearvest												
4	Manyoni DC	Plant												
		Hearvest												
5	Mkalama DC	Plant												
		Hearvest												
6	Singida DC	Plant												
		Hearvest												
7	Singida MC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Songwe Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ileje DC	Plant												
		Hearvest												
2	Mbozi DC	Plant												
		Hearvest												
3	Momba DC	Plant												
		Hearvest												
4	Songwe DC	Plant												
		Hearvest												
5	Tunduma TC	Plant												
		Hearvest												

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Tabora Region (in case of more than two LGAs applicable)	Plant		■	■	■	■							
		Hearvest						■	■	■	■			
1	Igunga DC	Plant												
		Hearvest												
2	Kaliua DC	Plant		■	■	■								
		Hearvest						■	■	■				
3	Nzega DC	Plant		■										
		Hearvest							■	■	■			
4	Nzega TC	Plant												
		Hearvest												
5	Sikonge DC	Plant		■	■	■	■							
		Hearvest						■	■	■	■			
6	Tabora DC (Uyui)	Plant		■	■	■	■							
		Hearvest						■	■	■				
7	Tabora MC	Plant		■	■	■								
		Hearvest						■						
8	Urambo DC	Plant		■	■	■								
		Hearvest						■	■	■	■			

## Key Crop Calender on Maharage production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Tanga Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	White	Black	Black	Black	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	White	White	White
1	Bumbuli DC	Plant	Black	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
2	Handeni DC	Plant	White	White	White	White	White	White	Black	White	White	White	White	White
		Hearvest	White	White	White	Black	White	White	White	White	Black	White	White	White
3	Handeni TC	Plant	Black	White	White	White	White	White	Black	Black	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	Black	White	White
4	Kilindi DC	Plant	White	White	White	White	Black	Black	Black	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	Black	Black	Black	White
5	Korogwe DC	Plant	Black	Black	White	White	White	Black	Black	Black	White	White	White	White
		Hearvest	Black	Black	Black	White	White	White	White	White	White	White	White	White
6	Korogwe TC	Plant	White	White	White	White	White	White	White	Black	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	White	White
7	Lushoto DC	Plant	Black	Black	White	White	Black	Black	White	White	White	White	White	White
		Hearvest	White	White	White	White	Black	White	White	White	Black	White	White	White
8	Mkinga DC	Plant	White	White	White	White	White	White	White	Black	White	White	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	White	White
9	Muheza DC	Plant	White	White	White	White	White	White	White	White	Black	Black	White	White
		Hearvest	Black	White	White	White	White	White	White	White	White	White	White	Black
10	Pangani DC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
11	Tanga CC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White

# **CHAPTER 5: SUNFLOWER (ALIZETI)**

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Arusha Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Arusha CC	Plant												
		Hearvest												
2	Arusha DC	Plant												
		Hearvest												
3	Karatu DC	Plant												
		Hearvest												
4	Longido DC	Plant												
		Hearvest												
5	Meru DC	Plant												
		Hearvest												
6	Monduli DC	Plant												
		Hearvest												
7	Ngorongoro DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Dar es Salaam Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ilala MC	Plant												
		Hearvest												
2	Kigamboni MC	Plant												
		Hearvest												
3	Kinondoni MC	Plant												
		Hearvest												
4	Temeke MC	Plant												
		Hearvest												
5	Ubungo MC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Dodoma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bahi DC	Plant												
		Hearvest												
2	Chamwino DC	Plant												
		Hearvest												
3	Chemba DC	Plant												
		Hearvest												
4	Dodoma MC	Plant												
		Hearvest												
5	Kondoa DC	Plant												
		Hearvest												
6	Kondoa TC	Plant												
		Hearvest												
7	Kongwa DC	Plant												
		Hearvest												
8	Mpwapwa DC	Plant												
		Hearvest												



## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Geita Region (in case of more than two LGAs applicable)	Plant												
		Harvest												
1	Bukombe DC	Plant												
		Harvest												
2	Chato DC	Plant												
		Harvest												
3	Geita DC	Plant												
		Harvest												
4	Geita TC	Plant												
		Harvest												
5	Mbogwe DC	Plant												
		Harvest												
6	Nyang'hwale DC	Plant												
		Harvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Iringa Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Iringa DC	Plant												
		Hearvest												
2	Iringa MC	Plant												
		Hearvest												
3	Kilolo DC	Plant												
		Hearvest												
4	Mafinga TC	Plant												
		Hearvest												
5	Mufindi DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kagera Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Biharamulo DC	Plant												
		Hearvest												
2	Bukoba DC	Plant												
		Hearvest												
3	Bukoba MC	Plant												
		Hearvest												
4	Karagwe DC	Plant												
		Hearvest												
5	Kyerwa DC	Plant												
		Hearvest												
6	Misenyi DC	Plant												
		Hearvest												
7	Muleba DC	Plant												
		Hearvest												
8	Ngara DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2019

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Katavi Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Mlele DC	Plant												
		Hearvest												
2	Mpanda DC	Plant												
		Hearvest												
3	Mpanda TC	Plant												
		Hearvest												
4	Mpinbwe DC	Plant												
		Hearvest												
5	Nsimbo DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Kigoma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Buhigwe DC	Plant												
		Hearvest												
2	Kakonko DC	Plant												
		Hearvest												
3	Kasulu DC	Plant												
		Hearvest												
4	Kasulu TC	Plant												
		Hearvest												
5	Kibondo DC	Plant												
		Hearvest												
6	Kibondo TC	Plant												
		Hearvest												
7	Kigoma DC	Plant												
		Hearvest												
8	Kigoma MC	Plant												
		Hearvest												
9	Uvinza DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year										
			10	11	12	1	2	3	4	5	6	7	8
	Kilimanjaro Region (in case of more than two LGAs applicable)	Plant	Black					Black					
		Hearvest					Black				Black		
1	Hai DC	Plant											
		Hearvest											
2	Moshi DC	Plant											
		Hearvest											
3	Moshi MC	Plant											
		Hearvest											
4	Mwanga DC	Plant											
		Hearvest											
5	Rombo DC	Plant	Black					Black					
		Hearvest				Black	Black			Black	Black		
6	Same DC	Plant											
		Hearvest											
7	Siha DC	Plant	Black	Black				Black	Black				
		Hearvest						Black				Black	

# Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Lindi Region (in case of more than two LGAs applicable)	Plant					■	■						
		Hearvest										■	■	
1	Kilwa DC	Plant					■	■						
		Hearvest										■	■	
2	Lindi DC	Plant					■	■						
		Hearvest										■	■	
3	Lindi MC	Plant					■	■						
		Hearvest										■	■	
4	Liwale DC	Plant					■	■						
		Hearvest										■	■	
5	Nachingwea DC	Plant					■	■						
		Hearvest										■	■	
6	Ruangwa DC	Plant					■	■						
		Hearvest										■	■	

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Manyara Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Babati DC	Plant												
		Hearvest												
2	Babati TC	Plant												
		Hearvest												
3	Hanang DC	Plant												
		Hearvest												
4	Kiteto DC	Plant												
		Hearvest												
5	Mbulu DC	Plant												
		Hearvest												
6	Mbulu TC	Plant												
		Hearvest												
7	Simanjiro DC	Plant												
		Hearvest												



## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mara Region (in case of more than two LGAs applicable)	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
1	Bunda DC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
2	Bunda TC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
3	Butiama DC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
4	Musoma DC	Plant	Black	Black	White	White	Black	White	White	White	White	White	White	White
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
5	Musoma MC	Plant	White	White	White	White	White	White	White	White	White	White	White	White
		Hearvest	White	White	White	White	White	White	White	White	White	White	White	White
6	Rorya DC	Plant	Black	White	White	White	Black	White	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	Black	Black	White	White	White
7	Serengeti DC	Plant	Black	White	White	White	White	Black	White	White	White	White	White	Black
		Hearvest	White	White	White	Black	Black	White	White	White	White	Black	White	White
8	Tarime DC	Plant	White	White	White	White	Black	White	White	White	White	White	Black	Black
		Hearvest	White	White	White	Black	Black	White	White	White	White	Black	White	White
9	Tarime TC	Plant	Black	White	White	White	White	Black	White	White	White	White	White	Black
		Hearvest	White	White	White	White	Black	Black	White	White	Black	Black	White	White

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mbeya Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Busokelo DC	Plant											█	█
		Hearvest					█	█						
2	Chunya DC	Plant			█	█								
		Hearvest							█	█				
3	Kyela DC	Plant												
		Hearvest												
4	Mbarali DC	Plant				█	█							
		Hearvest								█	█	█		
5	Mbeya CC	Plant												
		Hearvest												
6	Mbeya DC	Plant				█	█							
		Hearvest										█	█	
7	Rungwe DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Morogoro Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Gairo DC	Plant												
		Hearvest												
2	Ifakara TC	Plant												
		Hearvest												
3	Kilombero DC	Plant												
		Hearvest												
4	Kilosa DC	Plant												
		Hearvest												
5	Malinyi DC	Plant												
		Hearvest												
6	Morogoro DC	Plant												
		Hearvest												
7	Morogoro MC	Plant												
		Hearvest												
8	Mvomero DC	Plant												
		Hearvest												
9	Ulanga DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mtwara Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Masasi DC	Plant												
		Hearvest												
2	Masasi TC	Plant												
		Hearvest												
3	Mtwara DC	Plant												
		Hearvest												
4	Mtwara MC (Mikindani)	Plant												
		Hearvest												
5	Nanyamba TC	Plant												
		Hearvest												
6	Nanyumbu DC	Plant												
		Hearvest												
7	Newala DC	Plant												
		Hearvest												
8	Newala TC	Plant												
		Hearvest												
9	Tandahimba DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Mwanza Region (in case of more than two LGAs applicable)	Plant				■	■	■						
		Hearvest										■	■	
1	Buchosa DC	Plant					■	■						
		Hearvest										■	■	
2	Ilemela MC	Plant					■	■						
		Hearvest										■	■	
3	Kwimba DC	Plant				■	■							
		Hearvest									■	■		
4	Magu DC	Plant				■	■							
		Hearvest										■	■	
5	Misungwi DC	Plant				■	■							
		Hearvest										■	■	
6	Mwanza (Nyamagana) CC	Plant				■	■							
		Hearvest										■	■	
7	Sengerema DC	Plant					■	■						
		Hearvest										■	■	
8	Ukerewe DC	Plant				■	■	■						
		Hearvest										■	■	■

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Njombe Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ludewa DC	Plant												
		Hearvest												
2	Makambako TC	Plant												
		Hearvest												
3	Makete DC	Plant												
		Hearvest												
4	Njombe DC	Plant												
		Hearvest												
5	Njombe TC	Plant												
		Hearvest												
6	Wanging'ombe DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Pwani Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bagamoyo DC	Plant												
		Hearvest												
2	Chalinze DC	Plant												
		Hearvest												
3	Kibaha DC	Plant												
		Hearvest												
4	Kibaha TC	Plant												
		Hearvest												
5	Kibiti DC	Plant												
		Hearvest												
6	Kisarawe DC	Plant												
		Hearvest												
7	Mafia DC	Plant												
		Hearvest												
8	Mkuranga DC	Plant												
		Hearvest												
9	Rufiji DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Rukwa Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Kalambo DC	Plant												
		Hearvest												
2	Nkasi DC	Plant												
		Hearvest												
3	Sumbawanga DC	Plant												
		Hearvest												
4	Sumbawanga MC	Plant												
		Hearvest												



## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Ruvuma Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Madaba DC	Plant												
		Hearvest												
2	Mbinga DC	Plant												
		Hearvest												
3	Mbinga TC	Plant												
		Hearvest												
4	Namtumbo DC	Plant												
		Hearvest												
5	Nyasa DC	Plant												
		Hearvest												
6	Songea DC	Plant												
		Hearvest												
7	Songea MC	Plant												
		Hearvest												
8	Tunduru DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Shinyanga Region (in case of more than two LGAs applicable)	Plant		■	■	■	■	■						
		Hearvest						■	■	■	■			
1	Kahama TC	Plant		■	■	■	■	■						
		Hearvest						■	■	■	■			
2	Kishapu DC	Plant				■	■	■						
		Hearvest						■	■	■				
3	Msalala MC	Plant		■	■	■	■	■						
		Hearvest						■	■	■	■			
4	Shinyanga DC	Plant		■	■	■	■	■						
		Hearvest							■	■	■	■		
5	Shinyanga MC	Plant		■	■	■	■	■						
		Hearvest							■	■	■	■		
6	Ushetu DC	Plant		■	■	■	■	■						
		Hearvest						■	■	■	■			

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Simiyu Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bariadi DC	Plant												
		Hearvest												
2	Bariadi TC	Plant												
		Hearvest												
3	Busega DC	Plant												
		Hearvest												
4	Itilima DC	Plant												
		Hearvest												
5	Maswa DC	Plant												
		Hearvest												
6	Meatu DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Singida Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ikungi DC	Plant												
		Hearvest												
2	Iramba DC	Plant												
		Hearvest												
3	Itigi DC	Plant												
		Hearvest												
4	Manyoni DC	Plant												
		Hearvest												
5	Mkalama DC	Plant												
		Hearvest												
6	Singida DC	Plant												
		Hearvest												
7	Singida MC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Songwe Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Ileje DC	Plant												
		Hearvest												
2	Mbozi DC	Plant												
		Hearvest												
3	Momba DC	Plant												
		Hearvest												
4	Songwe DC	Plant												
		Hearvest												
5	Tunduma TC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Tabora Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Igunga DC	Plant												
		Hearvest												
2	Kaliua DC	Plant												
		Hearvest												
3	Nzega DC	Plant												
		Hearvest												
4	Nzega TC	Plant												
		Hearvest												
5	Sikonge DC	Plant												
		Hearvest												
6	Tabora DC (Uyui)	Plant												
		Hearvest												
7	Tabora MC	Plant												
		Hearvest												
8	Urambo DC	Plant												
		Hearvest												

## Key Crop Calender on Alizeti production

As of January 2020

**Legend: Applicable (Black) Not applicable (White)**

	Name of Region/LGA		Agricultuer Year											
			10	11	12	1	2	3	4	5	6	7	8	9
	Tanga Region (in case of more than two LGAs applicable)	Plant												
		Hearvest												
1	Bumbuli DC	Plant												
		Hearvest												
2	Handeni DC	Plant												
		Hearvest												
3	Handeni TC	Plant												
		Hearvest												
4	Kilindi DC	Plant												
		Hearvest												
5	Korogwe DC	Plant												
		Hearvest												
6	Korogwe TC	Plant												
		Hearvest												
7	Lushoto DC	Plant												
		Hearvest												
8	Mkinga DC	Plant												
		Hearvest												
9	Muheza DC	Plant												
		Hearvest												
10	Pangani DC	Plant												
		Hearvest												
11	Tanga CC	Plant												
		Hearvest												

添付資料 15: データブックレット



**THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF AGRICULTURE**



**BASIC DATA  
Crop Sub Sector  
(Tanzania Mainland)**

**2018/2019**

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**September, 2020**

**THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF AGRICULTURE**



**BASIC DATA  
Crop Sub Sector  
(Tanzania Mainland)  
2018/2019**

**September, 2020**

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## PREFACE

In order to satisfy popular data requirement of various stakeholders, the Ministry of Agriculture has compiled this Booklet publicizing national, regional and district's data on the agricultural sector. The publication contains basic information which can give a quick picture of the sector, while it covers all regions in Tanzania mainland.

This version of Booklet is the continuation of the series of Basic Data Booklet, as the Ministry has been publishing over a number of years. Data includes agriculture demographics, crop production, agricultural extension services, mechanization, cooperatives, and agricultural inputs which is composed of fertilizer and improved seed. Some of these data were captured from Agriculture Routine Data System-ARDS and others were obtained from various reports in the Ministry as well as National Bureau of Statistics-NBS. These time-series data disaggregated up to either region or district would enable users to lighten agricultural development of each administrative level.

I would like to express my sincere gratitude to anybody who in one way or another made the process of preparation and publishing of this Booklet successful especially Japan International Cooperation Agency-JICA who financially supported this task. Also JICA participated technically in some areas during preparation of the booklet.

We will appreciate if we would receive views, comments and suggestions so that we can improve the next version of this booklet. Moreover, the booklet can be also electronically obtained from the Ministry's Website; <https://www.kilimo.go.tz>



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September, 2020

## 1: AGRICULTURAL DEMOGRAPHICS

### 1.1 Number of Households and Persons engaged in Agriculture

Table 1.1.1 Number of Household and Population Engaged in Agriculture Sector by Region

	2012**	2017**	2017 June***		2018 June***		2019 June***	
	Actual Population - 2012 Population Census*	Population Projections for Year 2017	Number of household engaging in agriculture (crop production)	Population engaging in agriculture (crop production)	Number of household engaging in agriculture (crop production)	Population engaging in agriculture (crop production)	Number of household engaging in agriculture (crop production)	Population engaging in agriculture (crop production)
Arusha	1,694,310	1,943,196	222,502	463,832	188,201	556,877	189,783	682,621
Dar es salaam	4,364,541	5,781,557	21,254	105,211	30,454	70,142	158,319	136,578
Dodoma	2,083,588	2,312,141	281,470	1,038,423	422,447	1,024,269	209,224	642,575
Geita	1,739,530	1,983,653	209,321	744,077	223,399	710,726	275,855	917,989
Iringa	941,238	996,105	155,719	504,901	155,571	690,020	186,204	534,945
Kagera	2,458,023	2,879,231	344,556	1,195,074	335,162	1,123,470	365,125	1,145,538
Katavi	564,604	663,685	136,381	499,507	146,515	453,002	106,878	463,014
Kigoma	2,127,930	2,399,121	236,021	711,789	272,707	866,899	315,366	943,417
Kilimanjaro	1,640,087	1,790,113	410,593	1,122,040	264,872	840,868	188,651	617,358
Lindi	864,652	905,947	188,531	405,648	198,607	500,270	185,486	492,121
Manyara	1,425,131	1,670,191	244,872	961,597	221,309	1,090,926	223,571	1,022,358
Mara	1,743,830	1,972,173	253,402	957,990	243,044	896,794	240,358	1,010,908
Mbeya	1,708,548	1,929,359	296,174	768,229	335,700	902,681	328,642	1,017,695
Morogoro	2,218,492	2,495,462	403,386	1,019,803	456,927	1,166,858	460,302	1,331,506
Mtwara	1,270,854	1,351,038	274,925	725,778	343,388	860,711	278,848	824,523
Mwanza	2,772,509	3,217,328	316,557	1,205,852	333,265	1,420,274	350,673	1,579,080
Njombe	702,097	730,555	113,192	325,915	140,362	391,003	147,646	350,541
Pwani	1,098,668	1,224,120	218,402	589,101	194,931	579,878	218,650	673,508
Rukwa	1,004,539	1,179,149	185,554	651,783	189,051	644,131	203,100	776,691
Ruvuma	1,376,891	1,530,955	261,613	827,206	291,289	1,038,835	258,005	938,126
Shinyanga	1,534,808	1,701,220	195,404	903,486	154,140	567,322	218,142	932,121
Simiyu	1,584,157	1,736,839	197,931	957,263	212,226	1,039,727	224,796	1,056,541
Singida	1,370,637	1,539,286	170,752	653,361	238,558	868,459	249,582	903,501
Songwe	998,862	1,173,667	195,425	620,458	206,346	786,356	210,455	829,965
Tabora	2,291,623	2,652,514	274,826	954,536	254,088	1,085,100	335,839	1,309,878
Tanga	2,045,205	2,286,528	287,171	890,528	373,588	1,117,870	386,733	1,274,389
<b>Total</b>	<b>43,625,354</b>	<b>50,045,131</b>	<b>6,095,934</b>	<b>19,803,388</b>	<b>6,426,147</b>	<b>21,293,468</b>	<b>6,516,233</b>	<b>22,407,487</b>

Note\*: The figure from New created Region "Songwe" were derived from the old Region "Mbeya".

Source: \*\* Population and Housing Census 2012, National Bureau of Statistics

\*\*\* Agriculture Routine Data System (ARDS), Ministry of Agriculture

Table 1.1.2 Composition of Household Number and Population Engaged in Agriculture Sector by Region

	2017 June		2018 June		2019 June	
	Composition of household engaging in agriculture (crop production)	Composition of population engaging in agriculture (crop production)	Composition of household engaging in agriculture (crop production)	Composition of population engaging in agriculture (crop production)	Composition of household engaging in agriculture (crop production)	Composition of population engaging in agriculture (crop production)
Arusha	3.7%	2.3%	2.9%	2.6%	2.9%	3.0%
Dar es salaam	0.3%	0.5%	0.5%	0.3%	2.4%	0.6%
Dodoma	4.6%	5.2%	6.6%	4.8%	3.2%	2.9%
Geita	3.4%	3.8%	3.5%	3.3%	4.2%	4.1%
Iringa	2.6%	2.5%	2.4%	3.2%	2.9%	2.4%
Kagera	5.7%	6.0%	5.2%	5.3%	5.6%	5.1%
Katavi	2.2%	2.5%	2.3%	2.1%	1.6%	2.1%
Kigoma	3.9%	3.6%	4.2%	4.1%	4.8%	4.2%
Kilimanjaro	6.7%	5.7%	4.1%	3.9%	2.9%	2.8%
Lindi	3.1%	2.0%	3.1%	2.3%	2.8%	2.2%
Manyara	4.0%	4.9%	3.4%	5.1%	3.4%	4.6%
Mara	4.2%	4.8%	3.8%	4.2%	3.7%	4.5%
Mbeya	4.9%	3.9%	5.2%	4.2%	5.0%	4.5%
Morogoro	6.6%	5.1%	7.1%	5.5%	7.1%	5.9%
Mtwara	4.5%	3.7%	5.3%	4.0%	4.3%	3.7%
Mwanza	5.2%	6.1%	5.2%	6.7%	5.4%	7.0%
Njombe	1.9%	1.6%	2.2%	1.8%	2.3%	1.6%
Pwani	3.6%	3.0%	3.0%	2.7%	3.4%	3.0%
Rukwa	3.0%	3.3%	2.9%	3.0%	3.1%	3.5%
Ruvuma	4.3%	4.2%	4.5%	4.9%	4.0%	4.2%
Shinyanga	3.2%	4.6%	2.4%	2.7%	3.3%	4.2%
Simiyu	3.2%	4.8%	3.3%	4.9%	3.4%	4.7%
Singida	2.8%	3.3%	3.7%	4.1%	3.8%	4.0%
Songwe	3.2%	3.1%	3.2%	3.7%	3.2%	3.7%
Tabora	4.5%	4.8%	4.0%	5.1%	5.2%	5.8%
Tanga	4.7%	4.5%	5.8%	5.2%	5.9%	5.7%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture



## 1.2 Number of Households and Persons engaged in Agriculture by Crop

Table 1.2.1 Households Growing Crops by Region in 2012

Region	Total Number of Households Engaged in Agriculture	Households Engaged in Agricultural Activities by Crop in 2012														
		Maize			Paddy			Maize and Paddy			Cassava			Banana		
		Number of Households	Composition	Percentage per the farming households in region	Number of Households	Composition	Percentage per the farming households in region	Number of Households	Composition	Percentage per the farming households in region	Number of Households	Composition	Percentage per the farming households in region	Number of Households	Composition	Percentage per the farming households in region
Arusha	174,095	165,902	3.1%	95%	6,069	0.4%	3%	4,914	0.3%	3%	9,074	0.4%	5%	40,567	2.7%	23%
Dar es Salaam	75,948	39,662	0.7%	52%	22,430	1.3%	30%	12,812	0.8%	17%	33,849	1.4%	45%	13,962	0.9%	18%
Dodoma	376,924	311,928	5.8%	83%	15,859	0.9%	4%	11,942	0.8%	3%	24,365	1.0%	6%	9,363	0.6%	2%
Geita	224,402	218,688	4.1%	97%	133,769	7.8%	60%	130,506	8.6%	58%	154,794	6.4%	69%	26,812	1.8%	12%
Iringa	180,065	171,220	3.2%	95%	10,576	0.6%	6%	4,849	0.3%	3%	13,258	0.6%	7%	23,140	1.5%	13%
Kagera	403,107	387,230	7.2%	96%	22,410	1.3%	6%	21,890	1.4%	5%	358,808	14.9%	89%	350,686	23.3%	87%
Katavi	84,721	79,188	1.5%	93%	33,531	1.9%	40%	29,786	2.0%	35%	33,481	1.4%	40%	13,167	0.9%	16%
Kigoma	243,651	226,864	4.2%	93%	41,483	2.4%	17%	39,992	2.6%	16%	191,634	8.0%	79%	95,111	6.3%	39%
Kilimanjaro	247,080	231,710	4.3%	94%	17,133	1.0%	7%	14,555	1.0%	6%	43,510	1.8%	18%	149,061	9.9%	60%
Lindi	180,877	159,578	3.0%	88%	58,689	3.4%	32%	53,093	3.5%	29%	96,554	4.0%	53%	31,632	2.1%	17%
Manyara	201,604	196,759	3.7%	98%	6,363	0.4%	3%	5,204	0.3%	3%	9,257	0.4%	5%	18,584	1.2%	9%
Mara	239,683	202,016	3.8%	84%	31,146	1.8%	13%	25,728	1.7%	11%	176,922	7.4%	74%	35,167	2.3%	15%
Mbeya	439,851	409,757	7.6%	93%	116,513	6.8%	26%	95,735	6.3%	22%	69,469	2.9%	16%	154,356	10.2%	35%
Morogoro	375,838	311,115	5.8%	83%	205,924	11.9%	55%	149,877	9.9%	40%	118,561	4.9%	32%	112,823	7.5%	30%
Mtwara	257,833	199,930	3.7%	78%	65,917	3.8%	26%	56,080	3.7%	22%	212,405	8.8%	82%	30,251	2.0%	12%
Mwanza	294,937	258,620	4.8%	88%	207,611	12.0%	70%	192,275	12.7%	65%	189,810	7.9%	64%	36,157	2.4%	12%
Njombe	145,437	140,489	2.6%	97%	3,573	0.2%	2%	2,980	0.2%	2%	16,186	0.7%	11%	27,257	1.8%	19%
Pwani	162,626	114,084	2.1%	70%	77,114	4.5%	47%	53,121	3.5%	33%	103,073	4.3%	63%	41,793	2.8%	26%
Rukwa	162,681	148,356	2.8%	91%	27,675	1.6%	17%	23,098	1.5%	14%	31,727	1.3%	20%	18,945	1.3%	12%
Ruvuma	238,055	220,330	4.1%	93%	103,049	6.0%	43%	92,822	6.1%	39%	174,163	7.2%	73%	107,768	7.1%	45%
Shinyanga	203,173	190,606	3.5%	94%	148,099	8.6%	73%	140,050	9.2%	69%	55,822	2.3%	27%	8,460	0.6%	4%
Simiyu	199,592	191,717	3.6%	96%	126,840	7.4%	64%	123,664	8.2%	62%	10,878	0.5%	5%	3,749	0.2%	2%
Singida	219,948	183,401	3.4%	83%	19,725	1.1%	9%	16,898	1.1%	8%	9,468	0.4%	4%	3,902	0.3%	2%
Tabora	309,694	301,456	5.6%	97%	186,859	10.8%	60%	181,135	11.9%	58%	93,584	3.9%	30%	21,317	1.4%	7%
Tanga	320,269	312,612	5.8%	98%	35,012	2.0%	11%	33,435	2.2%	10%	174,745	7.3%	55%	133,699	8.9%	42%
<b>Total</b>	<b>5,962,091</b>	<b>5,373,218</b>	<b>100.0%</b>	<b>90%</b>	<b>1,723,369</b>	<b>100.0%</b>	<b>29%</b>	<b>1,516,441</b>	<b>100.0%</b>	<b>25%</b>	<b>2,405,397</b>	<b>100.0%</b>	<b>40%</b>	<b>1,507,729</b>	<b>100.0%</b>	<b>25%</b>

Source: Population and Housing Census 2012, National Bureau of Statistics

Table 1.2.2 Number of Maize's Farming Operators during 2014/15 and 2016/17 Agricultural Year

Region	Number of Farming Operators [Maize]			
	2014/15 Short Rainy Season	2014/15 Long Rainy Season	2016/17 Short Rainy Season	2016/17 Long Rainy Season
Arusha	22,468	165,902	19,202	118,120
Dar es salaam	1,069	1,599	S	9,772
Dodoma	S	346,546	-	325,492
Geita	339,628	111,889	341,034	61,615
Iringa	59,808	208,610	1,169	107,270
Kagera	321,419	133,068	242,870	143,368
Katavi	-	206,786	-	78,384
Kigoma	498,486	138,831	407,401	175,498
Kilimanjaro	142,921	155,097	48,602	131,915
Lindi	3,936	267,662	S	149,715
Manyara	2,762	330,190	23,046	307,375
Mara	261,703	171,532	229,750	192,962
Mbeya	40,228	481,167	39,841	300,580
Morogoro	61,927	157,822	24,830	131,257
Mtwara	3,689	244,181	-	235,485
Mwanza	479,952	91,576	508,558	185,315
Njombe	17,981	199,426	62,862	114,403
Pwani	74,442	107,560	47,717	183,173
Rukwa	-	229,415	11,150	140,927
Ruvuma	3,704	259,795	1,727	196,530
Shinyanga	27,519	391,222	251,894	73,541
Simiyu	302,983	53,891	224,766	43,421
Singida	S	342,445	-	261,018
Tabora	461,904	230,254	305,322	463,838
Tanga	276,258	377,548	142,693	338,605
<b>Mainland Total</b>	<b>3,405,535</b>	<b>5,404,014</b>	<b>2,936,490</b>	<b>4,469,579</b>

Source: Annual Agriculture Sample Survey 2014/15 & 2016/17, National Bureau of Statistics

Note "S": Withheld to avoid disclosing data for individual operation. Total includes withheld data.

Remark: Data for Songwe Region are included in Mbeya Region.

Table 1.2.3 Number of Paddy's Farming Operators during 2014/15 and 2016/17 Agricultural Year

Region	Number of Farming Operators [Paddy]			
	2014/15 Short Rainy Season	2014/15 Long Rainy Season	2016/17 Short Rainy Season	2016/17 Long Rainy Season
Arusha	3,616	17,759	S	-
Dar es salaam	523	5,575	149	10,877
Dodoma	-	15,119	-	4,406
Geita	89,735	85,875	65,809	44,588
Iringa	650	312	S	3,418
Kagera	15,604	3,686	5,773	10,256
Katavi	-	44,633	-	17,534
Kigoma	21,774	4,744	28,746	19,136
Kilimanjaro	20,837	14,569	5,026	3,459
Lindi	-	40,480	-	54,454
Manyara	-	485	-	S
Mara	2,492	5,679	3,735	9,069
Mbeya	232	123,571	-	123,093
Morogoro	14,422	113,883	3,830	140,154
Mtwara	10,442	99,636	-	42,861
Mwanza	194,876	37,339	139,720	57,948
Njombe	-	83	-	S
Pwani	56,040	85,331	738	130,782
Rukwa	-	31,374	S	13,199
Ruvuma	398	40,765	536	40,760
Shinyanga	6,198	228,664	123,599	61,279
Simiyu	43,260	33,759	48,672	18,445
Singida	-	10,683	-	26,261
Tabora	86,838	64,483	149,940	175,284
Tanga	4,580	26,785	1,427	8,282
<b>Mainland Total</b>	<b><u>572,517</u></b>	<b><u>1,135,272</u></b>	<b><u>578,245</u></b>	<b><u>1,018,879</u></b>

Source: Annual Agriculture Sample Survey 2014/15 & 2016/17, National Bureau of Statistics

Note "S": Withheld to avoid disclosing data for individual operation. Total includes withheld data.

Remark: Data for Songwe Region are included in Mbeya Region.

Table 1.2.4 Number of Cassavas Farming Operators during 2014/15 and 2016/17 Agricultural Year

Region	Number of Farming Operators [Cassava]	
	2014/15 Permanent Crop	2016/17 Permanent Crop
Arusha	0	2,168
Dar es salaam	3,800	13,735
Dodoma	5854	2,562
Geita	159,537	202,616
Iringa	S	S
Kagera	137,428	215,007
Katavi	23,822	16,807
Kigoma	111,535	330,537
Kilimanjaro	3,459	2,600
Lindi	32,236	24,147
Manyara	S	S
Mara	118,441	127,911
Mbeya	6,044	10,202
Morogoro	4,584	10,558
Mtwara	159,492	136,722
Mwanza	193,791	252,365
Njombe	490	49,360
Pwani	125,225	268,768
Rukwa	0	4,476
Ruvuma	37,291	76,163
Shinyanga	40,278	30,753
Simiyu	2,873	S
Singida	3,317	S
Tabora	10,245	70,634
Tanga	84,571	87,319
<b>Mainland Total</b>	<b><u>1,265,013</u></b>	<b><u>1,960,298</u></b>

Source: Annual Agriculture Sample Survey 2014/15 & 2016/17, National Bureau of Statistics

Note "S": Withheld to avoid disclosing data for individual operation. Total includes withheld data.

Remark: Data for Songwe Region are included in Mbeya Region.

Table 1.2.5 Number of Bean's Farming Operators during 2014/15 and 2016/17 Agricultural Year

Region	Number of Farming Operators [Bean]			
	2014/15 Short Rainy Season	2014/15 Long Rainy Season	2016/17 Short Rainy Season	2016/17 Long Rainy Season
Arusha	19,380	103,508	15,095	48,928
Dar es Salaam	-	-	-	-
Dodoma	-	31,629	S	36,448
Geita	86,228	38,122	158,974	13,824
Iringa	9,821	-	231	32,807
Kagera	328,351	-	230,098	151,633
Katavi	-	22,133	-	13,056
Kigoma	298,810	-	211,795	110,707
Kilimanjaro	76,908	89,281	22,365	72,291
Lindi	-	-	-	S
Manyara	10,483	-	3,818	210,755
Mara	13,834	-	26,790	19,132
Mbeya	-	-	7,365	81,706
Morogoro	S	14,377	3,809	9,332
Mtwara	-	-	-	-
Mwanza	31,332	-	75,344	35,371
Njombe	9,261	40,760	12,844	22,809
Pwani	-	-	-	-
Rukwa	917	-	4,746	48,393
Ruvuma	S	-	682	59,186
Shinyanga	11,557	-	34,347	2,927
Simiyu	7,914	5,644	9,271	S
Singida	-	-	-	8,893
Tabora	12,258	-	S	22,506
Tanga	39,816	75,729	32,646	81,427
<b>Mainland Total</b>	<b><u>958,380</u></b>	<b><u>421,183</u></b>	<b><u>861,290</u></b>	<b><u>1,084,317</u></b>

Source: Annual Agriculture Sample Survey 2014/15 & 2016/17, National Bureau of Statistics

Note "S": Withheld to avoid disclosing data for individual operation. Total includes withheld data.

Remark: Data for Songwe Region are included in Mbeya Region.

Table 1.2.6 Number of Sunflower's Farming Operators during 2014/15 and 2016/17 Agricultural Year

Region	Number of Farming Operators [Sunflower]			
	2014/15 Short Rainy Season	2014/15 Long Rainy Season	2016/17 Short Rainy Season	2016/17 Long Rainy Season
Arusha	1,601	5,720	438	8,037
Dar es salaam	S	S	-	-
Dodoma	1,407	186,369	-	178,275
Geita	-	-	3,818	928
Iringa	10,212	-	556	21,929
Kagera	-	-	1,689	555
Katavi	-	-	-	1,161
Kigoma	-	4,374	S	S
Kilimanjaro	28,169	35,218	11,136	31,015
Lindi	-	-	-	-
Manyara	-	75,585	10,500	63,430
Mara	-	-	169	S
Mbeya	4,203	-	-	29,765
Morogoro	7,839	21,781	-	6,966
Mtwara	-	110,187	-	142
Mwanza	-	-	S	-
Njombe	-	-	2,635	9,768
Pwani	-	-	-	-
Rukwa	-	-	237	32,864
Ruvuma	-	70,808	-	4,173
Shinyanga	S	391	4,162	3,113
Simiyu	-	-	18,713	3,964
Singida	S	-	-	138,515
Tabora	18,584	-	18,010	42,060
Tanga	2,195	8,491	S	4,738
<b>Mainland Total</b>	<b>44,129</b>	<b>471,075</b>	<b>79,774</b>	<b>581,944</b>

Source: Annual Agriculture Sample Survey 2014/15 & 2016/17, National Bureau of Statistics

Note "S": Withheld to avoid disclosing data for individual operation. Total includes withheld data.  
 Remark: Data for Songwe Region are included in Mbeya Region.

## 2.0 CROP PRODUCTION

Table 2.1 Crops: Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by National by Year

Crop	Data	Year								
		2010/2011	2011/2012	2012/2013	2013/2014	2014/2015'	2015/2016	2016/2017	2017/2018	2018/2019
Bambaranuts	Area ( '000' ha)	65.06	73.19	63.01	8.42	42.21	44.33	31.42	40.04	33.13
	Production ( '000' tons)	48.72	65.51	61.12	14.09	43.77	47.58	28.17	46.75	30.27
	Yield (tons/ha)	0.7	0.9	1.0	1.7	1.0	1.1	0.9	1.2	0.9
Banana	Area ( '000' ha)	532.08	442.19	469.59	505.33	452.56	352.31	440.80	281.49	302.76
	Production ( '000' tons)	3,143.83	2,524.74	2,678.68	3,192.04	3,584.53	3,183.33	2,533.67	3,395.50	3,406.94
	Yield (tons/ha)	5.9	5.7	5.7	6.3	7.9	9.0	5.7	12.1	11.3
Barley	Area ( '000' ha)	7.51	6.61	6.79	6.87	6.64	5.01	8.58	11.86	10.40
	Production ( '000' tons)	6.90	10.67	11.30	11.40	14.44	9.03	17.26	19.50	20.02
	Yield (tons/ha)	0.9	1.6	1.7	1.7	2.2	1.8	2.0	1.6	1.9
Beans	Area ( '000' ha)	737.66	1,265.40	1,151.38	1,114.39	1,124.71	1,181.04	1,119.83	896.65	893.57
	Production ( '000' tons)	675.95	1,199.27	1,113.54	1,114.50	1,201.92	1,306.54	1,428.43	1,096.93	1,197.49
	Yield (tons/ha)	0.9	0.9	1.0	1.0	1.1	1.1	1.3	1.2	1.3
Bulrush millet	Area ( '000' ha)	215.21	180.80	211.38	254.03	285.50	223.67	231.46	188.59	198.21
	Production ( '000' tons)	192.95	140.96	180.88	241.94	249.87	205.11	210.73	230.50	286.29
	Yield (tons/ha)	0.9	0.8	0.9	1.0	0.9	0.9	0.9	1.2	1.4
Cashewnut	Area ( '000' ha)	406.60	152.38	410.58	433.75	483.37	456.61	510.50	1,222.13	2,351.98
	Production ( '000' tons)	121.07	160.00	127.95	130.12	197.93	155.42	265.24	313.83	225.11
	Yield (tons/ha)	0.3	1.1	0.3	0.3	0.4	0.3	0.5	0.3	0.1
Cassava	Area ( '000' ha)	739.79	954.51	863.68	800.45	1,094.90	1,111.66	1,202.22	983.51	990.83
	Production ( '000' tons)	4,646.52	5,462.45	4,755.16	4,992.76	5,886.44	6,614.35	4,025.26	8,372.22	8,184.09
	Yield (tons/ha)	6.3	5.7	5.5	6.2	5.4	5.9	3.3	8.5	8.3
Chick pea (Dengu)	Area ( '000' ha)	74.83	198.11	136.19	115.29	39.73	41.72	40.13	73.44	46.33
	Production ( '000' tons)	71.18	119.98	110.12	109.50	33.89	36.84	36.52	66.83	42.16
	Yield (tons/ha)	1.0	0.6	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Coffee	Area ( '000' ha)	116.51	66.44	232.92	160.07	221.76	218.97	231.44	221.41	228.83
	Production ( '000' tons)	60.58	33.22	71.20	48.98	41.67	60.92	48.33	44.26	68.15
	Yield (tons/ha)	0.5	0.5	0.3	0.3	0.2	0.3	0.2	0.2	0.3

Cotton	Area ('000' ha)	226.51	322.77	450.00	311.18	450.00	418.44	662.20	-	747.28
(Seed cotton)	Production ('000' tons)	163.64	225.94	357.13	245.83	203.31	149.45	132.93	222.04	348.90
	Yield (tons/ha)	0.7	0.7	0.8	0.8	0.5	0.4	0.2	-	0.5
Cow pea	Area ('000' ha)	218.08	233.80	234.22	197.32	216.93	227.80	148.48	108.05	112.66
	Production ('000' tons)	172.74	179.57	188.72	190.50	180.78	196.51	177.63	121.77	127.88
	Yield (tons/ha)	0.8	0.8	0.8	1.0	0.8	0.9	1.2	1.1	1.1
Finger millet	Area ('000' ha)	137.10	79.62	123.20	111.26	67.09	74.56	85.30	71.95	71.76
	Production ('000' tons)	204.11	72.79	141.85	120.80	80.19	68.37	98.16	85.69	99.67
	Yield (tons/ha)	1.5	0.9	1.2	1.1	1.2	0.9	1.2	1.2	1.4
Garden pea (Njegere)	Area ('000' ha)	45.97	10.87	19.20	1.91	14.52	15.24	9.45	103.18	111.19
	Production ('000' tons)	52.29	15.14	34.51	5.89	29.93	32.53	23.13	116.52	122.54
	Yield (tons/ha)	1.1	1.4	1.8	3.1	2.1	2.1	2.4	1.1	1.1
Green gram	Area ('000' ha)	48.21	47.85	51.99	6.22	48.87	51.32	90.58	121.98	126.75
	Production ('000' tons)	44.43	36.04	45.26	8.69	49.55	53.87	91.53	108.98	115.18
	Yield (tons/ha)	0.9	0.8	0.9	1.4	1.0	1.0	1.0	0.9	0.9
Irish potatoes	Area ('000' ha)	203.09	168.45	203.17	189.64	175.42	158.15	164.07	96.57	96.59
	Production ('000' tons)	1,555.52	1,235.04	1,767.54	1,783.02	1,480.72	1,342.17	583.09	1,080.14	1,013.41
	Yield (tons/ha)	7.7	7.3	8.7	9.4	8.4	8.5	3.6	11.2	10.5
Maize	Area ('000' ha)	3,287.85	4,118.12	4,120.27	4,146.04	3,787.75	3,583.64	3,817.88	3,546.45	3,428.63
	Production ('000' tons)	4,340.82	5,104.25	5,356.35	6,734.44	5,902.78	6,148.70	6,680.76	6,273.15	5,652.01
	Yield (tons/ha)	1.3	1.2	1.3	-	1.6	1.7	1.7	1.8	1.6
Oil Palm	Area ('000' ha)	14.10	19.14	22.66	23.66	23.86	23.96	24.16	22.86	26.19
	Production ('000' tons)	17.00	24.88	40.50	41.00	41.48	41.93	42.28	40.50	42.18
	Yield (tons/ha)	1.2	1.3	1.8	1.7	1.7	1.8	1.8	1.8	1.6
Paddy	Area ('000' ha)	1,119.33	799.36	928.27	957.22	1,154.47	1,121.66	1,097.28	1,032.90	1,052.55
	Production ('000' tons)	2,248.32	1,800.55	2,194.75	2,586.35	2,979.86	3,429.34	2,451.71	3,414.82	3,174.77
	Yield (tons/ha)	2.0	2.3	2.4	2.7	2.6	3.1	2.2	3.3	3.0
Pigeon pea	Area ('000' ha)	288.16	257.29	287.18	250.51	253.09	265.76	290.32	87.19	87.43
	Production ('000' tons)	272.61	206.06	247.39	248.00	261.89	284.68	286.91	101.42	90.09
	Yield (tons/ha)	0.9	0.8	0.9	1.0	1.0	1.1	1.0	1.2	1.0
Pyrethrum	Area ('000' ha)	7.39	8.77	15.58	17.50	13.09	6.70	7.21	-	-
	Production ('000' tons)	5.00	5.70	6.10	7.00	6.05	2.01	2.15	2.40	2.01
	Yield (tons/ha)	0.7	0.7	0.4	0.4	0.5	0.3	0.3	-	-
Sisal	Area ('000' ha)	56.10	58.05	35.30	41.43	48.85	35.24	41.66	40.25	43.41
	Production ('000' tons)	24.83	25.69	34.87	37.29	39.20	42.31	36.53	44.00	33.27
	Yield (tons/ha)	0.4	0.4	1.0	0.9	0.8	1.2	0.9	1.1	0.8



Sorghum	Area ( '000' ha)	811.16	839.42	711.39	851.48	755.84	725.89	752.71	609.57	646.87
	Production ( '000' tons)	806.57	838.72	832.08	883.20	676.77	729.45	755.04	672.24	731.88
	Yield (tons/ha)	1.0	1.0	1.2	1.0	0.9	1.0	1.0	1.1	1.1
Soya Beans	Area ( '000' ha)	2.88	5.86	5.72	5.91	5.87	5.92	6.01	18.88	19.13
	Production ( '000' tons)	2.50	5.62	5.83	6.03	6.03	6.04	6.14	21.32	22.95
	Yield (tons/ha)	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.2
Sugar	Production ( '000' tons)	304.14	262.88	296.70	294.30	304.01	293.075	326.45	303.75	359.22
Sugercane	Area ( '000' ha)	57.07	56.71	58.50	58.00	44.00	42.18	43.78	44.60	51.34
	Production ( '000' tons)	3,021.31	2,716.62	2,992.18	2,966.54	3,133.07	2,839.23	3,060.61	3,117.81	3,589.46
	Yield (tons/ha)	52.9	47.9	51.1	51.1	71.2	67.3	69.9	69.9	69.9
Sweet potatoes	Area ( '000' ha)	699.07	651.22	788.60	736.09	746.60	673.10	733.73	530.26	539.51
	Production ( '000' tons)	3,573.30	3,018.18	3,470.30	3,500.70	3,454.49	3,131.70	5,440.82	3,744.09	3,921.59
	Yield (tons/ha)	5.1	4.6	4.4	4.8	4.6	4.7	7.4	7.1	7.3
Tea	Area ( '000' ha)	8.55	8.77	21.41	21.34	22.51	22.51	22.72	2.30	23.44
	Production ( '000' tons)	32.00	32.81	33.70	33.50	35.75	32.63	26.98	3.40	37.19
	Yield (tons/ha)	3.7	3.7	1.6	1.6	1.6	1.4	1.2	1.5	1.7
Tobacco	Area ( '000' ha)	168.49	118.25	76.66	88.76	77.52	54.25	47.64	44.81	44.65
	Production ( '000' tons)	130.00	126.62	86.36	100.00	87.74	60.69	81.98	50.52	70.82
	Yield (tons/ha)	0.8	1.1	1.1	1.1	1.1	1.1	1.7	1.1	1.6
Wheat	Area ( '000' ha)	108.28	109.82	107.19	100.76	85.60	65.17	42.63	51.97	42.18
	Production ( '000' tons)	112.66	108.89	103.97	167.04	72.48	76.41	50.47	56.65	63.39
	Yield (tons/ha)	1.0	1.0	1.0	1.7	0.8	1.2	1.2	1.1	1.5

Source: Ministry of Agriculture

Table 2.2.1 Maize: Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by Region by Year

Region	Area/Production QTY/Yield	Year								
		2010/2011	2011/2012	2012/2013	2013/2014	2014/2015'	2015/2016	2016/2017	2017/2018	2018/2019
Arusha	Area ('000'ha)	121.45	123.98	84.81	117.94	133.70	134.98	134.98	98.15	98.88
	Production ('000'tons)	109.31	86.78	88.25	165.89	195.53	202.46	229.46	158.18	128.54
	Yield (tons/ha)	0.9	0.7	1.0	1.4	1.5	1.5	1.7	1.6	1.3
Dar es Salaam	Area ('000'ha)	3.24	5.10	0.78	3.95	1.81	0.65	0.79	0.73	0.66
	Production ('000'tons)	0.97	3.06	0.66	2.37	1.64	0.58	0.59	0.76	0.59
	Yield (tons/ha)	0.3	0.6	0.8	0.6	0.9	0.9	0.7	1.0	0.9
Dodoma	Area ('000'ha)	104.28	141.87	117.55	138.47	157.62	179.81	228.94	168.46	111.69
	Production ('000'tons)	62.57	70.94	84.92	138.47	116.94	197.99	206.05	185.31	78.18
	Yield (tons/ha)	0.6	0.5	0.6	1.0	0.7	1.1	0.9	1.1	0.7
Geita	Area ('000'ha)	-	-	83.83	86.27	66.26	75.89	105.72	100.86	98.80
	Production ('000'tons)	-	-	106.02	115.79	101.25	121.42	187.90	181.55	167.95
	Yield (tons/ha)	-	-	1.3	1.3	1.5	1.6	1.8	1.8	1.7
Iringa	Area ('000'ha)	256.54	491.86	-	185.65	245.68	212.66	98.73	118.89	117.16
	Production ('000'tons)	359.16	639.42	-	319.83	351.77	446.58	187.58	225.89	210.89
	Yield (tons/ha)	1.4	1.3	-	1.7	1.4	2.1	1.9	1.9	1.8
Kagera	Area ('000'ha)	131.87	153.18	89.12	91.71	70.43	82.34	105.21	80.17	80.32
	Production ('000'tons)	197.81	306.36	208.11	227.30	198.75	98.81	178.85	144.31	136.54
	Yield (tons/ha)	1.5	2.0	2.3	2.5	2.8	1.2	1.7	1.8	1.7
Katavi	Area ('000'ha)	-	-	49.61	71.85	39.21	67.92	68.11	60.97	63.55
	Production ('000'tons)	-	-	68.90	145.49	65.80	163.01	163.47	148.67	146.18
	Yield (tons/ha)	-	-	2.0	2.0	1.7	2.4	2.4	2.4	2.3
Kigoma	Area ('000'ha)	198.63	262.05	244.92	210.52	207.75	210.37	254.33	228.57	218.79
	Production ('000'tons)	317.80	524.10	522.22	421.04	484.77	420.74	359.01	434.29	417.33
	Yield (tons/ha)	1.8	2.3	2.2	2.0	2.3	2.0	1.4	1.9	1.9
Kilimanjaro	Area ('000'ha)	67.79	119.81	109.82	121.22	112.30	116.36	103.06	80.54	80.01
	Production ('000'tons)	61.02	119.81	131.90	212.29	214.16	151.27	186.25	161.08	144.02
	Yield (tons/ha)	0.9	1.0	1.3	1.8	1.9	1.3	1.8	2.0	1.8
Lindi	Area ('000'ha)	77.24	101.27	94.75	89.91	86.89	86.89	109.46	98.17	87.83
	Production ('000'tons)	38.62	40.51	66.97	89.91	88.00	78.20	114.85	98.17	87.83
	Yield (tons/ha)	0.5	0.4	0.7	1.0	1.0	0.9	1.0	1.0	1.0
Manyara	Area ('000'ha)	175.48	245.64	313.26	257.95	223.09	233.09	277.11	260.13	240.65
	Production ('000'tons)	245.68	171.95	181.70	361.12	164.96	326.32	360.24	364.18	288.78
	Yield (tons/ha)	1.5	0.7	0.7	1.7	0.7	1.4	1.3	1.4	1.2
Mara	Area ('000'ha)	42.87	69.09	59.62	78.75	62.02	62.02	93.87	92.10	87.21
	Production ('000'tons)	64.31	158.90	89.26	173.24	97.67	105.43	210.16	174.09	156.97
	Yield (tons/ha)	1.5	2.3	1.5	2.2	1.6	1.7	2.2	1.9	1.8
Mbeya	Area ('000'ha)	330.75	366.20	310.43	463.40	364.04	318.20	184.66	190.17	192.07
	Production ('000'tons)	628.42	659.16	596.57	1,101.80	905.32	890.95	354.59	437.39	371.18
	Yield (tons/ha)	2.1	1.8	2.3	2.4	2.5	2.8	1.9	2.3	1.9

Morogoro	Area ('000'ha)	172.09	383.57	202.38	404.79	253.46	182.09	200.09	99.88	95.10
	Production ('000'tons)	292.55	306.85	294.84	401.54	306.98	218.51	300.14	153.12	123.63
	Yield (tons/ha)	1.7	0.8	1.8	1.0	1.2	1.2	1.5	1.5	1.3
Mtwara	Area ('000'ha)	211.35	58.12	79.28	66.31	85.25	62.78	66.77	46.40	40.68
	Production ('000'tons)	105.67	23.25	73.68	66.31	84.96	56.50	62.29	40.01	40.68
	Yield (tons/ha)	0.5	0.4	0.8	1.0	1.0	0.9	0.9	0.9	1.0
Mwanza	Area ('000'ha)	147.55	211.61	85.78	88.27	67.79	76.71	76.71	87.45	83.31
	Production ('000'tons)	221.32	296.25	275.73	301.15	263.33	145.75	103.03	126.39	91.64
	Yield (tons/ha)	1.5	1.4	3.7	3.4	3.9	1.9	1.3	1.4	1.1
Njombe	Area ('000'ha)	-	-	332.54	189.40	262.83	177.65	192.20	183.21	160.90
	Production ('000'tons)	-	-	409.48	346.48	391.06	390.83	345.96	348.10	321.80
	Yield (tons/ha)	-	-	1.3	1.8	1.5	2.2	1.8	1.9	2.0
Pwani	Area ('000'ha)	135.07	51.87	55.80	52.66	73.04	54.49	62.61	27.01	27.26
	Production ('000'tons)	94.55	15.56	64.65	94.79	117.60	49.04	77.57	27.01	27.26
	Yield (tons/ha)	0.7	0.3	0.9	1.8	1.6	0.9	1.2	1.0	1.0
Rukwa	Area ('000'ha)	165.41	249.43	188.44	184.75	148.94	197.15	200.55	210.83	209.07
	Production ('000'tons)	330.82	523.80	345.50	393.37	329.97	473.16	481.33	401.25	397.23
	Yield (tons/ha)	1.8	2.1	1.8	2.1	2.2	2.4	2.4	1.9	1.9
Ruvuma	Area ('000'ha)	118.67	183.95	192.09	196.72	174.08	188.54	275.97	272.81	275.44
	Production ('000'tons)	225.47	423.081	527.31	452.46	427.83	471.36	504.69	682.04	688.60
	Yield (tons/ha)	1.9	2.3	2.6	2.3	2.5	2.5	1.8	2.5	2.5
Shinyanga	Area ('000'ha)	223.12	417.56	291.93	320.70	246.29	179.30	42.42	60.39	76.10
	Production ('000'tons)	267.74	334.05	313.46	361.47	316.08	179.30	67.87	107.37	68.49
	Yield (tons/ha)	0.9	0.5	1.1	1.1	1.3	1.0	1.6	1.8	0.9
Simiyu	Area ('000'ha)	-	-	194.37	200.03	153.62	120.62	199.74	190.26	169.14
	Production ('000'tons)	-	-	139.68	152.56	133.40	144.75	260.47	266.37	253.71
	Yield (tons/ha)	-	-	0.8	0.8	0.9	1.2	1.3	1.4	1.5
Singida	Area ('000'ha)	129.56	163.08	60.59	147.84	169.73	170.05	173.64	160.01	158.60
	Production ('000'tons)	77.74	81.54	72.33	147.84	99.24	238.07	190.41	192.01	158.60
	Yield (tons/ha)	0.6	0.5	0.5	1.0	0.6	1.4	1.1	1.2	1.0
Songwe	Area ('000'ha)	-	-	-	-	-	-	174.41	164.73	164.72
	Production ('000'tons)	-	-	-	-	-	-	488.34	405.60	416.21
	Yield (tons/ha)	-	-	-	-	-	-	2.8	2.5	2.5
Tabora	Area ('000'ha)	280.02	231.52	237.82	247.35	247.39	222.83	201.82	224.60	237.96
	Production ('000'tons)	308.02	231.52	163.12	321.56	259.03	356.53	242.18	375.29	285.55
	Yield (tons/ha)	1.2	1.1	0.8	1.3	1.0	1.6	1.2	1.7	1.2
Tanga	Area ('000'ha)	194.88	87.37	307.09	129.63	134.55	170.28	186.01	241.18	252.75
	Production ('000'tons)	331.29	87.37	134.83	220.37	186.74	221.36	274.08	434.13	353.85
	Yield (tons/ha)	1.7	1.0	0.4	1.7	1.4	1.3	1.5	1.8	1.4
<b>National</b>	<b>Area ('000'ha)</b>	<b>3,287.85</b>	<b>4,118.12</b>	<b>4,120.27</b>	<b>4,146.04</b>	<b>3,787.75</b>	<b>3,583.64</b>	<b>3,817.88</b>	<b>3,546.45</b>	<b>3,428.63</b>
	<b>Production ('000'tons)</b>	<b>4,340.82</b>	<b>5,104.25</b>	<b>5,356.35</b>	<b>6,734.44</b>	<b>5,902.78</b>	<b>6,148.70</b>	<b>6,680.76</b>	<b>6,273.15</b>	<b>5,652.01</b>
	<b>Yield (tons/ha)</b>	<b>1.3</b>	<b>1.2</b>	<b>1.3</b>	<b>1.6</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>	<b>1.8</b>	<b>1.6</b>

Source: Ministry of Agriculture

Table 2.2.2 Annual Target and Achievement Rate for Maize Production

Region	July 2016 - June 2017				July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	105,567	2.4	256,293	89.5%	131,594	3.1	407,013	38.9%	129,835	3.0	387,062	33.2%
Dar es salaam	960	1.5	1,444	40.8%	1,123	1.9	2,127	35.8%	1,048	1.8	1,851	31.9%
Dodoma	248,542	1.5	362,461	56.8%	355,073	1.4	505,851	36.6%	279,646	1.3	367,070	21.3%
Geita	156,835	2.2	350,042	53.7%	139,949	2.2	302,776	60.0%	175,872	2.2	392,359	42.8%
Iringa	188,668	3.1	582,138	32.2%	211,953	2.4	513,767	44.0%	234,630	2.9	677,164	31.1%
Kagera	152,739	1.9	287,458	62.2%	164,651	1.8	302,543	47.7%	151,805	1.7	260,100	52.5%
Katavi	120,406	2.5	300,573	54.4%	103,669	2.1	215,168	69.1%	104,146	2.8	290,321	50.3%
Kigoma	153,839	3.2	489,779	73.3%	213,490	2.7	584,416	74.3%	219,613	2.6	572,258	72.9%
Kilimanjaro	109,488	2.3	256,078	72.7%	96,566	2.4	230,296	69.9%	96,399	2.2	209,525	68.7%
Lindi	132,894	1.9	248,512	46.2%	147,307	1.4	206,550	47.5%	108,025	1.4	140,880	62.3%
Manyara	341,060	2.0	683,306	52.7%	323,430	2.1	682,958	53.3%	388,515	2.1	822,396	35.1%
Mara	146,853	3.0	434,908	48.3%	146,475	2.6	376,225	46.3%	133,043	2.4	324,981	48.3%
Mbeya	132,343	3.1	406,637	87.2%	157,626	3.4	541,620	80.8%	160,976	2.9	449,910	82.5%
Morogoro	359,683	2.4	854,668	35.1%	334,659	2.4	812,524	18.8%	327,392	2.4	774,804	16.0%
Mtwara	74,727	1.2	92,130	67.6%	94,734	1.4	136,564	29.3%	99,405	1.6	155,718	26.1%
Mwanza	114,437	1.8	202,128	51.0%	141,799	1.9	269,367	46.9%	120,146	1.9	223,602	41.0%
Njombe	212,188	2.9	624,706	55.4%	209,340	2.9	605,918	57.5%	200,212	2.8	567,243	56.7%
Pwani	84,323	2.4	205,279	37.8%	81,592	2.3	188,043	14.4%	87,536	2.2	190,804	14.3%
Rukwa	264,103	2.9	775,681	62.1%	255,764	3.1	785,708	51.1%	244,583	3.1	750,777	52.9%
Ruvuma	238,306	2.6	617,732	81.7%	272,458	2.9	782,876	87.1%	246,529	3.5	852,989	80.7%
Shinyanga	198,750	1.0	201,911	33.6%	237,734	1.1	254,720	42.2%	167,179	1.3	220,264	31.1%
Simiyu	222,856	1.4	313,158	83.2%	253,658	1.8	459,615	58.0%	214,980	1.6	351,846	72.1%
Singida	241,138	2.1	503,685	37.8%	245,731	2.4	579,862	33.1%	243,603	1.8	434,281	36.5%
Songwe	170,858	2.9	497,705	98.1%	186,199	3.1	584,142	69.4%	178,074	3.0	539,501	77.1%
Tabora	211,638	2.3	475,325	51.0%	202,875	2.4	480,250	78.1%	240,073	2.4	574,968	49.7%
Tanga	216,168	2.0	431,468	63.5%	280,176	2.1	580,630	74.8%	303,877	2.1	639,685	55.3%
<b>Total</b>	<b>4,599,367</b>	<b>2.3</b>	<b>10,455,208</b>	<b>63.9%</b>	<b>4,989,624</b>	<b>2.3</b>	<b>11,391,530</b>	<b>55.1%</b>	<b>4,857,140</b>	<b>2.3</b>	<b>11,172,357</b>	<b>50.6%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from **Table 2.2.1**.

Table 2.3.1 Paddy: Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by Region by Year

Region	Area/Production QTY/Yield	Year								
		2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Arusha	Area ('000'ha)	106.89	106.94	43.65	110.61	55.12	54.28	57.28	57.48	51.00
	Production ('000'tons)	180.89	312.60	108.65	337.85	129.86	208.75	1.67	2.60	2.57
	Yield (tons/ha)	1.7	2.9	0.9	2.0	2.4	3.8	0.0	0.0	0.1
Dar es Salaam	Area ('000'ha)	2.90	2.46	2.22	2.84	2.43	2.46	2.90	4.03	1.84
	Production ('000'tons)	4.02	3.78	1.18	3.50	1.80	2.27	2.34	1.38	1.41
	Yield (tons/ha)	1.4	1.5	0.6	1.2	0.7	0.9	0.8	1.4	0.8
Dodoma	Area ('000'ha)	10.74	10.42	4.11	10.51	12.36	7.07	5.27	6.80	5.70
	Production ('000'tons)	11.57	9.62	10.46	32.54	15.19	18.49	8.42	18.82	10.53
	Yield (tons/ha)	1.1	0.9	1.4	3.1	1.2	2.6	1.6	2.8	1.8
Geita	Area ('000'ha)	-	-	33.41	23.86	41.84	89.40	70.40	70.87	80.12
	Production ('000'tons)	-	-	65.92	52.77	223.25	178.80	140.02	215.52	221.87
	Yield (tons/ha)	-	-	2.0	2.2	5.3	2.0	2.0	3.0	2.8
Iringa	Area ('000'ha)	10.92	10.03	15.92	21.91	19.93	12.47	13.47	13.54	13.04
	Production ('000'tons)	18.49	15.44	29.53	79.46	35.64	32.61	3.03	46.87	46.14
	Yield (tons/ha)	1.7	1.5	1.3	3.6	1.8	2.6	0.2	3.5	3.5
Kagera	Area ('000'ha)	6.79	5.61	3.72	2.66	4.66	7.62	8.19	8.68	8.86
	Production ('000'tons)	11.48	8.63	7.28	5.83	15.25	16.41	12.91	21.37	23.16
	Yield (tons/ha)	1.7	1.5	0.9	2.2	3.3	2.2	1.6	2.5	2.6
Katavi	Area ('000'ha)	-	-	25.38	50.27	31.78	53.61	50.45	50.40	55.52
	Production ('000'tons)	-	-	54.30	222.38	65.54	197.94	121.08	100.78	157.52
	Yield (tons/ha)	-	-	2.1	4.4	2.1	3.7	2.4	2.0	2.8
Kigoma	Area ('000'ha)	47.21	42.86	37.63	49.279	42.30	48.06	39.73	10.94	23.01
	Production ('000'tons)	116.20	98.92	100.44	121.077	87.18	125.70	9.65	28.41	63.72
	Yield (tons/ha)	2.3	2.4	2.6	1.8	2.1	2.6	0.2	2.6	2.8
Kilimanjaro	Area ('000'ha)	13.33	10.59	19.08	14.35	14.27	16.40	16.83	10.30	13.45
	Production ('000'tons)	22.56	21.19	18.45	77.00	39.04	78.22	9.58	8.24	13.78
	Yield (tons/ha)	1.7	2.0	0.6	5.4	2.7	4.8	0.6	0.8	1.0
Lindi	Area ('000'ha)	17.18	12.38	14.95	13.29	19.38	16.02	21.03	10.54	13.70
	Production ('000'tons)	26.44	17.14	13.32	10.55	13.24	19.71	20.08	16.22	25.29
	Yield (tons/ha)	1.5	1.4	0.8	0.8	0.7	1.2	1.0	1.5	1.8
Manyara	Area ('000'ha)	2.46	2.05	6.50	2.40	1.92	4.83	4.70	4.92	5.01
	Production ('000'tons)	3.78	2.84	10.77	2.67	5.50	18.58	2.93	12.41	10.68
	Yield (tons/ha)	0.4	1.4	0.6	1.1	2.9	3.8	0.6	2.5	2.1
Mara	Area ('000'ha)	1.61	8.27	11.45	1.47	2.67	18.17	18.21	17.05	17.94
	Production ('000'tons)	3.46	16.53	21.87	3.48	4.16	44.73	36.17	37.73	33.12
	Yield (tons/ha)	2.2	2.0	2.1	2.4	1.6	2.5	2.0	2.2	1.8
Mbeya	Area ('000'ha)	54.13	69.14	47.58	52.971	67.11	70.66	70.01	69.54	72.85
	Production ('000'tons)	174.87	212.75	195.93	203.322	162.15	304.38	192.06	310.27	336.23
	Yield (tons/ha)	2.4	3.1	3.7	3.8	2.4	4.3	2.7	4.5	4.6
Morogoro	Area ('000'ha)	114.36	92.61	188.03	111.92	194.76	168.48	172.47	189.23	190.33
	Production ('000'tons)	246.32	185.22	507.02	368.70	335.35	544.33	500.16	756.90	761.30
	Yield (tons/ha)	2.2	2.0	2.6	3.3	1.9	3.2	2.9	4.0	4.0
Mtwara	Area ('000'ha)	59.71	28.81	20.21	71.42	45.75	29.37	31.34	21.57	18.85
	Production ('000'tons)	101.04	44.33	31.06	115.43	56.05	40.66	3.75	32.80	28.99
	Yield (tons/ha)	1.4	1.5	2.9	1.6	1.0	1.4	0.1	1.5	1.5
Mwanza	Area ('000'ha)	86.17	83.04	60.73	43.37	76.04	82.96	81.96	85.96	86.35
	Production ('000'tons)	212.10	204.40	109.59	87.72	275.96	319.06	153.97	172.95	159.41
	Yield (tons/ha)	2.5	2.5	1.9	2.0	3.6	3.8	1.9	2.0	1.8
Njombe	Area ('000'ha)	-	-	0.46	1.15	0.58	0.80	0.80	0.84	0.84
	Production ('000'tons)	-	-	1.54	1.62	1.85	2.10	0.31	0.43	0.42
	Yield (tons/ha)	-	-	1.2	1.4	3.2	2.6	0.4	0.5	0.5
Pwani	Area ('000'ha)	262.01	52.16	48.09	58.10	85.08	40.62	40.62	36.20	47.77
	Production ('000'tons)	403.08	64.19	69.04	84.95	114.17	93.75	77.19	116.94	88.19
	Yield (tons/ha)	1.5	1.2	1.3	1.5	1.3	2.3	1.9	3.2	1.8
Rukwa	Area ('000'ha)	63.75	38.53	32.26	23.66	40.40	37.04	32.91	33.03	33.27
	Production ('000'tons)	166.74	94.83	92.85	33.23	112.07	113.97	74.85	101.50	97.26
	Yield (tons/ha)	2.1	2.5	2.8	1.4	2.8	3.1	2.3	3.1	2.9
Ruvuma	Area ('000'ha)	41.48	38.79	69.96	45.19	63.22	90.72	93.87	52.03	54.21
	Production ('000'tons)	82.97	71.62	186.46	147.73	84.40	279.14	26.42	141.51	150.12
	Yield (tons/ha)	1.3	1.8	2.5	3.3	2.0	3.1	0.3	2.7	2.8
Shinyanga	Area ('000'ha)	74.02	73.99	132.26	94.46	165.60	88.26	91.82	92.67	91.17
	Production ('000'tons)	170.82	147.97	359.07	287.41	577.06	285.16	192.83	270.89	140.26
	Yield (tons/ha)	1.9	2.0	2.0	3.0	3.5	3.2	2.1	2.9	1.5
Simiyu	Area ('000'ha)	-	-	22.60	16.14	28.30	72.14	49.73	55.85	35.82
	Production ('000'tons)	-	-	48.12	38.52	201.77	177.57	79.56	117.15	77.15
	Yield (tons/ha)	-	-	1.8	2.4	7.1	2.5	1.6	2.1	2.2
Singida	Area ('000'ha)	5.81	5.80	5.37	5.69	8.99	7.40	7.49	8.87	8.31
	Production ('000'tons)	6.26	5.35	8.02	9.65	6.79	12.53	8.37	15.26	19.19
	Yield (tons/ha)	1.1	0.9	1.2	1.7	0.8	1.7	1.1	1.7	2.3
Songwe	Area ('000'ha)	-	-	-	-	-	-	13.71	12.82	19.63
	Production ('000'tons)	-	-	-	-	-	-	4.18	48.50	44.17
	Yield (tons/ha)	-	-	-	-	-	-	0.3	3.8	2.3
Tabora	Area ('000'ha)	99.85	92.86	73.73	85.51	93.20	96.73	96.78	94.20	95.18
	Production ('000'tons)	215.07	242.86	121.19	135.36	139.80	297.62	164.53	289.85	234.28
	Yield (tons/ha)	2.2	2.6	1.9	1.6	1.5	3.1	1.7	3.1	2.5
Tanga	Area ('000'ha)	38.01	12.026	8.94	44.19	36.78	6.10	5.34	7.88	8.80
	Production ('000'tons)	70.16	20.352	22.68	123.60	74.58	16.89	12.81	32.73	25.73
	Yield (tons/ha)	1.8	1.7	1.5	2.8	2.0	2.8	2.4	4.2	2.9
National	Area ('000'ha)	1119.33	799.36	928.27	957.22	1,154.47	1,121.66	1,097.28	1,032.90	1,052.55
	Production ('000'tons)	2,248.32	1,800.55	2,194.75	2,586.35	2,979.86	3,429.34	2,451.71	3,414.82	3,174.77
	Yield (tons/ha)	2.0	2.3	2.4	2.7	2.6	3.1	2.2	3.3	3.0

Source: Ministry of Agriculture

Table 2.3.2 Annual Target and Achievement Rate for Paddy Production

Region	July 2016 - June 2017				July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	3,158	4.8	15,154	11.0%	2,072	4.5	9,950	26.1%	1,885	4.7	8,822	29.1%
Dar es salaam	2,260	1.2	2,816	83.2%	2,497	1.0	2,519	55.0%	1,785	1.3	2,380	59.3%
Dodoma	20,030	4.3	86,884	9.7%	15,408	3.1	47,174	39.9%	10,846	3.5	37,815	27.8%
Geita	96,828	2.9	280,228	50.0%	82,537	3.1	249,064	86.5%	113,448	2.9	334,235	66.4%
Iringa	8,540	1.9	18,594	16.3%	14,375	4.5	84,316	55.6%	13,519	5.4	73,306	62.9%
Kagera	14,442	2.2	31,785	40.6%	10,960	2.5	27,489	77.7%	11,307	2.3	26,098	88.8%
Katavi	48,520	3.7	177,225	68.3%	52,036	2.6	135,274	74.5%	55,218	0.0	194,947	80.8%
Kigoma	20,599	3.1	66,102	14.6%	46,482	3.5	162,851	17.4%	54,831	3.6	198,487	32.1%
Kilimanjaro	8,983	5.9	52,664	14.5%	7,691	5.7	44,062	18.7%	8,229	5.6	46,250	29.8%
Lindi	40,470	1.6	63,567	31.6%	35,404	1.2	43,656	37.2%	30,247	1.5	45,037	56.2%
Manyara	4,268	2.4	10,406	28.2%	7,959	3.7	29,260	42.4%	6,588	3.2	20,773	51.4%
Mara	28,660	2.0	55,980	64.6%	21,950	2.5	53,915	70.0%	20,901	2.1	43,229	76.6%
Mbeya	77,915	4.4	345,145	55.6%	85,780	4.5	386,850	80.2%	77,866	4.6	359,492	93.5%
Morogoro	329,932	3.0	979,474	51.1%	314,164	3.2	1,018,026	74.4%	372,901	3.2	1,166,251	65.3%
Mtwara	29,033	1.1	32,609	11.5%	27,581	1.6	42,930	76.4%	24,272	1.2	29,348	98.8%
Mwanza	108,641	2.0	213,259	72.2%	108,987	2.2	229,070	75.5%	77,460	2.1	165,202	96.5%
Njombe	804	2.7	2,140	14.4%	835	2.7	2,233	19.1%	843	2.8	2,378	17.6%
Pwani	43,194	2.7	118,590	65.1%	46,525	3.0	140,214	83.4%	52,470	2.6	133,954	65.8%
Rukwa	35,004	3.1	108,000	69.3%	35,854	3.1	112,431	90.3%	34,862	3.4	119,674	81.3%
Ruvuma	47,299	3.0	141,305	18.7%	53,857	3.0	160,308	88.3%	67,486	2.8	191,808	78.3%
Shinyanga	132,845	3.4	451,246	42.7%	135,552	3.3	451,963	59.9%	159,342	3.4	542,826	25.8%
Simiyu	67,135	1.9	129,472	61.5%	71,840	2.4	173,785	67.4%	55,053	2.1	113,769	67.8%
Singida	14,245	2.8	40,018	20.9%	15,624	2.8	43,779	34.8%	19,481	1.9	35,411	54.2%
Songwe	11,839	3.0	35,163	11.9%	28,051	3.5	98,750	49.1%	19,650	3.9	77,360	57.1%
Tabora	106,511	3.6	377,290	43.6%	102,832	4.0	412,323	70.3%	134,951	3.7	505,995	46.3%
Tanga	7,927	3.6	28,398	45.1%	12,271	3.5	46,459	70.4%	13,102	3.0	38,857	66.2%
<b>Total</b>	<b>1,309,080</b>	<b>3.0</b>	<b>3,863,512</b>	<b>63.5%</b>	<b>1,339,123</b>	<b>3.1</b>	<b>4,208,652</b>	<b>81.1%</b>	<b>1,438,543</b>	<b>0.0</b>	<b>4,513,703</b>	<b>70.3%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from [Table 2.3.1](#).

Table 2.4.1 Other Cereals: Area (ha), Production (tons) and Yield (tons/ha) by Region 2017/2018 and 2018/2019

Region	Data	Sorghum		Wheat		Bulrush millet		Finger millet	
		Year		Year		Year		Year	
		2017/2018	2018/2019	2017/2018	2018/2019	2017/2018	2018/2019	2017/2018	2018/2019
Arusha	Area (Ha)	23,480	23,247	3,788	3,906	-	-	819	791
	Production (Tons)	239	209	548	608	-	-	907	712
	Yield (Tons/Ha)	0.0	0.0	0.1	0.2	-	-	1.1	0.9
Dar es Salaam	Area (Ha)	-	-	-	-	-	-	-	-
	Production (Tons)	-	-	-	-	-	-	-	-
	Yield (Tons/Ha)	-	-	-	-	-	-	-	-
Dodoma	Area (Ha)	131,160	151,396	10,180	-	127,394	127,581	7,443	5,055
	Production (Tons)	140,126	151,396	11,198	-	152,872	88,160	8,931	7,076
	Yield (Tons/Ha)	1.1	1.0	1.1	-	1.2	0.7	1.2	1.4
Geita	Area (Ha)	6,986	9,796	-	-	444	1,825	481	592
	Production (Tons)	6,945	10,365	-	-	497	2,373	539	586
	Yield (Tons/Ha)	1.0	1.1	-	-	1.1	1.3	1.1	1.0
Iringa	Area (Ha)	6,448	4,458	10,180	10,280	-	0	5,278	6,454
	Production (Tons)	6,448	3,858	2,315	1,427	-	0	1,525	2,843
	Yield (Tons/Ha)	1.0	0.9	0.2	0.1	-	-	0.3	0.4
Kagera	Area (Ha)	8,743	8,426	-	-	233	225	1,934	1,637
	Production (Tons)	11,482	10,776	-	-	264	256	2,191	1,862
	Yield (Tons/Ha)	1.3	1.3	-	-	1.1	1.1	1.1	1.1
Katavi	Area (Ha)	1,483	760	-	-	-	7	33	13
	Production (Tons)	2,122	1,236	-	-	-	6	43	10
	Yield (Tons/Ha)	1.4	1.6	-	-	-	0.8	1.3	0.8
Kigoma	Area (Ha)	2,038	2,379	-	-	-	-	447	185
	Production (Tons)	2,649	4,224	-	-	-	-	565	198
	Yield (Tons/Ha)	1.3	1.8	-	-	-	-	1.3	1.1
Kilimanjaro	Area (Ha)	250	301	365	310	-	1,528	1,516	0
	Production (Tons)	325	396	644	689	-	1,738	467	0
	Yield (Tons/Ha)	1.3	1.3	1.8	2.2	-	1.1	0.3	-
Lindi	Area (Ha)	35,789	36,556	372	-	-	-	335	-
	Production (Tons)	35,789	36,556	409	-	-	-	335	-
	Yield (Tons/Ha)	1.0	1.0	1.1	-	-	-	1.0	-
Manyara	Area (Ha)	19,332	21,353	9,756	9,438	1,928	1,429	3,721	8,922
	Production (Tons)	19,332	19,575	8,289	17,932	2,276	1,857	4,392	5,216
	Yield (Tons/Ha)	1.0	0.9	0.8	1.9	1.2	1.3	1.2	0.6
Mara	Area (Ha)	63,012	65,409	-	-	199	325	6,266	4,093
	Production (Tons)	89,326	97,836	-	-	259	368	8,146	4,626
	Yield (Tons/Ha)	1.4	1.5	-	-	1.3	1.1	1.3	1.1
Mbeya	Area (Ha)	3,789	3,575	3,772	3,665	-	-	635	1,614
	Production (Tons)	5,193	5,236	486	611	-	-	572	524
	Yield (Tons/Ha)	1.4	1.5	0.1	0.2	-	-	0.9	0.3
Morogoro	Area (Ha)	10,993	12,733	-	-	2,316	47	2,137	469
	Production (Tons)	13,263	19,075	-	-	2,285	45	2,109	109
	Yield (Tons/Ha)	1.2	1.5	-	-	1.0	1.0	1.0	0.2
Mtwara	Area (Ha)	15,503	13,606	-	-	-	65	380	152
	Production (Tons)	13,313	9,506	-	-	-	19	360	143
	Yield (Tons/Ha)	0.9	0.7	-	-	-	0.3	0.9	0.9
Mwanza	Area (Ha)	11,762	11,546	-	-	1,740	1,145	11	11
	Production (Tons)	13,463	12,320	-	-	2,610	1,602	17	13
	Yield (Tons/Ha)	1.1	1.1	-	-	1.5	1.4	1.5	1.2
Njombe	Area (Ha)	343	1,250	4,492	4,329	1	0	1,508	1,311
	Production (Tons)	384	1,370	4,785	5,404	1	1	1,574	1,507
	Yield (Tons/Ha)	1.1	1.1	1.1	1.2	1.0	-	1.0	1.1
Pwani	Area (Ha)	2,096	6,185	-	-	-	-	-	-
	Production (Tons)	2,142	7,807	-	-	-	-	-	-
	Yield (Tons/Ha)	1.0	1.3	-	-	-	-	-	-
Rukwa	Area (Ha)	7,006	6,905	4,865	6,231	-	-	19,009	20,000
	Production (Tons)	8,407	7,197	4,889	7,341	-	-	24,729	32,000
	Yield (Tons/Ha)	1.2	1.0	1.0	1.2	-	-	1.3	1.6
Ruvuma	Area (Ha)	1,011	1,020	2,989	2,847	0	0	8,524	7,137
	Production (Tons)	178	171	2,356	965	0	0	2,939	4,509
	Yield (Tons/Ha)	0.2	0.2	0.8	0.3	-	-	0.3	0.6
Shinyanga	Area (Ha)	43,239	44,963	-	-	-	8,307	-	1,311
	Production (Tons)	39,265	38,889	-	-	-	11,630	-	1,625
	Yield (Tons/Ha)	0.9	0.9	-	-	-	1.4	-	1.2
Simiyu	Area (Ha)	65,461	71,209	-	-	-	-	-	14
	Production (Tons)	65,614	82,175	-	-	-	-	-	15
	Yield (Tons/Ha)	1.0	1.2	-	-	-	-	-	1.1
Singida	Area (Ha)	100,428	100,396	-	-	52,385	53,413	5,653	6,706
	Production (Tons)	110,592	120,475	-	-	67,270	85,461	7,259	10,058
	Yield (Tons/Ha)	1.1	1.2	-	-	1.3	1.6	1.3	1.5
Songwe	Area (Ha)	16,758	15,192	386	391	1,946	127	5,820	4,804
	Production (Tons)	20,110	15,720	251	204	167	153	6,489	3,111
	Yield (Tons/Ha)	1.2	1.0	0.7	0.5	0.1	1.2	1.1	0.6
Tabora	Area (Ha)	32,379	33,333	-	-	-	2,190	-	486
	Production (Tons)	40,557	46,666	-	-	-	2,129	-	632
	Yield (Tons/Ha)	1.3	1.4	-	-	-	1.0	-	1.3
Tanga	Area (Ha)	78	878	823	780	-	-	-	-
	Production (Tons)	1,705	1,013	70	114	-	-	-	-
	Yield (Tons/Ha)	21.9	1.2	0.1	0.1	-	-	-	-
National	Area (ha)	609,567	646,868	51,968	42,177	188,586	198,213	71,950	71,756
	Production (tons)	672,235	731,877	56,651	63,388	230,503	286,292	85,691	99,670
	Yield (Tons/Ha)	1.1	1.1	1.1	1.5	1.2	1.4	1.2	1.4

Source: Ministry of Agriculture

Table 2.4.2 Annual Target and Achievement Rate for Other Cereals Production

Region	Sorghum								Wheat							
	July 2017 - June 2018				July 2018 - June 2019				July 2017 - June 2018				July 2018 - June 2019			
	Planted Area (ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area (ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area (ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area (ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	1,166	1.0	1,112	21.5%	923	0.9	809	25.8%	1,708	1.7	2,980	18.4%	1,494	2.4	3,595	16.9%
Dar es salaam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dodoma	284,726	1.4	400,274	35.0%	314,779	1.1	331,620	45.7%	-	-	-	-	-	-	-	-
Geita	17,338	1.3	22,991	30.2%	12,450	1.2	14,596	71.0%	-	-	-	-	-	-	-	-
Iringa	18,126	1.3	24,613	26.2%	16,294	1.2	19,448	19.8%	1,751	5.0	8,837	26.2%	2,690	1.8	4,855	29.4%
Kagera	18,719	1.1	20,729	55.4%	16,632	1.6	27,013	39.9%	50	-	-	-	-	-	-	-
Katavi	1,582	1.8	2,789	76.1%	2,055	2.0	4,031	30.6%	-	-	-	-	-	-	-	-
Kiqoma	10,712	2.3	24,720	10.7%	8,107	2.3	18,303	23.1%	-	-	-	-	-	-	-	-
Kilimanjaro	2,275	1.4	3,083	10.5%	1,205	1.1	1,335	29.6%	290	6.0	1,740	37.0%	365	6.0	2,190	31.5%
Lindi	53,180	1.0	52,678	67.9%	43,447	1.0	43,828	83.4%	-	-	-	-	-	-	-	-
Manyara	30,942	1.3	41,121	47.0%	42,462	1.2	51,037	38.4%	8,398	2.1	17,302	47.9%	7,909	1.8	14,236	26.0%
Mara	100,663	1.8	185,628	48.1%	86,290	1.7	147,198	66.5%	-	-	-	-	-	-	-	-
Mbeya	8,018	2.5	19,758	26.3%	6,079	2.8	17,282	30.3%	1,581	1.6	2,468	19.7%	1,699	2.1	3,533	17.3%
Morogoro	28,614	1.8	50,997	26.0%	25,589	1.8	47,176	40.4%	8	1.8	15	-	3	1.0	3	-
Mtwara	26,948	1.1	29,214	45.6%	22,161	1.4	30,151	31.5%	-	-	-	-	-	-	-	-
Mwanza	38,995	1.4	52,028	25.9%	26,215	1.5	38,120	32.3%	-	-	-	-	-	-	-	-
Njombe	2,072	1.4	2,911	13.2%	2,260	1.0	2,148	63.8%	12,690	1.5	19,300	24.8%	13,152	1.4	17,852	30.3%
Pwani	14,205	2.0	28,065	7.6%	8,872	1.0	8,905	87.7%	-	-	-	-	-	-	-	-
Rukwa	12,919	1.7	22,150	38.0%	8,589	1.6	13,805	52.1%	7,801	2.0	15,975	30.6%	8,139	3.8	31,087	23.6%
Ruvuma	1,088	0.9	926	19.2%	1,048	1.1	1,125	15.2%	4,409	2.7	11,760	20.0%	799	1.9	1,442	36.9%
Shinyanga	65,933	1.5	99,834	39.3%	80,232	1.7	134,442	28.9%	-	-	-	-	-	-	-	-
Simiyu	127,091	1.5	186,826	35.1%	87,806	2.0	177,474	46.3%	-	-	-	-	-	-	-	-
Singida	126,522	1.5	187,161	59.1%	121,939	1.3	154,018	78.2%	-	-	-	-	-	-	-	-
Songwe	26,212	1.3	34,395	58.5%	17,296	1.6	27,151	57.9%	386	1.0	386	65.0%	348	1.1	369	55.4%
Tabora	41,242	2.4	99,125	40.9%	43,732	2.1	92,731	50.3%	-	-	-	-	-	-	-	-
Tanga	5,700	2.5	16,235	10.5%	4,746	1.5	7,197	14.1%	215	1.0	215	32.6%	240	1.0	240	47.5%
<b>Total</b>	<b>1,064,986</b>	<b>1.5</b>	<b>1,609,363</b>	<b>41.8%</b>	<b>1,001,207</b>	<b>1.4</b>	<b>1,410,939</b>	<b>51.9%</b>	<b>39,286</b>	<b>2.1</b>	<b>80,977</b>	<b>70.0%</b>	<b>36,837</b>	<b>2.2</b>	<b>79,403</b>	<b>79.8%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from [Table 2.4.1](#).



Region	Bulrush millet								Finger millet							
	July 2017 - June 2018				July 2018 - June 2019				July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	-	-	-	-	2	3.0	6	-	1,391	1.3	1,851	49.0%	703	1.6	1,124	63.3%
Dar es salaam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dodoma	212,715	1.4	300,394	50.9%	155,915	1.0	150,701	58.5%	16,666	1.4	23,264	38.4%	7,901	1.2	9,330	75.8%
Geita	2,065	1.0	2,058	24.2%	2,869	1.1	3,105	76.4%	1,157	1.0	1,118	48.2%	972	0.9	873	67.1%
Iringa	1,603	1.5	2,405	-	-	-	-	-	5,048	0.9	4,331	35.2%	5,314	0.8	4,463	63.7%
Kagera	1,642	0.7	1,193	22.1%	1,211	0.7	860	29.8%	5,430	1.0	5,511	39.8%	3,251	0.8	2,526	73.7%
Katavi	99	1.4	134	-	18	1.2	21	26.4%	115	1.3	144	30.0%	945	1.0	918	1.1%
Kiqoma	105	1.5	158	-	-	-	-	-	1,621	1.4	2,325	24.3%	1,527	1.3	1,962	10.1%
Kilimanjaro	-	-	-	-	-	-	-	-	819	1.0	834	56.0%	863	0.6	541	0.0%
Lindi	66	1.1	73	-	521	1.1	573	-	-	-	-	-	30	0.8	23	-
Manyara	2,751	1.3	3,625	62.8%	3,402	1.0	3,473	53.5%	6,125	1.4	8,525	51.5%	5,339	1.4	7,275	71.7%
Mara	1,557	1.0	1,539	16.8%	1,641	0.7	1,211	30.4%	8,620	1.2	10,372	78.5%	10,607	1.4	15,027	30.8%
Mbeya	16	3.0	48	-	25	3.0	75	-	1,805	1.3	2,332	24.5%	1,327	1.2	1,598	32.8%
Morogoro	2,890	0.9	2,549	89.6%	294	0.9	270	16.8%	2,610	1.1	2,914	72.4%	125	1.1	142	76.8%
Mtwara	67	0.9	58	-	65	0.6	42	46.1%	1,106	0.6	667	54.0%	339	0.6	197	72.6%
Mwanza	7,602	1.0	7,868	33.2%	5,159	1.1	5,862	27.3%	364	0.4	161	10.6%	426	2.2	957	1.3%
Njombe	2	2.0	4	23.8%	2	2.0	4	20.0%	1,858	1.1	2,097	75.1%	2,071	0.9	1,887	79.9%
Pwani	-	-	-	-	-	-	-	-	10	4.0	40	-	5	1.0	5	-
Rukwa	-	-	-	-	5	1.5	8	-	30,997	1.6	48,403	51.1%	20,136	1.6	31,354	102.1%
Ruvuma	-	-	-	-	30	0.1	3	0.0%	4,573	0.8	3,787	77.6%	5,309	1.0	5,485	82.2%
Shinyanga	26,165	1.1	28,282	-	25,166	1.3	32,270	36.0%	1,018	1.4	1,400	-	1,454	1.2	1,691	96.1%
Simiyu	1,354	1.0	1,395	-	276	2.4	672	-	149	1.0	149	-	206	2.2	458	3.4%
Singida	64,171	1.4	89,447	75.2%	71,826	1.2	86,611	98.7%	14,710	1.6	22,853	31.8%	10,137	1.2	12,242	82.2%
Songwe	890	1.5	1,335	12.5%	957	1.5	1,436	10.7%	8,512	1.3	11,034	58.8%	4,131	1.2	5,160	60.3%
Tabora	2,742	1.4	3,889	-	4,324	2.6	11,207	19.0%	319	0.8	265	-	1,138	1.6	1,866	33.9%
Tanga	-	-	-	-	110	0.3	33	-	1	25.6	21	-	130	0.5	63	-
<b>Total</b>	<b>328,502</b>	<b>1.4</b>	<b>446,455</b>	<b>51.6%</b>	<b>273,817</b>	<b>1.1</b>	<b>298,441</b>	<b>95.9%</b>	<b>115,019</b>	<b>1.3</b>	<b>154,396</b>	<b>55.5%</b>	<b>84,386</b>	<b>1.3</b>	<b>107,164</b>	<b>93.0%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from **Table 2.4.1**.

Table 2.5.1 Cassava: Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by Region by Year

Region	Area/Production QTY/Yield	Year								
		2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Arusha	Area ('000'ha)	1.26	1.45	0.92	2.53	1.34	2.51	2.61	1.54	1.50
	Production ('000'tons)	8.69	9.11	6.31	15.95	8.78	15.07	9.17	6.48	6.73
	Yield (tons/ha)	6.9	6.3	4.9	6.3	6.6	6.0	3.5	4.2	4.5
Dar es Salaam	Area ('000'ha)	2.83	4.09	2.71	5.15	19.09	19.02	18.78	6.72	5.65
	Production ('000'tons)	17.00	23.34	14.78	30.88	106.68	85.59	14.98	9.43	6.48
	Yield (tons/ha)	6.0	5.7	5.4	6.0	5.6	4.5	0.8	1.4	1.1
Dodoma	Area ('000'ha)	29.80	35.06	20.00	33.10	21.45	23.82	24.76	20.13	18.69
	Production ('000'tons)	107.28	115.71	67.48	119.16	48.71	71.45	44.36	181.17	60.99
	Yield (tons/ha)	3.6	3.3	3.3	3.6	2.3	3.0	1.8	9.0	3.3
Geita	Area ('000'ha)	-	-	38.49	57.17	62.96	97.14	117.05	68.92	68.39
	Production ('000'tons)	-	-	242.92	393.44	366.71	349.71	212.82	293.37	512.90
	Yield (tons/ha)	-	-	5.7	6.9	5.8	3.6	1.8	4.3	7.5
Iringa	Area ('000'ha)	0.85	0.93	2.22	3.45	3.64	1.29	1.40	2.34	0.27
	Production ('000'tons)	5.59	5.85	17.16	37.20	25.90	6.59	4.01	2.45	2.87
	Yield (tons/ha)	6.6	6.3	8.1	10.8	7.1	5.1	2.9	1.0	10.5
Kagera	Area ('000'ha)	83.02	90.78	77.58	115.25	126.92	80.01	95.53	97.80	100.25
	Production ('000'tons)	597.82	626.38	580.95	940.94	877.02	480.07	292.15	475.94	721.80
	Yield (tons/ha)	7.2	10.3	6.9	8.2	6.9	6.0	3.1	4.9	7.2
Katavi	Area ('000'ha)	-	-	8.31	6.75	13.59	21.67	33.44	15.01	14.05
	Production ('000'tons)	-	-	51.77	28.71	78.15	117.03	71.22	152.30	75.55
	Yield (tons/ha)	-	-	7.5	4.3	5.8	5.4	2.1	10.1	5.4
Kigoma	Area ('000'ha)	16.73	18.36	79.10	17.77	11.55	14.54	15.73	135.01	140.18
	Production ('000'tons)	110.40	115.67	383.91	122.62	61.11	109.07	66.38	529.46	415.97
	Yield (tons/ha)	6.9	6.3	6.3	6.9	5.3	7.5	4.2	3.9	3.0
Kilimanjaro	Area ('000'ha)	3.12	3.42	5.94	4.20	30.35	4.57	4.96	3.00	3.66
	Production ('000'tons)	21.55	22.58	47.76	23.94	89.66	20.58	12.54	19.14	23.05
	Yield (tons/ha)	6.9	6.6	6.9	5.7	3.0	4.5	2.5	6.4	6.3
Lindi	Area ('000'ha)	37.42	42.84	105.37	51.30	23.92	30.02	34.46	42.70	43.75
	Production ('000'tons)	280.66	295.62	158.90	369.34	113.49	198.11	120.56	115.13	122.62
	Yield (tons/ha)	7.5	6.9	3.5	7.2	4.7	6.6	3.5	2.7	2.8
Manyara	Area ('000'ha)	0.196	0.22	1.09	0.24	43.09	1.20	1.30	1.30	1.13
	Production ('000'tons)	1.235	1.29	8.25	1.37	232.45	5.39	3.28	6.62	5.78
	Yield (tons/ha)	6.3	6.0	6.2	5.7	5.4	4.5	2.5	5.1	5.1
Mara	Area ('000'ha)	47.87	84.53	35.31	50.86	74.41	95.14	100.89	62.24	60.19
	Production ('000'tons)	315.95	532.51	150.48	350.93	320.01	570.86	212.97	356.45	250.07
	Yield (tons/ha)	6.6	6.3	5.1	6.9	4.3	6.0	2.1	5.7	4.2
Mbeya	Area ('000'ha)	6.92	7.86	31.11	8.02	19.51	20.49	25.59	8.06	9.88
	Production ('000'tons)	49.81	54.26	262.12	55.32	214.82	172.15	104.77	106.45	100.87
	Yield (tons/ha)	7.3	6.9	8.5	6.9	11.0	8.4	4.1	13.2	10.2

Morogoro	Area ('000'ha)	32.69	35.97	43.79	40.14	109.93	30.55	33.04	17.73	18.59
	Production ('000'tons)	205.97	215.81	328.80	228.77	790.47	183.30	111.55	112.93	189.64
	Yield (tons/ha)	6.3	6.0	7.9	5.7	7.2	6.0	3.4	6.4	10.2
Mtwara	Area ('000'ha)	52.50	173.23	102.60	69.64	104.80	106.31	158.97	100.56	99.81
	Production ('000'tons)	409.45	987.40	526.25	522.29	484.30	797.30	296.82	243.71	281.51
	Yield (tons/ha)	7.8	5.7	4.9	7.5	4.6	7.5	1.9	2.4	2.8
Mwanza	Area ('000'ha)	76.61	102.69	37.96	56.39	62.10	79.53	104.01	79.66	80.52
	Production ('000'tons)	482.61	616.15	156.49	253.47	236.25	596.45	165.21	301.80	147.12
	Yield (tons/ha)	6.3	6.0	4.6	4.5	3.8	7.5	1.6	3.8	1.8
Njombe	Area ('000'ha)	-	-	16.86	5.63	27.58	6.75	7.30	4.55	4.36
	Production ('000'tons)	-	-	98.95	20.03	149.38	46.60	2.74	4.18	7.45
	Yield (tons/ha)	-	-	4.4	3.6	5.4	6.9	0.4	0.9	1.7
Pwani	Area ('000'ha)	155.4	83.74	83.92	76.23	53.13	72.98	86.92	64.00	65.19
	Production ('000'tons)	979.0	502.43	745.15	457.35	348.52	547.33	480.09	475.24	723.57
	Yield (tons/ha)	6.3	6.0	8.8	6.0	6.6	7.5	5.5	7.4	11.1
Rukwa	Area ('000'ha)	13.01	14.17	16.39	13.70	26.82	25.59	38.67	24.83	25.79
	Production ('000'tons)	101.46	106.30	95.32	130.78	143.89	138.16	93.08	67.68	61.13
	Yield (tons/ha)	5.9	7.5	7.3	9.7	5.4	5.4	2.4	2.7	2.4
Ruvuma	Area ('000'ha)	19.07	71.27	29.20	21.18	69.82	70.03	96.73	84.98	87.12
	Production ('000'tons)	143.01	406.21	176.45	158.84	390.48	399.14	168.71	249.18	471.18
	Yield (tons/ha)	7.5	5.7	5.5	7.5	5.6	5.7	1.7	2.9	5.4
Shinyanga	Area ('000'ha)	54.99	62.64	22.44	33.33	36.71	25.76	27.85	12.64	12.75
	Production ('000'tons)	329.91	319.49	96.33	156.02	145.42	77.27	47.02	42.94	91.81
	Yield (tons/ha)	6.2	5.1	4.1	4.7	4.0	3.0	1.7	3.4	7.2
Simiyu	Area ('000'ha)	-	-	5.61	8.33	9.17	11.15	12.06	8.85	7.49
	Production ('000'tons)	-	-	26.64	43.14	40.21	36.79	22.39	25.25	24.72
	Yield (tons/ha)	-	-	4.9	5.2	4.4	3.3	1.9	2.9	3.3
Singida	Area ('000'ha)	42.17	48.34	6.34	46.84	39.18	11.11	14.01	4.40	4.72
	Production ('000'tons)	189.76	203.02	28.68	210.77	127.31	36.65	33.31	53.38	32.58
	Yield (tons/ha)	4.5	4.2	4.9	4.5	3.2	3.3	2.4	12.1	6.9
Songwe	Area ('000'ha)	-	-	-	-	-	-	-	-	5.38
	Production ('000'tons)	-	-	-	-	-	-	-	-	48.42
	Yield (tons/ha)	-	-	-	-	-	-	-	-	9.0
Tabora	Area ('000'ha)	34.74	41.63	31.68	38.59	46.56	42.35	48.80	45.19	44.95
	Production ('000'tons)	83.37	87.42	121.36	92.60	209.52	127.05	92.32	176.22	187.30
	Yield (tons/ha)	2.2	2.1	3.7	2.4	4.5	3.0	1.9	3.9	4.2
Tanga	Area ('000'ha)	28.62	31.288	58.75	34.68	57.29	87.25	97.36	64.37	66.57
	Production ('000'tons)	206.05	215.90	361.94	228.87	277.22	444.99	377.27	482.78	519.28
	Yield (tons/ha)	7.2	6.9	6.1	6.6	4.8	5.1	3.9	7.5	7.8
<b>National</b>	<b>Area ('000'ha)</b>	<b>739.79</b>	<b>954.51</b>	<b>863.68</b>	<b>800.45</b>	<b>1,094.90</b>	<b>980.77</b>	<b>1,202.22</b>	<b>976.53</b>	<b>990.83</b>
	<b>Production ('000'tons)</b>	<b>4,646.52</b>	<b>5,462.45</b>	<b>4,755.16</b>	<b>4,992.76</b>	<b>5,886.44</b>	<b>5,632.71</b>	<b>4,025.26</b>	<b>5,495.37</b>	<b>5,373.89</b>
	<b>Yield (tons/ha)</b>	<b>6.3</b>	<b>5.7</b>	<b>5.5</b>	<b>6.2</b>	<b>5.4</b>	<b>5.7</b>	<b>3.3</b>	<b>5.6</b>	<b>5.4</b>

Source: Ministry of Agriculture

Table 2.5.2 Annual Target and Achievement Rate for Cassava Production

Region	July 2016 - June 2017				July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	662	16.6	10,982	83.5%	626	11.8	7,374	87.9%	712	10.9	7,780	86.5%
Dar es salaam	3,494	5.4	18,987	78.9%	2,068	6.0	12,475	75.6%	1,269	5.7	7,212	89.9%
Dodoma	32,251	4.8	155,815	28.5%	73,377	5.8	427,314	42.4%	38,955	3.4	132,005	46.2%
Geita	88,943	5.1	452,795	47.0%	91,041	5.0	441,826	66.4%	130,404	5.0	658,161	77.9%
Iringa	813	5.7	4,627	86.7%	1,276	5.7	7,234	33.9%	917	8.0	7,290	39.3%
Kagera	71,880	8.1	574,078	50.9%	77,602	8.3	643,158	74.0%	98,886	8.9	879,648	82.1%
Katavi	11,026	12.8	141,310	50.4%	21,093	13.7	289,610	52.6%	13,876	9.8	135,394	55.8%
Kigoma	91,568	5.0	464,836	14.3%	146,948	5.6	807,104	65.6%	155,205	4.4	677,473	61.4%
Kilimanjaro	4,297	6.1	26,156	47.9%	4,257	5.5	23,425	81.7%	5,637	6.7	37,845	60.9%
Lindi	87,808	2.2	197,289	61.1%	72,716	2.2	162,378	70.9%	74,150	2.2	165,477	74.1%
Manyara	1,933	3.4	6,585	49.8%	4,462	3.4	15,079	43.9%	3,462	4.3	15,044	38.4%
Mara	121,760	2.8	335,916	63.4%	123,538	3.4	415,925	85.7%	100,471	3.4	345,877	72.3%
Mbeya	8,349	15.6	130,343	80.4%	7,726	15.0	116,227	91.6%	7,013	15.5	108,584	92.9%
Morogoro	59,530	8.0	476,714	23.4%	52,027	7.6	394,359	28.6%	50,136	7.0	351,519	53.9%
Mtwara	114,860	3.9	449,052	66.1%	106,090	3.1	330,673	73.7%	102,657	3.3	334,734	84.1%
Mwanza	91,564	2.7	247,694	66.7%	134,029	3.1	415,132	72.7%	70,367	2.9	201,260	73.1%
Njombe	6,957	3.7	25,613	10.7%	7,745	3.6	28,031	14.9%	8,758	2.6	22,655	32.9%
Pwani	78,181	8.2	638,773	75.2%	73,255	8.0	588,174	80.8%	80,880	9.9	803,639	90.0%
Rukwa	43,754	4.7	206,553	45.1%	39,943	6.7	267,522	25.3%	44,527	6.2	271,670	22.5%
Ruvuma	74,463	3.9	293,404	57.5%	76,129	4.4	337,181	73.9%	94,774	6.4	606,413	77.7%
Shinyanga	41,236	2.2	89,100	52.8%	53,139	2.2	118,430	36.3%	40,728	2.9	117,327	78.3%
Simiyu	8,571	3.7	31,791	70.4%	13,088	2.5	32,443	77.8%	17,996	2.6	47,299	52.3%
Singida	25,374	3.0	77,164	43.2%	18,156	6.5	118,466	45.1%	15,432	5.6	86,118	37.8%
Songwe	9,678	5.7	55,361	-	10,683	7.4	79,156	-	6,742	8.7	58,339	83.0%
Tabora	56,094	3.8	210,935	43.8%	54,382	4.2	227,502	77.5%	61,531	3.7	230,102	81.4%
Tanga	81,575	4.8	392,636	96.1%	128,263	4.7	606,214	79.6%	136,551	5.3	725,020	71.6%
<b>Total</b>	<b>1,216,621</b>	<b>4.7</b>	<b>5,714,507</b>	<b>70.4%</b>	<b>1,393,659</b>	<b>5.0</b>	<b>6,912,411</b>	<b>79.5%</b>	<b>1,362,035</b>	<b>5.2</b>	<b>7,033,882</b>	<b>76.4%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Table 2.6.1 Other Roots/Tubers and Fruit: Area (ha), Production (tons) and Yield (tons/ha) by Region 2017/2018 and 2018/2019

Region	Data	Sweet Potatoes		Irish Potatoes		Banana	
		Year		Year		Year	
		2017/2018	2018/2019	2017/2018	2018/2019	2017/2018	2018/2019
Arusha	Area (Ha)	1,799	2,020	1,598	2,813	28,872	34,547
	Production (Tons)	806	638	7,347	7,595	346,464	414,564
	Yield (Tons/Ha)	0.4	0.3	4.6	2.7	12.0	12.0
Dar es Salaam	Area (Ha)	8,674	8,992	-	-	106	148
	Production (Tons)	1,083	890	-	-	762	1,102
	Yield (Tons/Ha)	0.1	0.1	-	-	7.2	7.5
Dodoma	Area (Ha)	15,743	15,427	-	1,190	-	-
	Production (Tons)	103,902	86,597	-	1,079	-	-
	Yield (Tons/Ha)	6.6	5.6	-	0.9	-	-
Geita	Area (Ha)	48,474	49,672	-	0	601	684
	Production (Tons)	76,424	67,176	-	0	2,445	2,679
	Yield (Tons/Ha)	1.6	1.4	-	-	4.1	3.9
Iringa	Area (Ha)	10,108	8,599	12,837	12,218	163	157
	Production (Tons)	22,214	39,004	96,036	109,734	1,581	1,572
	Yield (Tons/Ha)	2.2	4.5	7.5	9.0	9.7	10.0
Kagera	Area (Ha)	9,203	5,991	3,934	3,177	112,967	118,789
	Production (Tons)	70,260	42,795	30,030	22,694	1,389,489	1,389,831
	Yield (Tons/Ha)	7.6	7.1	7.6	7.1	12.3	11.7
Katavi	Area (Ha)	10,134	9,125	28	103	74	22
	Production (Tons)	113,892	103,913	315	957	600	198
	Yield (Tons/Ha)	11.2	11.4	11.3	9.3	8.1	9.0
Kigoma	Area (Ha)	7,439	6,585	570	426	22,453	27,202
	Production (Tons)	55,794	65,486	4,275	4,238	204,192	310,097
	Yield (Tons/Ha)	7.5	9.9	7.5	9.9	9.1	11.4
Kilimanjaro	Area (Ha)	472	841	4,820	5,003	62,947	64,199
	Production (Tons)	3,792	2,805	34,188	20,723	825,162	597,048
	Yield (Tons/Ha)	8.0	3.3	7.1	4.1	13.1	9.3
Lindi	Area (Ha)	1,931	2,144	-	-	-	-
	Production (Tons)	8,691	4,360	-	-	-	-
	Yield (Tons/Ha)	4.5	2.0	-	-	-	-
Manyara	Area (Ha)	2,103	2,503	802	1,061	697	807
	Production (Tons)	13,251	14,386	5,055	6,099	7,161	7,278
	Yield (Tons/Ha)	6.3	5.7	6.3	5.7	10.3	9.0
Mara	Area (Ha)	37,418	35,434	638	820	2,218	3,790
	Production (Tons)	29,731	42,290	2,317	493	14,640	27,233
	Yield (Tons/Ha)	0.8	1.2	3.6	0.6	6.6	7.2
Mbeya	Area (Ha)	13,358	14,619	33,195	34,327	12,229	12,201
	Production (Tons)	114,225	69,309	261,473	271,053	192,690	193,121
	Yield (Tons/Ha)	8.6	4.7	7.9	7.9	15.8	15.8
Morogoro	Area (Ha)	12,309	14,254	605	755	12,471	12,464
	Production (Tons)	153,636	128,182	712	671	156,789	183,227
	Yield (Tons/Ha)	12.5	9.0	1.2	0.9	12.6	14.7
Mtwara	Area (Ha)	3,468	2,811	-	-	608	473
	Production (Tons)	3,906	3,926	-	-	2,187	1,561
	Yield (Tons/Ha)	1.1	1.4	-	-	3.6	3.3
Mwanza	Area (Ha)	100,874	110,138	-	-	925	513
	Production (Tons)	102,315	97,095	-	-	9,159	3,825
	Yield (Tons/Ha)	1.0	0.9	-	-	9.9	7.5
Njombe	Area (Ha)	2,252	2,562	24,878	23,057	522	424
	Production (Tons)	15,981	22,226	164,196	193,116	4,680	4,129
	Yield (Tons/Ha)	7.1	8.7	6.6	8.4	9.0	9.7
Pwani	Area (Ha)	2,813	3,963	-	-	667	1,746
	Production (Tons)	12,276	23,779	-	-	5,004	9,846
	Yield (Tons/Ha)	4.4	6.0	-	-	7.5	5.6
Rukwa	Area (Ha)	17,459	15,873	4,549	3,080	414	413
	Production (Tons)	82,875	58,219	5,294	4,040	3,993	4,084
	Yield (Tons/Ha)	4.7	3.7	1.2	1.3	9.6	9.9
Ruvuma	Area (Ha)	17,382	17,826	174	182	2,678	3,383
	Production (Tons)	64,407	94,756	1,671	1,172	40,485	45,666
	Yield (Tons/Ha)	3.7	5.3	9.6	6.4	15.1	13.5
Shinyanga	Area (Ha)	60,158	53,904	-	-	-	-
	Production (Tons)	99,178	180,928	-	-	-	-
	Yield (Tons/Ha)	1.6	3.4	-	-	-	-
Simiyu	Area (Ha)	48,160	52,701	-	-	-	-
	Production (Tons)	166,719	134,954	-	-	-	-
	Yield (Tons/Ha)	3.5	2.6	-	-	-	-
Singida	Area (Ha)	10,986	12,584	-	-	-	7
	Production (Tons)	121,611	143,453	-	-	-	36
	Yield (Tons/Ha)	11.1	11.4	-	-	-	5.1
Songwe	Area (Ha)	15,579	14,834	2,448	2,481	7,838	7,901
	Production (Tons)	84,546	112,546	12,429	11,056	99,717	113,167
	Yield (Tons/Ha)	5.4	7.6	5.1	4.5	12.7	14.3
Tabora	Area (Ha)	65,087	68,549	-	-	-	-
	Production (Tons)	218,067	257,303	-	-	-	-
	Yield (Tons/Ha)	3.4	3.8	-	-	-	-
Tanga	Area (Ha)	6,873	7,563	5,498	5,901	12,036	12,890
	Production (Tons)	27,352	37,817	34,635	29,506	88,299	96,673
	Yield (Tons/Ha)	4.0	5.0	6.3	5.0	7.3	7.5
<b>National</b>	<b>Area (ha)</b>	<b>530,256</b>	<b>539,513</b>	<b>96,574</b>	<b>96,594</b>	<b>281,486</b>	<b>302,758</b>
	<b>Production (tons)</b>	<b>1,926,227</b>	<b>2,466,257</b>	<b>1,080,144</b>	<b>1,013,408</b>	<b>3,395,499</b>	<b>3,406,936</b>
	<b>Yield (Tons/Ha)</b>	<b>3.6</b>	<b>4.6</b>	<b>11.2</b>	<b>10.5</b>	<b>12.1</b>	<b>11.3</b>

Source: Ministry of Agriculture

Table 2.6.2 Annual Target and Achievement Rate for Other Roots/Tubers and Fruit Production

Region	Sweet Potatos							
	July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	343	5.4	1,866	43.2%	493	4.0	1,962	32.5%
Dar es salaam	1,846	7.1	13,049	8.3%	1,354	8.2	11,129	8.0%
Dodoma	28,440	5.7	163,230	63.7%	34,953	2.6	89,144	97.1%
Geita	59,513	3.9	229,501	33.3%	73,864	3.1	230,844	29.1%
Iringa	8,324	6.4	53,400	41.6%	11,440	6.7	76,478	51.0%
Kagera	48,238	6.2	298,942	23.5%	48,356	6.6	317,062	13.5%
Katavi	14,784	9.6	142,628	79.9%	15,031	8.7	130,846	79.4%
Kigoma	38,046	5.9	223,926	24.9%	38,359	7.1	274,702	23.8%
Kilimanjaro	1,437	5.3	7,600	49.9%	1,023	6.7	6,808	41.2%
Lindi	8,974	2.2	20,122	43.2%	4,120	2.4	9,886	44.1%
Manyara	4,572	3.8	17,528	75.6%	4,018	4.4	17,827	80.7%
Mara	52,073	3.5	183,522	16.2%	57,378	3.5	199,483	21.2%
Mbeya	12,352	10.2	126,215	90.5%	7,094	10.3	72,727	95.3%
Morogoro	35,228	8.2	289,885	53.0%	26,412	7.3	192,465	66.6%
Mtwara	5,618	1.3	7,273	53.7%	4,117	1.7	7,035	55.8%
Mwanza	69,326	2.9	201,407	50.8%	56,528	3.1	172,154	56.4%
Njombe	4,215	4.3	18,293	87.4%	4,540	5.2	23,516	94.5%
Pwani	7,327	6.8	49,900	24.6%	7,013	6.9	48,091	49.4%
Rukwa	17,222	9.5	164,434	50.4%	14,060	7.7	108,416	53.7%
Ruvuma	13,020	7.9	102,234	63.0%	16,651	8.2	136,144	69.6%
Shinyanga	76,902	2.1	162,320	61.1%	91,511	2.6	241,237	75.0%
Simiyu	78,176	3.2	252,375	66.1%	66,510	2.9	195,870	68.9%
Singida	41,787	7.8	326,697	37.2%	50,874	6.9	352,135	40.7%
Songwe	19,748	10.7	210,314	40.2%	20,545	12.2	250,102	45.0%
Tabora	72,613	4.3	314,619	69.3%	82,561	5.1	419,615	61.3%
Tanga	12,550	4.3	53,111	51.5%	15,666	3.3	51,871	72.9%
<b>Total</b>	<b>732,674</b>	<b>5.0</b>	<b>3,634,390</b>	<b>53.0%</b>	<b>754,471</b>	<b>4.8</b>	<b>3,637,547</b>	<b>67.8%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from **Table 2.6.1**.

Region	Irish Potatos							
	July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	2,276	4.5	10,280	71.5%	2,155	4.9	10,567	71.9%
Dar es salaam	-	-	-	-	-	-	-	-
Dodoma	1,376	2.3	3,100	-	925	2.2	2,048	52.7%
Geita	21	2.5	53	-	-	-	-	-
Iringa	11,777	19.3	226,924	42.3%	15,122	14.2	215,246	51.0%
Kagera	11,757	7.2	84,154	35.7%	9,792	8.0	78,042	29.1%
Katavi	90	13.8	1,232	25.6%	911	9.0	8,170	11.7%
Kigoma	1,458	4.9	7,169	59.6%	1,542	6.7	10,258	41.3%
Kilimanjaro	5,304	8.5	45,222	75.6%	5,349	5.4	28,943	71.6%
Lindi	-	-	-	-	-	-	-	-
Manyara	953	9.5	9,047	55.9%	1,176	11.1	13,070	46.7%
Mara	1,301	3.4	4,413	52.5%	208	3.9	813	60.6%
Mbeya	21,133	15.9	336,084	77.8%	23,145	14.4	333,809	81.2%
Morogoro	2,678	2.7	7,121	10.0%	1,211	4.4	5,281	12.7%
Mtwara	1	0.6	1	-	20	-	0	-
Mwanza	34	1.3	43	-	-	-	-	-
Njombe	57,326	10.1	577,298	28.4%	51,445	12.6	650,637	29.7%
Pwani	-	-	-	-	-	-	-	-
Rukwa	4,172	7.0	29,411	18.0%	3,195	5.7	18,197	22.2%
Ruvuma	694	3.8	2,649	63.1%	321	7.7	2,469	47.5%
Shinyanga	-	-	-	-	-	-	-	-
Simiyu	1	3.0	3	-	-	-	-	-
Singida	2	10.0	20	-	15	1.5	23	-
Songwe	3,205	8.5	27,317	45.5%	2,540	8.7	22,068	50.1%
Tabora	-	-	-	-	-	-	-	-
Tanga	12,034	8.4	101,268	34.2%	39,285	7.6	299,124	9.9%
<b>Total</b>	<b>137,590</b>	<b>10.7</b>	<b>1,472,807</b>	<b>73.3%</b>	<b>158,356</b>	<b>10.7</b>	<b>1,698,766</b>	<b>59.7%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from **Table 2.6.1**.

Region	Sweet Banana						Cooking Banana					
	July 2017 - June 2018			July 2018 - June 2019			July 2017 - June 2018			July 2018 - June 2019		
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)
Arusha	453	8.5	3,846	1,237	7.7	9,495	5,814	14.4	83,971	4,865	11.9	57,758
Dar es salaam	59	9.5	561	36	10.3	369	101	9.3	939	164	8.3	1,357
Dodoma	-	-	-	49	4.7	232	2,952	25.0	73,761	169	1.4	237
Geita	487	4.5	2,212	439	3.9	1,704	232	3.9	916	307	3.7	1,134
Iringa	1,805	1.4	2,529	7	9.0	59	240	4.7	1,131	999	0.5	531
Kagera	29,867	11.4	340,861	41,630	11.6	484,533	148,226	14.8	2,169,709	187,980	12.9	2,419,430
Katavi	70	11.3	790	13	10.0	125	186	11.7	2,169	128	10.0	1,278
Kigoma	5,921	15.6	86,386	4,051	11.3	35,033	13,460	16.3	216,309	11,916	15.7	187,597
Kilimanjaro	7,781	11.9	92,296	11,582	11.4	132,043	45,605	9.9	452,495	54,574	8.1	444,643
Lindi	169	0.8	134	-	-	-	172	1.5	261	47	0.5	24
Manyara	253	11.3	2,859	270	9.9	2,679	786	12.5	9,859	928	12.9	11,951
Mara	1,734	9.3	16,109	2,073	10.6	22,027	2,246	10.6	23,796	2,852	12.0	34,202
Mbeya	4,057	15.9	66,354	4,157	16.2	67,023	20,865	16.7	347,869	21,763	17.3	377,512
Morogoro	18,041	10.1	182,972	12,123	12.0	136,496	21,827	13.4	292,804	12,469	16.9	197,970
Mtwara	281	2.7	772	592	5.6	3,289	271	2.5	669	730	5.5	4,009
Mwanza	701	11.7	8,166	509	11.8	5,993	790	12.2	9,583	537	11.6	6,218
Njombe	922	4.5	4,104	482	8.1	3,913	122	7.1	859	576	5.4	3,103
Pwani	1,272	7.7	9,805	594	10.2	6,043	1,889	10.4	19,628	2,782	10.2	28,329
Rukwa	490	10.1	4,929	335	12.6	4,211	525	14.4	7,530	184	13.7	2,386
Ruvuma	6,677	9.7	64,944	4,239	9.3	39,583	11,861	3.9	46,331	8,713	4.0	35,258
Shinyanga	-	-	-	-	-	-	-	-	-	-	-	-
Simiyu	-	-	-	-	-	-	-	-	-	-	-	-
Singida	-	-	-	-	-	-	-	-	-	-	-	-
Songwe	5,662	14.0	79,028	5,918	14.0	83,101	3,152	9.1	28,720	2,626	9.4	24,689
Tabora	-	-	-	3	0.6	2				3	0.4	1
Tanga	4,431	7.5	33,258	5,070	4.4	22,193	18,999	7.1	135,788	12,166	7.0	85,381
<b>Total</b>	<b>91,133</b>	<b>11.0</b>	<b>1,002,915</b>	<b>95,406</b>	<b>11.1</b>	<b>1,060,144</b>	<b>300,319</b>	<b>13.1</b>	<b>3,925,095</b>	<b>327,476</b>	<b>12.0</b>	<b>3,924,995</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture



Table 2.7.1 Bean (Maharage): Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by Region by Year

Region	Area/Production QTY/Yield	Year								
		2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Arusha	Area ('000'ha)	20.07	56.17	28.91	43.77	42.20	40.88	35.02	20.02	21.85
	Production ('000'tons)	11.66	31.00	44.79	24.91	19.84	59.22	21.23	16.70	21.85
	Yield (tons/ha)	0.6	0.6	1.0	0.6	0.5	1.4	0.6	0.8	1.0
Dar es Salaam	Area ('000'ha)	-	-	-	0.62	14.03	0.39	-	-	-
	Production ('000'tons)	-	-	-	0.26	10.53	0.31	-	-	-
	Yield (tons/ha)	-	-	-	0.4	0.8	0.8	-	-	-
Dodoma	Area ('000'ha)	15.21	33.99	6.87	94.45	100.34	127.87	6.22	3.63	2.60
	Production ('000'tons)	6.08	25.00	2.85	57.84	71.22	119.33	4.85	4.35	5.38
	Yield (tons/ha)	0.4	0.7	0.3	0.6	0.7	0.9	0.8	1.2	2.1
Geita	Area ('000'ha)	-	-	38.29	43.81	31.60	80.13	48.34	29.68	29.14
	Production ('000'tons)	-	-	66.58	81.91	73.13	58.45	26.97	40.16	32.06
	Yield (tons/ha)	-	-	1.2	1.9	2.3	0.7	0.6	1.4	1.1
Iringa	Area ('000'ha)	27.73	34.62	77.18	23.85	74.60	78.34	112.07	84.64	84.33
	Production ('000'tons)	21.53	27.64	82.92	53.39	91.86	89.68	34.70	39.75	54.38
	Yield (tons/ha)	0.8	0.8	1.1	2.2	1.2	1.1	0.3	0.5	0.6
Kagera	Area ('000'ha)	73.69	184.91	127.95	156.91	110.17	120.77	158.58	107.71	109.28
	Production ('000'tons)	73.69	163.42	75.23	81.61	69.06	137.20	100.59	124.40	78.89
	Yield (tons/ha)	1.0	0.9	1.0	0.5	0.6	1.1	0.6	1.2	0.7
Katavi	Area ('000'ha)	-	-	12.21	0.00	10.25	38.57	5.68	6.10	6.16
	Production ('000'tons)	-	-	9.04	0.00	8.34	38.76	8.26	11.07	10.47
	Yield (tons/ha)	-	-	1.1	0.1	0.8	1.0	1.0	1.8	1.7
Kigoma	Area ('000'ha)	112.60	148.41	138.67	80.69	51.80	78.59	120.22	100.31	105.37
	Production ('000'tons)	110.24	134.53	114.32	97.26	86.39	113.43	101.76	120.37	128.57
	Yield (tons/ha)	1.0	0.9	0.9	1.2	1.7	32.1	0.8	1.2	1.2
Kilimanjaro	Area ('000'ha)	8.91	50.65	61.09	34.41	34.44	46.92	46.68	42.98	41.95
	Production ('000'tons)	44.96	45.02	49.19	57.41	38.13	50.64	35.52	37.99	24.09
	Yield (tons/ha)	5.0	0.9	0.7	1.7	1.1	1.1	0.8	0.9	0.6
Lindi	Area ('000'ha)	-	0.03	-	35.19	55.51	58.17	-	-	-
	Production ('000'tons)	-	0.01	-	33.37	44.22	40.61	-	-	-
	Yield (tons/ha)	-	0.4	-	0.9	0.8	0.7	-	-	-
Manyara	Area ('000'ha)	73.30	105.61	130.66	44.76	59.51	21.83	106.49	110.76	110.89
	Production ('000'tons)	62.33	133.82	46.03	92.07	76.21	24.89	70.08	67.39	77.99
	Yield (tons/ha)	0.9	1.3	0.5	2.1	1.3	1.1	0.7	0.6	0.7
Mara	Area ('000'ha)	29.47	31.58	31.37	19.93	10.87	11.64	18.19	10.85	11.66
	Production ('000'tons)	32.42	31.01	27.40	23.40	42.56	10.29	24.13	14.11	9.33
	Yield (tons/ha)	1.1	1.0	1.0	1.2	3.9	0.9	1.3	1.3	0.8
Mbeya	Area ('000'ha)	44.96	87.48	95.46	34.15	34.12	186.03	38.85	25.74	25.90
	Production ('000'tons)	54.20	68.52	184.55	45.85	41.91	237.72	51.32	33.47	41.45
	Yield (tons/ha)	1.2	0.8	1.3	1.3	1.2	12.0	1.3	1.3	1.6

Morogoro	Area ('000'ha)	28.36	40.42	30.15	38.84	44.45	37.61	73.92	35.23	21.14
	Production ('000'tons)	28.09	37.60	26.16	41.21	41.71	37.44	39.50	53.42	27.48
	Yield (tons/ha)	1.0	0.9	0.7	1.1	0.9	1.0	0.5	1.5	1.3
Mtwara	Area ('000'ha)	0.46	0.66	0.66	70.66	65.26	2.22	0.13	0.13	-
	Production ('000'tons)	0.32	0.58	0.62	63.25	41.81	0.85	0.12	0.12	-
	Yield (tons/ha)	0.7	0.9	0.9	0.9	0.6	0.4	1.0	0.9	-
Mwanza	Area ('000'ha)	0.16	40.37	16.11	19.34	12.16	26.87	20.38	20.33	19.38
	Production ('000'tons)	0.19	51.21	12.64	13.14	10.92	29.64	21.60	24.39	19.38
	Yield (tons/ha)	1.2	1.3	0.6	0.7	0.9	1.1	1.1	1.2	1.0
Njombe	Area ('000'ha)	-	-	41.59	6.05	28.29	36.83	39.05	28.19	27.77
	Production ('000'tons)	-	-	70.68	9.56	64.88	71.93	31.74	33.83	36.10
	Yield (tons/ha)	-	-	1.6	1.6	2.3	2.0	0.8	1.2	1.3
Pwani	Area ('000'ha)	-	-	-	14.40	27.63	4.13	-	-	-
	Production ('000'tons)	-	-	-	10.94	19.58	3.22	-	-	-
	Yield (tons/ha)	-	-	-	0.8	0.7	0.8	-	-	-
Rukwa	Area ('000'ha)	65.15	79.95	94.91	44.55	75.60	112.50	109.73	101.71	106.28
	Production ('000'tons)	60.93	71.99	115.00	65.50	110.25	103.97	142.35	132.62	123.93
	Yield (tons/ha)	0.9	0.9	1.4	1.5	1.5	0.9	1.3	1.3	1.2
Ruvuma	Area ('000'ha)	22.59	36.98	48.61	59.06	34.47	37.83	52.07	37.99	38.51
	Production ('000'tons)	30.58	43.05	45.00	80.22	40.43	43.47	57.57	47.25	65.95
	Yield (tons/ha)	1.4	1.2	0.7	1.4	1.2	1.1	1.1	1.2	1.7
Shinyanga	Area ('000'ha)	41.33	31.71	13.67	12.72	9.27	2.89	13.52	11.81	14.01
	Production ('000'tons)	49.25	38.68	17.52	17.51	15.20	2.63	16.35	13.59	14.01
	Yield (tons/ha)	1.2	1.2	1.2	1.4	1.6	0.9	1.2	1.2	1.0
Simiyu	Area ('000'ha)	-	-	3.67	3.41	2.95	11.77	27.38	12.16	9.69
	Production ('000'tons)	-	-	1.81	1.81	1.57	14.80	14.52	11.62	7.90
	Yield (tons/ha)	-	-	0.4	0.5	0.5	1.3	0.5	1.0	0.8
Singida	Area ('000'ha)	93.11	79.85	13.28	39.31	44.75	-	6.43	6.81	6.39
	Production ('000'tons)	31.48	65.36	10.84	20.62	31.93	-	8.89	5.35	6.39
	Yield (tons/ha)	0.3	0.8	0.6	0.5	0.7	-	1.4	0.8	1.0
Songwe	Area ('000'ha)	-	-	-	-	-	101.24	51.46	52.30	56.27
	Production ('000'tons)	-	-	-	-	-	161.88	68.87	71.45	67.43
	Yield (tons/ha)	-	-	-	-	-	1.6	1.3	1.4	1.2
Tabora	Area ('000'ha)	19.64	23.08	29.14	33.14	33.25	-	18.86	22.53	20.35
	Production ('000'tons)	22.02	21.00	22.12	18.87	27.44	-	15.25	19.76	10.18
	Yield (tons/ha)	1.1	0.9	0.5	0.6	0.8	-	0.8	0.9	0.5
Tanga	Area ('000'ha)	60.93	198.91	110.96	160.37	110.11	18.25	10.55	25.04	24.65
	Production ('000'tons)	35.96	209.83	88.26	122.57	113.30	18.04	21.10	38.16	32.05
	Yield (tons/ha)	0.6	1.1	0.6	0.8	1.0	1.0	2.0	1.5	1.3
<b>National</b>	<b>Area ('000'ha)</b>	<b>737.66</b>	<b>1,265.40</b>	<b>1,151.38</b>	<b>1,227.43</b>	<b>1,124.71</b>	<b>1,181.04</b>	<b>1,119.83</b>	<b>896.65</b>	<b>893.57</b>
	<b>Production ('000'tons)</b>	<b>675.95</b>	<b>1,199.27</b>	<b>1,113.54</b>	<b>1,213.82</b>	<b>1,201.92</b>	<b>1,306.54</b>	<b>1,146.88</b>	<b>1,096.93</b>	<b>1,197.49</b>
	<b>Yield (tons/ha)</b>	<b>0.9</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>1.2</b>	<b>1.3</b>

Source: Ministry of Agriculture

Table 2.7.2 Annual Target and Achievement Rate for Bean (Maharage) Production

Region	July 2016 - June 2017				July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	38,598	1.3	48,585	43.7%	46,129	1.4	64,030	26.1%	38,565	1.4	52,949	41.3%
Dar es salaam	-	-	-	-	-	-	-	-	-	-	-	-
Dodoma	9,943	1.2	12,217	39.7%	10,917	1.2	13,486	32.3%	16,507	1.1	17,763	30.3%
Geita	54,318	1.4	77,267	34.9%	67,659	1.8	120,444	33.3%	71,853	1.7	121,346	26.4%
Iringa	34,721	1.6	54,739	63.4%	45,739	1.4	61,817	64.3%	58,499	1.3	78,020	69.7%
Kagera	144,825	1.0	149,458	67.3%	162,778	1.1	169,325	73.5%	134,672	0.9	123,270	64.0%
Katavi	10,124	1.4	14,439	57.2%	20,873	1.2	25,270	43.8%	16,614	1.3	21,419	48.9%
Kigoma	87,028	1.8	164,654	61.8%	97,870	2.2	209,820	57.4%	95,377	2.1	200,580	64.1%
Kilimanjaro	35,973	1.4	51,255	69.3%	37,517	1.4	54,117	70.2%	31,002	1.2	35,695	67.5%
Lindi	-	-	-	-	894	0.8	724	-	308	0.9	277	-
Manyara	71,298	1.2	82,443	85.0%	93,741	0.9	84,025	80.2%	85,659	1.0	87,928	88.7%
Mara	26,262	1.3	32,878	73.4%	16,999	3.4	58,357	24.2%	20,390	1.9	37,417	24.9%
Mbeya	40,612	1.6	64,929	79.0%	37,885	1.7	66,036	50.7%	40,714	1.9	76,908	53.9%
Morogoro	41,693	1.5	61,433	64.3%	48,218	1.7	81,996	65.1%	30,251	1.5	46,529	59.1%
Mtwara	921	1.0	920	13.3%	1,555	0.7	1,049	11.2%	384	1.2	455	-
Mwanza	29,406	1.3	36,885	58.5%	34,557	1.3	45,511	53.6%	17,704	1.1	19,505	99.4%
Njombe	35,310	1.3	44,705	71.0%	37,352	1.2	46,443	72.8%	42,496	1.1	47,881	75.4%
Pwani	1	1.0	1	-	8	1.5	12	-	126	1.1	136	-
Rukwa	124,635	1.5	189,248	75.2%	115,477	1.5	168,973	78.5%	111,695	1.4	153,756	80.6%
Ruvuma	51,998	1.2	60,855	94.6%	63,826	1.6	99,386	47.5%	50,976	1.4	72,397	91.1%
Shinyanga	16,162	1.3	21,505	76.0%	12,311	1.6	19,600	69.3%	12,069	1.5	18,063	77.6%
Simiyu	17,877	1.0	17,768	81.7%	15,192	0.9	14,350	81.0%	12,707	0.7	8,954	88.2%
Singida	10,882	1.1	12,226	72.7%	10,627	1.8	19,540	27.4%	10,816	0.8	8,371	76.3%
Songwe	56,452	1.6	87,636	78.6%	53,676	2.0	108,926	65.6%	57,605	1.5	84,707	79.6%
Tabora	23,121	1.3	30,812	49.5%	16,959	1.6	27,575	71.6%	14,855	1.3	20,262	50.2%
Tanga	52,596	1.7	90,352	23.4%	64,114	1.5	97,316	39.2%	93,197	1.7	162,451	19.7%
<b>Total</b>	<b>1,014,756</b>	<b>1.4</b>	<b>1,407,209</b>	<b>81.5%</b>	<b>1,112,873</b>	<b>1.5</b>	<b>1,658,128</b>	<b>66.2%</b>	<b>1,065,041</b>	<b>1.4</b>	<b>1,497,036</b>	<b>80.0%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from **Table 2.7.1**.

Table 2.8.1 Other pulses (Cow pea): Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by Region 2017/2018 and 2018/2019

Region	Data	Cow pea		
		Year		
		2016/2017	2017/2018	2018/2019
Arusha	Area (Ha)	-	-	0.61
	Production (Tons)	-	-	0.52
	Yield (Tons/Ha)	-	-	0.9
Dar es Salaam	Area (Ha)	0.55	-	0.37
	Production (Tons)	0.34	-	0.37
	Yield (Tons/Ha)	0.6	-	1.0
Dodoma	Area (Ha)	17.88	8.55	8.97
	Production (Tons)	14.31	10.26	6.66
	Yield (Tons/Ha)	0.8	5.0	0.7
Geita	Area (Ha)	1.36	2.26	4.14
	Production (Tons)	2.76	3.70	3.48
	Yield (Tons/Ha)	2.0	1.6	0.8
Iringa	Area (Ha)	1.42	1.59	1.33
	Production (Tons)	1.45	2.47	2.15
	Yield (Tons/Ha)	1.0	1.6	1.6
Kagera	Area (Ha)	-	0.12	0.16
	Production (Tons)	-	0.07	0.19
	Yield (Tons/Ha)	-	0.6	1.2
Katavi	Area (Ha)	-	6.79	-
	Production (Tons)	-	0.10	-
	Yield (Tons/Ha)	-	0.0	-
Kigoma	Area (Ha)	-	0.17	0.25
	Production (Tons)	-	0.27	0.39
	Yield (Tons/Ha)	-	1.6	1.6
Kilimanjaro	Area (Ha)	0.13	-	0.22
	Production (Tons)	0.12	-	0.26
	Yield (Tons/Ha)	1.0	-	1.2
Lindi	Area (Ha)	-	0.99	1.02
	Production (Tons)	-	0.79	0.90
	Yield (Tons/Ha)	-	0.8	0.9
Manyara	Area (Ha)	0.25	-	3.38
	Production (Tons)	0.30	-	0.41
	Yield (Tons/Ha)	1.2	-	0.1
Mara	Area (Ha)	1.31	-	-
	Production (Tons)	1.63	-	-
	Yield (Tons/Ha)	1.2	-	-
Mbeya	Area (Ha)	-	0.47	1.55
	Production (Tons)	-	0.21	0.83
	Yield (Tons/Ha)	-	0.4	0.5
Morogoro	Area (Ha)	11.26	8.59	8.45
	Production (Tons)	15.36	12.21	10.31
	Yield (Tons/Ha)	1.4	1.4	1.2
Mtwara	Area (Ha)	23.14	20.90	18.44
	Production (Tons)	48.59	18.81	20.35
	Yield (Tons/Ha)	2.1	0.9	1.1
Mwanza	Area (Ha)	6.81	9.75	9.26
	Production (Tons)	4.77	13.37	11.10
	Yield (Tons/Ha)	0.7	1.4	1.2
Njombe	Area (Ha)	3.51	0.08	0.35
	Production (Tons)	2.63	0.12	0.52
	Yield (Tons/Ha)	0.7	1.5	1.5
Pwani	Area (Ha)	12.92	8.49	10.64
	Production (Tons)	9.68	6.42	8.97
	Yield (Tons/Ha)	0.7	0.8	0.8
Rukwa	Area (Ha)	0.01	-	-
	Production (Tons)	0.01	-	-
	Yield (Tons/Ha)	1.0	-	-
Ruvuma	Area (Ha)	6.09	0.41	0.49
	Production (Tons)	3.76	0.81	0.93
	Yield (Tons/Ha)	0.6	2.0	1.9
Shinyanga	Area (Ha)	5.94	5.97	2.49
	Production (Tons)	6.31	8.06	2.39
	Yield (Tons/Ha)	1.1	1.4	1.0
Simiyu	Area (Ha)	22.51	14.03	25.16
	Production (Tons)	7.61	13.40	24.53
	Yield (Tons/Ha)	0.3	1.0	1.0
Singida	Area (Ha)	4.10	3.71	2.00
	Production (Tons)	3.97	2.91	2.00
	Yield (Tons/Ha)	1.0	0.8	1.0
Songwe	Area (Ha)	0.75	0.36	0.11
	Production (Tons)	0.77	0.49	0.17
	Yield (Tons/Ha)	1.0	1.4	1.5
Tabora	Area (Ha)	2.96	9.12	9.99
	Production (Tons)	2.08	8.00	7.27
	Yield (Tons/Ha)	0.7	0.9	0.7
Tanga	Area (Ha)	25.59	5.73	3.29
	Production (Tons)	51.18	8.73	4.60
	Yield (Tons/Ha)	2.0	1.5	1.4
<b>National</b>	<b>Area (ha)</b>	<b>148.48</b>	<b>108.05</b>	<b>112.66</b>
	<b>Production (tons)</b>	<b>177.63</b>	<b>121.77</b>	<b>127.88</b>
	<b>Yield (Tons/Ha)</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>

Source: Ministry of Agriculture

Table 2.8.2 Annual Target and Achievement Rate for Other pulses (Cow pea) Production

Region	July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	919	2.9	2,709	-	925	2.9	2,671	19.4%
Dar es salaam	754	1.1	793	-	754	0.7	514	72.1%
Dodoma	21,703	1.0	22,003	46.6%	17,074	0.8	14,014	47.5%
Geita	2,890	1.4	3,920	94.4%	3,378	1.2	4,115	84.6%
Iringa	5,189	1.2	6,366	38.8%	8,881	1.2	10,959	19.6%
Kagera	123	0.9	108	63.6%	195	1.3	258	74.9%
Katavi	163	1.5	249	38.7%	342	1.4	494	-
Kigoma	2,516	1.2	3,026	9.0%	2,083	1.7	3,557	10.9%
Kilimanjaro	1,384	1.0	1,363	-	1,352	1.3	1,763	14.9%
Lindi	36,766	0.8	29,868	2.7%	27,281	0.9	23,785	3.8%
Manyara	2,324	0.8	1,842	-	8,260	0.4	3,527	11.7%
Mara	2,150	1.7	3,710	-	1,808	1.3	2,392	-
Mbeya	225	2.3	514	40.1%	1,086	1.4	1,536	54.3%
Morogoro	19,374	1.3	26,080	46.8%	16,515	1.2	19,240	53.6%
Mtwara	26,717	1.0	26,721	70.4%	25,555	0.9	22,095	92.1%
Mwanza	20,528	1.0	21,086	63.4%	12,597	0.9	11,158	99.4%
Njombe	5,543	1.0	5,789	2.0%	9,475	0.9	8,530	6.1%
Pwani	18,359	1.1	21,000	30.6%	14,348	1.0	14,410	62.3%
Rukwa	230	1.4	314	-	61	1.3	81	-
Ruvuma	6,156	1.2	7,103	11.4%	4,864	1.1	5,271	17.6%
Shinyanga	15,673	1.2	18,656	43.2%	19,851	0.9	17,134	13.9%
Simiyu	19,750	1.2	23,164	57.9%	25,548	1.0	26,718	91.8%
Singida	5,993	1.4	8,247	35.3%	8,405	0.8	6,474	30.8%
Songwe	1,064	1.0	1,069	45.7%	567	0.8	456	37.5%
Tabora	16,739	1.1	18,146	44.1%	11,338	1.0	11,489	63.2%
Tanga	34,048	0.8	28,136	31.0%	25,959	0.8	20,903	22.0%
<b>Total</b>	<b>267,279</b>	<b>1.1</b>	<b>281,981</b>	<b>43.2%</b>	<b>248,501</b>	<b>0.9</b>	<b>233,544</b>	<b>54.8%</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from **Table 2.8.1**.

Table 2.9.1 Sunflower: Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by Region by Year

Region	Area/Production QTY/Yield	Year								
		2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Arusha	Area ('000'ha)	9.13	13.05	14.58	15.40	16.00	16.24	-	-	5.61
	Production ('000'tons)	5.42	7.74	25.91	27.19	28.41	29.57	-	-	4.16
	Yield (tons/ha)	0.6	0.6	1.8	1.8	1.8	1.8	-	-	0.7
Dar es Salaam	Area ('000'ha)	-	-	-	-	-	-	-	-	-
	Production ('000'tons)	-	-	-	-	-	-	-	-	-
	Yield (tons/ha)	-	-	-	-	-	-	-	-	-
Dodoma	Area ('000'ha)	122.19	174.69	293.44	310.04	321.92	326.89	-	-	49.69
	Production ('000'tons)	110.53	158.02	421.93	442.83	462.68	481.52	-	-	36.15
	Yield (tons/ha)	-	-	-	1.4	1.4	1.5	-	-	0.7
Geita	Area ('000'ha)	-	-	0.87	0.92	0.96	0.97	33.19	2.15	7.51
	Production ('000'tons)	-	-	1.28	1.34	1.40	1.46	7.71	2.26	9.31
	Yield (tons/ha)	-	-	-	1.5	1.5	1.5	0.2	1.1	1.2
Iringa	Area ('000'ha)	148.87	212.83	140.75	148.71	154.41	156.79	49.73	32.98	14.07
	Production ('000'tons)	204.48	292.33	222.37	233.38	243.84	253.77	20.56	27.91	10.11
	Yield (tons/ha)	-	-	-	1.6	1.6	1.6	0.4	0.8	0.7
Kagera	Area ('000'ha)	0.09	0.13	-	-	-	-	-	-	1.52
	Production ('000'tons)	0.04	0.05	-	-	-	-	-	-	0.35
	Yield (tons/ha)	-	-	-	-	-	-	-	-	0.2
Katavi	Area ('000'ha)	-	-	8.34	8.82	9.15	9.29	-	2.18	1.80
	Production ('000'tons)	-	-	17.29	18.15	18.96	19.73	-	0.65	1.62
	Yield (tons/ha)	-	-	-	2.1	2.1	2.1	-	0.3	0.9
Kigoma	Area ('000'ha)	-	-	9.20	9.72	10.09	10.25	-	-	3.23
	Production ('000'tons)	-	-	19.41	20.37	21.28	22.15	-	-	2.08
	Yield (tons/ha)	-	-	-	2.1	2.1	2.2	-	-	0.6
Kilimanjaro	Area ('000'ha)	4.89	6.98	16.59	17.53	18.20	18.48	-	1.35	5.17
	Production ('000'tons)	3.99	5.70	23.86	25.04	26.16	27.23	-	0.89	5.10
	Yield (tons/ha)	-	-	-	1.4	1.4	1.5	-	0.7	1.0
Lindi	Area ('000'ha)	-	-	33.69	35.60	36.96	37.53	-	3.00	3.95
	Production ('000'tons)	-	-	13.83	14.51	15.17	15.78	-	4.18	3.52
	Yield (tons/ha)	-	-	-	0.4	0.4	0.4	-	1.4	0.9
Manyara	Area ('000'ha)	66.79	95.48	105.07	111.02	115.27	117.05	-	55.59	28.08
	Production ('000'tons)	68.16	97.45	163.22	171.31	178.99	186.28	-	60.76	21.85
	Yield (tons/ha)	-	-	-	1.5	1.6	1.6	-	1.1	0.8
Mara	Area ('000'ha)	1.36	1.94	2.53	2.68	2.78	2.82	3.47	-	2.08
	Production ('000'tons)	1.71	2.45	7.63	8.01	8.37	8.71	3.16	-	2.49
	Yield (tons/ha)	-	-	-	3.0	3.0	3.1	0.9	-	1.2
Mbeya	Area ('000'ha)	32.23	46.08	61.16	64.62	67.09	68.13	38.23	49.73	22.82
	Production ('000'tons)	30.95	44.25	129.77	136.20	142.30	148.10	12.59	25.83	18.33
	Yield (tons/ha)	-	-	-	2.1	2.1	2.2	0.3	0.5	0.8
Morogoro	Area ('000'ha)	27.76	39.69	44.10	46.60	48.38	49.13	-	-	12.89
	Production ('000'tons)	33.18	47.43	44.66	46.87	48.97	50.75	-	-	20.98
	Yield (tons/ha)	-	-	-	1.0	1.0	1.0	-	-	1.6
Mtwara	Area ('000'ha)	-	-	5.29	5.59	5.81	5.90	22.52	31.97	5.97
	Production ('000'tons)	-	-	8.36	8.77	9.16	9.54	0.34	1.36	1.07
	Yield (tons/ha)	-	-	-	1.6	1.6	1.6	0.0	0.0	0.2
Mwanza	Area ('000'ha)	0.85	1.21	16.93	17.89	18.57	18.86	-	-	2.43
	Production ('000'tons)	1.58	2.26	22.01	23.10	24.13	25.11	-	-	2.23
	Yield (tons/ha)	-	-	-	1.3	1.3	1.3	-	-	0.9
Njombe	Area ('000'ha)	-	-	385.59	407.40	423.02	429.54	66.88	24.97	18.31
	Production ('000'tons)	-	-	692.88	727.19	759.79	790.73	5.60	12.03	18.69
	Yield (tons/ha)	-	-	-	1.8	1.8	1.8	0.1	0.5	1.0
Pwani	Area ('000'ha)	3.65	5.22	3.16	3.34	3.47	3.52	-	-	-
	Production ('000'tons)	8.34	11.92	10.30	10.81	11.29	11.75	0.15	0.74	1.18
	Yield (tons/ha)	-	-	-	3.2	3.3	3.3	0.1	0.6	1.1
Rukwa	Area ('000'ha)	71.64	102.42	198.18	209.39	217.42	220.77	-	58.12	47.64
	Production ('000'tons)	94.00	134.38	345.65	362.77	379.04	394.47	-	76.95	52.16
	Yield (tons/ha)	-	-	-	1.7	1.7	1.8	-	1.3	1.1
Ruvuma	Area ('000'ha)	4.61	6.59	12.08	12.76	13.25	13.46	42.50	43.33	10.75
	Production ('000'tons)	4.00	5.72	14.93	15.67	16.37	17.03	8.55	10.49	9.55
	Yield (tons/ha)	-	-	-	1.2	1.2	1.3	0.2	0.2	0.9
Shinyanga	Area ('000'ha)	26.32	37.63	25.19	26.61	27.63	28.06	10.36	11.83	16.13
	Production ('000'tons)	20.28	29.00	33.45	35.11	36.68	38.18	4.61	12.44	15.28
	Yield (tons/ha)	-	-	-	1.3	1.3	1.4	0.4	1.1	0.9
Simiyu	Area ('000'ha)	-	-	25.08	26.50	27.52	27.94	72.11	23.75	42.97
	Production ('000'tons)	-	-	24.07	25.27	26.40	27.47	31.57	36.41	38.97
	Yield (tons/ha)	-	-	-	1.0	1.0	1.0	0.4	1.5	0.9
Singida	Area ('000'ha)	194.82	278.52	152.35	160.97	167.14	169.71	116.33	97.22	218.89
	Production ('000'tons)	158.66	226.83	284.24	298.32	311.69	324.38	93.12	97.76	55.12
	Yield (tons/ha)	-	-	-	1.9	1.9	1.9	0.8	1.0	0.3
Songwe	Area ('000'ha)	-	-	-	-	-	-	34.87	44.25	19.66
	Production ('000'tons)	-	-	-	-	-	-	19.99	33.42	21.11
	Yield (tons/ha)	-	-	-	-	-	-	0.6	0.8	1.1
Tabora	Area ('000'ha)	26.74	38.23	55.09	58.21	60.44	61.37	-	-	14.41
	Production ('000'tons)	38.64	55.25	75.20	78.92	82.46	85.82	-	-	14.22
	Yield (tons/ha)	-	-	-	1.4	1.4	1.4	-	-	1.0
Tanga	Area ('000'ha)	11.83	16.91	1.46	21.58	22.41	22.75	1.96	2.29	0.86
	Production ('000'tons)	2.94	4.20	20.42	23.88	24.95	25.97	1.60	1.95	0.68
	Yield (tons/ha)	-	0.2	14.0	1.1	1.1	1.1	0.8	0.9	0.8
<b>National</b>	<b>Area ('000'ha)</b>	<b>753.76</b>	<b>1,077.62</b>	<b>1,629.70</b>	<b>1,721.88</b>	<b>1,787.89</b>	<b>1,815.45</b>	<b>462.29</b>	<b>487.77</b>	<b>557.62</b>
	<b>Production ('000'tons)</b>	<b>786.90</b>	<b>1,125.00</b>	<b>2,625.00</b>	<b>2,755.00</b>	<b>2,878.50</b>	<b>2,995.50</b>	<b>352.90</b>	<b>543.26</b>	<b>561.30</b>
	<b>Yield (tons/ha)</b>	<b>1.0</b>	<b>1.0</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.7</b>	<b>0.8</b>	<b>1.1</b>	<b>1.0</b>

Source: Ministry of Agriculture

Table 2.9.2 Annual Target and Achievement Rate for Sunflower Production

Region	July 2016 - June 2017				July 2017 - June 2018				July 2018 - June 2019			
	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*	Planted Area(ha)	Yield (ton/ha)	Expected Production Quantity (ton)	Achievement Rate*
Arusha	7,105	0.8	6,003	-	3,680	1.0	3,649	-	3,858	1.1	4,178	99.6%
Dar es salaam	-	-	-	-	-	-	-	-	-	-	-	-
Dodoma	144,089	1.3	188,940	-	252,484	1.3	321,559	-	188,653	1.0	193,747	18.7%
Geita	14,471	1.0	14,882	51.8%	8,472	1.1	9,066	24.9%	8,191	1.4	11,505	80.9%
Iringa	29,844	1.4	41,366	49.7%	43,327	1.3	55,448	50.3%	35,773	1.2	42,254	23.9%
Kagera	4,560	0.7	3,373	-	3,089	0.8	2,470	-	2,305	0.6	1,478	23.4%
Katavi	2,457	1.1	2,715	-	2,058	0.5	1,101	59.2%	4,391	0.8	3,602	44.9%
Kigoma	4,833	1.9	9,872	-	2,822	1.4	3,967	-	3,693	1.3	4,861	42.7%
Kilimanjaro	6,697	1.3	8,820	-	6,325	1.2	7,512	11.8%	6,949	1.2	8,339	61.2%
Lindi	10,401	0.9	8,848	-	12,873	0.8	10,369	40.3%	8,964	1.0	9,070	38.8%
Manyara	88,843	1.2	103,447	-	89,755	1.2	111,909	54.3%	87,421	1.4	122,395	17.8%
Mara	14,199	1.3	18,871	16.8%	8,866	1.6	14,348	-	7,257	1.6	11,220	22.2%
Mbeya	16,268	1.5	24,043	52.4%	19,607	1.6	30,532	84.6%	14,906	1.7	23,149	79.2%
Morogoro	51,409	1.3	66,076	-	27,698	2.0	54,952	-	22,721	1.3	29,192	71.9%
Mtwara	1,039	1.2	1,202	28.2%	3,373	1.1	3,551	38.4%	4,319	0.9	4,045	26.4%
Mwanza	14,841	1.2	18,545	-	14,363	1.2	16,401	-	10,774	1.2	12,663	17.6%
Njombe	16,487	1.1	17,678	31.7%	15,572	1.0	16,276	73.9%	19,634	1.0	19,660	95.1%
Pwani	1,257	1.0	1,236	12.4%	3,243	1.0	3,221	23.1%	1,486	1.0	1,451	81.0%
Rukwa	70,338	1.3	93,818	-	58,375	1.3	77,323	99.5%	54,798	1.2	64,668	80.7%
Ruvuma	12,844	1.2	15,370	55.6%	12,251	1.3	16,449	63.8%	11,673	2.0	23,805	40.1%
Shinyanga	28,552	1.0	28,646	16.1%	27,765	1.0	27,132	45.8%	30,866	1.1	33,432	45.7%
Simiyu	49,546	1.7	84,953	37.2%	46,716	1.5	70,005	52.0%	73,463	1.7	125,648	31.0%
Singida	139,029	1.4	200,802	46.4%	170,961	1.3	223,570	43.7%	137,649	1.2	168,575	32.7%
Songwe	23,610	1.1	25,744	77.7%	37,396	1.6	61,323	54.5%	36,728	1.1	40,401	52.2%
Tabora	31,022	1.5	45,965	-	36,031	2.1	75,427	-	33,064	2.0	66,373	21.4%
Tanga	18,516	1.4	26,276	6.1%	18,493	1.4	28,667	6.8%	15,093	1.3	20,210	3.4%
<b>Total</b>	<b>802,257</b>	<b>1.3</b>	<b>1,057,487</b>	<b>33.4%</b>	<b>925,592</b>	<b>1.3</b>	<b>1,246,226</b>	<b>43.6%</b>	<b>824,628</b>	<b>1.3</b>	<b>1,045,922</b>	<b>53.7%</b>

Source: Agriculture Routine Data System (ARDS)

Note \*: It shows the percentage of actual production's achievement against annual target. The figures of actual production quantity are taken from [Table 2.9.1](#).

### 3: EXTENSION SERVICE

Table 3.1 Number of Extensions Officers, Crops, in Tanzania mainland

Period		Number of Extensions Officers, Crops							
		July 2016 - June 2017							
Area of specialization		Agro mechanization	Crop production	Horticulture	Irrigation	Land use	Nutrition	Agro veterinary	Cooperative
Available District HQ	Male	75	590	63	140	58	43	8	235
	Female	6	153	45	17	6	62	2	66
Available Wards	Male	84	1,687	34	71	22	12	21	2
	Female	9	541	25	7	3	20	6	1
Available Villages	Male	33	1,274	13	20	9	4	7	0
	Female	7	757	13	10	12	14	1	0
<b>Total</b>		<b>214</b>	<b>5,004</b>	<b>193</b>	<b>265</b>	<b>110</b>	<b>155</b>	<b>45</b>	<b>304</b>

Period		July 2017 - June 2018							
		Agro mechanization	Crop production	Horticulture	Irrigation	Land use	Nutrition	Agro veterinary	Cooperative
Area of specialization		Agro mechanization	Crop production	Horticulture	Irrigation	Land use	Nutrition	Agro veterinary	Cooperative
Available District HQ	Male	59	494	51	130	40	34	4	192
	Female	1	135	52	8	3	49	1	51
Available Wards	Male	78	1,850	32	80	33	16	9	8
	Female	8	623	37	7	7	26	2	0
Available Villages	Male	40	1,267	20	29	11	5	9	0
	Female	2	665	11	6	1	18	1	0
<b>Total</b>		<b>188</b>	<b>5,034</b>	<b>203</b>	<b>254</b>	<b>95</b>	<b>148</b>	<b>26</b>	<b>251</b>

Period		July 2018 - June 2019							
		Agro mechanization	Crop production	Horticulture	Irrigation	Land use	Nutrition	Agro veterinary	Cooperative
Area of specialization		Agro mechanization	Crop production	Horticulture	Irrigation	Land use	Nutrition	Agro veterinary	Cooperative
Available District HQ	Male	39	365	42	88	31	15	7	184
	Female	2	97	38	9	2	37	1	53
Available Wards	Male	87	1,944	48	92	29	21	8	7
	Female	12	614	41	12	2	31	3	0
Available Villages	Male	23	1,194	11	37	15	7	6	0
	Female	2	686	19	9	5	15	3	0
<b>Total</b>		<b>165</b>	<b>4,900</b>	<b>199</b>	<b>247</b>	<b>84</b>	<b>126</b>	<b>28</b>	<b>244</b>

Note: Number of extension officers is aggregated in each specialization as reported by LGAs (Local Government Authorities).

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture



Table 3.2 Number of Extensions Officers, Crop Sub Sector, in July 2018 - June 2019

Region	District HQ		Wards		Villages		Total
	Male	Female	Male	Female	Male	Female	
Arusha	6	8	41	23	34	17	129
Dar es salaam	1	5	16	18	0	0	40
Dodoma	12	5	84	12	71	31	215
Geita	4	0	22	6	0	0	32
Iringa	27	6	99	18	61	21	232
Kagera	8	4	47	22	14	26	121
Katavi	8	0	14	6	1	2	31
Kigoma	18	1	58	20	20	7	124
Kilimanjaro	12	5	53	29	67	48	214
Lindi	5	2	53	10	44	19	133
Manyara	15	2	76	37	25	15	170
Mara	17	3	128	25	63	16	252
Mbeya	11	1	105	33	104	58	312
Morogoro	19	12	133	58	105	134	461
Mtwara	17	5	81	54	13	11	181
Mwanza	26	3	133	48	52	18	280
Njombe	17	3	66	15	82	30	213
Pwani	19	7	61	31	81	59	258
Rukwa	17	1	95	7	47	8	175
Ruvuma	11	0	84	13	56	20	184
Shinyanga	15	1	72	7	50	22	167
Simiyu	8	3	67	6	16	5	105
Singida	15	6	61	31	9	11	133
Songwe	10	2	45	10	39	22	128
Tabora	19	2	107	40	51	26	245
Tanga	28	10	143	35	89	60	365
<b>Total</b>	<b>365</b>	<b>97</b>	<b>1,944</b>	<b>614</b>	<b>1,194</b>	<b>686</b>	<b>4,900</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Table 3.3 Working Facilities and Equipment for Agricultural Extension Service, Number of Motorcycle Available, by Region

Region	July 2016 - June 2017			July 2017 - June 2018			July 2018 - June 2019		
	District HQ	Wards	Villages	District HQ	Wards	Villages	District HQ	Wards	Villages
Arusha	25	42	3	15	36	3	7	50	-
Dar es salaam	1	13	0	4	9	0	1	13	-
Dodoma	9	22	-	26	62	-	18	43	-
Geita	30	33	14	35	46	1	19	38	-
Iringa	10	12	-	22	15	-	7	25	-
Kagera	53	93	5	41	102	-	19	60	8
Katavi	11	16	1	11	13	1	13	19	4
Kigoma	32	29	1	32	38	-	40	86	53
Kilimanjaro	39	61	13	38	58	15	24	62	-
Lindi	33	56	-	31	57	-	32	32	4
Manyara	34	82	16	28	67	18	34	55	11
Mara	27	46	5	34	57	6	27	54	2
Mbeya	31	25	-	25	36	6	19	47	110
Morogoro	20	68	10	120	50	9	30	96	51
Mtwara	52	83	44	37	83	27	14	39	4
Mwanza	45	77	-	65	86	-	36	79	10
Njombe	12	37	8	11	32	3	22	35	2
Pwani	30	77	11	36	62	34	35	78	11
Rukwa	11	43	-	14	38	1	12	27	3
Ruvuma	55	79	1	55	77	3	66	55	0
Shinyanga	32	61	1	18	54	6	15	66	5
Simiyu	42	95	17	25	99	20	14	105	22
Singida	7	27	1	7	47	-	12	49	7
Songwe	10	26	2	11	26	2	10	28	2
Tabora	26	28	1	21	26	2	12	20	2
Tanga	59	93	3	50	106	4	54	80	5
<b>Total</b>	<b>736</b>	<b>1,324</b>	<b>157</b>	<b>812</b>	<b>1,382</b>	<b>161</b>	<b>592</b>	<b>1,341</b>	<b>316</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

**Table 3.4 Ward Agricultural Resource Centre by Region**

Region	Number of Centres		
	July 2016 - June 2017	July 2017 - June 2018	July 2018 - June 2019
Arusha	5	9	3
Dar es salaam	4	4	5
Dodoma	6	6	8
Geita	5	3	2
Iringa	10	7	-
Kagera	22	12	10
Katavi	2	2	2
Kigoma	2	1	3
Kilimanjaro	29	29	20
Lindi	12	17	12
Manyara	20	18	24
Mara	3	3	3
Mbeya	9	9	11
Morogoro	8	10	3
Mtwara	10	3	2
Mwanza	12	9	10
Njombe	9	14	15
Pwani	3	4	4
Rukwa	7	9	7
Ruvuma	10	12	13
Shinyanga	2	2	4
Simiyu	5	5	5
Singida	15	11	11
Songwe	3	0	0
Tabora	1	4	4
Tanga	9	9	9

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

Table 3.5 Number of Farmers Field Schools (Crop) and Farmers Completed

Region	Number of Farmers Field School			Number of Farmers Completed								
				Male			Female			Total		
	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
Arusha	909	551	280	6,596	7,125	2,423	7,806	7,174	2,100	14,402	14,299	4,523
Dar es salaam	4	8	26	29	57	191	9	77	230	38	134	421
Dodoma	342	896	422	3,723	4,897	5,124	3,635	3,521	4,891	7,358	8,418	10,015
Geita	538	155	106	3,705	759	2,288	2,241	544	740	5,946	1,303	3,028
Iringa	344	1,227	918	3,528	5,528	6,308	4,715	5,326	8,934	8,243	10,854	15,242
Kagera	971	353	817	6,657	3,561	6,636	6,852	3,122	7,475	13,509	6,683	14,111
Katavi	216	208	250	822	6,315	2,644	643	6,242	1,374	1,465	12,557	4,018
Kigoma	184	509	858	2,041	4,628	5,197	2,228	7,110	5,997	4,269	11,738	11,194
Kilimanjaro	605	559	571	13,200	6,883	4,692	15,080	6,749	4,007	28,280	13,632	8,699
Lindi	100	145	111	1,184	1,828	787	936	1,689	1,151	2,120	3,517	1,938
Manyara	586	393	294	5,638	4,487	7,918	5,698	6,866	5,658	11,336	11,353	13,576
Mara	872	662	457	7,165	5,485	3,263	7,293	5,147	2,917	14,458	10,632	6,180
Mbeya	362	642	431	10,207	4,997	6,174	9,699	5,293	4,091	19,906	10,290	10,265
Morogoro	959	728	857	5,893	5,176	4,604	14,658	5,054	4,637	20,551	10,230	9,241
Mtwara	191	345	276	2,513	3,035	3,555	2,991	3,269	3,035	5,504	6,304	6,590
Mwanza	769	698	427	7,574	3,900	6,065	5,485	3,193	4,934	13,059	7,093	10,999
Njombe	299	290	381	2,816	3,497	3,254	0	4,411	4,012	2,816	7,908	7,266
Pwani	479	481	507	5,961	3,887	4,793	4,623	3,675	4,226	10,584	7,562	9,019
Rukwa	175	221	224	2,063	1,971	2,176	1,153	1,330	1,349	3,216	3,301	3,525
Ruvuma	428	405	435	7,735	4,970	10,629	6,533	3,946	8,699	14,268	8,916	19,328
Shinyanga	364	745	613	5,806	6,780	7,842	3,532	5,025	5,548	9,338	11,805	13,390
Simiyu	876	1,032	859	5,068	24,699	38,320	3,574	15,990	42,430	8,642	40,689	80,750
Singida	375	472	698	2,339	7,010	9,269	2,727	3,596	7,532	5,066	10,606	16,801
Songwe	624	544	398	16,464	15,547	11,295	14,191	7,426	6,071	30,655	22,973	17,366
Tabora	359	276	419	1,826	2,398	5,018	894	1,263	2,575	2,720	3,661	7,593
Tanga	543	755	745	3,873	8,115	12,934	3,729	7,915	10,410	7,602	16,030	23,344
<b>Total</b>	<b>12,474</b>	<b>13,300</b>	<b>12,380</b>	<b>134,426</b>	<b>147,535</b>	<b>173,399</b>	<b>130,925</b>	<b>124,953</b>	<b>155,023</b>	<b>265,351</b>	<b>272,488</b>	<b>328,422</b>

Source: Agriculture Routine Data System (ARDS), Ministry of Agriculture

#### 4: MECHANIZATION

Table 4.1 Number of Tractor by Region

Region [Tractor]	2015 <sup>*</sup>	July 2016 - June 2017 <sup>**</sup>					July 2017 - June 2018 <sup>**</sup>					July 2018 - June 2019 <sup>**</sup>				
	Working & Not working	Working		Not working		Working & Not working	Working		Not working		Working & Not working	Working		Not working		Working & Not working
		Individual	Group	Individual	Group		Individual	Group	Individual	Group		Individual	Group			
Arusha	1,454	1,148	176	135	39	1,498	1,776	98	280	37	2,191	1,614	51	225	27	1,917
Dar es salaam	41	9	3	4	1	17	13	3	4	2	22	15	3	2	2	22
Dodoma	1,142	782	22	83	3	890	695	30	65	16	806	743	17	62	6	828
Geita	88	105	8	14	3	130	123	7	10	1	141	113		8		121
Iringa	564	480	79	52	12	623	479	40	65	17	601	541	73	100	18	732
Kagera	83	25	12	4	5	46	29	8	11	2	50	51	7	11	9	78
Katavi	42	67	20	10	6	103	80	13	7	9	109	49	5	7	1	62
Kigoma	67	26	15	5	7	53	27	14	4	5	50	35	8	8	7	58
Kilimanjaro	642	528	31	74	15	648	583	59	61	21	724	482	41	57	23	603
Lindi	158	110	32	4	17	163	106	43	6	18	173	137	46	9	15	207
Manyara	1,425	2,155	14	319	9	2,497	2,829	28	228	11	3,096	2,857	13	200	8	3,078
Mara	193	137	13	30	2	182	172	14	26	4	216	184	18	34	2	238
Mbeya	566	396	69	86	28	579	350	64	67	21	502	337	78	69	19	503
Morogoro	1,081	1,044	82	243	19	1,388	1,281	83	254	16	1,634	1,437	91	260	34	1,822
Mtwara	129	87	32	12	15	146	127	30	9	10	176	176	26	16	13	231
Mwanza	281	213	27	40	6	286	230	25	38	7	300	238	30	32	8	308
Njombe	247	219	60	23	11	313	219	63	20	5	307	230	66	14	11	321
Pwani	241	269	33	54	22	378	274	46	48	18	386	304	32	50	30	416
Rukwa	78	88	8	12	2	110	89	5	12	2	108	107	6	22	2	137
Ruvuma	289	215	22	34	3	274	237	18	51	8	314	176	10	29	2	217
Shinyanga	253	334	12	52	2	400	265	12	51	1	329	316	15	41	9	381
Simiyu	563	662	48	74	15	799	798	37	53	10	898	907	56	79	11	1,053
Singida	208	157	36	12	5	210	205	28	22	8	263	243	36	12	6	297
Songwe	-	99	3	16		118	105	6	12	3	126	145	6	7	3	161
Tabora	246	93	9	14	23	139	63	3	12	19	97	141	6	23	9	179
Tanga	400	265	111	54	38	468	379	109	64	29	581	519	150	68	33	770
<b>sub-total</b>		<b>9,713</b>	<b>977</b>	<b>1,460</b>	<b>308</b>		<b>11,534</b>	<b>886</b>	<b>1,480</b>	<b>300</b>		<b>12,097</b>	<b>890</b>	<b>1,445</b>	<b>308</b>	
<b>Total</b>	<b>10,481</b>	<b>12,458</b>					<b>14,200</b>					<b>14,740</b>				

Source: \* Department of Mechanization and Implements, Ministry of Agriculture

Source: \*\* Agriculture Routine Data System (ARDS), Ministry of Agriculture

**Table 4.2 Number of Power tiller by Region**

Region [Power tiller]	2015*	July 2016 - June 2017**					July 2017 - June 2018**					July 2018 - June 2019**				
	Working & Not working	Working		Not working		Working & Not working	Working		Not working		Working & Not working	Working		Not working		Working & Not working
		Individual	Group	Individual	Group		Individual	Group	Individual	Group		Individual	Group	Individual	Group	
Arusha	99	98	23	9	7	137	62	22	12	9	105	70	36	8	9	123
Dar es salaam	16	1	5	0	6	12	2	3	0	7	12	2	3	0	7	12
Dodoma	357	327	20	17	2	366	372	23	21	3	419	259	8	24		291
Geita	108	70	26	5	4	105	130	8	3	2	143	71	6	2	1	80
Iringa	474	523	133	68	50	774	592	80	43	25	740	920	62	85	33	1,100
Kagera	80	90	18	1	23	132	11	10	7	14	42	7	18	7	17	49
Katavi	53	44	13	12	8	77	50	12	10	10	82	41	3	5	5	54
Kigoma	193	42	41	9	43	135	51	19	25	16	111	73	23	10	4	110
Kilimanjaro	184	101	34	11	3	149	118	23	10	16	167	112	14	12	9	147
Lindi	406	51	28	9	50	138	59	17	9	43	128	60	13	9	23	105
Manyara	224	222	18	27	11	278	232	19	29	7	287	205	13	22	8	248
Mara	63	19	22	5	10	56	36	19	4	11	70	29	14	3	19	65
Mbeya	1,976	2,402	77	249	19	2,747	2,943	121	362	17	3,443	2,941	131	297	34	3,403
Morogoro	524	403	81	89	36	609	465	59	96	39	659	563	43	109	41	756
Mtwara	238	37	17	11	31	96	23	15	7	13	58	24	11	9	18	62
Mwanza	211	81	82	5	25	193	115	72	12	30	229	156	48	20	31	255
Njombe	122	160	62	11	27	260	167	58	24	29	278	158	53	24	20	255
Pwani	138	46	27	12	38	123	40	19	12	32	103	346	23	7	38	414
Rukwa	123	99	3	24	3	129	79	5	20	2	106	115	8	30	3	156
Ruvuma	472	318	31	78	21	448	315	32	63	10	420	104	9	23	10	146
Shinyanga	173	72	27	17	12	128	62	17	17	11	107	56	12	17	11	96
Simiyu	264	121	103	25	16	265	149	80	20	22	271	212	54	18	11	295
Singida	197	68	36	6	19	129	94	48	6	24	172	92	38	6	14	150
Songwe	-	73	33	6	11	123	81	34	8	8	131	82	34	9	12	137
Tabora	288	87	47	26	28	188	87	36	23	13	159	144	31	20	15	210
Tanga	291	59	115	4	37	215	84	86	19	40	229	104	70	20	53	247
<b>sub-total</b>		<b>5,614</b>	<b>1,122</b>	<b>736</b>	<b>540</b>		<b>6,419</b>	<b>937</b>	<b>862</b>	<b>453</b>		<b>6,946</b>	<b>778</b>	<b>796</b>	<b>446</b>	
<b>Total</b>	<b>7,274</b>					<b>8,012</b>					<b>8,671</b>					<b>8,966</b>

Source: \* Department of Mechanization and Implements, Ministry of Agriculture

Source: \*\* Agriculture Routine Data System (ARDS), Ministry of Agriculture

**Table 4.3 Number and Percentage of Households by Ownership of Power tiller, Plough and Hand hoe by Region, Mainland in 2012**

Region	Total Number of Household	Households Engaged in Agriculture		Households by Ownership of Assets					
		Total Number	Percentage (%)	Power tiller		Plough		Hand hoe	
				(Number)*	(%)	(Number)*	(%)	(Number)*	(%)
Arusha	376,336	174,095	46.3	4,140	1.1	44,031	11.7	217,146	57.7
Dar es Salaam	1,083,381	75,948	7.0	3,250	0.3	2,167	0.2	219,926	20.3
Dodoma	450,305	376,924	83.7	4,503	1.0	65,294	14.5	389,064	86.4
Geita	283,584	224,402	79.1	1,985	0.7	29,493	10.4	225,449	79.5
Iringa	220,776	180,065	81.6	1,987	0.9	18,987	8.6	188,763	85.5
Kagera	521,028	403,107	77.4	2,084	0.4	3,126	0.6	451,210	86.6
Katavi	100,350	84,721	84.4	702	0.7	15,053	15.0	86,000	85.7
Kigoma	370,374	243,651	65.8	1,852	0.5	1,481	0.4	315,188	85.1
Kilimanjaro	381,526	247,080	64.8	3,815	1.0	5,723	1.5	305,984	80.2
Lindi	224,316	180,877	80.6	1,122	0.5	224	0.1	191,117	85.2
Manyara	271,050	201,604	74.4	3,253	1.2	59,089	21.8	224,700	82.9
Mara	308,483	239,683	77.7	3,393	1.1	69,100	22.4	250,488	81.2
Mbeya	630,593	439,851	69.8	5,675	0.9	63,690	10.1	508,889	80.7
Morogoro	501,794	375,838	74.9	3,513	0.7	10,538	2.1	405,951	80.9
Mtwara	342,165	257,833	75.4	2,053	0.6	342	0.1	290,156	84.8
Mwanza	481,107	294,937	61.3	2,887	0.6	45,705	9.5	342,067	71.1
Njombe	168,982	145,437	86.1	1,183	0.7	16,222	9.6	150,901	89.3
Pwani	254,810	162,626	63.8	1,529	0.6	764	0.3	191,617	75.2
Rukwa	198,011	162,681	82.2	990	0.5	56,037	28.3	171,082	86.4
Ruvuma	300,005	238,055	79.4	1,800	0.6	300	0.1	258,004	86.0
Shinyanga	258,981	203,173	78.5	2,072	0.8	64,745	25.0	206,926	79.9
Simiyu	227,862	199,592	87.6	2,051	0.9	84,765	37.2	201,658	88.5
Singida	255,613	219,948	86.0	1,789	0.7	74,639	29.2	223,917	87.6
Tabora	379,770	309,694	81.5	2,658	0.7	96,082	25.3	323,184	85.1
Tanga	435,583	320,269	73.5	3,049	0.7	2,178	0.5	355,436	81.6
<b>Total</b>	<b>9,026,785</b>	<b>5,962,091</b>	<b>66.0</b>	<b>63,187</b>	<b>0.7</b>	<b>830,464</b>	<b>9.2</b>	<b>6,761,062</b>	<b>74.9</b>

Source: Population and Housing Census 2012, National Bureau of Statistics

Note\*: Calculated by Ministry of Agriculture

## 5: COOPERATIVES

Table 5.1 Status of SACCOS in Tanzania 2016/17 – 2018/19

Year	Month	Total Number of SACCOS	Total Number of Members	Total Amount of Loans (Tshs Million)
2016	June	4,564	733,876	854,345
	December	5,640	977,937	1,071,054
2017	June	5,737	1,357,429	470,415
	December	5,918	1,398,853	473,108
2018	June	5,973	1,407,069	814,420
	December	6,551	1,590,716	1,299,662
2019	December	6,178	1,882,525	1,500,943

Source: Tanzania Cooperative Development Commission



**Table 5.2.1 Status of SACCOS as of December 2016**

No.	Region	No. SACCOS	Number of Members				Total amount of Loans (Tshs)
			Individual Members		Groups	Total	
			Male	Female			
1	Arusha	366	22,471	32,525	140	55,136	135,823,801,942
2	Dar es Salaam	819	80,808	65,669	5,249	151,726	308,016,787,029
3	DODOMA	195	15,383	11,317	848	27,548	35,855,397,248
4	Geita	350	21,664	11,203	92	32,959	7,902,673,282
5	Iringa	151	11,182	6,048	705	17,935	30,660,120,766
6	Kagera	187	22,552	10,340	1,100	33,992	24,826,648,895
7	katavi	33	3,608	1,329	21	4,958	2,480,079,110
8	Kigoma	239	9,630	7,841	47	17,518	30,328,089,340
9	Kilimanjaro	234	47,060	36,440	5,294	88,794	78,823,969,847
10	Lindi	16	460	350	14	824	1,215,136,144
11	Manyara	155	8,089	6,259	798	15,146	9,745,952,004
12	Mara	256	15,879	22,633	893	39,405	24,543,552,166
13	Mbeya	206	36,220	19,597	1,400	57,217	82,688,058,724
14	Morogoro	257	42,538	22,840	994	66,372	100,568,390,268
15	Mtwara	93	10,517	4,825	197	15,539	12,726,679,636
16	Mwanza	415	27,902	22,054	7,252	57,208	23,196,437,512
17	Njombe	121	22,086	15,510	3,014	40,610	17,096,226,636
18	Pwani	283	32,901	22,919	503	56,323	33,698,330,059
19	Rukwa	108	6,524	3,688	94	10,306	6,960,857,332
20	Ruvuma	113	28,764	20,197	2,592	51,553	21,074,125,032
21	Shinyanga	190	39,912	2,264	34	42,210	20,375,655,819
22	Simiyu	106	3,770	2,452	1	6,223	3,541,971,198
23	Singida	106	8,792	6,729	867	16,388	10,842,530,258
24	Songwe	122	-	-	-	-	-
25	Tabora	290	11,445	9,780	637	21,862	12,619,213,363
26	Tanga	229	29,977	19,164	1,044	50,185	35,443,172,779
	<b>Total</b>	<b>5,640</b>	<b>560,134</b>	<b>383,973</b>	<b>33,830</b>	<b>977,937</b>	<b>1,071,053,856,390</b>

Source: Tanzania Cooperative Development Commission

**Table 5.2.2 Status of SACCOS as of December 2017**

No.	Region	No. SACCOS	Number of Members				Total amount of Loans (Tshs)
			Individual Members		Groups	Total	
			Male	Female			
1	Arusha	373	26,205	44,561	90	70,856	234,842,405,578
2	Dar es Salaam	883	13,253	9,750	848	23,851	4,633,467,843
3	DODOMA	186	21,826	17,633	250	39,709	56,664,438,065
4	Geita	356	18,144	9,472	711	28,327	7,681,551,208
5	Iringa	160	18,963	13,602	195	32,760	3,365,535,842
6	Kagera	332	29,978	24,355	367	54,700	5,359,674,102
7	katavi	21	1,800	641	36	2,477	9,093,575,695
8	Kigoma	249	8,968	5,977	2	14,947	179,533,388
9	Kilimanjaro	243	50,695	38,045	236	88,976	5,000,045,614
10	Lindi	16	953	790	16	1,759	190,307,116
11	Manyara	155	8,769	7,083	251	16,103	408,945,308
12	Mara	256	22,213	15,024	412	37,649	341,539,667
13	Mbeya	222	29,702	15,213	267	45,182	53,831,074,544
14	Morogoro	257	2,859	5,609	194	8,662	4,295,154,204
15	Mtwara	93	6,785	3,113	60	9,958	-
16	Mwanza	445	27,478	17,598	553	45,629	28,015,415,992
17	Njombe	127	13,203	9,537	143	22,883	41,967,151,602
18	Pwani	286	10,123	7,415	131	17,669	335,804,254
19	Rukwa	115	7,605	4,775	184	12,564	1,817,732,533
20	Ruvuma	116	25,974	17,257	218	43,449	1,420,345,651
21	Shinyanga	187	9,847	5,399	163	15,409	5,225,283,776
22	Simiyu	115	323,184	3,110	212	326,506	49,868,596
23	Singida	106	251,799	143,008	123	394,930	6,221,484,208
24	Songwe	93	4,061	2,402	126	6,589	1,147,172,030
25	Tabora	287	456	1,140	12	1,608	565,224,002
26	Tanga	239	21,170	14,249	282	35,701	455,357,303
	<b>Total</b>	<b>5,918</b>	<b>956,013</b>	<b>436,758</b>	<b>6,082</b>	<b>1,398,853</b>	<b>473,108,088,120</b>

Source: Tanzania Cooperative Development Commission

**Table 5.2.3 Status of SACCOS as of December 2018**

No.	Region	No. SACCOS	Total No. of Members	Total amount of Loans
1	Arusha	391	71,808	162,607,017,786
2	Dar es Salaam	883	450,972	454,524,767,393
3	DODOMA	294	63,057	4,423,193,800
4	Geita	374	26,238	14,017,621,095
5	Iringa	259	46,214	21,983,095,965
6	Kagera	332	103,716	37,841,616,240
7	katavi	38	4,618	16,179,692,330
8	Kigoma	257	28,118	20,911,580,454
9	Kilimanjaro	341	155,548	9,251,629,923
10	Lindi	57	8,657	3,978,634,484
11	Manyara	177	37,818	93,804,479,668
12	Mara	183	39,196	11,762,031,371
13	Mbeya	265	88,896	62,997,880,638
14	Morogoro	304	56,750	76,877,918,389
15	Mtwara	171	16,556	91,928,390,075
16	Mwanza	445	56,342	11,526,790,743
17	Njombe	145	46,370	61,737,923,025
18	Pwani	266	31,200	19,368,739,067
19	Rukwa	134	15,394	2,817,320,892
20	Ruvuma	126	75,238	20,986,181,272
21	Shinyanga	187	14,376	6,412,286,907
22	Simiyu	124	7,796	2,063,226,626
23	Singida	124	29,244	15,150,297,737
24	Songwe	93	12,060	5,204,717,387
25	Tabora	287	34,182	17,565,727,581
26	Tanga	294	70,352	53,739,041,149
	<b>Total</b>	<b>6,551</b>	<b>1,590,716</b>	<b>1,299,661,801,996</b>

Source: Tanzania Cooperative Development Commission

**Table 5.2.4 Status of SACCOS as of December 2019**

No.	Region	No. SACCOS	Total No. of Members	Total amount of Loans
1	Arusha	400	86,350	263,683,304,983
2	Dar es Salaam	844	458,057	554,524,767,393
3	DODOMA	303	75,930	4,423,193,800
4	Geita	374	30,709	14,017,621,095
5	Iringa	277	54,325	21,983,095,965
6	Kagera	286	197,347	37,841,616,240
7	katavi	38	5,314	16,179,692,330
8	Kigoma	281	23,418	20,911,580,454
9	Kilimanjaro	342	218,228	9,251,629,923
10	Lindi	57	9,765	3,978,634,484
11	Manyara	182	45,001	93,804,479,668
12	Mara	188	56,309	11,762,031,371
13	Mbeya	273	105,360	62,997,880,638
14	Morogoro	304	66,303	76,877,918,389
15	Mtwara	171	18,954	91,928,390,075
16	Mwanza	355	72,680	11,526,790,743
17	Njombe	153	55,912	61,737,923,025
18	Pwani	211	34,254	19,368,739,067
19	Rukwa	134	18,745	3,351,652,000
20	Ruvuma	126	90,218	20,986,181,272
21	Shinyanga	105	14,774	6,082,945,304
22	Simiyu	41	9,307	2,063,226,626
23	Singida	141	36,254	15,150,297,737
24	Songwe	76	28,227	5,204,717,387
25	Tabora	220	63,261	17,565,727,581
26	Tanga	296	72,076	53,739,041,149
	<b>Total</b>	<b>6,178</b>	<b>1,947,078</b>	<b>1,500,943,078,699</b>

Source: Tanzania Cooperative Development Commission

## 6: AGRICULTURAL INPUTS

### 6.1 Fertilizer

Table 6.1.1: Fertilizer Utilization (tons) 2010/2011 - 2015/2016

Type of fertilizer	Year					
	2010/11	2011/12	2012/13	2013/14	2014/2015	2015/2016
CAN	14,359	12,808	9,853	9,367	8,260	7,153
DAP	42,909	69,918	21,000	35,911	38,824	81,736
MOP	1,581	1,319	894	233	324	448
MRP	30,806	20,338	64,000	29,797	22,689	9,627
NPK 6:20:18/10:18:24	51,005	35,198	32,917	30,567	32,129	33,692
NPK 17:17:17	7,258	4,000	553	8,783	17,490	13,030
NPK 20:10:10	2,868	9,540	2,416	6,996	7,488	8,791
NPK 25:5:5	238	4,658	-	1,812	1,531	1,250
SA	4,002	4,126	3,178	5,957	6,300	6,643
TSP	785	1,436	728	-	-	-
UREA	100,465	69,000	65,855	147,014	165,824	155,124
Others	1,370	19,374	9,480	7,143	8,229	8,423
<b>TOTAL</b>	<b>257,645</b>	<b>251,715</b>	<b>210,876</b>	<b>283,580</b>	<b>309,088</b>	<b>325,918</b>

Source: Ministry of Agriculture

**Table 6.1.2: Fertilizer Availability (tons) 2015/2016 - 2017/2018**

Type of fertilizer	2015-2016			2016-2017			2017-2018		
	Quantity Imported (tons)	Quantity Exported (tons)	Quantity remained in Country (tons)	Quantity Imported (tons)	Quantity Exported (tons)	Quantity remained in Country (tons)	Quantity Imported (tons)	Quantity Exported (tons)	Quantity remained in Country (tons)
CAN	61,771	2,600	59,171	34,399	2,700	31,699	54,556	300	54,256
DAP	71,584	26,000	45,584	61,257	26,607	34,650	78,172	26,303	51,869
NPK	65,516	18,040	47,476	51,343	22,238	29,105	89,759	32,264	57,495
SA	21,804	3,792	18,012	50,462	-	50,462	35,892	-	35,892
UREA	133,646	24,951	108,695	159,424	37,272	122,152	151,744	21,107	130,637
Others	3,934	2,249	1,685	32,248	4,280	27,968	23,813	2,104	21,709
Total	358,255	77,632	280,623	389,133	93,097	296,036	433,936	82,078	351,858

Source: Ministry of Agriculture

## 6.2 Improved Seed

Table 6.2: Amount of Seed Availability (tons) by Crop 2014/15 - 2017/18

Sub Category	Crop	2014-2015			2015-2016			2016-2017			2017-2018			
		Local Production (tons)	Importation (tons)	Total (tons)	Local Production (tons)	Importation (tons)	Total (tons)	Local Production (tons)	Importation (tons)	Total (tons)	Local Production (tons)	Carry over (tons)	Importation (tons)	Total (tons)
Cereals	Maize	17,412	12,939	30,290	16,993	15,361	32,354	10,432	13,903	24,335	6,800	1,265	15,938	24,004
	Paddy	1,445	0	1,445	1,418	25	1,443	948	2	951	434	1	10	444
	Sorghum	652	2	654	570	5	575	-	203	203	58	20	0	78
	Wheat	65	0	65	90	0	90	-	-	-	-	-	-	-
	Barley	200	280	480	-	162	150	-	-	-	-	-	-	-
Roots and Tubers	Sweet Potato	-	-	-	-	0.13	0.13	-	-	-	-	-	-	-
	Irish Potato	335	0	335	-	-	-	301	-	301	0	-	57	57
Oil Crops	Sunflower	298	1,096	1,394	270	100	370	19	98	117	100	12	127	239
	Sesame	36	0	36	82	0	82	25	0	25	56	1	0	57
	Groundnuts	0	0.01	0.01	-	0	0	-	-	-	-	-	-	-
	Oil Palm	-	-	-	-	2	2	-	-	-	-	-	-	-
	Soya bean	0	30	30	33	2	35	-	-	-	17	-	-	17
Pulses	Beans	197	207	404	1,091	83	1,174	33	35	67	97	9	2	107
	Cowpeas	16	0	16	2	0	2	9	-	9	1	0	-	1
	Pegion pea	60	0	60	27	1	28	-	-	-	30	0	-	30
	Green gram	2	0	2	-	-	-	-	10	10	4	-	0	4
	Peas	-	-	-	2	0	2	-	-	-	-	-	0.3	0.3
Industrial Crops	Tobacco	0	1	1	-	0.3	0.3	-	-	-	-	-	-	-
	Sisal	-	-	-	-	30	30	-	-	-	-	-	-	-
	Cotton	-	-	-	-	0.02	0.02	-	-	-	18,500	8,000	0	26,500
Vegetables	Vegetables	690	519	1,209	27	239	266	35	2,224	2,260	17	2	143	163
<b>Total</b>		<b>21,407</b>	<b>15,075</b>	<b>36,421</b>	<b>20,605</b>	<b>16,009</b>	<b>36,603</b>	<b>11,802</b>	<b>16,476</b>	<b>28,278</b>	<b>26,113</b>	<b>9,310</b>	<b>16,278</b>	<b>51,701</b>

Source: Ministry of Agriculture

## APPENDIX

Table A.1.1 Households and Population Engaged in Agriculture, Farmers Age 10+ as Main Occupation by Region, Tanzania Mainland in 2012

Region	Total Households Engaged in Agriculture	Composition of Households Engaged in Agriculture	Percentage engaged in agriculture in the Region (%)	Farmers Aged 10+		
				Population	Composition of population	Percentage in the Region (%)
Arusha	174,095	2.9%	46.3	259,007	2.3%	39.0
Dar es Salaam	75,948	1.3%	7.0	64,481	0.6%	3.8
Dodoma	376,924	6.3%	83.7	621,747	5.5%	72.8
Geita	224,402	3.8%	79.1	458,996	4.1%	66.8
Iringa	180,065	3.0%	81.6	299,826	2.7%	71.5
Kagera	403,107	6.8%	77.4	826,453	7.3%	75.4
Katavi	84,721	1.4%	84.4	135,702	1.2%	61.9
Kigoma	243,651	4.1%	65.8	672,731	6.0%	78.0
Kilimanjaro	247,080	4.1%	64.8	459,095	4.1%	62.9
Lindi	180,877	3.0%	80.6	336,001	3.0%	79.6
Manyara	201,604	3.4%	74.4	319,220	2.8%	57.2
Mara	239,683	4.0%	77.7	465,045	4.1%	70.9
Mbeya	439,851	7.4%	69.8	713,522	6.3%	63.5
Morogoro	375,838	6.3%	74.9	733,685	6.5%	73.2
Mtwara	257,833	4.3%	75.4	505,273	4.5%	80.3
Mwanza	294,937	4.9%	61.3	638,494	5.7%	65.0
Njombe	145,437	2.4%	86.1	270,973	2.4%	81.8
Pwani	162,626	2.7%	63.8	284,543	2.5%	61.8
Rukwa	162,681	2.7%	82.2	294,320	2.6%	71.6
Ruvuma	238,055	4.0%	79.4	509,207	4.5%	80.0
Shinyanga	203,173	3.4%	78.5	345,480	3.1%	61.0
Simiyu	199,592	3.3%	87.6	447,647	4.0%	75.1
Singida	219,948	3.7%	86.0	367,637	3.3%	66.3
Tabora	309,694	5.2%	81.5	537,416	4.8%	63.1
Tanga	320,269	5.4%	73.5	678,618	6.0%	76.9
<b>Total</b>	<b>5,962,091</b>	<b>100.0%</b>	<b>66.0</b>	<b>11,245,119</b>	<b>100.0%</b>	<b>62.8</b>

Source: Population and Housing Census 2012, National Bureau of Statistics



Table A.1.2 Number of Household Engaged in Agriculture Sector by District in 2012, Tanzania Mainland

Region	District	Total Number of Household	Households Engaged in Agriculture	
			Total Number	Percentage (%)
Arusha	Arusha CC	103,377	14,032	13.6
	Arusha DC	71,894	41,083	57.1
	Karatu DC	44,781	30,140	67.3
	Longido DC	24,644	10,573	42.9
	Meru DC	62,183	43,516	70.0
	Monduli DC	33,582	20,740	61.8
	Ngorongoro DC	35,875	14,011	39.1
Dar es salaam	Ilala MC	297,750	23,401	7.9
	Kinondoni MC	441,240	27,437	6.2
	Temeke MC	344,391	25,110	7.3
Dodoma	Bahi DC	49,287	45,884	93.1
	Chamwino DC	73,807	68,162	92.4
	Chemba DC	50,061	46,549	93.0
	Dodoma MC	92,978	49,965	53.7
	Kondoa DC	55,990	50,197	89.7
	Kongwa DC	61,907	56,497	91.3
	Mpwapwa DC	66,275	59,670	90.0
Geita	Bukombe DC	37,660	29,224	77.6
	Chato DC	59,891	50,729	84.7
	Geita DC	134,608	98,891	73.5
	Mbogwe DC	29,799	25,791	86.5
	Nyang'hwale DC	21,626	19,767	91.4
Iringa	Iringa MC	35,279	16,778	47.6
	Iringa DC	59,529	53,044	89.1
	Kilolo DC	50,295	46,385	92.2
	Mafinga TC	12,532	6,512	52.0
	Mufindi DC	63,141	57,346	90.8
Kagera	Biharamulo DC	55,674	45,963	82.6
	Bukoba MC	32,296	9,170	28.4
	Bukoba DC	65,375	55,887	85.5
	Karagwe DC	72,339	52,356	72.4
	Kyerwa DC	66,383	56,698	85.4
	Missenyi DC	48,104	37,664	78.3
	Muleba DC	113,380	87,970	77.6
	Ngara DC	67,477	57,399	85.1

Katavi	Mlele DC	48,348	42,663	88.2
	Mpanda MC	21,060	13,870	65.9
	Mpanda DC	30,942	28,188	91.1
Kigoma	Buhingwe DC	44,246	33,246	75.1
	Kakonko DC	33,479	24,702	73.8
	Kasulu TC	36,793	23,705	64.4
	Kasulu DC	54,528	40,069	73.5
	Kibondo DC	53,049	37,785	71.2
	Kigoma MC	42,448	10,686	25.2
	Kigoma DC	35,967	24,845	69.1
	Uvinza DC	69,864	48,613	69.6
	Kilimanjaro	Hai DC	50,242	35,083
Moshi MC		45,591	9,952	21.8
Moshi DC		109,878	76,088	69.2
Mwanga DC		29,996	19,012	63.4
Rombo DC		59,408	45,179	76.0
Same DC		59,480	42,065	70.7
Siha DC		26,931	19,701	73.2
Lindi	Kilwa DC	42,596	31,613	74.2
	Lindi MC	22,344	13,784	61.7
	Lindi DC	52,821	44,583	84.4
	Liwale DC	21,084	17,514	83.1
	Nachingwea DC	48,145	41,488	86.2
	Ruangwa DC	37,326	31,895	85.4
Manyara	Babati TC	20,776	11,645	56.1
	Babati DC	59,853	46,604	77.9
	Hanang DC	47,929	38,980	81.3
	Kiteto DC	50,717	40,512	79.9
	Mbulu DC	53,229	42,827	80.5
	Simanjiro DC	38,546	21,036	54.6
Mara	Bunda DC	56,121	44,600	79.5
	Butiama DC	39,812	34,594	86.9
	Musoma MC	26,656	7,398	27.8
	Musoma DC	27,917	24,781	88.8
	Rorya DC	52,492	44,971	85.7
	Serengeti DC	41,003	34,643	84.5
	Tarime DC	64,482	48,696	75.5

Mbeya	Chunya DC	58,860	43,484	73.9
	Ileje DC	30,826	25,939	84.1
	Kyela DC	53,447	37,393	70.0
	Mbarali DC	69,333	54,114	78.0
	Mbeya CC	90,066	31,106	34.5
	Mbeya DC	75,015	57,949	77.2
	Mbozi DC	103,649	82,689	79.8
	Momba DC	42,774	34,363	80.3
	Rungwe DC	82,963	65,713	79.2
	Tunduma TC	23,660	7,101	30.0
Morogoro	Gairo DC	37,007	32,491	87.8
	Kilombero DC	93,331	75,047	80.4
	Kilosa DC	102,443	80,772	78.8
	Morogoro MC	76,039	27,949	36.8
	Morogoro DC	67,671	56,675	83.8
	Mvomero DC	72,013	57,806	80.3
	Ulanga DC	53,290	45,098	84.6
Mtwara	Masasi TC	28,222	19,429	68.8
	Masasi DC	67,720	56,285	83.1
	Mtwara MC	27,968	8,826	31.6
	Mtwara DC	58,602	44,986	76.8
	Nanyumbu DC	40,746	33,681	82.7
	Newala DC	58,035	46,474	80.1
	Tandahimba DC	60,872	48,152	79.1
Mwanza	Ilemela MC	69,815	14,802	21.2
	Kwimba DC	62,328	54,343	87.2
	Magu DC	51,335	39,965	77.9
	Misungwi DC	53,560	44,661	83.4
	Nyamagana MC	75,735	12,866	17.0
	Sengerema DC	109,334	83,229	76.1
	Ukerewe DC	59,000	45,071	76.4
Njombe	Ludewa DC	29,990	27,475	91.6
	Makambako TC	21,911	15,076	68.8
	Makete DC	25,736	23,283	90.5
	Njombe TC	31,279	23,060	73.7
	Njombe DC	20,211	18,690	92.5
	Wang'ing'ombe DC	39,855	37,853	95.0

Pwani	Bagamoyo DC	70,312	46,524	66.2
	Kibaha TC	31,092	11,345	36.5
	Kibaha DC	16,892	9,596	56.8
	Kisarawe DC	25,475	19,631	77.1
	Mafia DC	11,774	7,143	60.7
	Mkuranga DC	51,101	32,043	62.7
	Rufiji DC	48,164	36,344	75.5
Rukwa	Kalambo DC	41,697	37,011	88.8
	Nkasi DC	52,666	45,129	85.7
	Sumbawanga MC	43,217	26,395	61.1
	Sumbawanga DC	60,431	54,146	89.6
Ruvuma	Mbinga DC	74,859	61,220	81.8
	Namtumbo DC	39,206	33,519	85.5
	Nyasa DC	30,808	26,051	84.6
	Songea MC	47,092	27,066	57.5
	Songea DC	38,515	33,198	86.2
	Tunduru DC	69,525	57,001	82.0
Shinyanga	Kahama TC	48,251	28,398	58.9
	Kahama DC	82,283	72,588	88.2
	Kishapu DC	43,298	37,913	87.6
	Shinyanga MC	32,952	16,414	49.8
	Shinyanga DC	52,197	47,860	91.7
Simiyu	Bariadi DC	59,414	50,861	85.6
	Busega DC	33,268	27,333	82.2
	Itilima DC	43,167	39,731	92.0
	Maswa DC	52,140	47,444	91.0
	Meatu DC	39,873	34,223	85.8
Singida	Ikungi DC	48,037	43,659	90.9
	Iramba DC	43,196	38,958	90.2
	Manyoni DC	58,464	50,797	86.9
	Mkalama DC	34,276	31,713	92.5
	Singida MC	30,383	16,448	54.1
	Singida DC	41,257	38,373	93.0
Tabora	Igunga DC	61,721	53,888	87.3
	Kaliua DC	63,411	48,745	76.9
	Nzega DC	85,773	75,087	87.5
	Sikonge DC	29,715	26,316	88.6
	Tabora MC	47,241	23,283	49.3
	Urambo DC	32,118	27,621	86.0
	Uyui DC	59,791	54,754	91.6

Tanga	Handeni TC	15,633	11,315	72.4
	Handeni DC	54,681	46,086	84.3
	Kilindi DC	46,239	38,819	84.0
	Korogwe TC	15,489	10,024	64.7
	Korogwe DC	51,967	42,128	81.1
	Lushoto DC	104,441	90,351	86.5
	Mkinga DC	25,254	19,573	77.5
	Muhenza DC	47,608	37,745	79.3
	Pangani DC	12,964	8,709	67.2
	Tanga CC	61,307	15,519	25.3
	<b>Total</b>	<b>9,026,785</b>	<b>5,962,091</b>	<b>66.0</b>

Source: Population and Housing Census 2012, National Bureau of Statistics

Table A.1.3 Number of Household and Population Engaged in Agriculture Sector by District

Region	District	2012	2017	2017 June***		2018 June***		2019 June***	
		Actual Population - 2012 Population Census*	Population Projections for Year 2017	Number of household engaging in agriculture (crop production)	Population engaging in agriculture (crop production)	Number of household engaging in agriculture (crop production)	Population engaging in agriculture (crop production)	Number of household engaging in agriculture (crop production)	Population engaging in agriculture (crop production)
Arusha	Arusha CC	416,442	477,615	18,931	48,483	16,051	34,238	9,525	81,129
	Arusha DC	323,198	370,674	43,741	82,246	55,245	157,323	41,702	144,894
	Karatu DC	230,166	263,976	45,798	92,725	23,711	76,401	29,991	115,306
	Longido DC	123,153	141,244	5,010	20,416	3,397	1,056	8,238	25,982
	Meru DC	268,144	307,533	65,612	147,534	55,666	165,113	50,180	151,571
	Monduli DC	158,929	182,275	18,245	58,922	28,473	105,009	29,773	114,013
	Ngorongoro DC	174,278	199,879	25,165	13,506	5,658	17,737	20,374	49,726
Sub-total		<b>1,694,310</b>	<b>1,943,196</b>	<b>222,502</b>	<b>463,832</b>	<b>188,201</b>	<b>556,877</b>	<b>189,783</b>	<b>682,621</b>
Dar es salaam	Ilala MC	1,220,611	1,616,901	5,122	21,000	5,836	23,928	6,377	26,145
	Kigamboni MC	162,932	215,830	6,528	9,999	7,981	14,706	5,971	25,791
	Kinondoni MC	929,681	1,231,516	6,841	25,795	6,670	7,723	112,588	75,343
	Temeke MC	1,205,949	1,597,479	2,614	48,172	1,208	1,929	32,399	3,718
	Ubungu MC	845,368	1,119,830	149	245	8,759	21,856	984	5,581
Sub-total		<b>4,364,541</b>	<b>5,781,557</b>	<b>21,254</b>	<b>105,211</b>	<b>30,454</b>	<b>70,142</b>	<b>158,319</b>	<b>136,578</b>
Dodoma	Bahi DC	221,645	245,958	56,120	130,842	64,443	163,826	25,196	70,872
	Chamwino DC	330,543	366,801	85,626	262,060	74,626	212,834	78,106	285,648
	Chemba DC	235,711	261,567	28,650	230,183	21,303	51,543	20,907	89,951
	Dodoma MC	410,956	456,035	33,820	115,284	13,363	61,645	53,202	88,554
	Kondoa TC	59,022	65,496	10,086	33,892	9,527	35,697	7,801	10,311
	Kondoa DC	210,682	233,792	45,479	192,568	27,097	98,735	24,012	97,239
	Kongwa DC	309,973	343,975	21,689	73,594	20,793	70,393	-	-
	Mpwapwa DC	305,056	338,518	-	-	191,295	329,596	-	-
Sub-total		<b>2,083,588</b>	<b>2,312,141</b>	<b>281,470</b>	<b>1,038,423</b>	<b>422,447</b>	<b>1,024,269</b>	<b>209,224</b>	<b>642,575</b>
Geita	Bukombe DC	224,542	256,054	22,188	62,093	29,922	124,331	37,060	157,165
	Chato DC	365,127	416,368	44,950	97,110	51,095	86,324	24,008	115,287
	Geita TC	192,707	219,751	26,020	137,176	19,308	106,893	33,036	104,899
	Geita DC	614,912	701,208	68,408	254,933	70,320	219,526	98,116	269,522
	Mbogwe DC	193,922	221,137	28,169	75,239	29,097	82,328	28,340	113,538
	Nyang'hwale DC	148,320	169,135	19,586	117,526	23,657	91,324	55,295	157,578
	Sub-total		<b>1,739,530</b>	<b>1,983,653</b>	<b>209,321</b>	<b>744,077</b>	<b>223,399</b>	<b>710,726</b>	<b>275,855</b>
Iringa	Iringa MC	151,345	160,167	6,824	51,945	7,262	64,902	8,394	70,850
	Iringa DC	254,032	268,840	54,500	182,213	43,806	199,242	55,789	139,706
	Kilolo DC	218,130	230,845	44,239	113,990	52,874	241,914	58,831	153,743
	Mafinga TC	71,641	75,817	8,857	22,038	8,598	24,276	9,954	23,779
	Mufindi DC	246,090	260,435	41,299	134,715	43,031	159,686	53,236	146,867
Sub-total		<b>941,238</b>	<b>996,105</b>	<b>155,719</b>	<b>504,901</b>	<b>155,571</b>	<b>690,020</b>	<b>186,204</b>	<b>534,945</b>
Kagera	Biharamulo DC	323,486	378,919	51,676	195,587	54,443	246,404	50,282	241,202
	Bukoba MC	128,796	150,867	9,438	37,407	9,457	34,682	9,606	31,217
	Bukoba DC	289,697	339,340	56,176	142,635	45,572	67,399	52,559	132,867
	Karagwe DC	332,020	388,915	59,081	184,559	57,667	190,079	56,701	181,256
	Kyerwa DC	321,026	376,037	56,608	210,097	17,845	59,247	59,053	234,867
	Missenyi DC	202,632	237,355	1,255	1,255	28,990	67,938	32,758	74,026
	Muleba DC	540,310	632,898	84,395	303,344	85,858	307,470	31,417	70,504
	Ngara DC	320,056	374,901	25,927	121,445	35,330	150,251	72,749	179,599
Sub-total		<b>2,458,023</b>	<b>2,879,231</b>	<b>344,556</b>	<b>1,195,074</b>	<b>335,162</b>	<b>1,123,470</b>	<b>365,125</b>	<b>1,145,538</b>

Katavi	Mlele DC	43,257	50,848	8,906	32,797	15,338	30,356	12,511	41,224
	Mpanda MC	110,053	129,366	39,245	94,224	56,730	86,770	20,072	94,252
	Mpanda DC	179,136	210,572	32,862	128,610	32,052	138,277	26,592	139,545
	Mpimbwe DC	103,625	121,810	26,869	113,877	23,316	112,602	28,875	119,917
	Nsimbo DC	128,533	151,089	28,499	129,999	19,079	84,997	18,828	68,076
Sub-total	<b>564,604</b>	<b>663,685</b>	<b>136,381</b>	<b>499,507</b>	<b>146,515</b>	<b>453,002</b>	<b>106,878</b>	<b>463,014</b>	
Kigoma	Buhingwe DC	254,342	286,756	7,800	15,201	18,658	43,076	26,639	58,357
	Kakonko DC	167,555	188,909	2,684	11,674	29,052	122,932	29,053	56,812
	Kasulu TC	208,244	234,783	33,343	146,271	31,446	142,195	28,822	149,236
	Kasulu DC	425,794	480,059	25,573	78,823	25,979	106,463	54,360	171,883
	Kibondo TC	261,331	294,636	3,242	13,576	3,418	10,375	3,500	13,058
	Kibondo DC			31,767	115,233	27,978	88,209	53,442	128,284
	Kigoma MC	215,458	242,917	15,199	60,844	-	-	3,825	15,449
	Kigoma DC	211,566	238,529	38,024	80,126	37,043	108,217	41,340	134,057
Uvinza DC	383,640	432,532	78,389	190,041	99,133	245,432	74,385	216,281	
Sub-total	<b>2,127,930</b>	<b>2,399,121</b>	<b>236,021</b>	<b>711,789</b>	<b>272,707</b>	<b>866,899</b>	<b>315,366</b>	<b>943,417</b>	
Kilimanjaro	Hai DC	210,533	229,791	38,333	112,460	40,689	106,693	48,851	95,701
	Moshi MC	184,292	201,150	5,330	15,314	2,009	-	4,445	6,047
	Moshi DC	466,737	509,431	130,514	233,529	81,593	257,344	61,047	240,783
	Mwanga DC	131,442	143,466	11,412	31,903	23,350	57,803	9,951	35,109
	Rombo DC	260,963	284,834	54,079	166,503	47,603	154,857	900	-
	Same DC	269,807	294,487	154,090	490,996	49,516	193,344	40,368	149,646
	Siha DC	116,313	126,953	16,835	71,335	20,112	70,827	23,089	90,072
	Sub-total	<b>1,640,087</b>	<b>1,790,113</b>	<b>410,593</b>	<b>1,122,040</b>	<b>264,872</b>	<b>840,868</b>	<b>188,651</b>	<b>617,358</b>
Lindi	Kilwa DC	190,744	199,854	40,970	122,186	46,639	142,665	49,928	170,943
	Lindi MC	78,841	82,606	7,941	15,407	8,500	38,873	-	16,488
	Lindi DC	194,143	203,415	43,435	67,355	41,433	96,288	57,862	128,938
	Liwale DC	91,380	95,744	10,157	8,138	15,578	30,860	22,468	58,076
	Nachingwea DC	178,464	186,987	46,353	129,130	45,326	98,012	33,157	78,286
	Ruangwa DC	131,080	137,340	39,675	63,432	41,131	93,572	22,071	39,390
Sub-total	<b>864,652</b>	<b>905,947</b>	<b>188,531</b>	<b>405,648</b>	<b>198,607</b>	<b>500,270</b>	<b>185,486</b>	<b>492,121</b>	
Manyara	Babati TC	93,108	109,118	12,547	49,489	10,345	41,495	10,452	44,082
	Babati DC	312,392	366,110	62,677	224,195	54,734	230,425	58,119	240,948
	Hanang DC	275,990	323,448	45,039	179,350	40,085	170,942	40,383	222,829
	Kiteto DC	244,669	286,741	57,807	228,392	54,661	216,887	60,788	187,032
	Mbulu TC	129,059	151,251	2,567	13,129	8,337	90,512	8,337	90,512
	Mbulu DC	191,220	224,101	29,349	144,079	25,658	214,690	22,908	96,437
	Simanjiro DC	178,693	209,420	34,886	122,963	27,489	125,975	22,584	140,518
Sub-total	<b>1,425,131</b>	<b>1,670,191</b>	<b>244,872</b>	<b>961,597</b>	<b>221,309</b>	<b>1,090,926</b>	<b>223,571</b>	<b>1,022,358</b>	
Mara	Bunda TC	113,962	128,885	23,441	65,222	23,019	84,231	8,106	50,899
	Bunda DC	221,099	250,050	27,862	108,396	29,210	115,916	32,940	122,032
	Butiama DC	211,899	239,646	36,167	139,195	32,032	159,089	28,579	167,912
	Musoma MC	134,327	151,916	6,925	23,806	8,574	25,553	5,223	20,821
	Musoma DC	208,189	235,450	38,999	202,346	37,949	221,140	36,891	181,910
	Rorya DC	265,241	299,973	39,428	160,250	48,842	90,156	27,408	63,924
	Serengeti DC	249,420	282,080	20,704	79,526	6,095	23,488	32,977	178,715
	Tarime TC	78,037	88,255	12,299	56,250	9,572	30,600	9,829	53,771
	Tarime DC	261,656	295,918	47,577	122,999	47,751	146,621	58,405	170,924
Sub-total	<b>1,743,830</b>	<b>1,972,173</b>	<b>253,402</b>	<b>957,990</b>	<b>243,044</b>	<b>896,794</b>	<b>240,358</b>	<b>1,010,908</b>	

Mbeya	Busokelo DC	96,348	108,800	24,346	72,236	24,351	72,295	24,379	42,192
	Chunya DC	156,786	177,049	35,891	36,797	34,705	78,811	47,928	195,706
	Kyela DC	221,490	250,115	46,817	91,120	58,354	142,818	59,706	207,600
	Mbarali DC	300,517	339,355	49,049	171,430	60,676	173,884	51,569	172,138
	Mbeya CC	385,279	435,072	23,604	76,009	36,645	140,411	20,620	67,909
	Mbeya DC	305,319	344,778	62,564	169,000	62,183	151,569	67,885	193,971
	Rungwe DC	242,809	274,189	53,903	151,637	58,786	142,893	56,555	138,179
Sub-total		<b>1,708,548</b>	<b>1,929,359</b>	<b>296,174</b>	<b>768,229</b>	<b>335,700</b>	<b>902,681</b>	<b>328,642</b>	<b>1,017,695</b>
Morogoro	Gairo DC	193,011	217,108	6,483	14,884	30,887	59,232	24,272	73,430
	Ifakara TC	106,424	119,711	42,234	100,788	23,957	78,360	20,425	75,145
	Kilombero DC	301,456	339,092	70,842	164,404	81,172	192,523	82,530	260,749
	Kilosa DC	438,175	492,879	58,286	155,062	72,643	172,363	72,194	205,273
	Malinyi DC	114,202	128,460	34,067	74,354	41,169	115,798	41,321	96,119
	Morogoro MC	315,866	355,301	12,757	32,882	20,239	51,292	25,819	91,021
	Morogoro DC	286,248	321,985	63,911	181,576	66,992	208,426	83,535	247,330
	Mvomero DC	312,109	351,075	82,545	202,624	86,351	198,730	75,048	183,066
	Ulianga DC	151,001	169,853	32,261	93,229	33,517	90,134	35,158	99,373
Sub-total		<b>2,218,492</b>	<b>2,495,462</b>	<b>403,386</b>	<b>1,019,803</b>	<b>456,927</b>	<b>1,166,858</b>	<b>460,302</b>	<b>1,331,506</b>
Mtwara	Masaki TC	89,835	95,503	19,930	69,197	20,368	78,097	20,597	74,043
	Masaki DC	260,854	277,312	48,086	135,591	45,390	143,033	86,480	307,986
	Mtwara MC	108,299	115,132	7,388	21,611	8,903	26,551	6,189	23,131
	Mtwara DC	122,997	130,757	31,640	81,333	32,747	84,648	37,737	103,536
	Nanyamba TC	105,006	111,631	23,277	57,117	21,663	79,709	28,932	75,653
	Nanyumbu DC	150,857	160,375	36,441	72,631	36,337	80,248	39,539	80,686
	Newala TC	89,251	94,882	27,635	69,046	27,635	83,582	28,027	73,460
	Newala DC	116,241	123,575	26,710	63,091	37,095	77,803	30,893	85,593
	Tandahimba DC	227,514	241,869	53,818	156,161	109,920	207,040	454	435
	Sub-total		<b>1,270,854</b>	<b>1,351,038</b>	<b>274,925</b>	<b>725,778</b>	<b>343,388</b>	<b>860,711</b>	<b>278,848</b>
Mwanza	Buchosa DC	327,767	380,354	51,675	157,677	50,631	171,021	39,195	237,232
	llemela MC	343,001	398,032	5,375	19,847	5,542	19,791	12,448	44,868
	Kwimba DC	406,509	471,729	52,646	262,157	55,348	251,287	63,016	271,365
	Magu DC	299,759	347,852	63,551	243,689	50,191	195,726	70,429	235,866
	Misungwi DC	351,607	408,019	37,634	204,675	62,595	222,713	53,614	248,924
	Mwanza CC (Nyamagana MC)	(363,452)	(421,764)	14,299	61,436	14,385	58,767	16,291	63,856
	Sengerema DC	335,267	389,057	45,356	122,033	52,349	257,954	49,573	250,116
	Ukerewe DC	345,147	400,522	46,021	134,338	42,224	243,015	46,107	226,853
Sub-total		<b>2,772,509</b>	<b>3,217,329</b>	<b>316,557</b>	<b>1,205,852</b>	<b>333,265</b>	<b>1,420,274</b>	<b>350,673</b>	<b>1,579,080</b>
Njombe	Ludewa DC	133,218	138,618	30,996	93,849	30,946	94,045	30,406	88,197
	Makambako TC	93,827	97,630	17,632	55,966	20,326	46,053	12,127	36,066
	Makete DC	97,266	101,208	19,258	46,439	20,664	79,597	30,351	69,524
	Njombe TC	130,223	135,501	3,209	12,949	7,350	16,766	14,169	29,978
	Njombe DC	85,747	89,223	17,383	32,120	18,721	38,051	16,742	36,569
	Wang'ing'ombe DC	161,816	168,375	24,714	84,592	42,355	116,491	43,851	90,207
	Sub-total		<b>702,097</b>	<b>730,555</b>	<b>113,192</b>	<b>325,915</b>	<b>140,362</b>	<b>391,003</b>	<b>147,646</b>
Pwani	Bagamoyo DC	97,660	108,811	10,984	29,961	12,669	35,134	11,974	31,669
	Chalinze DC	214,080	238,525	50,703	121,728	52,739	129,219	45,611	108,453
	Kibaha TC	128,488	143,159	9,415	23,162	10,193	22,503	11,586	24,764
	Kibaha DC	70,209	78,226	12,834	38,902	1,716	24,267	12,792	38,035
	Kibiti TC	103,929	115,796	24,217	59,585	22,412	85,190	36,750	76,931
	Kisarawe DC	101,598	113,199	32,994	107,236	19,623	59,699	20,142	150,238
	Mafia DC	46,438	51,741	6,155	23,399	7,646	29,571	3,639	16,384
	Mkuranga DC	222,921	248,375	42,989	126,716	43,831	148,774	45,504	144,172
	Rufiji DC	113,345	126,287	28,111	58,412	24,102	45,521	30,652	82,862
	Sub-total		<b>1,098,668</b>	<b>1,224,120</b>	<b>218,402</b>	<b>589,101</b>	<b>194,931</b>	<b>579,878</b>	<b>218,650</b>



Rukwa	Kalambo DC	207,700	243,803	40,622	125,680	43,027	135,012	49,819	156,094
	Nkasi DC	281,200	330,078	49,896	154,002	51,543	159,083	53,526	165,205
	Sumbawanga MC	209,793	246,259	38,345	155,906	41,739	173,287	41,088	197,179
	Sumbawanga DC	305,846	359,008	56,691	216,195	52,742	176,749	58,667	258,213
Sub-total		<b>1,004,539</b>	<b>1,179,149</b>	<b>185,554</b>	<b>651,783</b>	<b>189,051</b>	<b>644,131</b>	<b>203,100</b>	<b>776,691</b>
Ruvuma	Madaba DC	47,774	53,120	10,393	34,911	11,237	39,272	10,575	29,981
	Mbinga TC	129,297	143,764	38,676	70,008	36,976	70,895	20,544	78,037
	Mbinga DC	224,386	249,493	42,826	105,664	42,542	139,344	44,772	121,400
	Namtumbo DC	201,639	224,201	25,532	129,725	40,174	147,664	35,733	169,691
	Nyasa DC	146,160	162,514	18,319	92,341	31,391	94,686	17,189	72,616
	Songea MC	203,309	226,058	30,314	104,714	32,746	121,890	32,746	121,890
	Songea DC	126,047	140,151	27,667	80,808	29,245	83,546	30,823	85,884
	Tunduru DC	298,279	331,654	67,886	209,035	66,978	341,538	65,623	258,627
Sub-total		<b>1,376,891</b>	<b>1,530,955</b>	<b>261,613</b>	<b>827,206</b>	<b>291,289</b>	<b>1,038,835</b>	<b>258,005</b>	<b>938,126</b>
Shinyanga	Kahama TC	242,208	268,470	28,665	108,217	30,652	127,621	14,618	78,387
	Kishapu DC	272,990	302,589	41,385	260,338	27,237	94,589	42,711	179,905
	Msalala DC	250,727	277,912	34,577	111,310	24,237	64,550	27,503	139,634
	Shinyanga MC	161,391	178,890	14,022	59,689	10,026	44,546	11,586	45,789
	Shinyanga DC	334,417	370,676	31,007	167,140	21,882	85,743	46,955	208,103
	Ushetu DC	273,075	302,683	45,748	196,792	40,106	150,273	74,769	280,303
Sub-total		<b>1,534,808</b>	<b>1,701,220</b>	<b>195,404</b>	<b>903,486</b>	<b>154,140</b>	<b>567,322</b>	<b>218,142</b>	<b>932,121</b>
Simiyu	Bariadi TC	155,620	170,619	11,972	41,902	15,283	46,158	18,201	84,988
	Bariadi DC	267,296	293,058	38,889	203,970	41,097	227,982	38,113	235,555
	Busega DC	203,597	223,220	31,716	135,335	36,726	171,450	33,668	177,193
	Ililima DC	313,900	344,154	35,520	162,966	40,771	316,684	45,983	164,357
	Maswa DC	344,125	377,292	57,574	204,933	44,491	118,861	46,434	204,801
	Meatu DC	299,619	328,496	22,260	208,157	33,858	158,592	42,397	189,647
	Sub-total		<b>1,584,157</b>	<b>1,736,839</b>	<b>197,931</b>	<b>957,263</b>	<b>212,226</b>	<b>1,039,727</b>	<b>224,796</b>
Singida	Ikungi DC	272,959	306,545	31,762	148,542	44,995	186,547	44,858	173,695
	Iramba DC	236,282	265,355	6,937	42,168	41,304	126,666	40,672	149,844
	Itigi DC	112,565	126,415	24,038	124,334	24,672	126,038	25,305	113,719
	Manyoni DC	184,198	206,862	41,619	113,766	38,451	128,786	46,868	165,538
	Mkalama DC	188,733	211,955	34,311	102,933	34,877	104,631	35,983	107,949
	Singida MC	150,379	168,882	5,824	10,942	10,750	26,596	13,289	44,236
	Singida DC	225,521	253,270	26,261	110,676	43,509	169,195	42,607	148,520
	Sub-total		<b>1,370,637</b>	<b>1,539,286</b>	<b>170,752</b>	<b>653,361</b>	<b>238,558</b>	<b>868,459</b>	<b>249,582</b>
Songwe	Ileje DC	124,451	146,230	27,054	132,605	29,985	135,608	32,160	146,071
	Mbozi DC	446,339	524,450	89,639	247,702	92,836	257,017	94,971	271,416
	Momba DC	168,739	198,269	35,700	170,013	36,353	182,866	37,076	198,269
	Songwe DC	133,692	157,089	34,217	23,987	36,603	158,415	37,572	160,831
	Tunduma TC	125,641	147,629	8,815	46,151	10,569	52,450	8,676	53,378
Sub-total		<b>998,862</b>	<b>1,173,667</b>	<b>195,425</b>	<b>620,458</b>	<b>206,346</b>	<b>786,356</b>	<b>210,455</b>	<b>829,965</b>
Tabora	Igunga DC	399,727	462,677	62,615	286,817	57,706	259,878	57,347	285,745
	Kaliua DC	393,358	455,305	44,075	33,703	1,270	7,429	2,492	4,900
	Nzega TC	64,366	74,503	15,755	44,516	9,740	45,231	9,226	43,092
	Nzega DC	437,886	506,845	23,188	112,434	37,582	154,284	59,951	284,213
	Sikonge DC	179,883	208,211	44,739	131,709	20,320	159,787	43,113	190,462
	Tabora MC	226,999	262,747	37,117	149,332	47,299	111,935	59,247	50,840
	Urambo DC	192,781	223,141	19,463	81,598	19,417	25,330	19,417	57,026
	Uyui DC	396,623	459,084	27,874	114,427	74,592	321,226	85,046	393,600
	Sub-total		<b>2,291,623</b>	<b>2,652,514</b>	<b>274,826</b>	<b>954,536</b>	<b>254,088</b>	<b>1,085,100</b>	<b>335,839</b>

Tanga	Bumbuli DC	160,005	178,885	33,692	62,792	36,899	95,891	36,540	88,187
	Handeni TC	79,056	88,384	4,971	15,593	12,169	43,121	12,662	47,421
	Handeni DC	276,646	309,289	65,985	195,876	62,994	168,461	70,295	246,690
	Kilindi DC	236,833	264,778	33,564	91,848	43,523	132,260	50,647	138,616
	Korogwe TC	68,308	76,368	10,952	37,344	11,398	32,313	10,636	37,811
	Korogwe DC	242,038	270,597	21,298	78,274	48,155	182,737	45,840	140,196
	Lushoto DC	332,436	371,662	43,593	199,941	68,216	203,999	70,725	336,181
	Mkinga DC	118,065	131,996	10,543	24,170	21,627	53,820	17,895	51,837
	Muhenza DC	204,461	228,586	42,205	109,448	43,174	128,237	45,838	131,873
	Pangani DC	54,025	60,400	10,459	28,584	11,797	27,949	13,448	29,723
	Tanga CC	273,332	305,584	9,909	46,658	13,636	49,082	12,207	25,854
Sub-total	<b>2,045,205</b>	<b>2,286,528</b>	<b>287,171</b>	<b>890,528</b>	<b>373,588</b>	<b>1,117,870</b>	<b>386,733</b>	<b>1,274,389</b>	
<b>Total</b>	<b>43,625,354</b>	<b>50,045,131</b>	<b>6,095,934</b>	<b>19,803,388</b>	<b>6,426,147</b>	<b>21,293,468</b>	<b>6,516,233</b>	<b>22,407,487</b>	

Note\*: The figure from New created Districts were derived from the old districts

Source: \*\* Population and Housing Census 2012, National Bureau of Statistics

\*\*\* Agriculture Routine Data System (ARDS), Ministry of Agriculture

Table A.2.1 Maize: Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by Region and District by Year

Region	District	Data	Year							
			2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Arusha	Arusha DC	Area ('000'ha)	13.2	20.4	5.1	0.0	18.6	18.8	18.8	13.7
		Production ('000'tons)	2.9	16.4	11.8	0.0	36.4	37.7	42.7	29.4
		Yield (tons/ha)	0.2	0.8	2.3	1.3	2.0	2.0	2.3	2.2
	Arusha CC	Area ('000'ha)	2.5	8.8	14.9	0.0	5.3	5.4	5.4	3.9
		Production ('000'tons)	0.2	11.5	18.7	0.0	3.3	3.4	3.8	2.6
		Yield (tons/ha)	0.1	1.3	1.2	0.7	0.6	0.6	0.7	0.7
	Karatu	Area ('000'ha)	37.4	1.8	29.8	0.1	33.4	33.8	33.8	24.6
		Production ('000'tons)	37.1	0.2	34.5	0.0	37.8	39.2	44.4	30.6
		Yield (tons/ha)	1.0	0.1	1.2	0.7	1.1	1.2	1.3	1.2
	Longido	Area ('000'ha)	3.5	17.6	3.2	0.0	10.1	10.2	10.2	7.4
		Production ('000'tons)	1.2	7.1	0.3	0.0	18.3	18.9	21.4	14.8
		Yield (tons/ha)	0.3	0.4	0.1	0.1	1.8	1.9	2.1	2.0
	Meru	Area ('000'ha)	37.5	6.9	31.7	64.2	38.4	38.7	38.7	28.2
		Production ('000'tons)	8.7	2.3	22.9	110.8	52.0	53.9	61.1	42.1
		Yield (tons/ha)	0.2	0.3	0.7	1.7	1.4	1.4	1.6	1.5
	Monduli	Area ('000'ha)	15.4	6.5	0.0	25.1	15.0	15.1	15.1	11.0
		Production ('000'tons)	1.8	5.8	0.0	26.5	24.4	25.2	28.6	19.7
		Yield (tons/ha)	0.1	0.9	0.6	1.1	1.6	1.7	1.9	1.8
	Ngorongoro	Area ('000'ha)	12.1	62.0	0.0	28.5	12.9	13.0	13.0	9.5
		Production ('000'tons)	57.5	43.4	0.0	28.5	23.3	24.2	27.4	18.9
		Yield (tons/ha)	4.8	0.7	1.2	1.0	1.8	1.9	2.1	2.0
Arusha Area ('000'ha)			121.5	124.0	84.8	117.9	133.7	135.0	98.2	
Arusha Production ('000'tons)			109.3	86.8	88.3	165.9	195.5	202.5	158.2	
Arusha Yield (tons/ha)			0.9	0.7	1.0	1.4	1.5	1.5	1.6	
Dar es Salaam	Ilala	Area ('000'ha)	0.7	2.0	0.3	2.3	0.4	0.1	0.2	0.1
		Production ('000'tons)	0.3	0.7	0.1	0.7	0.3	0.1	0.1	0.1
		Yield (tons/ha)	0.0	0.3	0.2	3.4	0.8	0.8	0.7	1.0
	Kinondoni	Area ('000'ha)	2.1	1.3	0.4	1.1	0.3	0.1	0.1	0.1
		Production ('000'tons)	0.5	1.2	0.5	1.2	0.5	0.2	0.2	0.2
		Yield (tons/ha)	0.0	1.0	1.4	0.9	1.6	1.6	1.4	1.9
	Temeke	Area ('000'ha)	0.5	1.8	0.1	0.6	1.2	0.4	0.5	0.5
		Production ('000'tons)	0.1	1.2	0.1	0.5	0.9	0.3	0.3	0.4
		Yield (tons/ha)	0.8	0.6	0.8	1.2	0.7	0.7	0.6	0.8
Dar es salaam Area ('000'ha)			3.2	5.1	0.8	3.9	1.8	0.6	0.8	
Dar es salaam Production ('000'tons)			1.0	3.1	0.7	2.4	1.6	0.6	0.6	
Dar es salaam Yield (tons/ha)			0.3	0.6	0.8	0.6	0.9	0.9	0.7	
Dodoma	Bahi	Area ('000'ha)	-	-	-	-	-	-	0.1	0.1
		Production ('000'tons)	-	-	-	-	-	0.2	0.2	0.2
		Yield (tons/ha)	-	-	-	-	-	-	2.1	2.6
	Chamwino	Area ('000'ha)	7.9	33.6	31.5	38.4	-	-	-	-
		Production ('000'tons)	3.0	9.1	28.4	37.4	-	-	-	-
		Yield (tons/ha)	0.4	0.3	0.9	1.0	-	-	-	-
	Chemba DC	Area ('000'ha)	-	-	-	35.8	38.5	43.9	55.9	41.1
		Production ('000'tons)	-	-	-	33.3	30.1	50.9	53.0	47.6
		Yield (tons/ha)	-	-	-	1.1	0.8	1.2	0.9	1.2
	Dodoma CC	Area ('000'ha)	8.0	8.9	9.1	7.6	6.9	7.8	10.0	7.3
		Production ('000'tons)	2.3	1.5	5.4	4.9	14.9	25.2	26.2	23.6
		Yield (tons/ha)	0.3	0.2	0.6	1.5	2.2	3.2	2.6	3.2
	Kondoa	Area ('000'ha)	25.0	48.8	20.8	30.1	29.7	33.9	43.2	31.8
		Production ('000'tons)	21.0	32.5	22.2	44.0	19.4	32.8	34.1	30.7
		Yield (tons/ha)	0.8	0.7	1.1	0.7	0.7	1.0	0.8	1.0
	Kongwa	Area ('000'ha)	41.1	34.9	32.9	-	59.8	68.2	86.8	63.9
		Production ('000'tons)	25.9	17.4	18.0	-	30.9	52.3	54.4	48.9
		Yield (tons/ha)	0.6	0.5	0.5	-	0.5	0.8	0.6	0.8
	Mpwapwa	Area ('000'ha)	22.2	15.6	23.2	26.5	22.8	26.0	33.1	24.3
		Production ('000'tons)	10.2	10.4	10.9	18.8	21.6	36.6	38.1	34.2
		Yield (tons/ha)	0.5	0.7	0.5	1.4	0.9	1.4	1.2	1.4
Dodoma Area ('000'ha)			104.3	141.9	117.6	138.5	157.6	179.8	168.5	
Dodoma Production ('000'tons)			62.6	70.9	84.9	138.5	116.9	198.0	206.0	
Dodoma Yield (tons/ha)			0.6	0.5	0.6	1.0	0.7	1.1	0.9	

Geita	Bukombe	Area planted ('000'Ha)	-	-	39.6	30.0	23.0	26.4	36.8	35.1
		Production ('000'Tonnes)	-	-	49.5	39.2	34.2	41.1	63.5	61.4
		Crop yield (Tons/Ha)	-	-	1.3	1.3	1.5	1.6	1.7	1.8
	Chato	Area planted ('000'Ha)	-	-	14.3	3.6	2.8	3.2	4.4	4.2
		Production ('000'Tonnes)	-	-	19.9	5.9	5.2	6.2	9.6	9.3
		Crop yield (Tons/Ha)	-	-	1.4	1.6	1.9	1.9	2.2	2.2
	Geita DC	Area planted ('000'Ha)	-	-	30.0	13.1	10.1	11.5	16.1	15.3
		Production ('000'Tonnes)	-	-	36.6	15.4	13.5	16.1	25.0	24.1
		Crop yield (Tons/Ha)	-	-	1.2	1.2	1.3	1.4	1.6	1.6
	Geita TC	Area planted ('000'Ha)	-	-	-	7.5	5.7	6.6	9.1	8.7
		Production ('000'Tonnes)	-	-	-	8.8	7.7	9.2	14.2	13.7
		Crop yield (Tons/Ha)	-	-	-	1.2	1.3	1.4	1.6	1.6
	Mbogwe DC	Area planted ('000'Ha)	-	-	-	25.4	19.5	22.3	31.1	29.7
		Production ('000'Tonnes)	-	-	-	38.6	33.8	40.5	62.7	60.6
		Crop yield (Tons/Ha)	-	-	-	1.5	1.7	1.8	2.0	2.0
Nyang'hwale DC	Area planted ('000'Ha)	-	-	-	6.7	5.2	5.9	8.3	7.9	
	Production ('000'Tonnes)	-	-	-	7.9	6.9	8.3	12.9	12.4	
	Crop yield (Tons/Ha)	-	-	-	1.2	1.3	1.4	1.6	1.6	
Geita Area planted ('000'Ha)		-	-	83.8	86.3	66.3	75.9	105.7	100.9	
Geita Production ('000'Tonnes)		-	-	106.0	115.8	101.2	121.4	187.9	181.6	
Geita Crop yield (Tons/Ha)		-	-	1.3	1.3	1.5	1.6	1.8	1.8	
Iringa	Iringa DC	Area ('000'ha)	66.5	136.3	119.0	119.6	90.4	78.2	36.3	43.7
		Production ('000'tons)	74.7	183.4	127.1	207.1	136.7	173.5	72.9	87.8
		Yield (tons/ha)	1.1	1.0	1.1	1.7	1.5	2.2	2.0	2.0
	Iringa MC	Area ('000'ha)	0.5	4.6	4.8	5.2	4.3	3.7	1.7	2.1
		Production ('000'tons)	4.5	6.2	0.6	7.5	7.8	9.9	4.2	5.0
		Yield (tons/ha)	9.0	1.3	0.1	1.4	1.8	2.7	2.4	2.4
	Kilolo	Area ('000'ha)	39.4	52.4	56.4	60.7	48.5	42.0	19.5	23.5
		Production ('000'tons)	50.7	51.8	82.1	105.0	51.3	65.1	27.3	32.9
		Yield (tons/ha)	1.3	1.0	1.5	1.7	1.1	1.5	1.4	1.4
	Ludewa	Area ('000'ha)	26.9	32.7	-	-	-	-	-	-
		Production ('000'tons)	41.5	43.8	-	-	-	-	-	-
		Yield (tons/ha)	1.5	1.3	-	-	-	-	-	-
	Makete	Area ('000'ha)	11.5	14.2	-	-	-	-	-	-
		Production ('000'tons)	13.3	15.3	-	-	-	-	-	-
		Yield (tons/ha)	1.2	1.1	-	-	-	-	-	-
	Mufindi	Area ('000'ha)	74.8	93.0	130.6	0.2	102.5	88.7	41.2	49.6
		Production ('000'tons)	120.1	125.2	158.5	0.2	156.0	198.1	83.2	100.2
		Yield (tons/ha)	1.6	1.3	1.2	0.9	1.5	2.2	2.0	2.0
	Njombe DC	Area ('000'ha)	18.3	136.3	-	-	-	-	-	-
		Production ('000'tons)	27.2	183.4	-	-	-	-	-	-
		Yield (tons/ha)	1.5	1.0	-	-	-	-	-	-
Njombe (Urban)	Area ('000'ha)	18.4	22.4	-	-	-	-	-	-	
	Production ('000'tons)	27.2	30.3	-	-	-	-	-	-	
	Yield (tons/ha)	1.5	1.4	-	-	-	-	-	-	
Iringa Area ('000'ha)		256.5	491.9	-	185.7	245.7	212.7	98.7	118.9	
Iringa Production ('000'tons)		359.2	639.4	-	319.8	351.8	446.6	187.6	225.9	
Iringa Yield (tons/ha)		1.4	1.3	-	1.7	1.4	2.1	1.9	1.9	
Kagera	Biharamulo DC	Area ('000'ha)	23.1	4.7	12.8	13.1	15.5	18.1	23.2	17.7
		Production ('000'tons)	20.4	43.4	22.9	25.1	25.3	12.6	22.7	18.3
		Yield (tons/ha)	0.9	9.3	1.8	1.9	1.6	0.7	1.0	1.0
	Bukoba DC	Area ('000'ha)	14.8	0.0	7.6	7.8	4.4	5.1	6.5	5.0
		Production ('000'tons)	13.3	0.0	9.5	10.4	9.9	4.9	8.9	7.2
		Yield (tons/ha)	0.9	0.4	1.3	1.3	2.3	1.0	1.4	1.4
	Bukoba MC	Area ('000'ha)	0.9	-	0.8	0.8	-	-	-	-
		Production ('000'tons)	2.7	-	2.2	2.4	-	-	-	-
		Yield (tons/ha)	3.0	-	2.8	3.0	-	-	-	-
	Chato DC	Area ('000'ha)	20.5	27.8	-	-	-	-	-	-
		Production ('000'tons)	45.3	51.4	-	-	-	-	-	-
		Yield (tons/ha)	2.2	1.8	-	-	-	-	-	-
	Karagwe DC	Area ('000'ha)	22.5	36.2	22.6	23.3	17.9	21.0	26.8	20.4
		Production ('000'tons)	37.5	50.5	49.7	54.2	48.9	24.3	44.0	35.5
		Yield (tons/ha)	1.7	1.4	2.2	2.3	2.7	1.2	1.6	1.7
	Kyerwa DC	Area ('000'ha)	-	-	-	0.3	0.3	0.3	0.4	0.3
		Production ('000'tons)	-	-	-	0.4	0.5	0.3	0.5	0.4
		Yield (tons/ha)	-	-	-	1.5	1.9	0.8	1.1	1.2
	Misenyi DC	Area ('000'ha)	12.8	20.8	10.8	11.1	6.9	8.1	10.3	7.9
		Production ('000'tons)	22.4	30.7	23.2	25.3	25.3	12.6	22.7	18.3
		Yield (tons/ha)	1.8	1.5	2.1	2.3	3.7	1.6	2.2	2.3
Muleba DC	Area ('000'ha)	29.1	49.3	27.1	27.8	17.6	20.6	26.3	20.0	
	Production ('000'tons)	34.6	98.4	78.4	85.6	59.5	29.6	53.6	43.2	
	Yield (tons/ha)	1.2	2.0	2.9	3.1	3.4	1.4	2.0	2.2	
Ngara DC	Area ('000'ha)	8.2	14.4	7.5	7.7	7.8	9.2	11.7	8.9	
	Production ('000'tons)	21.6	32.0	22.2	24.3	29.4	14.6	26.5	21.4	
	Yield (tons/ha)	2.6	2.2	3.0	3.1	3.8	1.6	2.3	2.4	
Kagera Area ('000'ha)		131.9	153.2	89.1	91.7	70.4	82.3	105.2	80.2	
Kagera Production ('000'tons)		197.8	306.4	208.1	227.3	198.8	98.8	178.9	144.3	
Kagera Yield (tons/ha)		1.5	2.0	2.3	2.5	2.8	1.2	1.7	1.8	

Katavi	Mpanda DC	Area planted ('000'Ha)	-	-	22.9	26.3	18.1	31.4	31.5	28.2
		Production ('000'Tonnes)	-	-	27.1	51.6	25.9	64.2	64.4	58.5
		Crop yield (Tons/Ha)	-	-	1.2	2.0	1.4	2.0	2.0	2.1
	Mpanda TC	Area planted ('000'Ha)	-	-	3.1	2.1	2.4	4.2	4.2	3.8
		Production ('000'Tonnes)	-	-	10.5	11.5	10.1	24.9	25.0	22.7
		Crop yield (Tons/Ha)	-	-	3.4	5.5	4.1	5.9	5.9	6.0
	Mlele	Area planted ('000'Ha)	-	-	-	21.5	-	-	-	-
		Production ('000'Tonnes)	-	-	-	82.4	-	-	-	-
		Crop yield (Tons/Ha)	-	-	-	3.8	-	-	-	-
	Nsimbo	Area planted ('000'Ha)	-	-	23.6	21.9	18.6	32.3	32.4	29.0
		Production ('000'Tonnes)	-	-	31.2	0.0	29.8	73.9	74.1	67.4
		Crop yield (Tons/Ha)	-	-	1.3	0.0	1.6	2.3	2.3	2.3
Katavi Area planted ('000'Ha)		-	-	49.6	71.8	39.2	67.9	68.1	61.0	
Katavi Production ('000'Tonnes)		-	-	68.9	145.5	65.8	163.0	163.5	148.7	
Katavi Crop yield (Tons/Ha)		-	-	2.0	2.0	1.7	2.4	2.4	2.4	
Kigoma	Buhigwe DC	Area ('000'ha)	-	-	-	13.4	13.2	13.4	16.2	14.5
		Production ('000'tons)	-	-	-	4.9	5.6	4.9	6.4	5.0
		Yield (tons/ha)	-	-	-	0.4	0.4	0.4	0.4	0.3
	Kakonko DC	Area ('000'ha)	-	-	-	19.9	19.7	19.9	24.1	21.6
		Production ('000'tons)	-	-	-	49.8	57.3	49.7	65.5	51.3
		Yield (tons/ha)	-	-	-	2.5	2.9	2.5	2.7	2.4
	Kasulu	Area ('000'ha)	109.1	167.9	124.0	76.8	75.8	76.8	92.8	83.4
		Production ('000'tons)	145.8	291.4	339.4	124.2	143.0	124.1	163.6	128.1
		Yield (tons/ha)	1.3	1.7	2.7	1.6	1.9	1.6	1.8	1.5
	Kibondo	Area ('000'ha)	28.0	40.8	61.6	32.4	32.0	32.4	39.2	35.2
		Production ('000'tons)	37.4	102.8	173.9	68.0	78.3	68.0	89.6	70.2
		Yield (tons/ha)	1.3	2.5	2.8	2.1	2.4	2.1	2.3	2.0
	Kigoma DC	Area ('000'ha)	30.8	51.3	56.6	26.4	26.1	26.4	31.9	28.7
		Production ('000'tons)	67.3	124.6	0.0	59.7	68.7	59.7	78.7	61.6
		Yield (tons/ha)	2.2	2.4	0.0	2.3	2.6	2.3	2.5	2.1
	Kigoma MC	Area ('000'ha)	30.8	2.1	2.7	2.5	2.4	2.5	3.0	2.7
		Production ('000'tons)	67.3	5.3	9.0	6.3	7.3	6.3	8.3	6.5
		Yield (tons/ha)	2.2	2.6	3.3	2.6	3.0	2.6	2.8	2.4
	Uvinza DC	Area ('000'ha)	-	-	-	39.1	38.6	39.0	47.2	42.4
		Production ('000'tons)	-	-	-	108.2	124.6	108.1	142.5	111.6
		Yield (tons/ha)	-	-	-	2.8	3.2	2.8	3.0	2.6
Kigoma Area ('000'ha)		198.6	262.1	244.9	210.5	207.7	210.4	254.3	228.6	
Kigoma Production ('000'tons)		317.8	524.1	522.2	421.0	484.8	420.7	554.7	434.3	
Kigoma Yield (tons/ha)		1.8	2.3	2.2	2.0	2.3	2.0	2.2	1.9	
Kilimanjaro	Hai	Area ('000'ha)	13.7	23.2	21.4	46.3	-	-	-	
		Production ('000'tons)	2.4	19.0	38.1	106.2	-	-	-	
		Yield (tons/ha)	0.2	0.8	1.8	2.3	-	-	-	
	Moshi DC	Area ('000'ha)	17.9	33.7	28.1	0.1	28.8	37.0	32.8	25.6
		Production ('000'tons)	11.1	22.9	23.9	0.0	38.9	38.6	47.5	41.1
		Yield (tons/ha)	0.6	0.7	0.9	0.5	1.4	1.0	1.4	1.6
	Moshi MC	Area ('000'ha)	0.2	0.3	0.3	0.6	0.3	0.4	0.3	0.3
		Production ('000'tons)	0.4	0.2	0.8	1.7	1.3	1.3	1.6	1.4
		Yield (tons/ha)	1.9	0.8	2.7	2.7	4.2	3.3	4.5	5.0
	Mwanga	Area ('000'ha)	5.5	7.4	7.6	8.6	7.8	10.0	8.9	6.9
		Production ('000'tons)	6.5	13.9	0.8	3.1	1.3	1.3	1.6	1.4
		Yield (tons/ha)	1.2	1.9	0.1	0.4	0.2	0.1	0.2	0.2
	Rombo	Area ('000'ha)	10.0	16.9	15.6	3.0	15.9	20.5	18.2	14.2
		Production ('000'tons)	16.4	12.6	24.4	2.1	39.6	39.3	48.4	41.8
		Yield (tons/ha)	1.7	0.7	1.6	0.7	2.5	1.9	2.7	2.9
	Same	Area ('000'ha)	12.8	22.0	20.3	25.9	20.8	26.8	23.7	18.5
		Production ('000'tons)	18.4	32.9	26.6	45.5	43.3	43.0	52.9	45.7
		Yield (tons/ha)	1.4	1.5	1.3	1.8	2.1	1.6	2.2	2.5
Siha	Area ('000'ha)	7.7	16.2	16.4	36.7	16.8	21.6	19.2	15.0	
	Production ('000'tons)	5.7	18.2	17.3	53.7	28.1	27.9	34.3	29.7	
	Yield (tons/ha)	0.7	1.1	1.1	1.5	1.7	1.3	1.8	2.0	
Kilimanjaro Area ('000'ha)		67.8	119.8	109.8	121.2	112.3	116.4	103.1	80.5	
Kilimanjaro Production ('000'tons)		61.0	119.8	131.9	212.3	214.2	151.3	186.3	161.1	
Kilimanjaro Yield (tons/ha)		0.9	1.0	1.3	1.8	1.9	1.3	1.8	2.0	

Lindi	Kilwa	Area ('000'ha)	7.6	11.9	11.0	7.8	7.7	7.7	9.7	8.7
		Production ('000'tons)	5.9	7.6	7.4	8.7	7.9	7.0	10.2	8.8
		Yield (tons/ha)	0.8	1.7	0.7	0.9	1.0	0.9	1.1	1.0
	Lindi DC	Area ('000'ha)	20.5	24.1	26.7	18.6	9.9	9.9	12.5	11.2
		Production ('000'tons)	6.5	12.6	15.4	12.4	7.6	6.8	9.9	8.5
		Yield (tons/ha)	0.3	0.9	0.6	1.5	0.8	0.7	0.8	0.8
	Lindi MC	Area ('000'ha)	2.0	8.8	2.2	1.9	1.9	1.9	2.4	2.2
		Production ('000'tons)	0.5	4.0	1.6	1.7	0.0	0.0	0.0	0.0
		Yield (tons/ha)	0.2	0.8	0.7	1.1	0.0	0.0	0.0	0.0
	Liwale	Area ('000'ha)	7.6	11.9	13.5	7.9	27.3	27.3	34.4	30.9
		Production ('000'tons)	4.1	8.3	6.9	7.1	23.0	20.5	30.0	25.7
		Yield (tons/ha)	0.5	3.0	0.5	1.1	0.8	0.7	0.9	0.8
	Nachingwea	Area ('000'ha)	22.1	29.3	31.2	36.8	18.2	18.2	22.9	20.6
		Production ('000'tons)	12.6	0.3	26.3	41.1	19.4	17.2	25.3	21.6
		Yield (tons/ha)	0.6	5.2	0.8	0.9	1.1	0.9	1.1	1.1
	Ruungwa	Area ('000'ha)	17.5	15.3	10.2	16.8	21.8	21.8	27.5	24.6
		Production ('000'tons)	9.0	7.7	9.3	18.8	30.2	26.8	39.4	33.7
		Yield (tons/ha)	0.5	1.4	0.9	0.9	1.4	1.2	1.4	1.4
Lindi Area ('000'ha)		77.2	101.3	94.7	89.9	86.9	86.9	109.5	98.2	
Lindi Production ('000'tons)		38.6	40.5	67.0	89.9	88.0	78.2	114.8	98.2	
Lindi Yield (tons/ha)		0.5	0.4	0.7	1.0	1.0	0.9	1.0	1.0	
Manyara	Babati	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
	Babati DC	Area ('000'ha)	24.3	18.7	38.1	31.7	27.2	28.4	33.7	31.7
		Production ('000'tons)	56.7	34.8	32.7	57.3	29.6	58.7	64.7	65.5
		Yield (tons/ha)	2.3	1.9	0.9	0.0	1.1	2.1	1.9	2.1
	Babati TC	Area ('000'ha)	3.6	4.5	5.0	-	3.6	3.7	4.4	4.2
		Production ('000'tons)	7.5	6.8	4.9	-	4.4	8.8	9.7	9.8
		Yield (tons/ha)	2.1	1.5	1.0	-	1.2	2.3	2.2	2.3
	Hanang	Area ('000'ha)	32.6	37.1	46.1	45.6	32.8	34.3	40.8	38.3
		Production ('000'tons)	52.4	42.2	32.8	70.0	29.7	58.9	65.0	65.7
		Yield (tons/ha)	1.6	1.1	0.7	1.8	0.9	1.7	1.6	1.7
	Kiteto	Area ('000'ha)	78.5	104.0	136.4	111.3	97.1	101.5	120.6	113.3
		Production ('000'tons)	87.9	55.2	70.1	109.4	63.6	125.9	139.0	140.5
		Yield (tons/ha)	1.1	0.5	0.5	1.5	0.7	1.2	1.2	1.2
	Mbulu	Area ('000'ha)	22.9	28.0	32.6	31.8	23.3	24.3	28.9	27.1
		Production ('000'tons)	36.3	30.2	31.1	58.9	28.2	55.9	61.7	62.3
		Yield (tons/ha)	1.6	1.1	1.0	1.0	1.2	2.3	2.1	2.3
Simanjiro	Area ('000'ha)	13.6	53.3	55.0	37.6	39.1	40.9	48.6	45.6	
	Production ('000'tons)	4.8	2.8	10.2	65.6	9.3	18.3	20.2	20.4	
	Yield (tons/ha)	0.4	0.1	0.2	1.8	0.2	0.4	0.4	0.4	
Manyara Area ('000'ha)		175.5	245.6	313.3	257.9	223.1	233.1	277.1	260.1	
Manyara Production ('000'tons)		245.7	172.0	181.7	361.1	165.0	326.3	360.2	364.2	
Manyara Yield (tons/ha)		1.5	0.7	0.7	1.7	0.7	1.4	1.3	1.4	
Mara	Bunda	Area ('000'ha)	10.4	20.4	25.9	17.9	14.1	14.1	21.4	21.0
		Production ('000'tons)	12.1	30.4	25.6	21.0	11.8	12.8	25.5	21.1
		Yield (tons/ha)	1.2	1.5	1.0	1.2	0.8	0.9	1.2	1.0
	Butiama	Area ('000'ha)	-	-	3.1	11.7	9.2	9.2	13.9	13.6
		Production ('000'tons)	-	-	10.4	15.8	8.9	9.6	19.1	15.8
		Yield (tons/ha)	-	-	3.3	1.4	1.0	1.0	1.4	1.2
	Musoma DC	Area ('000'ha)	4.7	10.2	2.7	4.3	3.4	3.4	5.1	5.0
		Production ('000'tons)	4.1	15.3	2.6	5.2	3.0	3.2	6.4	5.3
		Yield (tons/ha)	0.9	1.5	1.0	1.2	0.9	0.9	1.2	1.1
	Musoma MC	Area ('000'ha)	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1
		Production ('000'tons)	0.0	0.1	0.1	0.2	0.1	0.1	0.3	0.2
		Yield (tons/ha)	2.3	2.0	1.6	4.2	3.0	3.2	4.3	3.6
	Rorya	Area ('000'ha)	6.2	12.2	4.3	5.7	4.5	4.5	6.7	6.6
		Production ('000'tons)	6.6	30.5	7.3	16.8	9.5	10.2	20.4	16.9
		Yield (tons/ha)	1.1	2.5	1.7	3.0	2.1	2.3	3.0	2.5
	Serengeti	Area ('000'ha)	12.1	10.7	12.0	21.5	16.9	16.9	25.6	25.2
		Production ('000'tons)	10.5	15.9	18.4	45.5	25.7	27.7	55.2	45.7
		Yield (tons/ha)	0.9	1.5	1.5	2.1	1.5	1.6	2.2	1.8
Tarime DC	Area ('000'ha)	9.4	15.6	14.8	14.3	11.3	11.3	17.1	16.8	
	Production ('000'tons)	31.0	66.7	35.3	53.7	30.3	32.7	65.1	53.9	
	Yield (tons/ha)	3.3	4.3	2.4	3.7	2.7	2.9	3.8	3.2	
Tarime TC	Area ('000'ha)	-	-	-	3.3	2.6	2.6	3.9	3.9	
	Production ('000'tons)	-	-	-	15.0	8.5	9.2	18.2	15.1	
	Yield (tons/ha)	-	-	-	4.6	3.3	3.5	4.6	3.9	
Mara Area ('000'ha)		42.9	69.1	59.6	78.7	62.0	62.0	93.9	92.1	
Mara Production ('000'tons)		64.3	158.9	89.3	173.2	97.7	105.4	210.2	174.1	
Mara Yield (tons/ha)		1.5	2.3	1.5	2.2	1.6	1.7	2.2	1.9	

Mbeya	Busokelo	Area ('000'ha)	-	-	8.5	16.0	10.0	8.7	5.1	5.2
		Production ('000'tons)	-	-	24.7	20.0	37.5	36.9	21.4	18.1
		Yield (tons/ha)	-	-	2.9	1.3	3.7	4.2	4.2	3.5
	Chunya	Area ('000'ha)	121.2	148.5	22.4	97.7	26.2	22.9	13.3	13.7
		Production ('000'tons)	133.8	231.1	85.2	121.5	129.3	127.2	73.8	62.5
		Yield (tons/ha)	1.1	1.6	3.8	1.2	4.9	5.5	5.5	4.6
	Ileje	Area ('000'ha)	16.6	28.8	8.2	33.3	9.6	8.4	4.9	5.0
		Production ('000'tons)	48.8	69.6	26.2	62.9	39.8	39.2	22.7	19.2
		Yield (tons/ha)	2.9	2.4	3.2	1.9	4.1	4.7	4.7	3.8
	Kyela	Area ('000'ha)	4.0	6.2	32.5	7.1	38.1	33.3	19.3	19.9
		Production ('000'tons)	5.9	6.6	7.1	6.6	10.8	10.6	6.2	5.2
		Yield (tons/ha)	1.5	1.1	0.2	0.9	0.3	0.3	0.3	0.3
	Mbarali	Area ('000'ha)	28.5	42.6	32.1	47.8	37.6	32.9	19.1	19.7
		Production ('000'tons)	31.4	39.8	62.4	79.1	94.6	93.1	54.0	45.7
		Yield (tons/ha)	1.1	0.9	1.9	1.7	2.5	2.8	2.8	2.3
	Mbeya DC	Area ('000'ha)	55.8	81.0	40.0	92.6	46.9	41.0	23.8	24.5
		Production ('000'tons)	143.9	186.5	162.6	153.9	246.8	242.9	140.9	119.2
		Yield (tons/ha)	2.6	2.3	4.1	1.7	5.3	5.9	5.9	4.9
	Mbeya CC	Area ('000'ha)	4.5	6.5	17.5	7.5	20.6	18.0	10.4	10.7
		Production ('000'tons)	11.5	14.1	9.6	12.3	14.5	14.3	8.3	7.0
		Yield (tons/ha)	2.6	2.2	0.5	1.7	0.7	0.8	0.8	0.7
	Mbozi	Area ('000'ha)	71.3	10.4	67.9	96.6	79.6	69.6	40.4	41.6
		Production ('000'tons)	178.4	19.4	108.8	0.0	165.1	162.4	94.3	79.7
		Yield (tons/ha)	2.5	1.9	1.6	0.0	2.1	2.3	2.3	1.9
	Momba	Area ('000'ha)	-	-	62.1	28.2	72.8	63.7	36.9	38.0
		Production ('000'tons)	-	-	26.0	26.6	39.4	38.8	22.5	19.1
		Yield (tons/ha)	-	-	0.4	0.9	0.5	0.6	0.6	0.5
Rungwe	Area ('000'ha)	29.0	42.2	19.2	36.6	22.6	19.7	11.4	11.8	
	Production ('000'tons)	74.7	92.0	84.0	618.7	127.5	125.5	72.8	61.6	
	Yield (tons/ha)	2.6	2.2	4.4	16.9	5.7	6.4	6.4	5.2	
Mbeya Area ('000'ha)		330.7	366.2	310.4	463.4	364.0	318.2	184.7	190.2	
Mbeya Production ('000'tons)		628.4	659.2	596.6	1,101.8	905.3	890.9	517.0	437.4	
Mbeya Yield (tons/ha)		2.1	1.8	2.3	2.4	2.5	2.8	2.8	2.3	
Morogoro	Gairo		-	-	-	71.5	34.0	24.4	26.8	13.4
			-	-	-	63.7	24.0	17.1	23.5	12.0
			-	-	-	1.1	0.7	0.7	0.9	0.9
	Kilombero	Area ('000'ha)	19.1	69.6	25.6	53.1	30.0	21.5	23.7	11.8
		Production ('000'tons)	38.5	49.2	57.7	65.9	53.0	37.7	51.8	26.4
		Yield (tons/ha)	2.0	0.7	2.3	0.8	1.8	1.8	2.2	2.2
	Kilosa	Area ('000'ha)	80.3	139.3	85.1	125.5	70.3	50.5	55.5	27.7
		Production ('000'tons)	128.5	117.4	68.9	104.6	82.9	59.0	81.1	41.4
		Yield (tons/ha)	1.6	0.8	0.8	1.2	1.2	1.2	1.5	1.5
	Morogoro DC	Area ('000'ha)	25.8	59.0	28.2	-	31.4	22.5	24.8	12.4
		Production ('000'tons)	43.3	39.2	41.6	-	27.7	19.7	27.1	13.8
		Yield (tons/ha)	1.7	0.7	1.5	-	0.9	0.9	1.1	1.1
	Morogoro MC	Area ('000'ha)	3.4	1.0	3.7	-	-	-	-	-
		Production ('000'tons)	5.7	1.1	9.2	-	-	-	-	-
		Yield (tons/ha)	1.7	1.1	2.5	-	-	-	-	-
	Mvomero	Area ('000'ha)	21.6	50.7	29.8	90.0	51.5	37.0	40.7	20.3
		Production ('000'tons)	26.2	40.5	52.8	112.4	75.8	54.0	74.1	37.8
Yield (tons/ha)		1.2	0.8	1.8	0.8	1.5	1.5	1.8	1.9	
Ulanga	Area ('000'ha)	22.0	63.9	30.0	64.7	36.3	26.1	28.6	14.3	
	Production ('000'tons)	50.3	59.5	64.6	54.9	43.5	31.0	42.6	21.7	
	Yield (tons/ha)	2.3	0.9	2.2	1.2	1.2	1.2	1.5	1.5	
Morogoro Area ('000'ha)		172.1	383.6	202.4	404.8	253.5	182.1	200.1	99.9	
Morogoro Production ('000'tons)		292.5	306.9	294.8	401.5	307.0	218.5	300.1	153.1	
Morogoro Yield (tons/ha)		1.7	0.8	1.8	1.0	1.2	1.2	1.5	1.5	

Mtwara	Masasi	Area ('000'ha)	58.1	15.9	-	-	-	-	0.0	0.0	
		Production ('000'tons)	17.3	9.1	-	-	-	-	-	-	-
		Yield (tons/ha)	0.3	0.6	-	-	-	-	-	-	-
	Masasi DC	Area ('000'ha)	-	-	13.3	11.1	14.3	10.5	11.2	7.8	
		Production ('000'tons)	-	-	17.9	16.1	20.6	13.7	15.1	9.7	
		Yield (tons/ha)	-	-	1.3	1.4	1.4	1.3	1.4	1.2	
	Masasi TC	Area ('000'ha)	-	-	18.4	15.4	19.8	14.6	15.5	10.8	
		Production ('000'tons)	-	-	25.2	22.7	29.0	19.3	21.3	13.7	
		Yield (tons/ha)	-	-	1.4	1.5	1.5	1.3	1.4	1.3	
	Mtwara DC	Area ('000'ha)	21.6	5.3	10.8	9.0	11.6	8.5	9.1	6.3	
		Production ('000'tons)	11.3	1.4	6.0	5.4	6.9	4.6	5.0	3.2	
		Yield (tons/ha)	0.5	0.3	0.6	0.6	0.6	0.5	0.6	0.5	
	Mtwara MC	Area ('000'ha)	1.3	0.2	0.2	0.2	0.3	0.2	0.2	0.1	
		Production ('000'tons)	0.41	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
		Yield (tons/ha)	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	
	Nanyumbu	Area ('000'ha)	55.4	15.1	18.0	15.0	19.3	14.2	15.2	10.5	
		Production ('000'tons)	34.1	4.8	11.8	10.7	13.7	9.1	10.0	6.4	
		Yield (tons/ha)	0.6	1.0	0.7	0.7	0.7	0.6	0.7	0.6	
	Newala	Area ('000'ha)	54.0	14.9	13.6	11.4	14.7	10.8	11.5	8.0	
		Production ('000'tons)	30.0	5.7	11.0	9.9	12.7	8.4	9.3	6.0	
		Yield (tons/ha)	0.6	1.2	0.8	0.9	0.9	0.8	0.8	0.7	
Tandahimba	Area ('000'ha)	21.1	6.6	4.9	4.1	5.3	3.9	4.1	2.9		
	Production ('000'tons)	13.0	2.1	1.6	1.5	1.9	1.3	1.4	0.9		
	Yield (tons/ha)	0.6	1.0	0.3	0.4	0.4	0.3	0.3	0.3		
Mtwara Area ('000'ha)		211.3	58.1	79.3	66.3	85.3	62.8	66.8	46.4		
Mtwara Production ('000'tons)		105.7	23.2	73.7	66.3	85.0	56.5	62.3	40.0		
Mtwara Yield (tons/ha)		0.5	0.4	0.8	1.0	1.0	0.9	0.9	0.9		
Mwanza	Geita	Area ('000'ha)	51.7	7.3	-	-	-	-	-	-	
		Production ('000'tons)	80.0	18.3	-	-	-	-	-	-	
		Yield (tons/ha)	1.5	2.5	-	-	-	-	-	-	
	Ilemela	Area ('000'ha)	0.4	1.4	0.6	0.5	0.4	0.4	0.4	0.5	
		Production ('000'tons)	0.9	3.3	2.6	1.6	1.4	0.8	0.5	0.7	
		Yield (tons/ha)	2.0	2.4	4.3	3.4	3.9	1.9	1.3	1.4	
	Kwimba	Area ('000'ha)	17.0	55.9	20.8	25.5	19.6	22.1	22.1	25.2	
		Production ('000'tons)	29.6	15.4	53.5	55.0	48.1	26.6	18.8	23.1	
		Yield (tons/ha)	1.7	0.3	2.6	2.2	2.5	1.2	0.8	0.9	
	Magu	Area ('000'ha)	25.6	37.0	8.1	6.1	4.7	5.3	5.3	6.0	
		Production ('000'tons)	29.8	104.6	31.7	25.7	22.5	12.4	8.8	10.8	
		Yield (tons/ha)	1.2	2.8	3.9	4.2	4.8	2.4	1.7	1.8	
	Misungwi	Area ('000'ha)	22.2	52.0	25.7	23.5	18.0	20.4	20.4	23.3	
		Production ('000'tons)	22.0	40.9	63.4	70.1	61.3	33.9	24.0	29.4	
		Yield (tons/ha)	1.0	0.8	2.5	3.0	3.4	1.7	1.2	1.3	
	Mwanza CC	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
	Nyamagana (Mwanza CC)	Area ('000'ha)	0.3	-	0.4	0.7	0.5	0.6	0.6	0.7	
		Production ('000'tons)	0.6	-	1.8	1.9	1.6	0.9	0.6	0.8	
		Yield (tons/ha)	2.4	-	4.3	2.8	3.2	1.6	1.1	1.2	
Sengerema	Area ('000'ha)	27.3	50.7	26.6	27.1	20.8	23.6	23.6	26.9		
	Production ('000'tons)	50.6	95.6	106.4	121.2	106.0	58.7	41.5	50.9		
	Yield (tons/ha)	1.9	1.9	4.0	4.5	5.1	2.5	1.8	1.9		
Ukerewe	Area ('000'ha)	3.0	7.3	3.6	5.0	3.8	4.3	4.3	4.9		
	Production ('000'tons)	7.9	18.3	16.4	25.7	22.5	12.4	8.8	10.8		
	Yield (tons/ha)	2.6	2.5	4.6	5.2	5.9	2.9	2.0	2.2		
Mwanza Area ('000'ha)		147.5	211.6	85.8	88.3	67.8	76.7	76.7	87.5		
Mwanza Production ('000'tons)		221.3	296.2	275.7	301.2	263.3	145.8	103.0	126.4		
Mwanza Yield (tons/ha)		1.5	1.4	3.7	3.4	3.9	1.9	1.3	1.4		
Njombe	Ludewa	Area planted ('000'Ha)	-	-	38.6	35.7	48.4	32.7	35.4	33.7	
		Production ('000'Tonnes)	-	-	40.0	51.7	58.2	58.2	51.5	51.8	
		Crop yield (Tons/ha)	-	-	1.0	1.4	1.2	1.8	1.5	1.5	
	Makambako	Area planted ('000'Ha)	-	-	10.1	12.3	12.7	8.6	9.3	8.9	
		Production ('000'Tonnes)	-	-	11.8	17.9	15.8	15.8	14.0	14.1	
		Crop yield (Tons/ha)	-	-	1.2	1.5	1.2	1.8	1.5	1.6	
	Makete	Area planted ('000'Ha)	-	-	14.1	14.9	16.2	10.9	11.8	11.3	
		Production ('000'Tonnes)	-	-	14.3	17.3	18.0	17.9	15.9	16.0	
		Crop yield (Tons/ha)	-	-	1.0	1.2	1.1	1.6	1.3	1.4	
	Njombe DC	Area planted ('000'Ha)	-	-	125.9	54.8	61.3	41.4	44.8	42.7	
		Production ('000'Tonnes)	-	-	150.2	79.6	101.9	101.9	90.2	90.7	
		Crop yield (Tons/ha)	-	-	1.2	1.5	1.7	2.5	2.0	2.1	
	Njombe TC	Area planted ('000'Ha)	-	-	22.8	24.9	27.0	18.3	19.8	18.8	
		Production ('000'Tonnes)	-	-	49.0	65.2	67.4	67.4	59.6	60.0	
		Crop yield (Tons/ha)	-	-	2.1	2.6	2.5	3.7	3.0	3.2	
Wanging'ombe	Area planted ('000'Ha)	-	-	121.0	46.7	97.2	65.7	71.1	67.8		
	Production ('000'Tonnes)	-	-	144.3	114.7	129.7	129.7	114.8	115.5		
	Crop yield (Tons/ha)	-	-	1.2	2.5	1.3	2.0	1.6	1.7		
Njombe Area planted ('000'Ha)		-	-	332.5	189.4	262.8	177.6	192.2	183.2		
Njombe Production ('000'Tonnes)		-	-	409.5	346.5	391.1	390.8	346.0	348.1		
Njombe Crop yield (Tons/ha)		-	-	1.3	1.8	1.5	2.2	1.8	1.9		



Pwani	Bagamoyo	Area ('000'ha)	64.6	23.6	25.4	23.9	36.6	27.3	31.4	13.5	
		Production ('000'tons)	61.7	8.5	35.2	51.7	41.1	17.1	27.1	9.4	
		Yield (tons/ha)	1.0	0.4	1.4	2.2	1.1	0.6	0.9	0.7	
	Kibaha DC	Area ('000'ha)	4.6	0.4	0.4	0.4	-	-	-	-	-
		Production ('000'tons)	0.6	0.1	0.2	0.3	-	-	-	-	-
		Yield (tons/ha)	0.1	0.2	0.6	1.0	-	-	-	-	-
	Kibaha TC	Area ('000'ha)	0.9	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1
		Production ('000'tons)	0.4	0.1	0.3	0.4	0.1	0.1	0.1	0.1	0.0
		Yield (tons/ha)	0.5	0.2	0.7	1.1	0.9	-	0.7	0.6	
	Kisarawe	Area ('000'ha)	8.8	3.5	3.8	3.6	-	-	-	-	-
		Production ('000'tons)	5.4	0.8	3.4	5.0	-	-	-	-	-
		Yield (tons/ha)	0.6	0.2	0.9	1.4	-	-	-	-	-
	Mafia	Area ('000'ha)	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
		Production ('000'tons)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Yield (tons/ha)	0.6	0.2	0.8	1.2	0.2	0.1	0.1	0.1	
	Mkuranga	Area ('000'ha)	18.0	6.7	7.2	6.8	9.9	7.4	8.5	3.7	
		Production ('000'tons)	11.2	1.4	6.0	8.8	10.9	4.5	7.2	2.5	
		Yield (tons/ha)	0.6	0.2	0.8	1.3	1.1	0.6	0.8	0.7	
	Rufiji	Area ('000'ha)	38.1	17.4	18.7	17.6	26.3	19.6	22.5	9.7	
		Production ('000'tons)	15.3	4.7	19.5	28.5	65.5	27.3	43.2	15.0	
		Yield (tons/ha)	0.4	0.3	1.0	1.6	2.5	1.4	1.9	1.5	
Pwani Area ('000'ha)			135.1	51.9	55.8	52.7	73.0	54.5	62.6	27.0	
Pwani Production ('000'tons)			94.5	15.6	64.6	94.8	117.6	49.0	77.6	27.0	
Pwani Yield (tons/ha)			0.7	0.3	0.9	1.8	1.6	0.9	1.2	1.0	
Rukwa	Mpanda	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
	Mpanda DC	Area ('000'ha)	103.7	64.5	-	-	-	-	-	-	
		Production ('000'tons)	190.8	122.5	-	-	-	-	-	-	
		Yield (tons/ha)	1.8	1.9	-	-	-	-	-	-	
	Mpanda TC	Area ('000'ha)	1.7	78.1	-	-	-	-	-	-	
		Production ('000'tons)	0.6	24.7	-	-	-	-	-	-	
		Yield (tons/ha)	0.3	0.3	-	-	-	-	-	-	
	Kalambo	Area ('000'ha)	-	-	50.8	49.0	40.2	53.2	54.1	56.9	
		Production ('000'tons)	-	-	89.6	98.2	85.6	122.7	124.8	104.1	
		Yield (tons/ha)	-	-	1.8	2.0	2.1	2.3	2.3	1.8	
	Nkasi	Area ('000'ha)	14.3	42.0	47.1	50.8	37.2	49.3	50.1	52.7	
		Production ('000'tons)	33.2	153.2	92.3	118.0	88.1	126.4	128.5	107.2	
		Yield (tons/ha)	2.3	3.6	2.0	2.3	2.4	2.6	2.6	2.0	
	Sumbawanga DC	Area ('000'ha)	35.7	39.3	62.5	61.4	49.4	65.4	66.5	69.9	
		Production ('000'tons)	86.6	155.6	114.9	137.5	109.7	157.3	160.0	133.4	
		Yield (tons/ha)	2.4	4.0	1.8	2.2	2.2	2.4	2.4	1.9	
	Sumbawanga MC	Area ('000'ha)	10.0	25.5	28.0	23.6	22.1	29.3	29.8	31.3	
		Production ('000'tons)	19.7	67.8	48.8	39.7	46.6	66.8	67.9	56.6	
		Yield (tons/ha)	2.0	2.7	1.7	1.7	2.1	2.3	2.3	1.8	
Rukwa Area ('000'ha)			165.4	249.4	188.4	184.8	148.9	197.1	200.6	210.8	
Rukwa Production ('000'tons)			330.8	523.8	345.5	393.4	330.0	473.2	481.3	401.2	
Rukwa Yield (tons/ha)			1.8	2.1	1.8	2.1	2.2	2.4	2.4	1.9	
Ruvuma	Mbinga	Area ('000'ha)	28.6	37.4	46.5	45.3	42.1	45.6	66.8	66.0	
		Production ('000'tons)	58.2	75.9	114.8	94.2	93.2	102.6	150.2	148.5	
		Yield (tons/ha)	1.5	2.0	2.5	2.1	2.2	2.3	2.3	2.3	
	Namtumbo	Area ('000'ha)	21.9	39.8	41.3	36.6	37.4	40.5	59.3	58.6	
		Production ('000'tons)	31.2	114.3	138.6	103.3	112.4	123.9	181.3	179.2	
		Yield (tons/ha)	1.4	2.9	3.4	2.8	3.0	3.1	3.1	3.1	
	Nyasa DC	Area ('000'ha)	-	-	-	9.1	-	-	-	-	
		Production ('000'tons)	-	-	-	12.5	-	-	-	-	
		Yield (tons/ha)	-	-	-	1.4	-	-	-	-	
	Songea DC	Area ('000'ha)	27.1	72.7	68.6	71.6	62.2	67.4	98.6	97.5	
		Production ('000'tons)	71.2	178.4	196.6	172.5	159.5	175.7	257.2	254.3	
		Yield (tons/ha)	1.9	3.2	2.9	2.4	2.6	2.6	2.6	2.6	
	Songea MC	Area ('000'ha)	23.2	6.9	7.7	7.6	6.9	7.5	11.0	10.9	
		Production ('000'tons)	47.2	10.8	17.1	20.0	13.9	15.3	22.4	22.1	
		Yield (tons/ha)	14.8	2.0	2.2	2.6	2.0	2.0	2.0	2.0	
Tunduru	Area ('000'ha)	17.9	27.2	28.0	26.5	25.4	27.5	40.3	39.8		
	Production ('000'tons)	17.7	43.7	60.2	49.9	48.9	53.8	78.8	77.9		
	Yield (tons/ha)	1.0	2.1	2.1	1.9	1.9	2.0	2.0	2.0		
Ruvuma Area ('000'ha)			118.7	183.9	192.1	196.7	174.1	188.5	276.0	272.8	
Ruvuma Production ('000'tons)			225.5	423.1	527.3	452.5	427.8	471.4	689.9	682.0	
Ruvuma Yield (tons/ha)			1.9	2.3	2.6	2.3	2.5	2.5	2.5	2.5	

Shinyanga	Bariadi	Area ('000'ha)	60.9	63.4	-	-	-	-	-	-
		Production ('000'tons)	75.6	42.3	-	-	-	-	-	-
		Yield (tons/ha)	1.2	0.7	-	-	-	-	-	-
	Bukombe	Area ('000'ha)	35.4	38.4	-	-	-	-	-	-
		Production ('000'tons)	58.7	38.9	-	-	-	-	-	-
		Yield (tons/ha)	1.7	1.0	-	-	-	-	-	-
	Kahama TC	Area ('000'ha)	53.6	185.4	19.7	20.3	13.9	10.1	2.4	3.4
		Production ('000'tons)	93.4	211.8	17.5	19.1	15.5	8.8	3.3	5.3
		Yield (tons/ha)	1.7	1.1	0.9	0.9	1.1	0.9	1.4	1.6
	Kishapu DC	Area ('000'ha)	14.5	23.3	34.7	35.7	47.7	34.7	8.2	11.7
		Production ('000'tons)	5.7	5.3	3.6	3.9	21.7	12.3	4.7	7.4
		Yield (tons/ha)	0.4	0.2	0.1	0.1	0.5	0.4	0.6	0.6
	Msalala DC	Area ('000'ha)	-	-	96.3	99.1	29.1	21.2	5.0	7.1
		Production ('000'tons)	-	-	116.8	127.6	44.1	25.0	9.5	15.0
		Yield (tons/ha)	-	-	1.2	1.3	1.5	1.2	1.9	2.1
	Maswa	Area ('000'ha)	30.7	39.3	-	-	-	-	-	-
		Production ('000'tons)	12.4	9.4	-	-	-	-	-	-
		Yield (tons/ha)	0.4	0.2	-	-	-	-	-	-
	Meatu	Area ('000'ha)	22.9	30.5	-	-	-	-	-	-
		Production ('000'tons)	19.7	15.7	-	-	-	-	-	-
		Yield (tons/ha)	0.9	0.5	-	-	-	-	-	-
Shinyanga DC	Area ('000'ha)	0.4	18.7	13.8	14.2	16.8	12.2	2.9	4.1	
	Production ('000'tons)	0.3	5.3	9.2	10.0	25.4	14.4	5.5	8.6	
	Yield (tons/ha)	0.8	0.3	0.7	0.7	1.5	1.2	1.9	2.1	
Shinyanga MC	Area ('000'ha)	4.8	18.7	9.9	10.2	1.1	0.8	0.2	0.3	
	Production ('000'tons)	1.8	5.3	1.2	1.3	1.0	0.6	0.2	0.3	
	Yield (tons/ha)	0.4	0.3	0.1	0.1	0.8	0.7	1.1	1.2	
Ushetu DC	Area ('000'ha)	-	-	137.2	141.2	137.7	100.2	23.7	33.8	
	Production ('000'tons)	-	-	182.7	199.5	208.4	118.2	44.8	70.8	
	Yield (tons/ha)	-	-	1.3	1.4	1.5	1.2	1.9	2.1	
Shinyanga Area ('000'ha)		223.1	417.6	291.9	320.7	246.3	179.3	42.4	60.4	
Shinyanga Production ('000'tons)		267.7	334.0	313.5	361.5	316.1	179.3	67.9	107.4	
Shinyanga Yield (tons/ha)		0.9	0.5	1.1	1.1	1.3	1.0	1.6	1.8	
Simiyu	Bariadi DC	Area planted ('000'Ha)	-	-	25.9	26.7	36.2	28.4	47.1	44.8
		Production ('000'Tonnes)	-	-	8.2	8.9	19.9	21.6	38.9	39.8
		Crop yield (Tons/Ha)	-	-	0.3	0.3	0.6	0.8	0.8	0.9
	Bariadi TC	Area planted ('000'Ha)	-	-	15.9	16.4	15.5	12.2	20.2	19.2
		Production ('000'Tonnes)	-	-	7.1	7.8	25.9	28.1	50.5	51.7
		Crop yield (Tons/Ha)	-	-	0.4	0.5	1.7	2.3	2.5	2.7
	Busega DC	Area planted ('000'Ha)	-	-	1.9	1.9	4.8	3.8	6.2	5.9
		Production ('000'Tonnes)	-	-	1.7	1.9	4.3	4.7	8.5	8.7
		Crop yield (Tons/Ha)	-	-	0.9	1.0	0.9	1.3	1.4	1.5
	Itilima DC	Area planted ('000'Ha)	-	-	81.9	84.3	24.9	19.5	32.4	30.8
		Production ('000'Tonnes)	-	-	40.6	44.3	41.6	45.1	81.2	83.0
		Crop yield (Tons/Ha)	-	-	0.5	0.5	1.7	2.3	2.5	2.7
	Maswa DC	Area planted ('000'Ha)	-	-	36.8	37.9	40.1	31.5	52.1	49.6
		Production ('000'Tonnes)	-	-	6.1	6.7	17.8	19.4	34.8	35.6
		Crop yield (Tons/Ha)	-	-	0.2	0.2	0.4	0.6	0.7	0.7
	Meatu DC	Area planted ('000'Ha)	-	-	31.9	32.8	32.2	25.2	41.8	39.8
		Production ('000'Tonnes)	-	-	75.9	82.9	23.9	25.9	46.6	47.6
		Crop yield (Tons/Ha)	-	-	2.4	2.5	0.7	1.0	1.1	1.2
	Simiyu Area planted ('000'Ha)		-	-	194.4	200.0	153.6	120.6	199.7	190.3
	Simiyu Production ('000'Tonnes)		-	-	139.7	152.6	133.4	144.7	260.5	266.4
	Simiyu Crop yield (Tons/Ha)		-	-	0.8	0.8	0.9	1.2	1.3	1.4
Singida	Iramba	Area ('000'ha)	79.2	90.8	43.6	106.4	89.2	89.4	91.3	84.1
		Production ('000'tons)	48.0	57.7	59.4	121.4	55.1	132.1	105.6	106.5
		Yield (tons/ha)	0.6	0.6	1.4	1.1	0.6	1.5	1.2	1.3
	Manyoni	Area ('000'ha)	17.7	20.9	17.0	41.5	34.8	34.8	35.6	32.8
		Production ('000'tons)	3.2	7.1	13.0	26.5	12.0	28.8	23.0	23.2
		Yield (tons/ha)	0.2	0.3	0.8	0.6	0.3	0.8	0.6	0.7
	Mkalama DC	Area ('000'ha)	-	-	-	-	35.5	35.6	36.3	33.5
		Production ('000'tons)	-	-	-	-	24.9	59.7	47.7	48.1
		Yield (tons/ha)	-	-	-	-	0.7	1.7	1.3	1.4
	Singida DC	Area ('000'ha)	32.4	51.3	-	-	8.6	8.6	8.8	8.1
		Production ('000'tons)	26.4	16.7	-	-	6.4	15.2	12.2	12.3
		Yield (tons/ha)	0.8	0.3	-	-	0.7	1.8	1.4	1.5
Singida MC	Area ('000'ha)	0.3	0.1	-	-	1.7	1.7	1.7	1.6	
	Production ('000'tons)	0.1	0.1	-	-	0.9	2.3	1.8	1.8	
	Yield (tons/ha)	0.5	0.8	-	-	0.6	1.4	1.1	1.2	
Singida Area ('000'ha)		129.6	163.1	60.6	147.8	169.7	170.0	173.6	160.0	
Singida Production ('000'tons)		77.7	81.5	72.3	147.8	99.2	238.1	190.4	192.0	
Singida Yield (tons/ha)		0.6	0.5	0.5	1.0	0.6	1.4	1.1	1.2	

Songwe	Ileje	Area ('000'ha)	-	-	-	-	-	-	-	13.3	12.5	
		Production ('000'tons)	-	-	-	-	-	-	-	-	12.0	10.0
		Yield (tons/ha)	-	-	-	-	-	-	-	-	0.9	0.8
	Mbozi	Area ('000'ha)	-	-	-	-	-	-	-	-	63.3	59.8
		Production ('000'tons)	-	-	-	-	-	-	-	-	220.7	183.3
		Yield (tons/ha)	-	-	-	-	-	-	-	-	3.5	3.1
	Momba	Area ('000'ha)	-	-	-	-	-	-	-	-	63.3	59.8
		Production ('000'tons)	-	-	-	-	-	-	-	-	177.8	147.7
		Yield (tons/ha)	-	-	-	-	-	-	-	-	2.8	2.5
	Songwe	Area ('000'ha)	-	-	-	-	-	-	-	-	13.3	12.5
		Production ('000'tons)	-	-	-	-	-	-	-	-	18.0	15.0
		Yield (tons/ha)	-	-	-	-	-	-	-	-	1.4	1.2
Tunduma	Area ('000'ha)	-	-	-	-	-	-	-	-	21.2	20.0	
	Production ('000'tons)	-	-	-	-	-	-	-	-	59.8	49.7	
	Yield (tons/ha)	-	-	-	-	-	-	-	-	2.8	2.5	
Songwe Area ('000'ha)										174.4	164.7	
Songwe Production ('000'tons)			152.7	-	-	-	-	-	-	488.3	405.6	
Songwe Yield (tons/ha)			-	-	-	-	-	-	-	2.8	2.5	
Tabora	Igunga	Area ('000'ha)	52.3	40.6	18.3	19.0	19.0	17.1	15.5	17.2		
		Production ('000'tons)	44.8	56.2	17.1	33.7	27.1	37.3	25.4	39.3		
		Yield (tons/ha)	0.9	1.4	0.9	1.8	1.4	2.2	1.6	2.3		
	Kaliua	Area ('000'ha)	-	-	45.7	47.6	47.6	42.8	38.8	43.2		
		Production ('000'tons)	-	-	35.4	69.7	56.2	77.3	52.5	81.4		
		Yield (tons/ha)	-	-	0.8	1.5	1.2	1.8	1.4	1.9		
	Nzega	Area ('000'ha)	57.6	53.6	49.0	51.0	51.0	45.9	41.6	46.3		
		Production ('000'tons)	73.1	50.0	28.9	56.9	45.9	63.1	42.9	66.4		
		Yield (tons/ha)	1.3	0.9	0.6	1.1	0.9	1.4	1.0	1.4		
	Sikonge	Area ('000'ha)	26.8	22.6	14.4	15.0	15.0	13.5	12.2	13.6		
		Production ('000'tons)	56.8	45.9	23.9	47.1	37.9	52.2	35.5	55.0		
		Yield (tons/ha)	2.1	2.0	1.7	3.1	2.5	3.9	2.9	4.0		
	Tabora MC	Area ('000'ha)	9.3	8.5	8.2	8.5	8.5	7.7	7.0	7.8		
		Production ('000'tons)	14.0	10.4	7.6	15.0	12.1	16.6	11.3	17.5		
		Yield (tons/ha)	1.5	1.2	0.9	1.8	1.4	2.2	1.6	2.3		
	Urambo	Area ('000'ha)	76.4	61.1	60.9	63.3	63.3	57.0	51.7	57.5		
		Production ('000'tons)	90.1	51.1	37.4	73.8	59.4	81.8	55.6	86.1		
		Yield (tons/ha)	1.2	0.8	0.6	1.2	0.9	1.4	1.1	1.5		
Uyui	Area ('000'ha)	57.5	45.1	41.3	43.0	43.0	38.7	35.1	39.0			
	Production ('000'tons)	29.3	17.8	12.9	25.4	20.4	28.1	19.1	29.6			
	Yield (tons/ha)	0.5	0.4	0.3	0.6	0.5	0.7	0.5	0.8			
Tabora Area ('000'ha)			280.0	231.5	237.8	247.4	247.4	222.8	201.8	224.6		
Tabora Production ('000'tons)			308.0	231.5	163.1	321.6	259.0	356.5	242.2	375.3		
Tabora Yield (tons/ha)			1.2	1.1	0.8	1.3	1.0	1.6	1.2	1.7		
Tanga	Bumbuli DC	Area ('000'ha)	-	-	-	-	19.6	24.8	27.1	35.2		
		Production ('000'tons)	-	-	-	-	23.2	27.5	34.1	54.0		
		Yield (tons/ha)	-	-	-	-	1.2	1.1	1.3	1.5		
	Handeni	Area ('000'ha)	77.5	39.0	44.1	18.6	17.3	21.8	23.9	30.9		
		Production ('000'tons)	93.9	50.8	45.3	74.1	51.0	60.5	74.9	118.6		
		Yield (tons/ha)	1.2	1.3	1.0	4.0	3.0	2.8	3.1	3.8		
	Kilindi	Area ('000'ha)	21.7	11.9	156.3	66.0	54.1	68.5	74.9	97.1		
		Production ('000'tons)	41.9	7.7	13.5	22.0	43.3	51.3	63.5	100.5		
		Yield (tons/ha)	1.9	0.7	0.1	0.3	0.8	0.7	0.8	1.0		
	Korogwe DC	Area ('000'ha)	59.4	11.9	37.6	15.9	-	-	-	-		
		Production ('000'tons)	88.2	0.5	28.1	45.9	-	-	-	-		
		Yield (tons/ha)	1.5	0.0	0.7	2.9	-	-	-	-		
	Korogwe TC	Area ('000'ha)	4.8	0.2	5.3	2.2	8.6	10.8	11.9	15.4		
		Production ('000'tons)	18.4	0.2	6.7	10.9	27.9	33.0	40.9	64.8		
		Yield (tons/ha)	3.9	0.9	1.3	4.9	3.3	3.0	3.5	4.2		
	Lushoto	Area ('000'ha)	4.8	7.2	17.7	7.5	-	-	-	-		
		Production ('000'tons)	5.6	7.6	5.0	8.2	-	-	-	-		
		Yield (tons/ha)	1.2	1.1	0.3	1.1	-	-	-	-		
	Mkinga	Area ('000'ha)	7.6	3.8	10.9	4.6	20.3	25.6	28.0	36.3		
		Production ('000'tons)	17.6	8.6	7.5	12.3	6.1	7.2	8.9	14.1		
		Yield (tons/ha)	2.3	2.2	0.7	2.7	0.3	0.3	0.3	0.4		
	Muheza	Area ('000'ha)	15.7	11.2	22.6	9.6	1.3	1.7	1.9	2.4		
		Production ('000'tons)	54.5	8.2	15.7	25.7	1.6	1.9	2.3	3.7		
		Yield (tons/ha)	3.5	0.7	0.7	2.7	1.2	1.1	1.3	1.5		
Pangani	Area ('000'ha)	2.3	1.7	7.3	3.1	13.3	16.9	18.5	23.9			
	Production ('000'tons)	8.9	2.6	6.3	10.3	33.8	40.0	49.5	78.5			
	Yield (tons/ha)	3.9	1.5	0.9	3.3	2.5	2.4	2.7	3.3			
Tanga	Area ('000'ha)	1.2	0.6	5.3	2.2	-	-	-	-			
	Production ('000'tons)	2.3	1.1	6.7	10.9	-	-	-	-			
	Yield (tons/ha)	1.9	1.9	1.3	4.9	-	-	-	-			
Tanga Area ('000'ha)			194.9	87.4	307.1	129.6	134.5	170.3	186.0	241.2		
Tanga Production ('000'tons)			331.3	87.4	134.8	220.4	186.7	221.4	274.1	434.1		
Tanga Yield (tons/ha)			1.7	1.0	0.4	1.7	1.4	1.3	1.5	1.8		
<b>National Maize Area ('000'ha)</b>			<b>3,287.8</b>	<b>4,118.1</b>	<b>4,120.3</b>	<b>4,146.0</b>	<b>3,787.8</b>	<b>3,583.6</b>	<b>3,817.9</b>	<b>3,546.4</b>		
<b>National Maize Production ('000'tons)</b>			<b>4,340.8</b>	<b>5,104.2</b>	<b>5,356.3</b>	<b>6,734.4</b>	<b>5,902.8</b>	<b>6,148.7</b>	<b>6,680.8</b>	<b>6,273.2</b>		
<b>National Maize Yield (tons/ha)</b>			<b>1.3</b>	<b>1.2</b>	<b>1.3</b>	<b>1.6</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>	<b>1.8</b>		

Source: Ministry of Agriculture

Table A.2.2 Paddy: Area ('000'ha), Production ('000'tons) and Yield (tons/ha) by Region and District by Year

Region	District	Data	Year							
			2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Arusha	Karatu	Area ('000'ha)	41.6	50.9	20.3	1.3	20.6	20.2	21.4	21.4
		Production ('000'tons)	94.5	148.1	69.2	4.6	50.5	81.2	65.9	103.2
		Yield (tons/ha)	2.3	2.9	3.4	2.3	2.5	4.0	3.1	4.8
	Longido	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
	Meru	Area ('000'ha)	37.6	32.3	23.3	64.4	19.9	19.6	20.7	20.8
		Production ('000'tons)	46.5	118.7	39.4	265.1	54.4	87.4	70.9	111.1
		Yield (tons/ha)	1.2	3.7	1.7	2.7	2.7	4.5	3.4	5.3
	Monduli	Area ('000'ha)	27.7	23.7	0.0	44.9	14.6	14.4	15.2	15.3
		Production ('000'tons)	39.9	45.8	0.0	68.2	25.0	40.1	32.6	51.0
		Yield (tons/ha)	1.4	1.9	1.0	1.0	1.7	2.8	2.1	3.3
	Ngorongoro	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
Arusha Area ('000'ha)			106.9	106.9	43.6	110.6	55.1	54.3	57.3	57.5
Arusha Production ('000'tons)			180.9	312.6	108.7	337.8	129.9	208.8	169.4	265.3
Arusha Yield (tons/ha)			1.7	2.9	0.9	2.0	2.4	3.8	3.0	4.6
Dar es salaam	Ilala	Area ('000'ha)	0.8	0.5	0.6	0.7	0.3	0.3	0.4	0.8
		Production ('000'tons)	1.6	1.0	0.1	0.2	1.0	1.2	1.3	0.2
		Yield (tons/ha)	0.6	2.1	0.1	0.2	3.1	3.9	3.4	0.3
	Kinondoni	Area ('000'ha)	0.1	1.4	0.1	0.1	0.1	0.1	0.1	0.1
		Production ('000'tons)	0.2	1.4	0.1	0.3	0.1	0.1	0.1	0.4
		Yield (tons/ha)	0.5	1.0	1.2	2.8	0.7	0.8	0.7	3.1
	Temeke	Area ('000'ha)	2.0	0.6	1.5	2.0	2.0	2.1	2.4	2.0
		Production ('000'tons)	2.2	1.3	1.0	3.0	0.8	1.0	1.0	3.4
		Yield (tons/ha)	0.3	2.2	0.6	1.5	0.4	0.5	0.4	1.7
Dar es salaam Area ('000'ha)			2.9	2.5	2.2	2.8	2.4	2.5	2.9	2.9
Dar es salaam Production ('000'tons)			4.0	3.8	1.2	3.5	1.8	2.3	2.3	4.0
Dar es salaam Yield (tons/ha)			1.4	1.5	0.6	1.2	0.7	0.9	0.8	1.4
Dodoma	Bahi	Area ('000'ha)	6.2	6.0	2.6	6.7	-	-	-	-
		Production ('000'tons)	8.1	6.2	9.2	28.8	-	-	-	-
		Yield (tons/ha)	1.3	1.0	3.5	4.3	-	-	-	-
	Chamwino	Area ('000'ha)	1.1	0.0	-	-	-	-	-	-
		Production ('000'tons)	0.6	0.0	-	-	-	-	-	-
		Yield (tons/ha)	0.6	0.3	-	-	-	-	-	-
	CHEMBA DC	Area ('000'ha)	-	-	-	-	2.5	1.4	1.1	1.4
		Production ('000'tons)	-	-	-	-	1.2	1.5	0.7	1.5
		Yield (tons/ha)	-	-	-	-	0.5	1.0	0.6	1.1
	Dodoma CC	Area ('000'ha)	-	0.1	0.0	0.1	0.2	0.1	0.1	0.1
		Production ('000'tons)	-	0.0	0.0	0.1	0.3	0.4	0.2	0.4
		Yield (tons/ha)	-	0.1	0.7	0.8	1.6	3.5	2.1	3.7
	Kondoa	Area ('000'ha)	0.4	1.0	0.2	0.6	1.2	0.7	0.5	0.7
		Production ('000'tons)	0.1	1.0	0.9	2.8	1.2	1.5	0.7	1.5
		Yield (tons/ha)	0.4	1.0	4.2	5.1	1.0	2.2	1.4	2.4
Kongwa	Area ('000'ha)	-	-	-	-	-	-	-	-	
	Production ('000'tons)	-	-	-	-	-	-	-	-	
	Yield (tons/ha)	-	-	-	-	-	-	-	-	
Mpwapwa	Area ('000'ha)	3.1	3.3	1.2	3.1	8.5	4.8	3.6	4.7	
	Production ('000'tons)	2.8	2.4	0.3	0.8	12.4	15.1	6.9	15.3	
	Yield (tons/ha)	0.9	0.7	0.2	0.3	1.5	3.1	1.9	3.3	
Dodoma Area ('000'ha)			10.7	10.4	4.1	10.5	12.4	7.1	5.3	6.8
Dodoma Production ('000'tons)			11.6	9.6	10.5	32.5	15.2	18.5	8.4	18.8
Dodoma Yield (tons/ha)			1.1	0.9	1.4	3.1	1.2	2.6	1.6	2.8
Geita	Bukombe	Area planted ('000'Ha)	-	-	19.0	8.3	14.5	28.0	22.1	22.2
		Production ('000'Tonnes)	-	-	31.2	17.8	75.5	60.5	47.4	72.9
		Crop yield (Tons/ha)	-	-	1.6	2.2	5.2	2.2	2.1	3.3
	Chato DC	Area planted ('000'Ha)	-	-	2.7	1.0	1.8	3.4	2.7	2.7
		Production ('000'Tonnes)	-	-	4.8	2.7	11.4	9.1	7.1	11.0
		Crop yield (Tons/ha)	-	-	1.8	2.7	6.5	2.7	2.7	4.1
	Geita DC	Area planted ('000'Ha)	-	-	11.7	3.6	6.4	12.2	9.6	9.7
		Production ('000'Tonnes)	-	-	29.9	7.0	29.7	23.8	18.6	28.7
		Crop yield (Tons/ha)	-	-	2.6	1.9	4.7	1.9	1.9	3.0
	Geita TC	Area planted ('000'Ha)	-	-	-	2.1	3.6	7.0	5.5	5.5
		Production ('000'Tonnes)	-	-	-	4.0	16.9	13.5	10.6	16.3
		Crop yield (Tons/ha)	-	-	-	1.9	4.7	1.9	1.9	3.0
	Mbogwe DC	Area planted ('000'Ha)	-	-	-	7.0	16.9	32.5	25.6	25.8
		Production ('000'Tonnes)	-	-	-	17.6	74.5	59.7	46.7	71.9
		Crop yield (Tons/ha)	-	-	-	2.5	6.1	1.8	1.8	2.8
Nyang'hwale DC	Area planted ('000'Ha)	-	-	-	1.9	3.3	6.3	5.0	5.0	
	Production ('000'Tonnes)	-	-	-	3.6	15.3	12.2	9.6	14.8	
	Crop yield (Tons/ha)	-	-	-	1.9	4.7	1.9	1.9	3.0	
Geita Area planted ('000'Ha)			-	-	33.4	23.9	41.8	89.4	70.4	70.9
Geita Production ('000'Tonnes)			-	-	65.9	52.8	223.3	178.8	140.0	215.5
Geita Crop yield (Tons/ha)			-	-	2.0	2.2	5.3	2.0	2.0	3.0

Iringa	Iringa DC	Area ('000'ha)	10.7	9.2	15.5	21.5	19.4	12.1	13.1	13.2	
		Production ('000'tons)	18.0	14.7	29.0	78.5	35.5	32.5	29.7	46.7	
		Yield (tons/ha)	0.6	1.6	1.9	3.7	1.8	2.7	2.3	3.5	
	Iringa MC	Area ('000'ha)	-	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-	-
	Kilolo	Area ('000'ha)	0.2	0.2	0.3	0.4	0.4	0.2	0.2	0.2	
		Production ('000'tons)	0.4	0.2	0.4	1.0	0.0	0.0	0.0	0.0	
		Yield (tons/ha)	0.7	1.5	1.3	2.3	0.0	0.0	0.0	0.0	
	Ludewa	Area ('000'ha)	-	0.4	-	-	-	-	-	-	-
		Production ('000'tons)	-	0.3	-	-	-	-	-	-	-
		Yield (tons/ha)	-	0.7	-	-	-	-	-	-	-
	Makete	Area ('000'ha)	-	0.2	-	-	-	-	-	-	-
		Production ('000'tons)	-	0.2	-	-	-	-	-	-	-
		Yield (tons/ha)	-	1.5	-	-	-	-	-	-	-
Mufindi	Area ('000'ha)	0.1	0.1	0.2	-	0.2	0.1	0.1	0.1		
	Production ('000'tons)	0.1	0.1	0.1	-	0.1	0.1	0.1	0.2		
	Yield (tons/ha)	0.4	0.6	0.7	-	0.6	0.9	-	1.2		
Njombe DC	Area ('000'ha)	-	-	-	-	-	-	-	-	-	
	Production ('000'tons)	-	-	-	-	-	-	-	-	-	
	Yield (tons/ha)	-	-	-	-	-	-	-	-	-	
Njombe TC	Area ('000'ha)	-	-	-	-	-	-	-	-	-	
	Production ('000'tons)	-	-	-	-	-	-	-	-	-	
	Yield (tons/ha)	-	-	-	-	-	-	-	-	-	
Iringa Area ('000'ha)		10.9	10.0	15.9	21.9	19.9	12.5	13.5	13.5		
Iringa Production ('000'tons)		18.5	15.4	29.5	79.5	35.6	32.6	29.8	46.9		
Iringa Yield (tons/ha)		1.7	1.5	1.3	3.6	1.8	2.6	2.2	3.5		
Kagera	Biharamulo	Area ('000'ha)	4.9	1.7	1.8	1.3	2.6	4.2	4.5	4.8	
		Production ('000'tons)	8.4	3.4	5.2	4.1	12.0	12.9	10.2	16.8	
		Yield (tons/ha)	1.7	2.0	2.8	3.2	4.7	3.1	2.3	3.5	
	Bukoba DC	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
	Chato DC	Area ('000'ha)	0.7	2.0	-	-	-	-	-	-	
		Production ('000'tons)	1.2	3.8	-	-	-	-	-	-	
		Yield (tons/ha)	1.7	1.9	-	-	-	-	-	-	
	Karagwe DC	Area ('000'ha)	-	-	-	0.2	-	-	-	-	
		Production ('000'tons)	-	-	-	0.1	-	-	-	-	
		Yield (tons/ha)	-	-	-	0.7	-	-	-	-	
	Kyerwa DC	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
Misenyi DC	Area ('000'ha)	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1		
	Production ('000'tons)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2		
	Yield (tons/ha)	1.7	1.0	1.5	1.7	2.8	1.8	1.3	2.1		
Muleba DC	Area ('000'ha)	0.7	1.8	1.7	1.2	1.8	3.0	3.2	3.4		
	Production ('000'tons)	1.2	1.3	1.9	1.5	2.7	2.9	2.3	3.8		
	Yield (tons/ha)	1.7	0.7	1.1	1.2	1.5	1.0	0.7	1.1		
Ngara DC	Area ('000'ha)	0.4	0.1	0.1	0.1	0.2	0.4	0.4	0.4		
	Production ('000'tons)	0.7	0.1	0.1	0.1	0.4	0.5	0.4	0.6		
	Yield (tons/ha)	1.7	0.8	1.2	1.3	1.9	1.3	0.9	1.4		
Kagera Area ('000'ha)		6.8	5.6	3.7	2.7	4.7	7.6	8.2	8.7		
Kagera Production ('000'tons)		11.5	8.6	7.3	5.8	15.2	16.4	12.9	21.4		
Kagera Yield (tons/ha)		1.7	1.5	0.9	2.2	3.3	2.2	1.6	2.5		
Katavi	Mpanda DC	Area planted ('000'Ha)	-	-	6.3	11.0	7.8	13.2	12.5	12.4	
		Production ('000'Tonnes)	-	-	11.2	58.9	13.5	40.8	24.9	34.7	
		Crop yield (Tons/Ha)	-	-	1.8	5.3	1.7	3.1	2.0	2.8	
	Mpanda TC	Area planted ('000'Ha)	-	-	10.5	11.9	13.1	22.1	20.8	20.8	
		Production ('000'Tonnes)	-	-	30.1	91.6	36.3	109.7	67.1	93.4	
		Crop yield (Tons/Ha)	-	-	2.9	7.7	2.8	5.0	3.2	4.5	
	Mlele	Area planted ('000'Ha)	-	-	-	16.5	-	-	-	-	
		Production ('000'Tonnes)	-	-	-	71.8	-	-	-	-	
		Crop yield (Tons/Ha)	-	-	-	4.3	-	-	-	-	
	Nsimbo	Area planted ('000'Ha)	-	-	8.6	10.8	10.8	18.2	17.2	17.1	
		Production ('000'Tonnes)	-	-	13.0	0.0	15.7	47.5	29.0	40.4	
		Crop yield (Tons/Ha)	-	-	1.5	0.0	1.5	2.6	1.7	2.4	
	Katavi Area planted ('000'Ha)		-	-	25.4	50.3	31.8	53.6	50.5	50.4	
	Katavi Production ('000'Tonnes)		-	-	54.3	222.4	65.5	197.9	121.1	168.4	
	Katavi Crop yield (Tons/Ha)		-	-	2.1	4.4	2.1	3.7	2.4	3.3	

Kigoma	Kasulu	Area ('000'ha)	4.3	5.7	11.1	4.7	7.1	8.1	6.7	3.2
		Production ('000'tons)	9.0	12.7	29.5	7.5	9.1	13.1	9.8	4.8
		Yield (tons/ha)	2.1	2.2	2.6	1.0	1.3	1.6	1.5	1.5
	Kibondo	Area ('000'ha)	5.1	6.8	14.6	23.0	2.2	2.5	2.1	1.0
		Production ('000'tons)	10.8	17.3	42.8	51.6	2.5	3.6	2.7	1.3
		Yield (tons/ha)	2.1	2.5	2.9	1.5	1.1	1.4	1.3	1.3
	Kigoma DC	Area ('000'ha)	18.9	28.1	5.8	0.8	1.2	1.4	1.1	0.5
		Production ('000'tons)	48.2	62.3	13.4	1.7	2.1	3.0	2.3	1.1
		Yield (tons/ha)	2.5	2.2	2.3	1.4	1.7	2.2	2.0	2.1
	Kigoma Ujiji/MC	Area ('000'ha)	18.9	2.3	6.1	1.3	2.1	2.3	1.9	0.9
		Production ('000'tons)	48.2	6.7	14.7	4.2	5.1	7.4	5.5	2.7
		Yield (tons/ha)	2.5	3.0	2.4	2.0	2.5	3.2	2.9	3.0
	Buhigwe DC	Area ('000'ha)	-	-	-	0.0	0.0	0.0	0.0	0.0
		Production ('000'tons)	-	-	-	0.0	0.0	0.0	0.0	0.0
		Yield (tons/ha)	-	-	-	0.2	0.2	0.3	0.3	0.3
	Kakonko DC	Area ('000'ha)	-	-	-	3.3	5.0	5.7	4.7	2.2
		Production ('000'tons)	-	-	-	12.1	14.7	21.2	15.9	7.8
		Yield (tons/ha)	-	-	-	2.4	2.9	3.7	3.4	3.5
	Uvinza DC	Area ('000'ha)	-	-	-	16.2	24.7	28.1	23.2	10.9
		Production ('000'tons)	-	-	-	44.1	53.7	77.4	58.1	28.4
		Yield (tons/ha)	-	-	-	1.8	2.2	2.8	2.5	2.6
Kigoma Area ('000'ha)		47.2	42.9	37.6	49.3	42.3	48.1	39.7	10.9	
Kigoma Production ('000'tons)		116.2	98.9	100.4	121.1	87.2	125.7	94.3	28.4	
Kigoma Yield (tons/ha)		2.3	2.4	2.6	1.8	2.1	2.6	2.4	2.6	
Kilimanjaro	Hai	Area ('000'ha)	4.6	3.5	4.3	8.7	3.2	3.7	3.8	2.3
		Production ('000'tons)	5.2	4.8	2.9	54.8	6.2	12.5	9.6	8.4
		Yield (tons/ha)	1.1	1.4	0.7	4.1	1.9	3.4	2.5	3.6
	Moshi DC	Area ('000'ha)	3.9	3.1	10.3	-	7.7	8.8	9.1	5.6
		Production ('000'tons)	9.4	7.5	11.1	-	23.6	47.3	36.4	31.6
		Yield (tons/ha)	2.4	2.4	1.1	-	3.1	5.3	4.0	5.7
	Moshi MC	Area ('000'ha)	0.2	0.1	0.2	0.4	0.1	0.2	0.2	0.1
		Production ('000'tons)	0.6	0.5	0.2	4.1	0.4	0.9	0.7	0.6
		Yield (tons/ha)	2.8	3.4	1.1	6.8	3.0	-	3.9	5.6
	Mwanga	Area ('000'ha)	0.6	0.5	0.2	0.3	0.1	0.1	0.1	0.1
		Production ('000'tons)	1.0	0.8	0.1	1.1	0.2	0.3	0.3	0.2
		Yield (tons/ha)	1.6	1.6	0.5	2.6	1.5	2.5	1.9	2.7
	Rombo	Area ('000'ha)	-	-	0.1	-	0.1	0.1	0.1	0.1
		Production ('000'tons)	-	-	0.0	-	0.0	0.0	0.0	0.0
		Yield (tons/ha)	-	-	0.1	-	0.3	0.6	0.4	0.6
	Same	Area ('000'ha)	4.0	3.3	4.0	5.0	3.0	3.5	3.6	2.2
		Production ('000'tons)	6.5	7.6	4.1	17.1	8.6	17.2	13.3	11.5
		Yield (tons/ha)	1.6	2.3	1.0	2.2	2.8	5.0	3.7	5.3
	Siha	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
Kilimanjaro Area ('000'ha)		13.3	10.6	19.1	14.4	14.3	16.4	16.8	10.3	
Kilimanjaro Production ('000'tons)		22.6	21.2	18.4	77.0	39.0	78.2	60.3	52.3	
Kilimanjaro Yield (tons/ha)		1.7	2.0	0.6	5.4	2.7	4.8	3.6	5.1	
Lindi	Kilwa	Area ('000'ha)	8.3	3.8	2.1	1.9	2.7	2.2	2.9	1.5
		Production ('000'tons)	10.6	6.4	1.8	1.5	1.6	2.4	2.5	2.0
		Yield (tons/ha)	1.3	1.0	0.9	0.8	0.6	1.1	0.8	1.4
	Lindi DC	Area ('000'ha)	-	2.5	3.5	3.1	3.6	3.0	3.9	2.0
		Production ('000'tons)	-	3.4	2.8	2.2	3.0	4.4	4.5	3.6
		Yield (tons/ha)	-	1.0	0.8	0.7	0.8	1.5	1.1	1.8
	Lindi MC	Area ('000'ha)	0.3	2.3	0.1	0.1	0.9	0.7	0.9	0.5
		Production ('000'tons)	1.5	2.9	0.1	0.1	0.0	0.0	0.0	0.0
		Yield (tons/ha)	5.7	1.0	0.8	0.7	0.0	0.0	0.0	0.0
	Liwale	Area ('000'ha)	0.8	0.5	0.8	0.7	7.1	5.9	7.7	3.9
		Production ('000'tons)	0.4	0.6	0.4	0.3	0.9	1.4	1.4	1.1
		Yield (tons/ha)	0.4	1.0	0.5	0.5	0.1	0.2	0.2	0.3
	Nachingwea	Area ('000'ha)	4.5	1.7	1.3	1.2	1.5	1.3	1.6	0.8
		Production ('000'tons)	4.2	1.6	1.4	1.1	0.6	0.9	0.9	0.8
		Yield (tons/ha)	0.9	1.0	1.1	1.0	0.4	0.7	0.6	0.9
Ruangwa	Area ('000'ha)	3.3	1.5	7.1	6.3	3.6	3.0	3.9	1.9	
	Production ('000'tons)	9.8	2.2	6.7	5.3	7.1	10.6	10.8	8.7	
	Yield (tons/ha)	3.0	1.0	1.0	0.8	2.0	3.6	2.8	4.5	
Lindi Area ('000'ha)		17.2	12.4	14.9	13.3	19.4	16.0	21.0	10.5	
Lindi Production ('000'tons)		26.4	17.1	13.3	10.5	13.2	19.7	20.1	16.2	
Lindi Yield (tons/ha)		1.5	1.4	0.8	0.8	0.7	1.2	1.0	1.5	

Manyara	Babati	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
	Babati DC	Area ('000'ha)	-	1.1	4.6	1.8	-	-	-	-	
		Production ('000'tons)	-	1.0	7.2	1.1	-	-	-	-	
		Yield (tons/ha)	-	0.9	1.5	0.4	-	-	-	-	
	Babati TC	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
	Hanang	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
	Simanjoro	Area ('000'ha)	2.5	1.0	1.9	0.6	1.9	4.8	4.7	4.9	
		Production ('000'tons)	3.8	1.8	3.6	1.6	5.5	18.6	13.3	21.2	
		Yield (tons/ha)	1.5	1.9	1.9	1.7	2.9	3.8	2.8	4.3	
Manyara Area ('000'ha)			2.5	2.1	6.5	2.4	1.9	4.8	4.7	4.9	
Manyara Production ('000'tons)			3.8	2.8	10.8	2.7	5.5	18.6	13.3	21.2	
Manyara Yield (tons/ha)			0.4	1.4	0.6	1.1	2.9	3.8	2.8	4.3	
Mara	Bunda DC	Area ('000'ha)	0.7	3.4	6.9	0.9	1.7	11.5	11.5	10.8	
		Production ('000'tons)	1.4	6.0	13.6	1.9	2.3	24.4	19.8	20.6	
		Yield (tons/ha)	1.9	1.7	2.0	1.3	1.3	2.1	1.7	1.9	
	Butiama DC	Area ('000'ha)	-	-	2.3	0.2	0.3	2.3	2.3	2.2	
		Production ('000'tons)	-	-	3.2	0.6	0.7	7.6	6.1	6.4	
		Yield (tons/ha)	-	-	1.4	2.1	2.1	3.3	2.7	3.0	
	Musoma DC	Area ('000'ha)	0.2	2.8	1.0	0.2	0.4	2.9	2.9	2.8	
		Production ('000'tons)	0.6	7.7	3.6	0.8	0.9	10.1	8.2	8.5	
		Yield (tons/ha)	2.6	2.8	3.4	2.2	2.2	3.4	2.8	3.1	
	Musoma MC	Area ('000'ha)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	
		Production ('000'tons)	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.2	
		Yield (tons/ha)	0.7	2.8	3.4	2.3	2.4	3.7	3.0	3.4	
	Rorya DC	Area ('000'ha)	0.4	1.3	0.1	0.0	0.0	0.3	0.3	0.3	
		Production ('000'tons)	1.3	2.2	0.3	0.0	0.1	0.6	0.5	0.5	
		Yield (tons/ha)	3.4	1.7	2.1	1.5	1.5	2.4	1.9	2.1	
	Serengeti DC	Area ('000'ha)	0.2	0.7	1.0	0.1	0.1	1.0	1.0	1.0	
		Production ('000'tons)	0.1	0.5	1.1	0.1	0.1	1.4	1.2	1.2	
		Yield (tons/ha)	0.4	0.7	1.1	0.9	0.9	1.4	1.1	1.3	
	Tarime DC	Area ('000'ha)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	
		Production ('000'tons)	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.3	
		Yield (tons/ha)	0.8	3.2	1.4	2.7	2.7	4.2	3.4	3.8	
	Tarime TC	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
	Mara Area ('000'ha)			1.6	8.3	11.5	1.5	2.7	18.2	18.2	17.1
	Mara Production ('000'tons)			3.5	16.5	21.9	3.5	4.2	44.7	36.2	37.7
	Mara Yield (tons/ha)			2.2	2.0	2.1	2.4	1.6	2.5	2.0	2.2
Mbeya	Busokelo	Area ('000'ha)	-	-	0.7	1.1	1.0	1.0	1.0	1.0	
		Production ('000'tons)	-	-	2.7	0.0	2.2	4.1	2.6	4.2	
		Yield (tons/ha)	-	-	3.8	0.0	2.2	4.0	2.6	4.2	
	Chunya	Area ('000'ha)	2.7	11.0	0.9	1.8	1.3	1.3	1.3	1.3	
		Production ('000'tons)	4.0	10.6	1.8	0.0	1.5	2.8	1.7	2.8	
		Yield (tons/ha)	1.5	1.0	2.0	0.0	1.2	2.1	1.3	2.1	
	Ileje	Area ('000'ha)	1.0	1.1	0.9	0.8	1.2	1.3	1.3	1.3	
		Production ('000'tons)	4.9	3.7	4.4	0.0	3.6	6.8	4.3	6.9	
		Yield (tons/ha)	4.8	3.4	5.1	0.0	3.0	5.3	3.4	5.5	
	Kyela	Area ('000'ha)	14.3	17.5	13.3	15.0	18.7	19.7	19.6	19.4	
		Production ('000'tons)	41.9	52.5	46.6	0.0	38.6	72.4	45.7	73.8	
		Yield (tons/ha)	2.9	3.0	3.5	0.0	2.1	3.7	2.3	3.8	
	Mbarali	Area ('000'ha)	26.3	28.5	26.5	29.7	37.4	39.4	39.0	38.8	
		Production ('000'tons)	99.4	115.5	124.0	203.3	102.6	192.6	121.5	196.4	
		Yield (tons/ha)	3.8	4.1	4.7	6.9	2.7	4.9	3.1	5.1	
	Mbeya DC	Area ('000'ha)	-	-	0.0	0.0	0.0	0.0	0.0	0.0	
		Production ('000'tons)	-	-	0.0	0.0	0.0	0.0	0.0	0.0	
		Yield (tons/ha)	-	-	3.3	0.0	2.0	3.5	2.2	3.6	
	Mbeya CC	Area ('000'ha)	-	-	-	-	-	-	-	-	
		Production ('000'tons)	-	-	-	-	-	-	-	-	
		Yield (tons/ha)	-	-	-	-	-	-	-	-	
	Mbozi	Area ('000'ha)	8.5	11.0	0.3	0.3	0.4	0.4	0.4	0.4	
		Production ('000'tons)	20.2	10.6	1.1	-	0.9	1.7	1.0	1.7	
		Yield (tons/ha)	2.4	1.0	3.8	-	2.2	4.0	2.5	4.1	
	Momba	Area ('000'ha)	-	-	3.4	3.8	4.7	5.0	4.9	4.9	
		Production ('000'tons)	-	-	7.7	0.0	6.4	11.9	7.5	12.2	
		Yield (tons/ha)	-	-	2.3	0.0	1.3	2.4	1.5	2.5	
Rungwe	Area ('000'ha)	1.3	2.2	1.7	0.6	2.3	2.5	2.4	2.4		
	Production ('000'tons)	4.5	9.7	7.8	0.0	6.4	12.0	7.6	12.3		
	Yield (tons/ha)	3.6	4.5	4.7	0.0	2.7	4.9	3.1	5.1		
Mbeya Area ('000'ha)			54.1	69.1	47.6	53.0	67.1	70.7	70.0	69.5	
Mbeya Production ('000'tons)			174.9	212.8	195.9	203.3	162.2	304.4	192.1	310.3	
Mbeya Yield (tons/ha)			2.4	3.1	3.7	3.8	2.4	4.3	2.7	4.5	

Morogoro	Kilombero	Area ('000'ha)	41.5	42.0	86.5	51.5	89.9	77.7	79.6	87.3
		Production ('000'tons)	84.0	74.9	209.0	152.0	191.0	310.1	284.9	431.2
		Yield (tons/ha)	2.0	1.8	2.4	3.0	2.1	4.0	3.6	4.9
	Kilosa	Area ('000'ha)	14.1	7.6	20.6	12.2	17.3	15.0	15.3	16.8
		Production ('000'tons)	25.7	11.9	53.2	38.7	42.0	68.2	62.7	94.9
		Yield (tons/ha)	1.8	1.6	2.6	3.2	2.4	4.6	4.1	5.6
	Morogoro DC	Area ('000'ha)	14.4	13.0	22.6	1.6	13.2	11.4	11.7	12.8
		Production ('000'tons)	29.2	10.7	35.0	5.1	8.0	13.0	12.0	18.1
		Yield (tons/ha)	2.0	0.8	1.6	3.2	0.6	1.1	1.0	1.4
	Morogoro MC	Area ('000'ha)	1.6	0.3	2.7	13.4	-	-	-	-
		Production ('000'tons)	4.4	0.3	7.0	25.5	-	-	-	-
		Yield (tons/ha)	2.8	1.0	2.6	1.9	-	-	-	-
	Mvomero	Area ('000'ha)	7.9	5.6	12.7	7.5	31.1	26.9	27.5	30.2
		Production ('000'tons)	13.4	11.7	27.3	19.9	50.9	82.7	76.0	114.9
		Yield (tons/ha)	1.7	2.1	2.2	2.6	1.6	3.1	2.8	3.8
	Ulanga	Area ('000'ha)	34.9	24.1	43.0	25.6	43.3	37.5	38.4	42.1
		Production ('000'tons)	89.6	75.8	175.5	127.6	43.3	70.3	64.6	97.8
		Yield (tons/ha)	2.6	3.1	4.1	5.0	1.8	1.9	1.7	2.3
Morogoro Area ('000'ha)		114.4	92.6	188.0	111.9	194.8	168.5	172.5	189.2	
Morogoro Production ('000'tons)		246.3	185.2	507.0	368.7	335.4	544.3	500.2	756.9	
Morogoro Yield (tons/ha)		2.2	2.0	2.6	3.3	1.9	3.2	2.9	4.0	
Mtwara	Masasi	Area ('000'ha)	10.8	5.6	-	-	-	-	-	-
		Production ('000'tons)	12.0	9.9	-	-	-	-	-	-
		Yield (tons/ha)	0.7	1.0	-	-	-	-	-	-
	Masasi DC	Area ('000'ha)	-	-	4.0	14.0	9.0	5.7	6.1	4.2
		Production ('000'tons)	-	-	12.9	48.0	18.3	13.3	11.8	10.7
		Yield (tons/ha)	-	-	3.3	3.4	2.0	2.3	1.9	2.5
	Masasi TC	Area ('000'ha)	-	-	1.1	4.0	2.5	1.6	1.7	1.2
		Production ('000'tons)	-	-	5.9	21.9	8.4	6.1	5.4	4.9
		Yield (tons/ha)	-	-	5.3	5.5	3.3	3.7	3.1	4.1
	Mtwara DC	Area ('000'ha)	19.6	6.3	8.7	30.7	19.7	12.6	13.5	9.3
		Production ('000'tons)	35.8	9.0	5.4	20.1	19.7	14.3	12.6	11.5
		Yield (tons/ha)	1.9	1.0	0.6	0.7	0.4	1.1	0.9	1.2
	Mtwara MC	Area ('000'ha)	0.4	0.1	0.1	0.2	0.1	0.1	0.1	0.1
		Production ('000'tons)	0.6	0.1	0.1	0.2	0.1	0.1	0.0	0.0
		Yield (tons/ha)	1.2	1.0	0.9	0.9	0.6	0.6	0.5	0.7
	Nanyumbu	Area ('000'ha)	0.2	1.9	1.0	3.4	2.2	1.4	1.5	1.0
		Production ('000'tons)	3.3	1.8	1.0	3.7	1.4	1.0	0.9	0.8
		Yield (tons/ha)	1.4	1.0	1.0	1.1	0.6	0.7	0.6	0.8
	Newala	Area ('000'ha)	13.1	6.7	0.5	1.9	1.2	0.8	0.8	0.6
		Production ('000'tons)	27.8	12.0	4.8	17.7	6.7	4.9	4.3	3.9
		Yield (tons/ha)	1.7	1.0	8.9	9.4	5.6	6.3	5.3	6.9
	Tandahimba	Area ('000'ha)	15.7	8.2	4.9	17.3	11.1	7.1	7.6	5.2
		Production ('000'tons)	21.7	11.7	1.1	3.9	1.5	1.1	1.0	0.9
		Yield (tons/ha)	2.2	1.0	0.2	0.2	0.1	0.2	0.1	0.2
Mtwara Area ('000'ha)		59.7	28.8	20.2	71.4	45.7	29.4	31.3	21.6	
Mtwara Production ('000'tons)		101.0	44.3	31.1	115.4	56.1	40.7	36.0	32.8	
Mtwara Yield (tons/ha)		1.4	1.5	2.9	1.6	1.0	1.4	1.1	1.5	
Mwanza	Geita	Area ('000'ha)	18.4	5.5	-	-	-	-	-	-
		Production ('000'tons)	52.5	35.2	-	-	-	-	-	-
		Yield (tons/ha)	2.9	6.4	-	-	-	-	-	-
	Ilemela	Area ('000'ha)	0.8	0.8	19.6	0.5	0.1	0.2	0.2	0.2
		Production ('000'tons)	2.2	2.1	28.7	0.8	0.5	0.5	0.3	0.5
		Yield (tons/ha)	2.7	2.7	1.5	1.7	3.3	3.5	2.2	2.8
	Kwimba	Area ('000'ha)	17.0	29.1	4.9	14.0	23.4	25.5	25.2	26.5
		Production ('000'tons)	65.0	43.2	12.4	23.0	63.1	72.9	45.0	60.5
		Yield (tons/ha)	3.8	1.5	2.5	1.6	2.7	2.9	1.8	2.3
	Magu	Area ('000'ha)	13.3	10.4	15.2	3.5	7.3	8.0	7.9	8.2
		Production ('000'tons)	5.5	36.6	32.5	9.9	30.5	35.3	21.7	29.2
		Yield (tons/ha)	0.4	3.5	2.1	2.9	4.2	4.4	2.8	3.5
	Misungwi	Area ('000'ha)	14.3	16.3	0.5	10.9	15.8	17.3	17.1	17.9
		Production ('000'tons)	21.2	27.1	0.8	26.0	74.4	86.0	53.0	71.3
		Yield (tons/ha)	1.5	1.7	1.5	2.4	4.7	5.0	3.1	4.0
	Mwanza CC	Area ('000'ha)	0.3	-	15.1	0.4	0.9	1.0	1.0	1.0
		Production ('000'tons)	0.7	-	19.6	0.7	4.1	4.8	3.0	4.0
		Yield (tons/ha)	2.8	-	1.3	1.7	4.6	4.9	3.1	3.9
	Sengerema	Area ('000'ha)	17.0	15.6	4.8	10.8	24.9	27.2	26.9	28.2
		Production ('000'tons)	30.7	25.0	14.5	15.7	73.9	85.4	52.7	70.8
		Yield (tons/ha)	1.8	1.6	3.1	1.5	3.0	3.1	2.0	2.5
	Ukerewe	Area ('000'ha)	5.2	5.5	60.7	3.4	3.5	3.9	3.8	4.0
		Production ('000'tons)	34.3	35.2	109.6	11.6	29.5	34.1	21.0	28.3
		Yield (tons/ha)	2.7	6.4	1.9	3.4	8.4	8.9	5.5	7.1
Mwanza Area ('000'ha)		86.2	83.0	60.7	43.4	76.0	83.0	82.0	86.0	
Mwanza Production ('000'tons)		212.1	204.4	109.6	87.7	276.0	319.1	196.7	264.5	
Mwanza Yield (tons/ha)		2.5	2.5	1.9	2.0	3.6	3.8	2.4	3.1	



Njombe	Ludewa	Area ('000'ha)	-	-	0.2	0.8	0.3	0.4	0.4	0.4
		Production ('000'tons)	-	-	0.7	1.0	1.1	1.3	0.8	1.3
		Yield (tons/ha)	-	-	4.3	1.2	3.9	3.2	2.1	3.2
	Makambako	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
	Makete	Area ('000'ha)	-	-	0.3	0.4	0.3	0.4	0.4	0.4
		Production ('000'tons)	-	-	0.9	0.7	0.7	0.8	0.5	0.9
		Yield (tons/ha)	-	-	2.8	1.9	2.5	2.1	1.4	2.1
	Njombe DC	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
	Njombe TC	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
	Wanging'ombe	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
Njombe Area ('000'ha)		-	-	0.5	1.2	0.6	0.8	0.8	0.8	
Njombe Production ('000'tons)		-	-	1.5	1.6	1.9	2.1	1.4	2.2	
Njombe Yield (tons/ha)		-	-	1.2	1.4	3.2	2.6	1.7	2.7	
Pwani	Bagamoyo	Area ('000'ha)	24.4	5.9	5.4	6.5	6.7	3.2	3.2	2.9
		Production ('000'tons)	116.9	17.4	18.7	23.0	11.4	9.4	7.7	11.7
		Yield (tons/ha)	0.5	3.0	3.5	3.5	1.7	2.9	2.4	4.1
	Kibaha DC	Area ('000'ha)	4.3	1.0	1.0	1.2	-	-	-	-
		Production ('000'tons)	14.5	0.3	0.3	0.4	-	-	-	-
		Yield (tons/ha)	0.4	0.3	0.4	0.4	-	-	-	-
	Kibaha TC	Area ('000'ha)	1.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2
		Production ('000'tons)	0.0	0.2	0.2	0.3	0.3	0.3	0.2	0.3
		Yield (tons/ha)	0.0	1.1	1.3	1.3	0.6	1.1	0.9	1.6
	Kisarawe	Area ('000'ha)	82.8	1.4	1.3	1.6	-	-	-	-
		Production ('000'tons)	89.3	0.8	0.9	1.1	-	-	-	-
		Yield (tons/ha)	0.1	0.6	0.7	0.7	-	-	-	-
	Mafia	Area ('000'ha)	5.2	1.3	1.2	1.4	2.7	1.3	1.3	1.2
		Production ('000'tons)	6.8	0.8	0.9	1.1	1.3	1.1	0.9	1.3
		Yield (tons/ha)	0.1	0.7	0.8	0.8	0.5	0.8	0.7	1.1
	Mkuranga	Area ('000'ha)	82.8	23.9	22.1	26.6	12.8	6.1	6.1	5.4
		Production ('000'tons)	89.3	20.0	21.5	26.5	6.6	5.4	4.5	6.8
		Yield (tons/ha)	0.1	0.8	1.0	1.0	0.5	0.9	0.7	1.2
	Rufiji	Area ('000'ha)	61.5	18.5	17.1	20.6	62.3	29.8	29.8	26.5
		Production ('000'tons)	86.2	24.7	26.5	32.6	94.5	77.6	63.9	96.8
		Yield (tons/ha)	0.2	1.3	1.6	1.6	1.5	2.6	2.1	3.7
	Pwani Area ('000'ha)		262.0	52.2	48.1	58.1	85.1	40.6	40.6	36.2
	Pwani Production ('000'tons)		403.1	64.2	69.0	84.9	114.2	93.7	77.2	116.9
	Pwani Yield (tons/ha)		1.5	1.2	1.3	1.5	1.3	2.3	1.9	3.2
Rukwa	Mpanda	Area ('000'ha)	-	-	2.0	-	-	-	-	-
		Production ('000'tons)	-	-	5.2	-	-	-	-	-
		Yield (tons/ha)	-	-	2.6	-	-	-	-	-
	Mpanda DC	Area ('000'ha)	32.1	5.8	-	-	-	-	-	-
		Production ('000'tons)	50.9	14.8	-	-	-	-	-	-
		Yield (tons/ha)	1.6	2.5	-	-	-	-	-	-
	Mpanda TC	Area ('000'ha)	5.9	-	-	-	-	-	-	-
		Production ('000'tons)	13.6	-	-	-	-	-	-	-
		Yield (tons/ha)	2.3	-	-	-	-	-	-	-
	Kalambo	Area ('000'ha)	-	-	7.2	0.0	2.5	2.3	2.0	2.1
		Production ('000'tons)	-	-	19.8	0.0	6.2	6.3	4.2	5.6
		Yield (tons/ha)	-	-	2.8	0.9	2.5	2.7	2.0	2.7
	Nkasi	Area ('000'ha)	6.3	7.3	23.1	5.8	9.0	8.2	7.3	7.3
		Production ('000'tons)	14.3	14.8	67.9	25.1	23.9	24.3	15.9	21.6
		Yield (tons/ha)	2.3	2.3	2.9	4.3	2.7	3.0	2.2	2.9
	Sumbawanga DC	Area ('000'ha)	19.5	25.4	32.3	17.8	28.9	26.5	23.6	23.6
		Production ('000'tons)	88.0	65.2	92.9	8.1	82.0	83.4	54.8	74.3
		Yield (tons/ha)	4.5	2.6	2.8	0.5	2.8	3.1	2.3	3.1
Sumbawanga (Urban)	Area ('000'ha)	-	-	-	-	-	-	-	-	
	Production ('000'tons)	-	-	-	-	-	-	-	-	
	Yield (tons/ha)	-	-	-	-	-	-	-	-	
Rukwa Area ('000'ha)		63.8	38.5	32.3	23.7	40.4	37.0	32.9	33.0	
Rukwa Production ('000'tons)		166.7	94.8	92.9	33.2	112.1	114.0	74.9	101.5	
Rukwa Yield (tons/ha)		2.1	2.5	2.8	1.4	2.8	3.1	2.3	3.1	

Ruvuma	Mbinga	Area ('000'ha)	5.5	0.2	0.7	0.5	0.7	0.9	1.0	0.5
		Production ('000'tons)	10.0	0.3	1.7	1.5	1.1	3.8	2.3	1.9
		Yield (tons/ha)	2.4	1.5	2.3	2.9	1.7	4.0	2.3	3.5
	Namtumbo	Area ('000'ha)	6.6	7.8	14.2	9.2	12.8	18.4	19.0	10.5
		Production ('000'tons)	13.6	15.3	36.7	29.9	24.8	81.9	49.2	41.5
		Yield (tons/ha)	13.6	1.0	2.6	3.3	1.9	4.5	2.6	3.9
	Nyasa DC	Area ('000'ha)	-	-	-	4.9	-	-	-	-
		Production ('000'tons)	-	-	-	9.5	-	-	-	-
		Yield (tons/ha)	-	-	-	1.9	-	-	-	-
	Songea DC	Area ('000'ha)	10.9	6.5	10.8	6.3	9.8	14.0	14.5	8.0
		Production ('000'tons)	15.0	12.0	26.1	15.0	17.6	58.2	35.0	29.5
		Yield (tons/ha)	1.9	1.0	2.4	2.4	1.8	4.2	2.4	3.7
	Songea MC	Area ('000'ha)	0.9	0.5	1.1	0.9	1.0	1.4	1.4	0.8
		Production ('000'tons)	0.9	0.6	2.7	2.8	1.9	6.1	3.7	3.1
		Yield (tons/ha)	1.0	1.0	2.6	3.3	1.9	4.5	2.6	3.9
Tunduru	Area ('000'ha)	17.6	23.8	43.2	23.4	39.0	56.0	58.0	32.1	
	Production ('000'tons)	43.4	43.5	119.2	89.0	39.0	129.1	77.6	65.4	
	Yield (tons/ha)	1.9.23	1.0	2.8	3.8	2.1	2.3	1.3	2.0	
Ruvuma Area ('000'ha)		41.5	38.8	70.0	45.2	63.2	90.7	93.9	52.0	
Ruvuma Production ('000'tons)		83.0	71.6	186.5	147.7	84.4	279.1	167.7	141.5	
Ruvuma Yield (tons/ha)		1.3	1.8	2.5	3.3	2.0	3.1	1.8	2.7	
Shinyanga	Bariadi	Area ('000'ha)	6.8	4.0	-	-	-	-	-	-
		Production ('000'tons)	49.3	8.1	-	-	-	-	-	-
		Yield (tons/ha)	7.3	2.1	-	-	-	-	-	-
	Bukombe	Area ('000'ha)	20.3	9.6	-	-	-	-	-	-
		Production ('000'tons)	13.8	14.3	-	-	-	-	-	-
		Yield (tons/ha)	0.7	1.5	-	-	-	-	-	-
	Kahama TC	Area ('000'ha)	26.9	48.0	12.7	9.1	38.8	20.7	21.5	21.7
		Production ('000'tons)	92.9	113.7	15.2	12.2	64.0	31.6	21.4	30.1
		Yield (tons/ha)	3.5	2.4	1.2	1.3	1.7	1.5	1.0	1.4
	Kishapu DC	Area ('000'ha)	1.9	1.5	4.9	3.5	-	-	-	-
		Production ('000'tons)	0.6	1.8	9.0	7.2	-	-	-	-
		Yield (tons/ha)	0.3	1.2	1.8	2.0	-	-	-	-
	Msalala DC	Area ('000'ha)	-	-	39.1	27.9	21.0	11.2	11.7	11.8
		Production ('000'tons)	-	-	126.7	101.4	13.5	6.7	4.5	6.3
		Yield (tons/ha)	-	-	3.2	3.6	0.6	0.6	0.4	0.5
	Maswa	Area ('000'ha)	6.3	4.0	-	-	-	-	-	-
		Production ('000'tons)	7.3	3.5	-	-	-	-	-	-
		Yield (tons/ha)	1.2	0.9	-	-	-	-	-	-
	Meatu	Area ('000'ha)	3.4	2.1	-	-	-	-	-	-
		Production ('000'tons)	1.9	1.2	-	-	-	-	-	-
		Yield (tons/ha)	0.6	0.6	-	-	-	-	-	-
	Shinyanga DC	Area ('000'ha)	1.6	2.4	20.0	14.3	53.9	28.7	29.9	30.2
		Production ('000'tons)	2.6	2.6	34.5	27.6	145.2	71.7	48.5	68.1
		Yield (tons/ha)	1.6	1.1	1.7	1.9	2.7	2.5	1.6	2.3
Shinyanga MC	Area ('000'ha)	6.8	2.4	4.4	3.2	26.0	13.8	14.4	14.5	
	Production ('000'tons)	2.5	2.6	1.8	1.4	177.2	87.6	59.2	83.2	
	Yield (tons/ha)	0.4	1.1	0.4	0.5	6.8	6.3	4.1	5.7	
Ushetu DC	Area ('000'ha)	-	-	51.1	36.5	26.0	13.8	14.4	14.5	
	Production ('000'tons)	-	-	171.8	137.5	177.2	87.6	59.2	83.2	
	Yield (tons/ha)	-	-	3.4	3.8	6.8	6.3	4.1	5.7	
Shinyanga Area ('000'ha)		74.0	74.0	132.3	94.5	165.6	88.3	91.8	92.7	
Shinyanga Production ('000'tons)		170.8	148.0	359.1	287.4	577.1	285.2	192.8	270.9	
Shinyanga Yield (tons/ha)		1.9	2.0	2.0	3.0	3.5	3.2	2.1	2.9	
Simiyu	Bariadi DC	Area planted ('000'Ha)	-	-	4.3	3.1	0.9	2.4	1.6	1.8
		Production ('000'Tonnes)	-	-	3.7	3.0	20.8	18.3	8.2	12.1
		Crop yield (Tons/ha)	-	-	0.9	1.0	22.3	7.7	5.0	6.6
	Bariadi TC	Area planted ('000'Ha)	-	-	0.8	0.6	2.2	5.6	3.8	4.3
		Production ('000'Tonnes)	-	-	1.6	1.3	-	-	-	-
		Crop yield (Tons/ha)	-	-	2.0	2.2	-	-	-	-
	Buseqa DC	Area planted ('000'Ha)	-	-	1.6	1.2	2.5	6.3	4.3	4.9
		Production ('000'Tonnes)	-	-	2.2	1.7	21.5	18.9	8.5	12.5
		Crop yield (Tons/ha)	-	-	1.3	1.5	8.7	3.0	2.0	2.6
	Itilima DC	Area planted ('000'Ha)	-	-	8.0	5.7	6.6	16.7	11.5	12.9
		Production ('000'Tonnes)	-	-	29.4	23.5	74.7	65.7	29.5	43.4
		Crop yield (Tons/ha)	-	-	3.7	4.1	11.4	3.9	2.6	3.4
	Maswa DC	Area planted ('000'Ha)	-	-	4.8	3.4	10.7	27.4	18.9	21.2
		Production ('000'Tonnes)	-	-	8.1	6.4	70.9	62.4	28.0	41.2
		Crop yield (Tons/ha)	-	-	1.7	1.9	6.6	2.3	1.5	1.9
	Meatu DC	Area planted ('000'Ha)	-	-	3.2	2.3	5.4	13.8	9.5	10.7
		Production ('000'Tonnes)	-	-	3.3	2.6	13.8	12.1	5.4	8.0
		Crop yield (Tons/ha)	-	-	1.0	1.2	2.5	0.9	0.6	0.7
Simiyu Area planted ('000'Ha)		-	-	22.6	16.1	28.3	72.1	49.7	55.8	
Simiyu Production ('000'Tonnes)		-	-	48.1	38.5	201.8	177.6	79.6	117.1	
Simiyu Crop yield (Tons/ha)		-	-	1.8	2.4	7.1	2.5	1.6	2.1	

Singida	Iramba	Area ('000'ha)	1.1	1.9	1.2	1.3	2.0	1.7	1.7	2.0
		Production ('000'tons)	1.3	0.9	2.4	2.9	2.0	3.7	2.5	4.5
		Yield (tons/ha)	1.1	0.5	2.0	2.3	1.0	2.2	1.5	2.3
	Manyoni	Area ('000'ha)	3.9	2.8	1.9	2.0	3.1	2.6	2.6	3.1
		Production ('000'tons)	3.0	3.5	2.6	3.1	2.2	4.0	2.7	4.9
		Yield (tons/ha)	0.8	1.3	1.4	1.6	0.7	1.6	1.0	1.6
	Singida DC	Area ('000'ha)	0.8	1.1	2.3	-	3.9	3.2	3.2	3.8
		Production ('000'tons)	2.0	0.9	3.1	-	2.6	4.8	3.2	5.8
		Yield (tons/ha)	2.6	0.9	1.3	-	0.7	1.5	1.0	1.5
	Singida MC	Area ('000'ha)	-	0.0	-	2.4	-	-	-	-
		Production ('000'tons)	-	0.0	-	3.7	-	-	-	-
		Yield (tons/ha)	-	0.8	-	1.5	-	-	-	-
Singida Area ('000'ha)		5.8	5.8	5.4	5.7	9.0	7.4	7.5	8.9	
Singida Production ('000'tons)		6.3	5.4	8.0	9.7	6.8	12.5	8.4	15.3	
Singida Yield (tons/ha)		1.1	0.9	1.2	1.7	0.8	1.7	1.1	1.7	
Songwe	Ileje	Area ('000'ha)	-	-	-	-	-	-	0.2	0.2
		Production ('000'tons)	-	-	-	-	-	-	0.6	0.7
		Yield (tons/ha)	-	-	-	-	-	-	3.0	3.9
	Mbozi	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
	Momba	Area ('000'ha)	-	-	-	-	-	-	13.4	12.6
		Production ('000'tons)	-	-	-	-	-	-	38.6	47.6
		Yield (tons/ha)	-	-	-	-	-	-	2.9	3.8
	Songwe	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
Tunduma	Area ('000'ha)	-	-	-	-	-	-	0.1	0.1	
	Production ('000'tons)	-	-	-	-	-	-	0.2	0.2	
	Yield (tons/ha)	-	-	-	-	-	-	2.3	3.1	
Songwe Area ('000'ha)		-	-	-	-	-	-	13.7	12.8	
Songwe Production ('000'tons)		-	-	-	-	-	-	39.3	48.5	
Songwe Yield (tons/ha)		-	-	-	-	-	-	2.9	3.8	
Tabora	Igunga	Area ('000'ha)	10.4	8.6	7.6	8.8	9.6	9.9	9.9	9.7
		Production ('000'tons)	33.5	48.6	26.1	29.2	30.1	64.1	35.5	62.5
		Yield (tons/ha)	3.2	5.6	3.5	3.3	3.1	6.5	3.6	6.5
	Kaliua	Area ('000'ha)	-	-	10.0	11.6	12.7	13.2	13.2	12.8
		Production ('000'tons)	-	-	18.2	20.3	21.0	44.6	24.7	43.5
		Yield (tons/ha)	-	-	1.8	1.7	1.7	3.4	1.9	3.4
	Nzega	Area ('000'ha)	41.1	34.6	22.0	25.5	27.8	28.9	28.9	28.1
		Production ('000'tons)	107.6	92.8	31.6	35.3	36.4	77.6	42.9	75.6
		Yield (tons/ha)	2.6	2.7	1.4	1.4	1.3	-	1.5	2.7
	Sikonge	Area ('000'ha)	9.9	3.1	1.4	1.6	1.7	1.8	1.8	1.7
		Production ('000'tons)	10.5	13.8	3.5	3.9	4.0	8.5	4.7	8.3
		Yield (tons/ha)	1.1	4.4	2.5	2.4	2.3	4.7	2.6	4.7
Tabora MC	Area ('000'ha)	10.1	4.4	3.0	3.5	3.8	3.9	3.9	3.8	
	Production ('000'tons)	25.8	9.9	3.9	4.4	4.5	9.6	5.3	9.3	
	Yield (tons/ha)	2.6	2.3	1.3	1.2	1.2	2.4	1.3	2.4	
Urambo	Area ('000'ha)	-	28.2	16.3	18.9	20.6	21.4	21.4	20.9	
	Production ('000'tons)	-	60.3	26.8	30.0	30.9	65.9	36.4	64.2	
	Yield (tons/ha)	-	2.1	1.6	1.6	1.5	3.1	1.7	3.1	
Uyui	Area ('000'ha)	28.4	14.0	13.4	15.6	17.0	17.6	17.6	17.1	
	Production ('000'tons)	37.7	17.6	11.1	12.4	12.8	27.3	15.1	26.6	
	Yield (tons/ha)	1.3	1.3	0.8	0.8	0.8	1.6	0.9	1.6	
Tabora Area ('000'ha)		99.9	92.9	73.7	85.5	93.2	96.7	96.8	94.2	
Tabora Production ('000'tons)		215.1	242.9	121.2	135.4	139.8	297.6	164.5	289.9	
Tabora Yield (tons/ha)		2.2	2.6	1.9	1.6	1.5	3.1	1.7	3.1	

Tanga	Handeni	Area ('000'ha)	-	0.5	-	-	-	-	-	-
		Production ('000'tons)	-	0.3	-	-	-	-	-	-
		Yield (tons/ha)	-	0.6	-	-	-	-	-	-
	Kilindi	Area ('000'ha)	-	-	-	-	-	-	-	-
		Production ('000'tons)	-	-	-	-	-	-	-	-
		Yield (tons/ha)	-	-	-	-	-	-	-	-
	Korogwe DC	Area ('000'ha)	22.4	4.2	4.1	39.3	16.7	2.8	2.4	3.6
		Production ('000'tons)	37.8	9.8	15.7	97.9	51.7	11.7	8.9	22.7
		Yield (tons/ha)	1.7	2.3	3.9	1.6	3.1	4.2	3.7	6.3
	Korogwe TC	Area ('000'ha)	2.2	0.5	0.6	-	2.7	0.4	0.4	0.6
		Production ('000'tons)	7.4	0.7	1.7	-	5.5	1.3	0.9	2.4
		Yield (tons/ha)	3.3	1.5	2.6	-	2.1	2.8	2.5	4.3
	Lushoto	Area ('000'ha)	2.3	3.3	0.4	3.1	1.8	0.3	0.3	0.4
		Production ('000'tons)	4.1	7.3	0.8	19.8	2.7	0.6	0.5	1.2
		Yield (tons/ha)	2.0	2.2	1.8	4.1	1.4	2.0	1.7	3.0
	Mkinga	Area ('000'ha)	0.1	-	0.0	1.3	0.2	0.0	0.0	0.0
		Production ('000'tons)	0.1	-	0.0	1.5	0.2	0.0	0.0	0.1
		Yield (tons/ha)	1.2	-	0.5	0.8	0.4	1.4	1.2	2.0
	Muheza	Area ('000'ha)	10.9	3.1	3.1	0.0	12.6	2.1	1.8	2.7
		Production ('000'tons)	15.3	1.7	1.9	4.2	6.3	1.4	1.1	2.8
		Yield (tons/ha)	1.4	0.6	0.6	1.2	0.5	0.7	0.6	1.0
	Pangani	Area ('000'ha)	0.5	0.1	0.0	0.4	0.2	0.0	0.0	0.0
		Production ('000'tons)	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.0
		Yield (tons/ha)	2.0	0.9	0.6	0.3	0.5	0.7	0.6	1.0
	Tanga	Area ('000'ha)	0.2	0.4	0.6	-	2.7	0.4	0.4	0.6
		Production ('000'tons)	0.2	0.5	2.5	-	8.2	1.9	1.4	3.6
		Yield (tons/ha)	1.2	1.3	3.9	-	3.1	4.2	3.7	6.3
	Tanga Area ('000'ha)		38.0	12.0	8.9	44.2	36.8	6.1	5.3	7.9
	Tanga Production ('000'tons)		70.2	20.4	22.7	123.6	74.6	16.9	12.8	32.7
	Tanga Yield (tons/ha)		1.8	1.7	1.5	2.8	2.0	2.8	2.4	4.2
<b>National Paddy Area ('000'ha)</b>		<b>1,119.3</b>	<b>799.4</b>	<b>928.3</b>	<b>957.2</b>	<b>1,154.5</b>	<b>1,121.7</b>	<b>1,097.3</b>	<b>1,032.9</b>	
<b>National Paddy Production ('000'tons)</b>		<b>2,248.3</b>	<b>1,800.6</b>	<b>2,194.8</b>	<b>2,586.3</b>	<b>2,979.9</b>	<b>3,429.3</b>	<b>2,451.7</b>	<b>3,414.8</b>	
<b>National Paddy Yield (tons/ha)</b>		<b>2.0</b>	<b>2.3</b>	<b>2.4</b>	<b>2.7</b>	<b>2.6</b>	<b>3.1</b>	<b>2.2</b>	<b>3.3</b>	

Source: Ministry of Agriculture

Table A.2.3 Cotton: Area (ha), Production (tons) and Yield (tons/ha) by Region and District in 2017/2018

Region	District	Planted area (Ha)	Yield (Tons/Ha)	Production (Tons)
Dodoma	Bahi	1,180	0.1	119
	Chamwino	1,288	0.1	109
	Chemba	1,360	0.1	116
	<b>Sub total</b>	<b>3,828</b>	<b>0.1</b>	<b>344</b>
Geita	Bukombe	18,062	0.3	4,954
	Chato	24,266	0.4	10,890
	Geita	25,205	0.3	8,760
	Mbogwe	13,222	0.3	3,902
	Nyang'hwale	19,342	0.2	4,441
	<b>Sub total</b>	<b>100,097</b>	<b>0.3</b>	<b>32,947</b>
Iringa	Iringa	4	1.3	5
	<b>Sub total</b>	<b>4</b>	<b>1.3</b>	<b>5</b>
Mara	Bunda	20,030	0.3	6,076
	Bunda TC	8,804	0.4	3,895
	Musoma	8,380	0.2	1,807
	Serengeti	19,775	0.3	6,795
	Butiama	7,600	0.3	1,963
	Rorya	235	0.3	69
	Tarime	200	0.1	11
	<b>Sub total</b>	<b>65,024</b>	<b>0.3</b>	<b>20,617</b>
Mwanza	Sengerema	10,600	0.4	4,023
	Buchosa	9,000	0.2	1,956
	Magu	12,960	0.9	11,462
	Kwimba	19,500	0.6	12,603
	Ilemela	3	0.2	0.50
	Misungwi	13,784	0.2	3,150
	<b>Sub total</b>	<b>65,847</b>	<b>0.5</b>	<b>33,195</b>
Kagera	Biharamulo	9,700	0.3	2,773
	Muleba	723	0.4	278
	<b>Sub total</b>	<b>10,423</b>	<b>0.3</b>	<b>3,051</b>
Katavi	Tanganyika	11,879	0.6	7,023
	Nsimbo	1,500	0.8	1,217
	Mpanda	529	0.6	342
	<b>Sub total</b>	<b>13,907</b>	<b>0.6</b>	<b>8,582</b>
Kigoma	Kakonko	2,014	0.3	521
	Kibondo	1,400	0.1	75
	Kasulu	863	0.6	486
	Uvinza	2,912	0.4	1,176
	<b>Sub total</b>	<b>7,189</b>	<b>0.3</b>	<b>2,258</b>
Manyara	Babati	357	0.7	250
	<b>Sub total</b>	<b>357</b>	<b>0.7</b>	<b>250</b>
Morogoro	Kilosa	216	0.7	151
	Ulanga	309	0.7	216
	Mvomero&Malinyi	69	0.7	48
	<b>Sub total</b>	<b>593</b>	<b>0.7</b>	<b>415</b>
Pwani	Bagamoyo	12	0.0	-
	<b>Sub total</b>	<b>12</b>	<b>0.0</b>	<b>-</b>

Simiyu	Bariadi	46,400	0.7	31,178
	Bariadi TC	19,092	0.6	11,604
	Busega	39,104	0.3	13,437
	Itilima	62,388	0.5	28,126
	Maswa	34,700	1.1	39,448
	Meatu	90,507	0.5	41,442
	<b>Sub total</b>	<b>292,191</b>	<b>0.6</b>	<b>165,235</b>
Singida	Iramba	4,288	0.5	2,038
	Mkalama	2,400	0.3	780
	Manyoni	4,324	0.2	706
	Ikungi	4,392	0.3	1,488
	Singida	1,028	0.1	132
	Itigi	2,000	0.3	647
<b>Sub total</b>	<b>18,432</b>	<b>0.3</b>	<b>5,791</b>	
Shinyanga	Kishapu	76,960	0.4	31,250
	Shinyanga DC	6,221	0.7	4,638
	Shinyanga MC	4,200	0.9	3,920
	Kahama TC	1,447	0.2	243
	Msalala	2,800	0.2	606
	Ushetu	7,000	0.5	3,769
	<b>Sub total</b>	<b>98,628</b>	<b>0.5</b>	<b>44,427</b>
Tabora	Igunga	50,111	0.5	24,209
	Urambo	1,728	0.3	460
	Kaliua	10,333	0.4	4,110
	Nzega	4,676	0.3	1,554
	Tabora Manispaa	240	0.3	64
	Uyui	3,526	0.4	1,290
<b>Sub total</b>	<b>70,614</b>	<b>0.4</b>	<b>31,687</b>	
Tanga	Lushoto	139	0.7	97
	<b>Sub total</b>	<b>139</b>	<b>0.7</b>	<b>97</b>
<b>TOTAL (NATIONAL)</b>		<b>747,284</b>	<b>0.5</b>	<b>348,901</b>

Source: Ministry of Agriculture

Table A.2.4 Tobacco: Area (Ha), Production (tons) and Yield (tons/ha) by Region and District in 2018/2019

Region	District	Planted area (Ha)	Yield (Tons/Ha)	Production (Tons)
Geita	Bukombe	450	1.68	754
	Mbogwe	45	1.17	53
	<b>Sub Total</b>	<b>495</b>	<b>1.63</b>	<b>806</b>
Iringa	Iringa	203	1.36	277
	<b>Sub Total</b>	<b>203</b>	<b>1.36</b>	<b>277</b>
Kagera	Biharamulo	187	1.06	199
	<b>Sub Total</b>	<b>187</b>	<b>1.06</b>	<b>199</b>
Katavi	Mlele	1,575	1.45	2,282
	Mpanda MC	341	1.95	665
	Nsimbo	997	2.10	2,090
	Tanganyika	1,287	1.64	2,108
	<b>Sub Total</b>	<b>4,200</b>	<b>1.70</b>	<b>7,144</b>
Kigoma	Kasulu	1,479	0.81	1,205
	Uvinza	1,915	1.81	3,468
	<b>Sub Total</b>	<b>3,394</b>	<b>1.38</b>	<b>4,673</b>
Mbeya	Chunya	7,667	1.47	11,303
	<b>Sub Total</b>	<b>7,667</b>	<b>1.47</b>	<b>11,303</b>
Morogoro	Kilosa	14	3.04	43
	<b>Sub Total</b>	<b>14</b>	<b>3.04</b>	<b>43</b>
Ruvuma	Namtumbo	711	1.66	1,183
	Songea DC	31	1.22	37
	Songea MC	24	1.15	28
	<b>Sub Total</b>	<b>766</b>	<b>1.63</b>	<b>1,248</b>
Singida	Itigi	3	3.48	9
	<b>Sub Total</b>	<b>3</b>	<b>3.48</b>	<b>9</b>
Shinyanga	Ushetu	6,352	1.57	10,004
	<b>Sub Total</b>	<b>6,352</b>	<b>1.57</b>	<b>10,004</b>
Songwe	Songwe	448	1.38	620
	<b>Sub Total</b>	<b>448</b>	<b>1.38</b>	<b>620</b>
Tabora	Kaliua	7,120	1.42	10,140
	Nzega	397	1.42	565
	Sikonge	4,205	1.66	6,974
	Tabora MC	476	3.57	1,697
	Urambo	4,493	1.72	7,737
	Uyui	4,235	1.74	7,385
	<b>Sub Total</b>	<b>20,926</b>	<b>1.65</b>	<b>34,498</b>
<b>TOTAL (NATIONAL)</b>		<b>44,654</b>	<b>1.59</b>	<b>70,824</b>

Source: Ministry of Agriculture

Table A.2.5 Coffee: Area (ha), Production (tons) and Yield (tons/ha) by Region and District in 2018/2019

Region	District	Planted Area (Ha)	Yield (Tons/Ha)	Production (Tons)
Arusha	Meru	10,000	0.1	800
	Arusha	2,960	0.2	650
	Karatu	3,125	0.2	504
	<b>Sub total</b>	<b>16,085</b>	<b>0.1</b>	<b>1,954</b>
Iringa	Iringa DC	10	0.1	1
	Mufindi	100	0.01	1
	Kilolo	112	0.03	3
	<b>Sub total</b>	<b>4,146</b>	<b>0.0</b>	<b>5</b>
Kagera	Muleba	19,030	0.4	7,056
	Karagwe	19,850	1.0	19,580
	Bukoba	1,150	2.3	2,645
	Misenyi	650	1.0	674
	Ngara	810	0.6	500
	Biharamulo	750	0.003	2
<b>Sub total</b>	<b>42,240</b>	<b>0.7</b>	<b>30,457</b>	
Kigoma	Kigoma	2,044	0.3	665
	Buigwe	2,100	0.3	585
	Kasulu	390	0.04	14
	<b>Sub total</b>	<b>4,534</b>	<b>0.3</b>	<b>1,264</b>
Kilimanjaro	Moshi	30,904	0.1	1,669
	Hai	9,013	0.03	306
	Siha	8,009	0.03	204
	Rombo	14,247	0.1	1,107
	Mwanga	1,500	0.05	74
	Same	1,604	0.1	112
<b>Sub total</b>	<b>57,268</b>	<b>0.1</b>	<b>3,472</b>	
Manyara	Mbulu	12	0.2	3
	Babati TC	73	0.1	6
	Babati DC	81	0.1	8
	<b>Sub total</b>	<b>85</b>	<b>0.2</b>	<b>14</b>
Mara	Tarime	3,020	0.3	882
	Serengeti	132	-	-
	<b>Sub total</b>	<b>3,152</b>	<b>0.3</b>	<b>882</b>
Mbeya	Mbeya	11,000	0.2	1,968
	Busekelo	102	0.3	32
	Rungwe	2,265	0.1	205
	<b>Sub total</b>	<b>13,337</b>	<b>0.2</b>	<b>2,205</b>
Mwanza	Ukerewe	296	0.01	4
	Sengerema	561	0.01	4
	<b>Sub total</b>	<b>296</b>	<b>0.0</b>	<b>8</b>
Njombe	Njombe DC	196	0.2	39
	Njombe MC	8	0.03	0.20
	Ludewa	1,674	0.0005	1
	Makete	84	0.0048	0.4
	<b>Sub total</b>	<b>1,962</b>	<b>0.02</b>	<b>40</b>



Ruvuma	Mbinga TC	9,737	0.2	1,950
	Mbinga DC	27,125	0.4	11,315
	Nyasa	4,528	0.4	1,645
	Madaba DC	51	0.1	5
	Songea	1,915	0.9	1,760
	<b>Sub total</b>	<b>43,357</b>	<b>0.4</b>	<b>16,675</b>
Songwe	Mbozi	31,469	0.3	10,035
	Ileje	6,225	0.2	961
	<b>Sub total</b>	<b>37,694</b>	<b>0.3</b>	<b>10,996</b>
Tanga	Lushoto	4,640	0.01	55
	Bumbuli	475	0.3	120
	<b>Sub total</b>	<b>4,640</b>	<b>0.04</b>	<b>175</b>
<b>TOTAL (NATIONAL)</b>		<b>228,826</b>	<b>0.3</b>	<b>68,147</b>

Source: Ministry of Agriculture

Table A.2.6 Tea: Area ('000'ha), Production ('000'tons) and Yield (tons/ha)by Region and District by Year

Region	District	Data	Year									
			2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	
Iringa	Kilolo	Area ('000' ha)	-	-	-	-	-	-	-	-	0.21	-
		Production ('000' tons)	-	-	-	-	-	-	-	-	-	-
		Yield (Tons/ha)	-	-	-	-	-	-	-	-	-	-
	Ludewa	Area ('000' ha)	-	0.004	-	-	-	-	-	-	-	-
		Production ('000' tons)	-	0.01	-	-	-	-	-	-	-	-
		Yield (Tons/ha)	-	-	-	-	-	-	-	-	-	-
	Mufindi	Area ('000' ha)	3.43	2.00	5.07	5.07	5.07	5.07	5.07	5.07	5.57	6.00
		Production ('000' tons)	10.70	11.47	15.50	15.20	15.57	14.44	11.53	13.16	13.94	
		Yield (Tons/ha)	-	-	-	3.00	3.07	2.85	2.27	2.36	2.32	
Iringa Area ('000' ha)			3.59	4.71	8.87	5.07	5.07	5.07	5.07	5.78	6.00	
Iringa Production ('000' tons)			16.78	21.14	21.04	15.20	15.57	14.44	11.53	13.16	13.94	
Iringa Yield(tons/ha)			-	4.48	2.37	3.00	3.07	2.85	2.27	2.28	2.32	
Kagera	Bukoba DC	Area ('000' ha)	0.50	0.55	1.63	-	-	-	1.63	1.43	1.37	
		Production ('000' tons)	0.56	2.40	0.57	-	-	-	0.24	0.46	0.47	
		Yield (Tons/ha)	-	-	-	-	-	-	0.15	0.32	0.35	
	Muleba	Area ('000' ha)	0.20	0.08	-	1.63	1.63	1.63	0.21	-	0.26	
		Production ('000' tons)	0.28	0.38	-	0.70	0.68	0.53	0.04	-	0.09	
		Yield (Tons/ha)	-	-	-	0.43	0.42	0.32	0.18	-	0.35	
Kagera Area ('000' ha)			0.70	0.63	1.63	1.63	1.63	1.84	1.43	1.63		
Kagera Production ('000' tons)			0.84	2.79	0.57	0.70	0.68	0.53	0.28	0.46	0.56	
Kagera Yield(tons/ha)			1.21	4.42	0.35	0.43	0.42	0.32	0.15	0.32	0.34	
Kilimanjaro	Moshi	Area planted ('000'Ha)	-	-	-	-	-	-	-	0.0005	-	
		Production ('000'Tons)	-	-	-	-	-	-	-	0.0003	-	
		Yield (Tons/ha)	-	-	-	-	-	-	-	0.61	-	
	Kilimanjaro Area planted ('000'Ha)			-	-	-	-	-	-	0.00	-	
Kilimanjaro Production ('000'Tons)			-	-	-	-	-	-	0.00	-		
Kilimanjaro Yield (Tons/ha)			-	-	-	-	-	-	0.61	-		
Mara	Tarime	Area planted ('000'Ha)	-	-	-	-	-	-	-	0.05	-	
		Production ('000'Tons)	-	-	-	-	-	-	-	-	-	
		Yield (Tons/ha)	-	-	-	-	-	-	-	-	-	
Mara Area planted ('000'Ha)			-	-	-	-	-	-	0.05	-		
Mara Production ('000'Tons)			-	-	-	-	-	-	-	-		
Mara Yield (Tons/ha)			-	-	-	-	-	-	-	-		
Mbeya	Rungwe	Area ('000' ha)	1.98	1.85	4.48	4.41	5.58	5.58	5.58	5.41	5.58	
		Production ('000' tons)	11.16	6.50	6.46	6.25	7.08	5.23	5.23	7.53	7.69	
		Yield (Tons/ha)	-	-	-	1.42	1.27	0.94	0.93	1.39	1.38	
Mbeya Area ('000' ha)			1.98	1.85	4.48	4.41	5.58	5.58	5.58	5.41	5.58	
Mbeya Production ('000' tons)			11.16	6.50	6.46	6.25	7.08	5.23	5.23	7.53	7.69	
Mbeya Yield (Tons/ha)			-	-	-	1.42	1.27	0.94	0.93	1.39	1.38	
Njombe	Njombe DC	Area ('000' ha)	0.08	1.38	3.80	3.80	3.80	3.81	3.81	1.64	3.80	
		Production ('000' tons)	3.04	3.27	5.54	5.97	7.28	7.05	5.60	2.34	7.35	
		Yield (Tons/ha)	-	-	1.46	1.57	1.91	1.85	1.47	1.43	1.93	
	Njombe TC	Area ('000' ha)	0.08	1.33	-	-	-	-	-	1.55	-	
		Production ('000' tons)	3.04	6.39	-	-	-	-	-	1.34	-	
		Yield (Tons/ha)	-	-	-	-	-	-	-	0.87	-	
	Wang'ingombe	Area planted ('000'Ha)	-	-	-	-	-	-	-	0.73	-	
		Production ('000'Tons)	-	-	-	-	-	-	-	2.61	-	
		Yield (Tons/ha)	-	-	-	-	-	-	-	3.58	-	
Njombe Area planted ('000'Ha)			0.16	2.71	3.80	3.80	3.80	3.81	3.81	3.91	3.80	
Njombe Production ('000'Tons)			6.08	9.66	5.54	5.97	7.28	7.05	5.60	6.29	7.35	
Njombe Yield (Tons/ha)			38.00	3.56	1.46	1.57	1.91	1.85	1.47	1.61	1.93	

Tanga	Korogwe DC	Area ('000' ha)	0.89	0.20	1.82	1.82	1.82	1.82	1.82	1.61	1.82
		Production ('000' tons)	2.28	0.30	1.70	2.11	2.11	1.91	1.81	2.23	3.27
		Yield (Tons/ha)	-	-	-	1.16	1.16	1.05	0.99	1.39	1.80
	Lushoto	Area ('000' ha)	1.40	0.62	2.07	2.07	2.07	2.07	2.07	2.28	2.07
		Production ('000' tons)	0.94	1.17	1.21	0.61	0.36	0.33	0.38	1.37	0.54
		Yield (Tons/ha)	-	-	-	0.29	0.17	0.16	0.18	0.60	0.26
	Muheza	Area ('000' ha)	-	0.76	2.54	2.54	2.54	2.54	2.54	2.56	2.54
		Production ('000' tons)	-	0.91	2.73	2.67	2.67	3.16	2.15	2.96	3.85
		Yield (Tons/ha)	-	-	-	1.05	1.05	1.24	0.84	1.15	1.51
Tanga Area ('000' ha)		2.29	1.57	6.43	6.43	6.43	6.43	6.43	6.45	6.43	
Tanga Production ('000' tons)		3.22	2.38	5.63	5.38	5.14	5.40	4.33	6.56	7.65	
Tanga Yield (Tons/ha)		-	-	-	0.84	0.80	0.84	0.67	1.02	1.19	
<b>National Tea Area ('000'ha)</b>		<b>8.55</b>	<b>8.77</b>	<b>21.41</b>	<b>21.34</b>	<b>22.51</b>	<b>22.51</b>	<b>22.72</b>	<b>2.30</b>	<b>23.44</b>	
<b>National Tea Production ('000'tons)</b>		<b>32.00</b>	<b>32.81</b>	<b>33.70</b>	<b>33.50</b>	<b>35.75</b>	<b>32.63</b>	<b>26.98</b>	<b>3.40</b>	<b>37.19</b>	
<b>Natioanal Tea Yield (Tons/ha)</b>		<b>3.74</b>	<b>3.74</b>	<b>1.57</b>	<b>1.57</b>	<b>1.59</b>	<b>1.45</b>	<b>1.19</b>	<b>1.48</b>	<b>1.59</b>	

Source: Ministry of Agriculture

Table A.2.7 Pyrethrum: Production (tons) by Region by District in 2017/2018 and 2018/2019

Region	District	Production (Tons)	
		2017/2018	2018/2019
Arusha	Arumeru	11	8
	<b>Sub total</b>	<b>11</b>	<b>8</b>
Iringa	Iringa DC	0	0
	Kilolo	8	6
	Mufindi	7	5
	<b>Sub total</b>	<b>15</b>	<b>11</b>
Kilimanjaro	Siha	1	0
	<b>Sub total</b>	<b>1</b>	<b>0</b>
Manyara	Babati	7	6
	Hanang	0	0
	Mbulu	25	21
	<b>Sub total</b>	<b>32</b>	<b>27</b>
Mbeya	Mbeya DC	1,933	1,636
	Rungwe	3	2
	<b>Sub total</b>	<b>1,936</b>	<b>1,638</b>
Njombe	Makete	100	94
	Ludewa	16	15
	Njombe DC	3	1
	Wanging'ombe	2	1
	<b>Sub total</b>	<b>121</b>	<b>112</b>
Songwe	Ileje	285	218
	<b>Sub total</b>	<b>285</b>	<b>218</b>
<b>TOTAL (NATIONAL)</b>		<b>2,400</b>	<b>2,014</b>

Source: Ministry of Agriculture

Table A.2.8 Sugarcane and Sugar: Production (tons) by Region and District in 2017/2018 and 2018/2019

Region	District	Year 2017/18			Sugar Production
		Sugarcane			
		Industry (Miller)	Outgrowers	Total	
Morogoro	Kilombero & Kilosa	716,617	486,113	1,202,730	303,752
	Mvomero	206,094	22,423	228,517	
Kilimanjaro	Moshi	920,472	0	920,472	
Kagera	Misenyi	706,546	59,547	766,093	
Manyara	Babati	-	57,660	57,660	
<b>Total</b>		<b>2,549,729</b>	<b>625,743</b>	<b>3,117,812</b>	-

Region	District	Year 2018/19			Sugar Production
		Sugarcane			
		Industry (Miller)	Outgrowers	Total	
Morogoro	Kilombero & Kilosa	660,598	624,749	1,285,347	359,219
	Mvomero	281,330	43,640	324,970	
Kilimanjaro	Moshi	1,043,679		1,043,679	
Kagera	Misenyi	806,836	43,670	850,506	
Manyara	Babati	-	84,957	84,957	
<b>Total</b>		<b>2,792,443</b>	<b>797,016</b>	<b>3,589,459</b>	-

Source: Ministry of Agriculture

Table A.2.9 Sisal: Area (ha), Production (tons) and Yield (tons/ha) by Region and District in 2018/2019

Region	District	Area planted (ha)	Yield (Tons/ha)	Production (Tons)
Arusha	Arumeru	177	0.8	147
	<b>Sub total</b>	<b>177</b>	<b>0.8</b>	<b>147</b>
Kilimanjaro	Same	2,985	0.4	1,285
	Mwanga	1,315	1.0	1,281
	<b>Sub total</b>	<b>4,300</b>	<b>0.6</b>	<b>2,566</b>
Mara	Serengeti	1,141	0.2	257
	Bunda	1,673	0.2	374
	Tarime	109	0.3	33
	Rorya	295	0.1	39
	Musoma DC	403	0.2	80
	<b>Sub total</b>	<b>3,621</b>	<b>0.2</b>	<b>784</b>
Morogoro	Morogoro MC	1,111	1.0	1,051
	Morogoro DC	1,159	0.7	840
	Kilosa	1,510	1.9	2,857
	<b>Sub total</b>	<b>3,780</b>	<b>1.3</b>	<b>4,748</b>
Mwanza	Misungwi	102	0.2	23
	Kwimba	785	0.2	157
	Sengerema	214	0.2	45
	<b>Sub total</b>	<b>1,102</b>	<b>0.2</b>	<b>224</b>
Pwani	Kibaha	1,350	0.04	49
	Bagamoyo	722	1.5	1,055
	<b>Sub total</b>	<b>2,073</b>	<b>0.5</b>	<b>1,104</b>
Shinyanga	Kishapu	2,532	0.2	505
	Shinyanga MC	173	0.2	38
	Shinyanga DC	108	0.2	23
	Kahama	190	0.3	58
	<b>Sub total</b>	<b>3,003</b>	<b>0.2</b>	<b>625</b>
Simiyu	Bariadi DC	2,341	0.3	587
	Bariadi TC	678	0.2	127
	Meatu	602	0.2	136
	Maswa	95	0.2	19
	<b>Sub total</b>	<b>3,716</b>	<b>0.2</b>	<b>870</b>
Tanga	Korogwe	10,124	0.9	8,754
	Muheza	3,100	1.2	3,685
	Pangani	3,871	1.5	5,897
	Mkinga	2,801	0.8	2,150
	Handeni	1,039	1.0	1,035
	Tanga	100	0.5	47
	Lushoto	601	1.1	636
	<b>Sub total</b>	<b>21,635</b>	<b>1.0</b>	<b>22,204</b>
<b>Total (National)</b>		<b>43,406</b>	<b>0.8</b>	<b>33,271</b>

Source: Ministry of Agriculture

Table A.2.10 Cashew nut: Area (ha), Production (tons) and Yield (tons/ha) by Region and District in 2018/2019

Region	District	Planted Area (Ha)	Yield (Tons/Ha)	Production (Tons)
Dar es Salaam	Ilala DC	89	-	-
	Kigamboni DC	1,128	-	-
	Temeke DC	2	-	-
	<b>Sub total</b>	<b>1,219</b>	-	-
Dodoma	Chamwino DC	86	-	-
	Dodoma DC	138	-	-
	Dodoma Jiji	74	-	-
	Kongwa DC	1,035	-	-
	Mpwapwa DC	569	-	-
	<b>Sub total</b>	<b>1,901</b>	-	-
Iringa	Iringa DC	473	0.01	7
	<b>Sub total</b>	<b>473</b>	<b>0.01</b>	<b>7</b>
Katavi	Mpanda DC	463	-	-
	Msimbo DC	92	-	-
	Tanganyika DC	209	-	-
	<b>Sub total</b>	<b>764</b>	-	-
Kigoma	Kibondo TC	286	-	-
	Uvinza DC	1,090	-	-
	<b>Sub total</b>	<b>1,376</b>	-	-
Kilimanjaro	Hai DC	43	-	-
	Moshi DC	27,835	-	-
	Mwanga DC	135	-	-
	Rombo DC	9	-	-
	Same DC	15	-	-
	<b>Sub total</b>	<b>28,037</b>	-	-
Lindi	Kilwa DC	70,125	0.09	6,465
	Lindi DC	114,493	0.10	11,667
	Lindi MC	31,162	0.05	1,434
	Liwale	144,862	0.08	12,191
	Nachingwea	203,165	0.08	16,084
	Ruangwa	92,367	0.13	11,761
	<b>Sub total</b>	<b>656,174</b>	<b>0.09</b>	<b>59,603</b>
Mbeya	Chunya DC	3,891	0.00008	0.3
	Kyela DC	1,000	0.07	68
	Mbarali DC	617	-	-
	<b>Sub total</b>	<b>5,508</b>	<b>0.01</b>	<b>68</b>
Morogoro	Gairo DC	517	-	-
	Ifakara DC	103	-	-
	Kilosa	567	0.04	20
	Malinyi	1,273	0.04	50
	Morogoro DC	1,357	0.01	17
	Mvomero DC	1,362	0.001	2
	Ulanga DC	2,798	0.003	8
	<b>Sub total</b>	<b>2,798</b>	<b>0.03</b>	<b>97</b>

Mtwara	Masasi DC	212,836	0.12	26,338
	Masasi TC	78,611	0.07	5,684
	Tandahimba	165,083	0.23	37,567
	Newala DC	91,572	0.13	11,477
	Newala TC	27,017	0.37	10,033
	Nanyumbu DC	252,259	0.06	13,945
	Mtwara DC	104,781	0.06	6,227
	Mtwara MC	8,496	0.14	1,159
	Nanyamba TC	94,530	0.12	11,574
	<b>Sub total</b>	<b>1,035,184</b>	<b>0.12</b>	<b>124,004</b>
Njombe	Ludewa DC	2,270	0.03	71
	Makete DC	449	-	-
	Wangingombe DC	140	-	-
	<b>Sub total</b>	<b>2,859</b>	<b>0.02</b>	<b>71</b>
Pwani	Bagamoyo DC	6,192	0.02	117
	Chalinze	1,300	0.07	94
	Kibaha DC	3,725	0.11	406
	Kibaha TC	2,557	0.19	483
	Kibiti	58,695	0.13	7,738
	Kisarawe	4,761	0.13	609
	Mafia DC	4,706	0.05	214
	Mkuranga DC	91,858	0.10	9,444
	Rufiji	18,765	0.19	3,475
	<b>Sub total</b>	<b>192,559</b>	<b>0.12</b>	<b>22,580</b>
Ruvuma	Madaba DC	976	-	0
	Mbinga DC	1,806	-	0
	Mbinga TC	585	-	0
	Namtumbo DC	13,454	0.02	257
	Nyasa DC	718	-	-
	Songea DC	1,030	-	-
	Tunduru DC	362,781	0.05	18,271
	<b>Sub total</b>	<b>381,347</b>	<b>0.05</b>	<b>18,528</b>
Singida	Ikungi MC	129	-	-
	Iramba DC	170	-	-
	Itigi DC	856	0.0018	2
	Manyoni DC	1,242	0.0003	0.36
	Mkalama DC	370	-	-
	Singida DC	16	-	-
	<b>Sub total</b>	<b>2,783</b>	<b>0.0007</b>	<b>2</b>
Shinyanga	Ushetu DC	834	-	-
	<b>Sub total</b>	<b>834</b>	-	-
Songwe	Songwe DC	996	-	-
	<b>Sub total</b>	<b>996</b>	-	-
Tabora	Igunga DC	94	-	-
	Sikongi DC	267	-	-
	Tabora mc	497	-	-
	Urambo DC	218	-	-
	Uyui DC	381	-	-
	<b>Sub total</b>	<b>1,456</b>	-	-



Tanga	Handeni DC	418	-	-
	Handeni MC	645	-	-
	Kilindi DC	1,758	-	-
	Korogwe DC	4,224	0.003	12
	Korogwe TC	314	0.005	2
	Mkinga DC	14,702	0.002	30
	Muheza DC	1,718	0.002	3
	Pangani DC	4,402	0.02	75
	Tanga MC	2,349	0.01	29
	<b>Sub total</b>	<b>30,530</b>	<b>0.005</b>	<b>148</b>
<b>TOTAL (NATIONAL)</b>		<b>2,351,978</b>	<b>0.10</b>	<b>225,106</b>

Source: Ministry of Agriculture

**Table A.3.1 Percentage of Household by Ownership of Power tiller, Plough and Hand hoe by District, Mainland in 2012**

Region	District	Percentage of Households Engaged in Agriculture (%)	Percentage of Households by Ownership of Assets		
			Power tiller (%)	Plough (%)	Hand hoe (%)
Arusha	Arusha CC	13.6	0.8	1.5	26.1
	Arusha DC	57.1	1.3	9.6	63.8
	Karatu DC	67.3	1.2	17.6	79.7
	Longido DC	42.9	0.6	14.6	58.0
	Meru DC	70.0	1.4	16.2	80.7
	Monduli DC	61.8	1.4	20.6	76.8
	Ngorongoro DC	39.1	0.7	19.9	51.1
Dar es salaam	Ilala MC	7.9	0.4	0.2	24.6
	Kinondoni MC	6.2	0.3	0.2	18.3
	Temeke MC	7.3	0.3	0.3	19.5
Dodoma	Bahi DC	93.1	0.8	17.6	92.7
	Chamwino DC	92.4	0.6	17.7	93.1
	Chemba DC	93.0	1.2	15.1	91.6
	Dodoma MC	53.7	0.9	3.4	68.1
	Kondoa DC	89.7	1.2	28.6	88.6
	Kongwa DC	91.3	1.4	12.4	91.3
	Mpwapwa DC	90.0	0.8	13.8	89.4
Geita	Bukombe DC	77.6	1.1	8.3	76.6
	Chato DC	84.7	0.6	4.3	80.6
	Geita DC	73.5	0.6	5.4	77.5
	Mbogwe DC	86.5	0.9	19.0	83.3
	Nyang'hwale DC	91.4	0.8	27.8	88.2
Iringa	Iringa MC	47.6	0.8	1.2	61.1
	Iringa DC	89.1	1.2	12.4	90.7
	Kilolo DC	92.2	0.8	9.2	91.8
	Mafinga TC	52.0	1.4	1.3	71.0
	Mufindi DC	90.8	0.7	10.2	92.2
Kagera	Biharamulo DC	82.6	0.5	4.2	89.4
	Bukoba MC	28.4	0.3	0.3	55.6
	Bukoba DC	85.5	0.5	0.0	91.9
	Karagwe DC	72.4	0.4	0.1	86.4
	Kyerwa DC	85.4	0.3	0.0	88.8
	Missenyi DC	78.3	0.5	0.1	87.2
	Muleba DC	77.6	0.5	0.3	87.0
	Ngara DC	85.1	0.4	0.1	91.2
Katavi	Mlele DC	88.2	0.5	22.2	89.8
	Mpanda MC	65.9	1.0	5.8	73.2
	Mpanda DC	88.2	0.9	10.2	87.7

Kigoma	Buhingwe DC	75.1	0.4	0.0	92.0
	Kakonko DC	73.8	0.4	0.3	91.3
	Kasulu TC	64.4	0.6	0.1	84.7
	Kasulu DC	73.5	0.4	0.7	90.5
	Kibondo DC	71.2	0.5	0.1	90.8
	Kigoma MC	25.2	0.4	0.2	55.4
	Kigoma DC	69.1	0.4	0.0	87.0
	Uvinza DC	69.6	0.4	1.3	86.8
Kilimanjaro	Hai DC	69.8	1.3	2.3	83.5
	Moshi MC	21.8	0.6	0.4	39.1
	Moshi DC	69.2	0.9	0.5	86.6
	Mwanga DC	63.4	0.7	1.0	83.0
	Rombo DC	76.0	1.0	0.3	87.7
	Same DC	70.7	0.9	0.2	86.4
	Siha DC	73.2	1.9	11.7	83.9
	Lindi	Kilwa DC	74.2	0.5	0.3
Lindi MC		61.7	0.7	0.2	68.8
Lindi DC		84.4	0.5	0.1	90.0
Liwale DC		83.1	0.6	0.1	85.5
Nachingwea DC		86.2	0.6	0.1	87.6
Ruangwa DC		85.4	0.7	0.0	91.0
Manyara		Babati TC	56.1	1.3	11.2
	Babati DC	77.9	1.3	24.8	87.2
	Hanang DC	81.3	1.0	40.6	89.5
	Kiteto DC	79.9	1.4	4.1	84.5
	Mbulu DC	80.5	0.9	32.3	88.1
	Simanjiro DC	54.6	1.4	8.3	64.2
	Mara	Bunda DC	79.5	1.4	15.0
Butiama DC		86.9	1.1	19.5	86.1
Musoma MC		27.8	1.2	0.8	55.0
Musoma DC		88.8	1.1	10.8	88.2
Rorya DC		85.7	1.0	21.8	85.8
Serengeti DC		84.5	0.8	43.7	87.3
Tarime DC		75.5	1.0	31.3	77.6
Mbeya		Chunya DC	73.9	0.8	14.4
	Ileje DC	84.1	0.6	1.5	91.2
	Kyela DC	70.0	0.7	17.3	76.9
	Mbarali DC	78.0	3.1	17.3	88.9
	Mbeya CC	34.5	0.7	0.6	53.7
	Mbeya DC	77.2	0.6	2.4	86.9
	Mbozi DC	79.8	0.6	15.2	88.9
	Momba DC	80.3	0.6	32.1	89.9
	Rungwe DC	79.2	0.5	1.5	89.4
	Tunduma TC	30.0	0.5	0.9	39.6

Morogoro	Gairo DC	87.8	1.0	8.1	91.9
	Kilombero DC	80.4	0.8	3.3	85.3
	Kilosa DC	78.8	0.5	1.0	85.8
	Morogoro MC	36.8	0.8	0.2	47.8
	Morogoro DC	83.8	0.5	0.6	88.4
	Mvomero DC	80.3	0.7	0.3	84.4
	Ulanga DC	84.6	0.9	4.8	88.7
Mtwara	Masasi TC	68.8	0.9	0.2	79.1
	Masasi DC	83.1	0.6	0.1	90.5
	Mtwara MC	31.6	0.8	0.2	52.7
	Mtwara DC	76.8	0.5	0.1	86.9
	Nanyumbu DC	82.7	0.4	0.0	90.1
	Newala DC	80.1	0.5	0.1	88.4
	Tandahimba DC	79.1	0.5	0.0	86.9
Mwanza	Ilemela MC	21.2	0.5	0.4	40.4
	Kwimba DC	87.2	0.7	31.3	91.8
	Magu DC	77.9	1.1	12.0	81.3
	Misungwi DC	83.4	0.8	21.9	88.0
	Nyamagana MC	17.0	0.5	0.6	36.4
	Sengerema DC	76.1	0.5	7.0	83.3
	Ukerewe DC	76.4	0.7	0.1	83.3
Njombe	Ludewa DC	91.6	0.6	6.7	92.9
	Makambako TC	68.8	1.3	11.5	77.2
	Makete DC	90.5	0.6	0.6	92.5
	Njombe TC	73.7	0.5	4.5	84.1
	Njombe DC	92.5	1.1	11.6	92.3
	Wang'ing'ombe DC	95.0	0.7	19.6	93.5
Pwani	Bagamoyo DC	66.2	0.6	0.2	75.1
	Kibaha TC	36.5	0.7	0.2	62.3
	Kibaha DC	56.8	0.5	0.4	68.7
	Kisarawe DC	77.1	0.5	0.3	86.1
	Mafia DC	60.7	0.5	0.4	70.4
	Mkuranga DC	62.7	0.5	0.1	74.7
	Rufiji DC	75.5	0.7	0.6	82.0
Rukwa	Kalambo DC	88.8	0.6	35.3	90.9
	Nkasi DC	85.7	0.6	28.3	88.1
	Sumbawanga MC	61.1	0.5	15.6	73.1
	Sumbawanga DC	89.6	0.6	32.6	91.4
Ruvuma	Mbinga DC	81.8	0.7	0.1	88.3
	Namtumbo DC	85.5	0.8	0.1	91.4
	Nyasa DC	84.6	0.6	0.0	90.2
	Songea MC	57.5	0.4	0.2	66.6
	Songea DC	86.2	0.6	0.2	91.7
	Tunduru DC	82.0	0.6	0.1	88.5
Shinyanga	Kahama TC	58.9	0.7	13.9	65.2
	Kahama DC	88.2	0.8	25.1	85.1
	Kishapu DC	87.6	1.2	34.8	87.9
	Shinyanga MC	49.8	0.6	9.7	63.9
	Shinyanga DC	91.7	0.8	36.7	88.8

Simiyu	Bariadi DC	85.6	0.8	38.5	87.1
	Busega DC	82.2	0.8	25.6	86.5
	Itilima DC	92.0	1.0	36.8	89.3
	Maswa DC	91.0	0.9	38.1	90.3
	Meatu DC	85.8	1.1	44.4	89.4
Singida	Ikungi DC	90.9	0.8	28.9	90.4
	Iramba DC	90.2	0.5	40.5	90.5
	Manyoni DC	86.9	0.7	20.7	89.7
	Mkalama DC	92.5	0.9	45.6	92.1
	Singida MC	54.1	1.0	7.9	65.9
	Singida DC	93.0	0.6	32.0	90.9
Tabora	Igunga DC	87.3	0.9	39.3	87.3
	Kaliua DC	76.9	0.7	20.4	88.1
	Nzega DC	87.5	0.6	36.7	87.0
	Sikonge DC	88.6	0.8	17.8	88.2
	Tabora MC	49.3	0.6	3.3	64.8
	Urambo DC	86.0	0.6	14.8	86.7
	Uyui DC	91.6	0.8	26.5	90.7
Tanga	Handeni TC	72.4	0.9	0.6	79.9
	Handeni DC	84.3	0.6	0.8	88.9
	Kilindi DC	84.0	0.5	1.8	89.5
	Korogwe TC	64.7	1.3	0.2	75.5
	Korogwe DC	81.1	0.6	0.3	89.4
	Lushoto DC	86.5	0.7	0.1	91.3
	Mkinga DC	77.5	0.6	1.0	89.5
	Muhenza DC	79.3	0.7	0.2	84.4
	Pangani DC	67.2	0.6	0.2	75.6
	Tanga CC	25.3	0.8	0.3	46.0
<b>Total</b>		<b>66.0</b>	<b>0.7</b>	<b>9.2</b>	<b>74.9</b>

Source: Population and Housing Census 2012, National Bureau of Statistics

Table A.3.2 Number of Agricultural Mechanization (Tractor, Power tiller and Plough) by District in 2015

Region	District	Number of Tractor (in 2015)			Number of Power tiller (in 2015)			Tractor	Power tiller
		Working	Not Working	Total	Working	Not Working	Total	Number of Plough (in 2015)	
Arusha	Arusha CC	33	9	42	3	0	3	37	3
	Arusha DC	361	0	361	22	0	22	362	22
	Karatu DC	420	108	528	18	1	19	307	-
	Longido DC	6	6	12	5	0	5	6	5
	Meru DC	266	8	274	23	2	25	261	26
	Monduli DC	169	29	198	13	1	14	268	23
	Ngorongoro DC	32	7	39	8	3	11	39	11
	<b>Sun total</b>	<b>1,287</b>	<b>167</b>	<b>1,454</b>	<b>92</b>	<b>7</b>	<b>99</b>	<b>1,280</b>	<b>90</b>
Dar es salaam	Ilala MC	1	2	3	3	0	3	3	3
	Kinondoni MC	-	-	34	5	2	7	8	10
	Temeke MC	2	2	4	4	2	6	4	4
	<b>Sun total</b>	<b>3</b>	<b>4</b>	<b>41</b>	<b>9</b>	<b>7</b>	<b>16</b>	<b>15</b>	<b>17</b>
Dodoma	Bahi DC	-	-	49	46	0	46	8	75
	Chamwino DC	91	5	96	72	7	79	96	118
	Dodoma MC	40	8	48	12	5	17	37	26
	Kondoa DC	129	7	136	54	3	57	136	89
	Kongwa DC	630	105	735	34	9	43	650	43
	Mpwapwa DC	76	2	78	109	6	115	119	-
	<b>Sun total</b>	<b>966</b>	<b>127</b>	<b>1,142</b>	<b>327</b>	<b>30</b>	<b>357</b>	<b>1,046</b>	<b>351</b>
Geita	Bukombe DC	7	0	7	15	13	28	7	15
	Chato DC	10	2	12	10	7	17	10	17
	Geita DC	21	3	24	8	2	10	14	10
	Geita TC	15	6	21	8	1	9	18	9
	Mbogwe DC	12	4	16	25	1	26	16	52
	Nyang'hwale DC	7	1	8	16	2	18	8	10
	<b>Sun total</b>	<b>72</b>	<b>16</b>	<b>88</b>	<b>82</b>	<b>26</b>	<b>108</b>	<b>73</b>	<b>113</b>
Iringa	Iringa DC	266	25	291	222	16	238	396	238
	Iringa MC	23	6	29	9	0	9	19	9
	Kilolo DC	79	13	92	62	2	64	88	61
	Mufindi DC	97	55	152	147	16	163	16	163
	<b>Sun total</b>	<b>465</b>	<b>99</b>	<b>564</b>	<b>440</b>	<b>34</b>	<b>474</b>	<b>519</b>	<b>471</b>
Kagera	Biharamulo DC	8	2	10	13	2	15	9	-
	Bukoba DC	10	2	12	4	0	4	3	4
	Bukoba MC	0	0	0	1	0	1	0	1
	Karagwe DC	7	4	11	2	1	3	11	3
	Kyerwa DC	3	0	3	0	0	0	-	-
	Missenyi DC	27	6	33	7	1	8	33	8
	Muleba DC	6	0	6	10	8	18	6	18
	Ngara DC	5	3	8	2	29	31	5	62
	<b>Sun total</b>	<b>66</b>	<b>17</b>	<b>83</b>	<b>39</b>	<b>41</b>	<b>80</b>	<b>67</b>	<b>96</b>
Katavi	Mlele DC	-	-	14	-	-	0	31	0
	Mpanda DC	-	-	12	-	-	19	12	19
	Mpanda MC	-	-	16	-	-	17	12	17
	Nsimbo	-	-	0	-	-	17	7	17
	<b>Sun total</b>	<b>-</b>	<b>-</b>	<b>42</b>	<b>-</b>	<b>-</b>	<b>53</b>	<b>62</b>	<b>53</b>
Kigoma	Buhingwe DC	2	0	2	3	2	5	2	5
	Kakonko DC	7	0	7	11	15	26	7	-
	Kasulu DC	14	0	14	51	0	51	9	100
	Kibondo DC	7	1	8	24	2	26	6	26
	Kigoma DC	6	1	7	7	5	12	7	12
	Kigoma MC	2	1	3	4	7	11	2	11
	Uvinza DC	22	4	26	51	11	62	11	61
	<b>Sun total</b>	<b>60</b>	<b>7</b>	<b>67</b>	<b>151</b>	<b>42</b>	<b>193</b>	<b>44</b>	<b>215</b>
Kilimanjaro	Hai DC	145	37	182	11	2	13	-	-
	Moshi DC	126	20	146	56	2	58	-	-
	Moshi MC	17	3	20	12	0	12	-	12
	Mwanga DC	20	9	29	11	3	14	-	-
	Rombo DC	12	11	23	14	0	14	-	-
	Same DC	39	27	66	-	-	69	-	29
	Siha DC	128	48	176	4	0	4	-	4
	<b>Sun total</b>	<b>487</b>	<b>155</b>	<b>642</b>	<b>108</b>	<b>7</b>	<b>184</b>	<b>502</b>	<b>45</b>

Lindi	Kilwa DC	12	1	13	45	19	64	13	-
	Lindi DC	17	4	21	37	76	113	21	-
	Lindi MC	15	19	34	7	11	18	-	-
	Liwale DC	16	2	18	46	8	54	12	-
	Nachingwea DC	35	10	45	24	30	54	30	-
	Ruangwa DC	25	2	27	72	30	102	25	-
	<b>Sun total</b>	<b>120</b>	<b>38</b>	<b>158</b>	<b>231</b>	<b>174</b>	<b>405</b>	<b>101</b>	<b>-</b>
Manyara	Babati DC	310	45	355	70	12	82	200	65
	Babati TC	56	0	56	15	4	19	59	38
	Hanang DC	286	11	297	35	1	36	319	36
	Kiteto DC	321	36	357	25	11	36	342	72
	Mbulu DC	57	7	64	16	0	16	64	16
	Simanjiro DC	271	25	296	31	4	35	301	63
	<b>Sun total</b>	<b>1,301</b>	<b>124</b>	<b>1,425</b>	<b>192</b>	<b>32</b>	<b>224</b>	<b>1,285</b>	<b>290</b>
Mara	Bunda DC	62	22	84	8	3	11	-	-
	Butiama DC	23	18	41	4	1	5	33	5
	Musoma DC	14	0	14	5	0	5	13	-
	Musoma MC	1	0	1	5	0	5	5	-
	Rorya DC	25	6	31	19	3	22	24	-
	Serengeti DC	10	4	14	9	4	13	8	20
	Tarime DC	5	3	8	1	1	2	8	2
		<b>Sun total</b>	<b>140</b>	<b>53</b>	<b>193</b>	<b>51</b>	<b>12</b>	<b>63</b>	<b>91</b>
Mbeya	Busokelo DC	2	1	3	12	2	14	3	-
	Chunya DC	29	3	32	68	6	74	-	-
	Ileje DC	4	1	5	25	2	27	5	-
	Kyela DC	25	7	32	96	0	96	20	73
	Mbarali DC	270	40	310	1,592	63	1,655	310	-
	Mbeya DC	32	3	35	22	2	24	24	31
	Mbeya MC	18	8	26	10	1	11	23	-
	Mbozi DC	63	11	74	27	2	29	35	-
	Momba DC	41	0	41	24	8	32	34	-
	Rungwe DC	5	3	8	7	0	7	217	-
	<b>Sun total</b>	<b>489</b>	<b>77</b>	<b>566</b>	<b>854</b>	<b>198</b>	<b>1,969</b>	<b>671</b>	<b>104</b>
Morogoro	Gairo DC	85	18	103	8	0	8	103	8
	Kilombero DC	231	42	273	134	38	172	267	177
	Kilosa DC	149	4	153	81	8	89	166	176
	Morogoro DC	56	5	61	37	16	53	61	53
	Morogoro MC	109	12	121	10	1	11	54	5
	Mvomero DC	186	42	228	61	27	88	92	87
	Ulanga DC	112	30	142	96	8	104	98	104
	<b>Sun total</b>	<b>928</b>	<b>153</b>	<b>1,081</b>	<b>427</b>	<b>98</b>	<b>525</b>	<b>864</b>	<b>610</b>
Mtwara	Masasi TC	26	10	36	0	2	2	36	2
	Masasi DC	33	7	40	27	31	58	40	58
	Mtwara MC	1	3	4	3	8	11	0	11
	Mtwara DC	8	1	9	41	0	41	6	37
	Nanyumbu DC	10	5	15	10	16	26	13	26
	Newala DC	14	2	16	10	40	50	16	50
	Tandahimba DC	6	3	9	23	27	50	8	50
		<b>Sun total</b>	<b>98</b>	<b>31</b>	<b>129</b>	<b>114</b>	<b>124</b>	<b>238</b>	<b>119</b>
Mwanza	Ilemela MC	1	0	1	12	0	12	0	-
	Kwimba DC	35	20	55	45	0	45	55	90
	Magu DC	46	14	60	46	4	50	42	100
	Misungwi DC	77	34	111	31	1	32	-	-
	Nyamagana MC	1	0	1	4	0	4	-	-
	Sengerema DC	42	10	52	46	12	58	14	78
	Ukerewe DC	1	0	1	9	1	10	-	-
	<b>Sun total</b>	<b>203</b>	<b>78</b>	<b>281</b>	<b>193</b>	<b>18</b>	<b>211</b>	<b>111</b>	<b>268</b>
Njombe	Ludewa DC	66	3	69	11	5	16	69	16
	Makete DC	17	4	21	21	5	26	42	52
	Njombe TC	42	25	67	7	1	8	25	5
	Njombe DC	62	0	62	48	0	48	24	72
	Wang'ing'ombe DC	23	5	28	20	4	24	28	24
	<b>Sun total</b>	<b>210</b>	<b>37</b>	<b>247</b>	<b>107</b>	<b>15</b>	<b>122</b>	<b>206</b>	<b>169</b>
Pwani	Bagamoyo DC	69	5	74	34	9	43	58	75
	Kibaha TC	18	6	24	4	2	6	18	5
	Kibaha DC	17	12	29	1	5	6	15	3
	Kisarawe DC	17	1	18	21	3	24	18	48
	Mafia DC	2	1	3	2	8	10	3	10
	Mkuranga DC	25	4	29	19	3	22	29	18
	Rufiji DC	60	4	64	17	10	27	64	26
	<b>Sun total</b>	<b>208</b>	<b>33</b>	<b>241</b>	<b>98</b>	<b>40</b>	<b>138</b>	<b>205</b>	<b>185</b>

Rukwa	Kalambo DC	-	-	-	-	-	-	-	-
	Nkasi DC	28	5	33	40	25	65	26	65
	Sumbawanga MC	31	9	40	16	3	19	25	31
	Sumbawanga DC	5	0	5	21	18	39	5	5
	<b>Sun total</b>	<b>64</b>	<b>14</b>	<b>78</b>	<b>77</b>	<b>46</b>	<b>123</b>	<b>56</b>	<b>101</b>
Ruvuma	Mbinga DC	41	50	91	40	3	43	32	44
	Namtumbo DC	13	3	16	86	6	92	16	71
	Nyasa DC	3	2	5	2	14	16	3	16
	Songea MC	-	-	23	23	2	25	10	-
	Songea DC	91	10	101	80	9	89	98	89
	Tunduru DC	45	8	53	150	57	207	40	62
<b>Sun total</b>	<b>-</b>	<b>-</b>	<b>289</b>	<b>381</b>	<b>91</b>	<b>472</b>	<b>199</b>	<b>282</b>	
Shinyanga	Kahama TC	13	3	16	26	0	26	7	-
	Kishapu DC	102	35	137	23	0	23	143	29
	Msalala	23	8	31	33	10		39	39
	Shinyanga MC	17	5	22	8	6	14	22	16
	Shinyanga DC	32	7	39	38	4	42	43	41
	Ushetu	8	0	8	17	8	25	8	47
	<b>Sun total</b>	<b>195</b>	<b>58</b>	<b>253</b>	<b>145</b>	<b>28</b>	<b>173</b>	<b>262</b>	<b>172</b>
Simiyu	Bariadi TC	66	11	77	26	2	28	82	37
	Bariadi DC	30	37	67	39	10	49	46	98
	Busega DC	27	16	43	24	6	30	39	30
	Itilima DC	52	35	87	17	11	28	95	-
	Maswa DC	93	65	158	79	5	84	110	86
	Meatu DC	62	69	131	30	15	45	37	-
	<b>Sun total</b>	<b>330</b>	<b>233</b>	<b>563</b>	<b>215</b>	<b>49</b>	<b>264</b>	<b>409</b>	<b>251</b>
Singida	Ikungi DC	11	0	11	14	0	14	12	14
	Iramba DC	32	1	33	16	1	17	61	28
	Manyoni DC	48	10	58	62	14	76	60	-
	Mkalama DC	45	6	51	18	9	27	48	27
	Singida MC	6	1	7	15	1	16	7	16
	Singida DC	39	9	48	24	23	47	52	20
	<b>Sun total</b>	<b>181</b>	<b>27</b>	<b>208</b>	<b>149</b>	<b>48</b>	<b>197</b>	<b>240</b>	<b>105</b>
Tabora	Igunga DC	52	8	60	34	18	52	56	52
	Kaliua DC	20	11	31	36	9	45	21	44
	Nzega DC	10	0	10	52	3	55	10	55
	Sikonge DC	12	4	16	8	18	26	6	30
	Tabora MC	49	12	61	13	0	13	34	13
	Urambo DC	43	10	53	73	0	73	29	73
	Uyui DC	13	2	15	17	7	24	15	17
	<b>Sun total</b>	<b>199</b>	<b>47</b>	<b>246</b>	<b>233</b>	<b>55</b>	<b>288</b>	<b>171</b>	<b>284</b>
Tanga	Handeni DC	89	9	98	65	0	65	113	65
	Kilindi DC	9	2	11	15	5	20	11	20.0
	Korogwe TC	34	5	39	22	2	24	34	46
	Korogwe DC	78	0	78	51	2	53	49	53
	Lushoto DC	14	1	15	29	3	32	14	33
	Mkinga DC	2	3	5	10	9	19	5	19
	Muhenza DC	76	1	77	54	2	56	33	56
	Pangani DC	-	-	51	8	3	13	28	
	Tanga CC	17	9	26	4	7	11	6	21
<b>Sun total</b>	<b>-</b>	<b>-</b>	<b>400</b>	<b>258</b>	<b>33</b>	<b>291</b>	<b>293</b>	<b>326</b>	
<b>Total</b>			<b>10,481</b>			<b>7,267</b>	<b>8,891</b>	<b>4,859</b>	

Source: Department of Mechanization and Implements, Ministry of Agriculture



添付資料 16: ASDP2 関連文書

**AGRICULTURAL SECTOR DEVELOPMENT  
PROGRAMME PHASE TWO (ASDP II)**

# **Result Framework**

**Excerpt of ARDS related parts**

(as of June 2020)

THE UNITED REPUBLIC OF TANZANIA



**AGRICULTURAL SECTOR  
DEVELOPMENT PROGRAMME PHASE  
TWO (ASDP II)**

***“CHAKULA NI UHAI”***

***FOOD IS LIFE***

***(Excerpts of M&E and ARDS Parts)***

Government Programme Document

March 2017

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#### **Sub-component 4.4: Monitoring and Evaluation (M&E) and Agricultural Statistics**

1. Data availability and reliability were major shortcomings experienced by the sector during ASDP-1 implementation. According to the Agricultural Statistics Strategic Plan (AASP; 2014), National Sample Census of Agriculture (NSCA), Annual Agricultural Sample Survey (AASS), and Agriculture Routine Data collection Systems (ARDS) need to be further consolidated and integrated towards an evidence-based decision-making and management tool. ASDP-2 intermediate result IR4.5 (*M&E and Agricultural Statistics Strengthened*) focuses priority areas on: (i) strengthening and rationalizing M&E to enhance evidence-based strategy development and design of programmes and projects; and (ii) improving the quality, cost effectiveness and timeliness of agricultural statistics.

2. The objective of this sub-component is to ensure that there is an improvement in the timeliness, quality and relevance of available statistics and routine data systems in the agriculture sector, to provide the data needed to monitor the performance of the ASDP-2 Support Programme, starting with the indicators contained in its results framework, as well as sector-wide statistical data. Under this sub-component, support will be divided in two thematic areas: (i) dedicated ASDP-2 M&E support; and (ii) support to agricultural statistics and sector M&E efforts<sup>1</sup>.

3. **ASDP-2 Support Programme Monitoring and Evaluation.** One of the lessons learned from ASDP-1 was that the delays in implementing key surveys led to a deficit in the information available to properly monitor and evaluate the results of the first phase. It was therefore easy to assert that ASDP-1 had not achieved its results, that there had been no “impact” and that resources were spread too thinly. Many key performance indicators under ASDP-1 relied on the National Sample Census of Agriculture being completed on time and its results disseminated rapidly<sup>2</sup>. There was confusion during the ASDP-1 monitoring between the project-specific and sector-wide outcomes data collection: because of clear connection to budgets, the former received in general more attention than the latter, resulting in relatively weak development of ASDP sector-wide monitoring.

4. **ASDP-2 provides and implements a results-focused framework for the agriculture sector.** As multiple actors implement their respective interventions and projects in ASDP-2, M&E needs strong coordination, data collection, processing, analytical and reporting capabilities. The M&E capacities of the M&E sections in the ASLMs, M&E TWG and NACOTE will need to be strengthened under ASDP-2 for stronger M&E coordination and a small M&E team be tasked with day-to-day operation and data processing tasks at each ASLMs. Reports on the state of data collection and overall state/performance of the sector should be submitted to ASDP-2 decision-making levels, and also widely disseminated through websites or any other means for the accountability of the programme<sup>3</sup>.

5. A baseline survey will be conducted in 2016/17 complimented by secondary data available from different sources. The National Sample Census Survey of Agriculture (NSCA) to be implemented in 2016/2017 (thus the reference year is 2015/2016) and 10-year periodicity, in combination with AASS and TWG will also provide the consolidated baseline and final levels of outcome and impact indicators for the sector programme. At mid-term an intermediate survey could be envisaged (as required) to allow for a revision of the results framework to adjust actual performance of the M&E of ASDP-2.

6. To allow tracking of key performance indicators identified in the results framework (see Annex II), intermediate outcome indicators will be evaluated yearly to provide useful feedback regarding the implementation of the ASDP-2 and progress toward measurable strategic objectives. Given that AASS will focus mainly on crop, livestock and fisheries productivity and production

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<sup>1</sup> Details for the proposed M&E system are provided in Annex II.

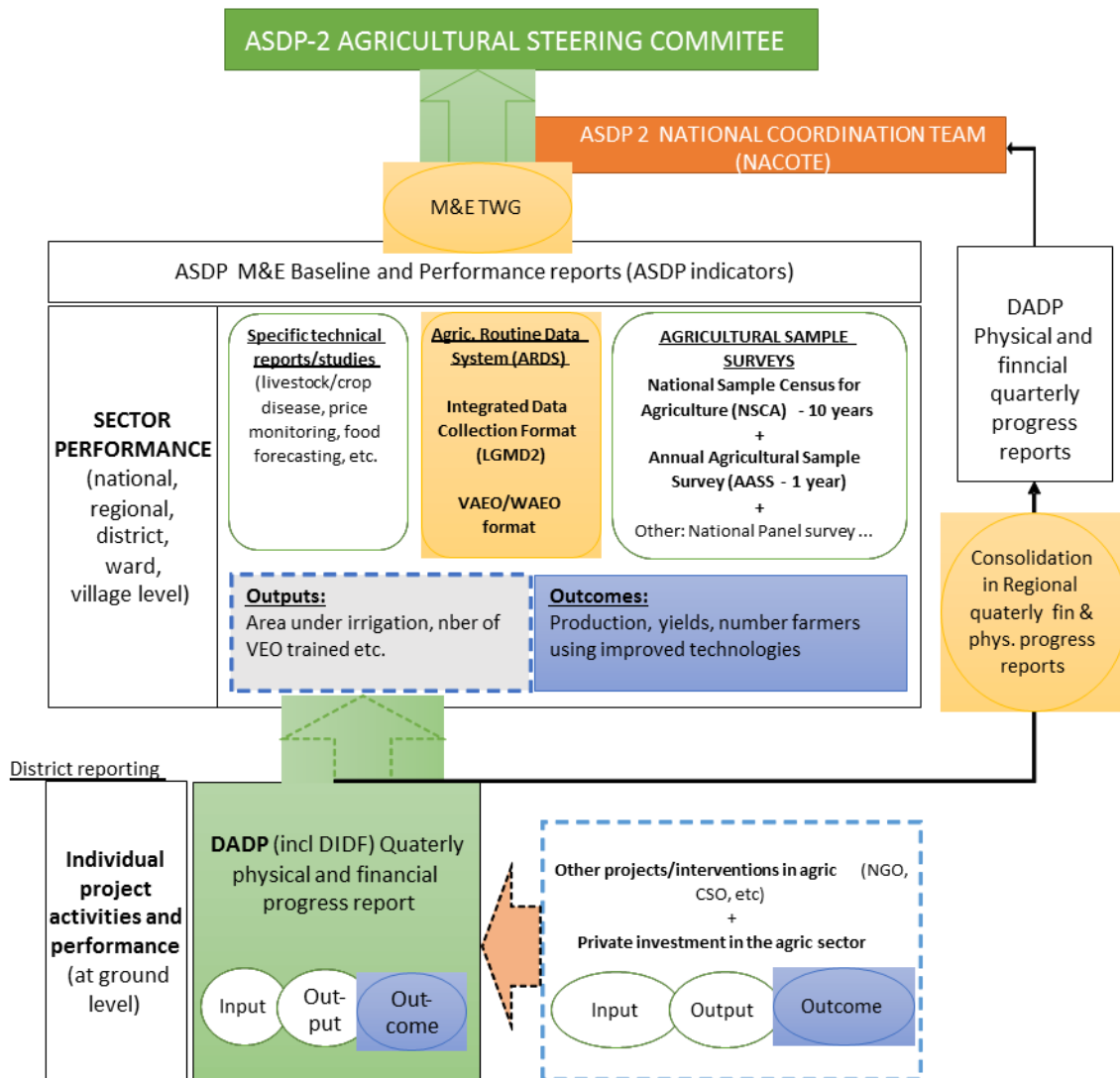
<sup>2</sup> The last National Sample Census of Agriculture and Livestock NSCA were held in 2002/2003, and then in 2007/2008. The results of the latter were made available in July 2012, while the 2012/2013 Sample Census has been postponed to 2014/2015. It is the main source of information for outcome indicators in the ASDP-1 M&E Framework.

<sup>3</sup> Sourced from discussions with M&E TWG.

statistics, the best options is to integrate programme specific indicators into AASS with data representative of districts; Not all intermediate outcome indicators will need to be assessed annually. The sampling frame should be the same as for the baseline and survey results should be representative at district level: to produce quality data in a shorter time frame (ideally 3–4 months), the use of portable electronic devices will be promoted.

7. The overall M&E framework for ASDP-2 including impact/outcome evaluations, output monitoring and quarterly physical and financial reporting of LGAs will be carried out through PO-RALG administrative<sup>4</sup> channels.

Figure 1: ASDP M&E system for sector and programme performance (adapted for ASDP-2)



<sup>4</sup> The capacity of PO-RALG teams will be strengthened as required (see institutional capacity building in s/c 4.2). Incentives



### ***Main proposed actions.***

8. ***Strengthening agricultural statistics, sector M&E and analytical capacity.*** Based on the *Global Strategy to Improve Agricultural and Rural Statistics*, promoted in Tanzania by the United States Department of Agriculture (USDA), FAO and AfDB, and based on the ASSP being developed by the Agriculture Statistics Task Force, this sub-component will include the following priority activities: (i) co-financing of the National Sample Census of Agriculture and Livestock (NSCA), foreseen to take place in 2016/2017 (reference year 2015/2016); (ii) financing of AASS during the period of ASDP-2 implementation (2015–2025); (iii) strengthening the Agricultural Routine Data System (ARDS) and support to the M&E departments and TWG; and (iv) improve analytical capacity of ASLMs for planning and policy analysis, sector performance reviews, annual budgetary cycle, and PERs. These investments are deemed necessary under ASDP-2, given that it will be the largest public-sector financed programme in the sector, and that no other ongoing programme is providing financing in this area.

9. **National Sample Census for Agriculture (NSCA).** Given that ASDP-2 will be one of the few large-scale projects/programmes providing financing in agriculture through the public sector over the coming years, and given that financing for agricultural statistics is an ongoing discussion under the aegis of the *Global Strategy to Improve Agricultural and Rural Statistics*, several partners, including the government, have expressed willingness to participate in the financing of the NSCA. This is seen as the key survey and its regular implementation would go a long way in providing a common national system to all projects operating in the sector in Tanzania. It is envisaged that the NSCA will be held every 10 years, and will provide up to regional-level<sup>5</sup> representative statistics on a wide range of variables, based on a sample size of 50,000 households. ASDP-2 will therefore co-finance the cost of the next NSCA, which is due to take place in 2016/2017.

10. **Annual Agriculture Sample Survey (AASS).** The Agricultural Statistics Strategic Plan developed by the Agriculture Statistics Task Force foresees that AASS will provide annual, regional level, production and productivity statistics for main crops and livestock species. The annual cost of AASS has not yet been fully defined and nor has the methodology<sup>6</sup> been consolidated or the questionnaire been prepared. However, an annual survey is intended to capture necessary outcome indicators for monitoring the sector. Production and productivity are among those indicators, but there are some most necessary indicators like adoption of improved technologies and access to services. Under ASDP-1 these indicators were obtained from the National Sample Census of Agriculture which was conducted at 5-year intervals. Under ASSP, the NSCA has shifted from a 5-year interval to the global interval of 10 years.

11. Within Agricultural Statistics Task Force (NBS, ASLMs and technical assistance from USDA and FAO), there are ongoing methodological discussions regarding the sampling approach (area-based, list-based or a combination), the content of the questionnaire and the data representative level (regional and district), as there are concerns about the current statistical methodology being advocated by USDA. It is important that the integration of intermediate outcomes into the AASS questionnaire would fully streamline the ASDP-2 M&E into agricultural sector processes.

12. **Agricultural Routine Data System (ARDS)**<sup>7</sup> is a key management information system that has been improved under ASDP-1. A lot of resources have also been invested to build a national database (known previously as LGMD2, but now called ARDS\LGMD2/ Web Portal) with

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<sup>5</sup> FAO is planning to conduct “small area estimation method” study for Tanzania to utilize the results of NSCA and AASS and estimate district level data. For this calculation/model, ARDS data are expected to be used.

<sup>6</sup> Methodologies for baseline and the final survey should be harmonized with NSCA as well as AASS so that data obtained can be comparable. For that matter, it is better to postpone an envisaged break from the normal list sampling frame to the area sampling frame and continue with the methodology which NBS and ASLMs are familiar with. The pilot conducted for the area frame method has so far indicated a lot of challenges that need to be tackled before rolling out.

<sup>7</sup> ARDS needs to be aligned with AASS.

information disaggregated at district level to clarify data flow, to develop data format, procedures for data collection at village and ward level and data dissemination from district to national level. The Japanese International Cooperation Agency (JICA) has provided long-term technical assistance and capacity building support to national ARDS roll-out<sup>8</sup>. This system provides data on the output performance of the agricultural sector, and relies on front-line extension staff to provide monthly, quarterly and annual information, which is compiled at district level and entered into a web-based database, and made available to ASLM through regional secretariats and PO-RALG. ARDS now has a window for users in the web portal, “ards.go.tz” where potential users can access information by obtaining the User ID from the M&E TWG. There is a need to readjust the scope of the ARDS with other data sources, such as AASS and NSCA, but also the quarterly physical and financial reporting to avoid duplications and improve data quality, reliability and timeliness. It is also necessary to strengthen coordination among ARDS, within the early warning and other administrative data collection systems to improve efficiency of overall data collection.

13. **The M&E Thematic Working Group** compiles the ASDP Annual Performance Report which provides an update on all key performance indicators, at impact, outcome and output level<sup>9</sup> and participates in the JSR and PER (see s/c 4.4), which undertake an annual assessment of progress made under ASDP-2. BRN has its own M&E processes which should be integrated and aligned into the overall sector M&E framework, including JSR.

14. **Joint Sector Review.** The JSR will comprise a key component of the M&E system and will be undertaken following finalization of the NBS Annual Agricultural Sample Survey (AASS) and immediately preceding the NASSM. It will be conducted by government, development partners and consultants to rigorously review the programme over several weeks on the basis of analysed national statistics as a professional annual evaluation exercise. It will include field visits in selected regions where the ASDP-2 is being implemented by way of sampling. JSR will be a forum for coordination and dialogue to enable shared vision and the opportunity to initiate corrective action in the management of projects. The conclusions of the JSR will be presented to the NASSM for discussion and corrective action. The report from this meeting will be summarized by the ASDP Coordination and Management Team and forwarded to the National Steering Committee for action.

15. Finally the **Public Expenditure Review** provides a further opportunity to monitor the progress and performance of the ASDP-2 in the wider context of the national economy. Results of the JSR/PER will be discussed at the ASCG, and then adopted by ASC for further action implementation.

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<sup>8</sup> Agricultural Routine Data System (ARDS): National Roll-Out Plan, ASDP M&E TWG, 2010.

<sup>9</sup> ASDP Annual Performance Report 2009/2010, March 2011; ASDP Annual Performance Report 2010/2011, November 2011; ASDP Annual Performance Report 2011/2012, draft in progress, April 2013.

<b>Program Name:</b>		<b>AGRICULTURAL SECTOR DEVELOPMENT PROGRAM (ASDP II)</b>				
<b>Program Goal:</b>		Transform the agricultural sector (crops, livestock & fisheries) towards higher productivity, competitiveness, and commercialization and improve smallholder farmers' incomes, livelihoods, and food and nutrition security.				
<b>RESULTS CHAIN</b>		<b>INDICATOR</b>	<b>UNIT</b>	<b>BASELINE (2018)</b>	<b>TARGET (2023)</b>	<b>MEANS OF VERIFICATION</b>
<b>IMPACTS</b>	<i>Contribute to the agricultural sector higher productivity, improve smallholder income, livelihood, food and nutrition security</i>	1.1 Agricultural growth rate	%	1.1.1 Agricultural: 5.3	1.1.1 Agricultural: 7.0	National Bureau of Statistics annual report
			%	1.1.1.1 Crop: 5.0	1.1.1.1 Crop: 9.0	
			%	1.1.1.2 Livestock: 4.9	1.1.1.2 Livestock: 6.0	
			%	1.1.1.3 Fisheries: 9.2	1.1.1.3 Fisheries: 10.0	
		1.2 Headcount ratio in rural areas – basic need poverty line	%	1.2.1: 31.3% rural; 15.8% urban	1.2.1: Reduce by 50%	Survey reports (Source: HBS 2017-18)
		1.3 Gross value (in USD) of agricultural Exports	USD	1.3.1: Maize 40,729,000	1.3.1: Maize increase by 50%	Project impact survey & Statistics
			USD	1.3.2: Rice 11,490,000	1.3.2: Rice increase by 50%	
			USD	1.3.3: Sunflower oil 7,163,000	1.3.3: Sunflower oil increase by 50%	
			USD	1.3.4: Cotton 70,188,953	1.3.4: 50% increase	
			USD	1.3.5: Round Poteto TBD	1.3.5: Round Poteto increase by 50%	
			USD	1.3.6: Beef 731,584.56	1.3.6: Beef increase by 40%	
			USD	1.3.7: Marine Fish: 287,796.48	1.3.7: Marine Fish increase by 50%	
			USD	1.3.8: Fresh water Fish: 239,392,218.08	1.3.8: Fresh water Fish increase by 50%	
			USD	1.3.9: Seaweed: 195,200	1.3.9: Seaweed increase by 5%	
			USD	1.3.10: Milk 0	1.3.10: Milk production increase by 8%	
			USD	1.3.11: Coffee: 123,185,587	1.3.11: 50% increase	
			USD	1.3.12: Sugar 0	1.3.12: TBD	
			USD	1.3.13: Tea: 62,200,000	1.3.13: Tea: 50% increase	
			USD	1.3.14: Cashew: 3,981.4	1.3.14: Cashew increase by 50%	
			USD	1.3.15 Goat/sheep meat: 644,610.78	1.3.15: Goat/sheep meat increase by 30%	
			USD	1.3.16 Hides & Skins 2,796,087	1.3.16 Hides & Skins increase by 20%	
			USD	1.3.17 Horticulture 31,200,000	1.3.17 Horticulture TBD	
		1.4 Gross value (in USD) of agricultural imports	USD	1.4.1: Maize 2,873,000	1.4.1: Maize decrease by 50%	Project impact survey & Statistics
			USD	1.4.2: Rice 1,619,000	1.4.2: Rice decrease by 50%	
			USD	1.4.3: Sunflower oil 7,235,000	1.4.3: Sunflower oil decrease by 50%	
			USD	1.4.4: Beef: 1,790,409.26	1.4.4: Beef decrease by 30%	
			USD	1.4.5: Marine Fish: 25,065,355.98	1.4.5: Marine Fish decrease by 50%	
			USD	1.4.6: Milk: 8,755,934.9	1.4.6: Milk decrease by 40%	
USD	1.4.7: Coffee 149,465.51		1.4.7: 50% decrease			
TZS	1.4.8: Sugar 3,488,333,000		1.4.8: 50% decrease			
USD	1.4.9: Tea 350,000		1.4.9: 50% decrease			
USD	1.4.10: Hides & Skins products TBD		1.4.10: Hides & Skins products TBD			
<b>OUTPUT</b>	<b>COMPONENT TWO: Productivity and Profitability through Market oriented Agriculture</b>					
	2.1 Strengthened Extension services	2.1.1. Number of Extension staff.	Number	2.1.1.1: Crop: 7,307	2.1.1.1: 14,287	Annual Performance report
			Number	2.1.1.2: Livestock: 3795	2.1.1.2: Increase by 20%	
			Number	2.1.1.3: Fisheries: 750	2.1.1.3: Fisheries: 1500	
	2.1.2 Number of agricultural households having access to extension services	Number	2.1.2.1: Crop: 4,690,529	2.1.2.1: Crop: 4,761,439	ARDS Annual Reports	
			2.1.2.2: Livestock: 9245	2.1.2.2: Livestock: Increase by 30%		
			Number	2.1.2.3: Fisheries: TBD	2.1.2.3: Fisheries: TBD	
	2.1.3 Number of farmers trained	Number	2.1.3.1: Crop: 961,367	2.1.3.1: Crop: 3,364,785	ARDS Annual Reports	
			2.1.3.2: Livestock: 13,223	2.1.3.2: Livestock: Increase by 67%		
			2.1.3.3: Fisheries: 12,613	2.1.3.3: Fisheries: Increase by 100%		
	2.1.4 Number of Extension staff trained	Number	2.1.4.1: Crop: 1,026	2.1.4.1: Crop: 4,617	ARDS Annual Reports	
			2.1.4.2: Livestock: 3,344	2.1.4.2: Livestock: Increase by 80%		

RESULTS CHAIN	INDICATOR	UNIT	BASELINE (2018)	TARGET (2023)	MEANS OF VERIFICATION	
		Number	2.1.4.3: Fisheries: 100	2.1.4.3: Fisheries: Increase by 100%		
	2.1.5 Number of Extension staff retooled	Number	2.1.5.1: Crop: 2,133	2.1.5.1: Crop: 2,429	Annual Performance report	
		Number	2.1.5.2: Livestock: 2,317	2.1.5.2: Livestock: Increase by 40%		
		Number	2.1.5.3: Fisheries: TBD	2.1.5.3: Fisheries: TBD		
	2.1.6 Number of ward agricultural resources centers (WARC)	Number	2.1.6.1: Crop: 268	2.1.6.1: 475	ARDS Annual Reports	
		Number	2.1.6.2: Livestock: 2,107	2.1.6.2: Livestock: Increase by 8%		
		Number	2.1.6.3: Fisheries: <b>8</b>	2.1.6.3: Fisheries: <b>6</b>		
	2.2 Improved access to inputs and health services	2.2.1 Amount of improved seeds used	Tone	2.2.1.1: Crop: 49,539.18	2.2.1.1: Crop: 30% increase	ARDS Annual Reports
			Dozes	2.2.1.2: Livestock: 82,801	2.2.1.2: Livestock: To increase by 30%	
			Tone	2.2.1.3: Fisheries: 17,301,076	2.2.1.3: Fisheries: Increase by 50%	
2.2.2 Amount of fertilizer applied		Ton	2.2.2.1: 435,178	2.2.2.1: 30% increase	ARDS Annual Reports	
2.2.3 Number of agricultural Household applying agrochemicals		Number	2.2.3.1: Crop: TBD	2.2.3.1: TBD	National Agriculture Census Reports	
		Number	2.2.3.2: Livestock: 197,298	2.2.3.2: Livestock: To increase by 100%		
2.2.4 Number of stockiest at village level.	Number	2.2.4.1: Crop: 4,000	2.2.4.1: 6,000	Business Register Annual Reports		
2.3. Research and Development	2.3.1 Budget allocation to agricultural research	TZS	2.3.1.1: Crop: 18,278,443,706	2.3.1.1: Crop: 67,963,625,044	Annual performance report	
		TZS	2.3.1.2: Livestock: 6,191,113,990	2.3.1.2: Livestock: To increase by 20%		
		TZS	2.3.1.3: Fisheries: 3,332,847,422	2.3.1.3: Fisheries: 4,332,847,422		
	2.3.2 Number of agricultural research technologies developed	Number	2.3.2.1: Crop: 7	2.3.2.1: Crop: 20	Annual performance report	
		Number	2.3.2.2: Livestock: 38	2.3.2.2: Livestock: To increase by 20%		
		Number	2.3.2.3: Fisheries: <b>2</b>	2.3.2.3: Fisheries: TBD		
2.4 Strengthen and Promote mechanization	2.4.1 Number of agricultural households using agro-machinery	Number	2.4.1.1: Crop: <b>2,308,754</b>	2.4.1.1: Crop: <b>2,930,791</b>	Annual performance report	
		Number	2.4.1.2: Livestock: <b>137,200</b>	2.4.1.2: To increase by 30%		
	2.4.2 Area (hectares) utilized agro-machinery	Ha	2.4.2.1: Ha. 6,697,500	2.4.2.1: Ha. 8,232,676	ARDS Annual Reports	
	2.4.3 Number of agro-mechanization hiring centers	Number	2.4.3.1: 43	2.4.3.1: 54	Annual performance report	
2.5. Food and Nutrition Security	2.5.1 Average number of meals consumed per day (Rural)	Number	2.5.1.1: <b>(Rural: 2.5, Urban: 2.7)</b>	2.5.1.1: <b>(Rural: 3, Urban: 3)</b>	National Agriculture Census Reports <b>(source: HBS 2017 - 2018)</b>	
	2.5.2 Percent of Population by the Number of Daily meals (Rural)	%	2.5.2.1: Rural 1. meal 0.5 2. meal 33.3 3. 66.1	2.5.2.1: Rural 1 meal 2. meal 3. TBD	<b>Source: NPS 2014/15</b>	
	2.5.3 Percent of Population by the Number of Daily meals (Urban)	%	2.5.3.1: Urban 1. meal 0.7 2. meal 18.4 3. 80.9	2.5.3.1: Urban 1 meal 2. meal 3. TBD	<b>Source: NPS 2014/15</b>	
	2.5.4 Average number of rural household with low dietary diversity	Number	2.5.4.1: TBD	2.5.4.1: TBD	National Agriculture Census Reports	

**JAMHURI YA MUUNGANO WA TANZANIA  
OFISI YA RAIS**

*Anuani ya Simu "TAMISEMI" DODOMA*  
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*Tawala za Mikoa na Serikali za Mitaa*  
*(TAMISEMI),*  
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*S.L.P 1923,*  
*41185 DODOMA.*

Kumb. Na. AH. 9/275/02/64

09/07/2019

Makatibu Tawala Mikoa,  
**TANZANIA BARA.**

**YAH: MUENDELEZO WA MAFUNZO YA KUIMARISHA MFUMO  
WA KUKUSANYIA TAKWIMU ZA KILIMO (ARDS)**

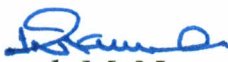
1. Mtakumbuka kuwa Ofisi ya Rais Tawala za Mikoa na Serikali za Mitaa iliandika barua yenye Kumb. Na. AH.9/275/01B/51 tarehe 25 Septemba, 2014 kuelekeza kuwa Mamlaka za Serikali za Mitaa zianze rasmi kutumia mfumo wa pamoja wa uandaaji wa takwimu za kilimo (Agricultural Routine Data System-ARDS) katika kutoa taarifa za kila mwezi za sekta ya kilimo. Katika kutekeleza maelekezo hayo tumebaini kuwepo kwa mapungufu mbalimbali. Baadhi ya mapungufu yaliyobainika ni pamoja na:- Mamlaka za Serikali za Mitaa kushindwa kutenga fedha za uendeshaji mfumo huu toka katika vyanzo vya ndani; Mamlaka za Serikali za Mitaa kushindwa kusambaza miongozo na kutoa mafunzo kwa Maafisa kilimo ngazi ya Kata/Vijiji (WAEO/VAEO); Mamlaka za Serikali za Mitaa kutowasilisha taarifa kwa wakati kwenye mfumo (**kabla ya tarehe 15 ya kila mwezi**); taarifa zilizopo kwenye mfumo kukosa ubora na uhalisia unaokusudiwa; Sekretarieti za Mikoa kushindwa kupitia, kuhakiki, na kuidhinisha taarifa kwenda kwenye mfumo kwa wakati (**kabla ya tarehe 25 ya kila mwezi**).
2. Moja ya jitihada za kuhakikisha kuwa mapungufu haya hayajitokezi tena katika siku za usoni, Serikali kupitia Wizara za Sekta ya Kilimo imeandaa mafunzo rasmi yatakatayowahusisha Wakuu wa Idara za Kilimo na Mifugo na Uvuvi (DAICOs na DLFOs) katika Halmashauri



zote nchini pamoja na Maafisa Kilimo na Maafisa Mifugo mmoja mmoja kutoka katika ngazi ya Mkoa. Aidha, kati ya Maafisa hao wawili wa Mkoa awepo, Afisa aliyeteuliwa kusimamia masuala ya ARDS katika ngazi ya Mkoa. Mafunzo haya yatalenga kuweka uelewa wa jinsi Mfumo unavyofanya kazi na namna ya kuutumia, ili waweze kuusimamia na kufuatilia ubora wa takwimu zinazoingizwa kwenye mfumo huo. **Maafisa hao watalazimika kushiriki wao wenyewe bila kutuma wawakilishi.** Kila mshiriki aje na kompyuta mpakato (laptop computer).

3. Kwa barua hii, mnaombwa kuwaruhusu maafisa tajwa ili waweze kushiriki katika mafunzo hayo muhimu yanayotarajiwa kufanyika kulingana na ratiba iliyoambatanishwa pamoja na barua hii. Gharama za mafunzo na posho za kujikimu pamoja usafiri wa umma kwa washiriki zitagharamiwa na Shirika la Maendeleo la Japani (JICA).

Nawashukuru kwa ushirikiano wenu.

  
Eng. Joseph M. Nyamhanga  
**KATIBU MKUU**

**Nakala:** Katibu Mkuu,  
Wizara ya Kilimo,  
S. L. P 2182,  
Kilimo IV,  
**DODOMA.**

Group 1: Mara, Geita&ShinyangaCentres

Day	Date (all July 2019)	Regions	Total LGAs	Participants	Venue
Thursday -Friday	18 <sup>th</sup> - 19 <sup>th</sup>	Mara, Simiyu	15	DAICO & DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Mara RS/hired venue
Monday -Tuesday	22 <sup>nd</sup> - 23 <sup>rd</sup>	Geita, Kagera	14	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Geita RS/ hired venue
Thursday -Friday	25 <sup>th</sup> -26 <sup>th</sup>	Mwanza, Shinyanga	14	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Shinyanga RS/hired venue

Group 2: Kilimanjaro, Tanga&MorogoroCentres

Day	Date (all July 2019)	Regions	Total LGAs	Participants	Venue
Thursday -Friday	18 <sup>th</sup> - 19 <sup>th</sup>	Arusha, Manyara	14	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	ManyaraRS/ hired venue
Monday -Tuesday	22 <sup>nd</sup> - 23 <sup>rd</sup>	Kilimanjaro, Tanga	18	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Tanga RS/ hired venue
Thursday -Friday	25 <sup>th</sup> -26 <sup>th</sup>	Morogoro, Dodoma	17	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Morogoro RS/ hired venue

Group 3: Njombe, Songwe&TaboraCentres

Day	Date (all July 2019)	Regions	Total LGAs	Participants	Venue
Thursday -Friday	18 <sup>th</sup> - 19 <sup>th</sup>	Njombe, Iringa, Ruvuma	19	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Njombe RS/ hired venue
Monday -Tuesday	22 <sup>nd</sup> - 23 <sup>rd</sup>	Mbeya, Songwe, Rukwa	16	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Songwe RS/ hired venue
Thursday -Friday	25 <sup>th</sup> -26 <sup>th</sup>	Tabora, Singida	15	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Tabora RS/ hired venue

Group 4: Kigoma, Mtwara, &DSM Centres

Day	Date (all July 2019)	Regions	Total LGAs	Participants	Venue
Thursday -Friday	18 <sup>th</sup> - 19 <sup>th</sup>	Kigoma, Katavi	14	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Kigoma RS/ hired venue
Monday -Tuesday	22 <sup>nd</sup> - 23 <sup>rd</sup>	Linidi, Mtwara	15	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	Mtwara RS/ hired venue
Thursday -Friday	25 <sup>th</sup> -26 <sup>th</sup>	DSM, Pwani	14	DAICO& DLFO (LGAs) & RS agricultural & livestock officers in charge of ARDS	DSM RS/ hired venue