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

TECHNICAL COOPERATION IN CAPACITY DEVELOPMENT FOR THE ASDP MONITORING AND EVALUATION SYSTEM

FINAL REPORT

MARCH 2011

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

INTERNATIONAL DEVELOPMENT CENTER OF JAPAN (IDCJ)

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Final Report

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ACRONYM

AfDB	African Development Bank
ARDS	Agricultural Routine Data System
ASDP	Agricultural Sector Development Programme
ASDS	Agricultural Sector Development Strategy
ASLMs	Agricultural Sector Lead Ministries (MAFC, MLDF, MIT and PMO-RALG)
ASPS	Agricultural Sector Support Programme
A-WG	Agricultural Working Group (Development Partners)
BOP	Bank of Tanzania
CAADP	Comprehensive Africa Agriculture Development Programme
CARD	Coalition for African Rice Development
C/P	Counterpart
CSO	Civil Society Organization
DADP	District Agricultural Development Plan
DALDO	District Agricultural and Livestock Development Officer
DASIP	District Agricultural Sector Investment Project
DC	District Council
DCD	Department of Crop Development
DCM	Department of Commodity Marketing
DED	District Executive Director
DFID	United Kingdom Department for International Development
DITS	Department of Irrigation and Technical Services
DNFS	Department of National Food Security
DPLO	District Planning Officer
DPP	Department of Policy and Planning
DP	Development Partner
DSM	Dar es Salaam
FFS	Farmers' Field School
F/R	Final Report
FY	Fiscal Year
GBS	General Budget Support
GDP	Gross Domestic Product
GoT	Government of Tanzania
ICT	Information, Communication and Technology
IDCJ	International Development Center of Japan
IT	Information Technology
JICA	Japan International Cooperation Agency
JIR	Joint Implementation Review
LGA	Local Government Authority
LGMD	Local Government Monitoring Database
LGPMS	Local Government Performance Monitoring System
MAFC	Ministry of Agriculture, Food Security and Cooperatives
M&E	Monitoring and Evaluation
MDA	Ministry, Department and Agency
MIT	Ministry of Industry and Trade
MLDF	Ministry of Livestock Development and Fisheries
MNRT	Ministry of Natural Resources and Tourism
MoFEA	Ministry of Finance and Economic Affaires
MoU	Memorandum of Understanding

MWI	Ministry of Water and Irrigation
NBS	National Bureau of Statistics
NGO	Non Governmental Organization
NPS	National Panel Survey
NSCA	National Sample Census of Agriculture
NSGRP	National Strategy for Growth and Reduction of Poverty
OJT	On the Job Training
PADEP	Participatory Agricultural Development and Empowerment Project
P&I	Planning and Implementation
PMO-RALG	Prime Minister's Office - Regional Administration and Local Government
P/R	Progress Report
RAA	Regional Agricultural Adviser
RAAS	Rapid Appraisal Agricultural Survey
RADAG	Rural and Agricultural Development Advisory Group
RAS	Regional Administrative Secretary
RLA	Regional Livestock Adviser
RTA	Regional Trade Adviser
RS	Regional Secretariat
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
TC	Technical Cooperation
TOR	Terms of Reference
TOT	Training of Trainers
TSED	Tanzania Socio-Economic Database
TSMP	Tanzania Statistical Master Plan
TWG	Thematic Working Group
UCC	University Computing Centre
VAEO	Village Agricultural Extension Officer(s)
VEO	Village Executive Officer
VIC	Veterinary Inspection Centre
WAEO	Ward Agricultural Extension Officer(s)
WG	Working Group
ZARDEF	Zonal Agricultural and Livestock Research and Development Fund

1. Background and purpose

In Tanzania, national development and poverty reduction have been guided by the three Poverty Reduction Strategy documents since 2000[1]. In order to contribute from the agricultural sector, the Agricultural Sector Development Strategy (ASDS) was formulated in 2001. The Agricultural Sector Development Programme (ASDP) started in July 2006 to implement the strategy. The ASDP has adopted a sector wide approach with a basket fund supported by the Government of Tanzania (GoT) and Development Partners (DPs). The four Agricultural Sector Lead Ministries (ASLMs) participate in the ASDP[2]. Seventy five (75) percent of the ASDP Basket Fund is allocated to 133 Local Government Authorities (LGAs) in the country and are used to implement District Agricultural Development Plans (DADP) in each LGA. The remaining 20 percent is used by ASLMs and 5 percent is for cross-cutting issues such as the environment and gender.

In order to track the progress of the ASDP and evaluate its effects, a monitoring and evaluation (M&E) system is essential. However, the M&E system was not in place when the ASDP started. To develop an M&E framework for the ASDP, the ASDP M&E Thematic Working Group (TWG) was established in December 2006 with the officers of ASLMs specializing in M&E, statistics and management information systems and DPs which support the ASDP. The TWG developed the ASDP M&E Framework, which was approved by the Committee of ASLMs Directors in August 2007. Since then the task of the M&E TWG has shifted to the operationalization of the M&E Framework. The M&E TWG is one of the nine TWGs of the ASDP and is chaired by the Director of Policy and Planning (DPP), MLDF.

The M&E of the ASDP can be broadly divided into two aspects: i) physical and financial progress pertaining to the use of the basket fund by LGAs and ASLMs, and ii) the technical performance of the agricultural sector. As for the former, PMO-RALG consolidates physical and financial progress of the DADP in each LGA every quarter, and the report is submitted to the ASDP Basket Fund Steering Committee. Reports summarizing the activities conducted by the ASLMs are also prepared and submitted to the Committee. At present (March 2011), a mechanism is being developed to capture project level outcome information and to transfer them to ASLMs. The DADP Planning and Implementation TWG works on this task in collaboration with the M&E TWG

As for the technical performance of the agricultural sector, agricultural sample surveys and Agricultural Routine Data Systems (ARDS) are the primary sources of information. There are two agricultural sample surveys in Tanzania: the National Sample Census of Agricultural (NSCA) and the National Panel Survey (NPS). They are conducted jointly by the National Bureau of Statistics (NBS) and ASLMs. The NSCA is rich in agricultural information, but it is implemented only every 5 year. The NPS also has a lot of

[1] They are the Poverty Reduction Strategy (2000), the National Strategy for Growth and Reduction of Poverty (NSGRP or MKUKUTA) (2005) and the subsequent NSGRP II or MKUKUTA II (2010).

[2] They are the Ministry of Agriculture Food Security and Cooperatives (MAFC), the Ministry of Livestock Development and Fisheries (MLDF), the Ministry of Industry and Trade (MIT), and the Prime Minister's Office – Regional Administration and Local Government (PMO-RALG). The Department of Irrigation and Technical Services (DITS) was transferred from MAFC to the then Ministry of Water and Irrigation (MWI) in February 2008. There had been five ASLMs (including MWI) until DITS returned to MAFC in November 2011. MIT had been called the Ministry of Industry, Trade and Marketing (MITM) until November 2010.

information on agriculture and is supposed to be an annual survey. But the estimates are available only at the national level.

On the other hand, the ARDS is supposed to deliver agricultural sector information from LGAs to ASLMs through regions every quarter. But it is not functioning properly at present. For example, ASLMs have not been able to receive reports on agricultural performance regularly from LGAs through regions, and standard reporting forms and flows have not been clearly defined yet.

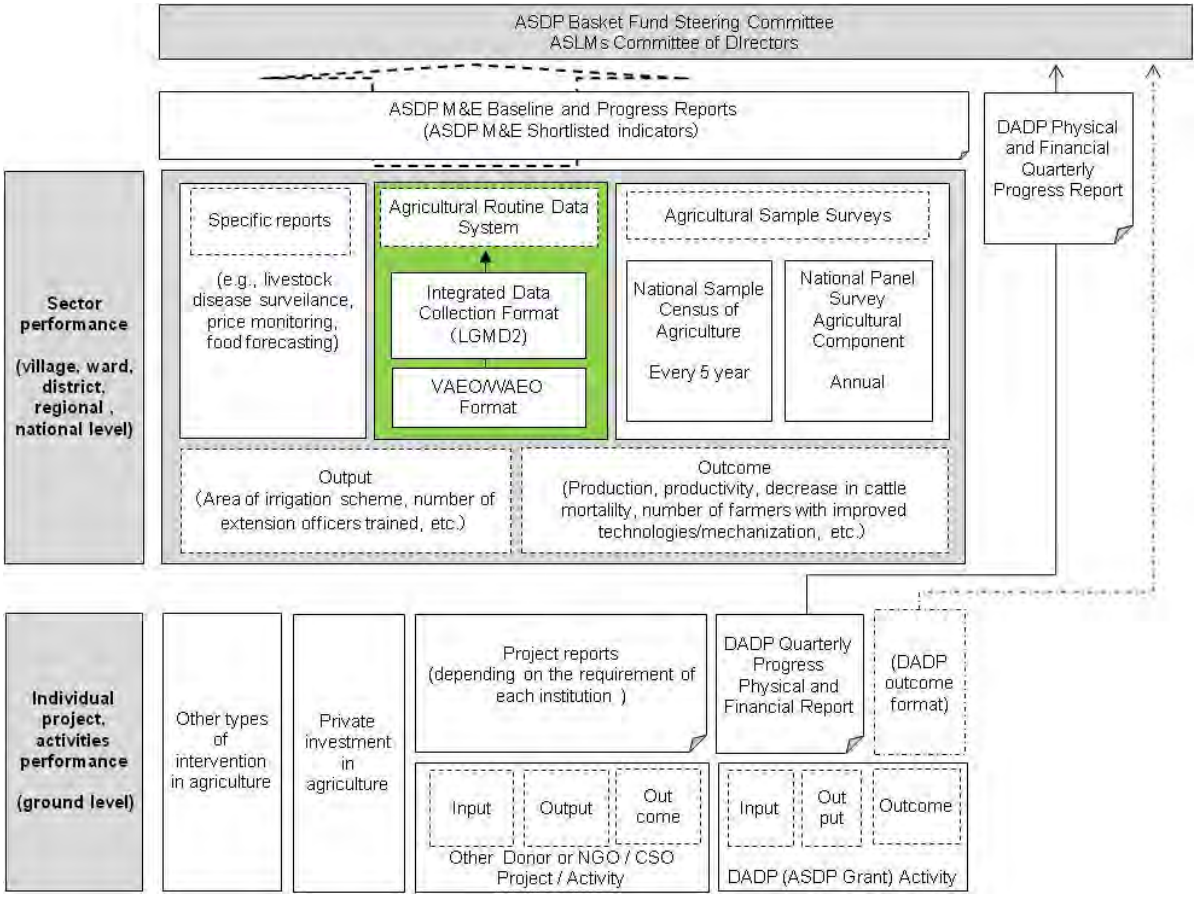

Figure 1.1.1 Data Collection and reporting from LGAs to ASLMs in the ASDP[3]

The Technical Cooperation (TC) in Capacity Development for the ASDP M&E System has been implemented since March 2008. The overall goal, purpose, output, duration, and counterpart of the TC according to its logical framework are shown below.

Overall goal: The Agricultural Routine Data System is effectively used nationwide for Monitoring and Evaluation of the ASDP.

Purpose: An effective Agricultural Routine Data System of the ASDP M&E framework to be deployed from villages to national levels is established.

Output: 1) A provisional model of the ARDS is developed by means of streamlining and coordinating ASLMs' routine data system.

[3] The reports prepared by the ASLMs on the ASDP are not shown in this figure.

2) Local Government officials concerned in the pilot districts in Morogoro and Dodoma Regions are conversant with how to operate the provisional model of the ARDS.
3) The model of ARDS is completed by carrying out necessary modifications to the provisional model through implementation in the pilot districts in Morogoro and Dodoma Regions.
4) The ASDP M&E guideline is improved to incorporate the revision of the ARDS through the results of pilot implementation.
5) A wide range of capacities of the M&E TWG are enhanced for smooth and effective operation of all M&E related activities under the ASDP.
6) Progress and achievements of the TC are shared with Central and Local Government officials and Development Partners.

Period: March 2008 – March 2011

Counterpart: Members of the ASDP M&E Thematic Working Group

Improving the ARDS is one of the action plans of the ASDP M&E Framework. It is the task of the ASDP M&E TWG, and thus the initiative of the TC has been taken by the TWG. The role of the Rural and Agricultural Development Advisory Group (Monitoring and Evaluation) (RADAG (M&E))[4], a team of the Japanese consultants hired by JICA for this TC, is to provide technical backstopping as members of the TWG. Thus, this report presents the progress of the activities of the M&E TWG to which RADAG (M&E) provided technical backstopping.

Revision of Logical Framework

The output 5) was added to the logical framework at the mid-term review. The primary task of the TC is to improve the ARDS, and RADAG (M&E) was supposed to work primarily on the activities pertaining to the task. However, RADAG (M&E) joined the M&E TWG as a member, and the tasks of the TWG were not limited to the ARDS improvement. Thus, RADAG (M&E) worked on all kinds of activities of the M&E TWG after having consulted with JICA Tanzania office. The logical framework was revised to reflect this change.

[4] It is named after RADAG who had been undertaking JICA's "Support Program on Rural and Agricultural Sector Development Phase 2" until February 2009.

2. Activities

2.1. Workflow

Main activities and workflow of the TC are shown in Table 2.1.1 and Figure 2.1.1, respectively.

Table 2.1.1 Main activities of the TC by fiscal year

Year	Main activities
Mar. - Jun. 2008	● Review current ARDS and select four districts for pilot implementation
Aug. 2008 – Jun. 2009	● Develop an Integrated Data Collection Format by integrating ASLMs' data needs and harmonizing them with those of regions/LGAs. ● Develop a VAEO/WAEO Format which feeds the data into the Integrated Data Collection Format.
Aug. 2009 – Jun. 2010	● Improve the two common formats through pilot operation of the ARDS in the four districts. ● Develop new software (LGMD2) which transfers data from LGAs to ASLMs and improve it through the pilot implementation.
Aug. 2010 – Mar. 2011	● Finalize the two common formats and LGMD2. ● Revise and update relevant documents concerning ASDP M&E. ● Prepare a national roll-out plan of the ARDS.

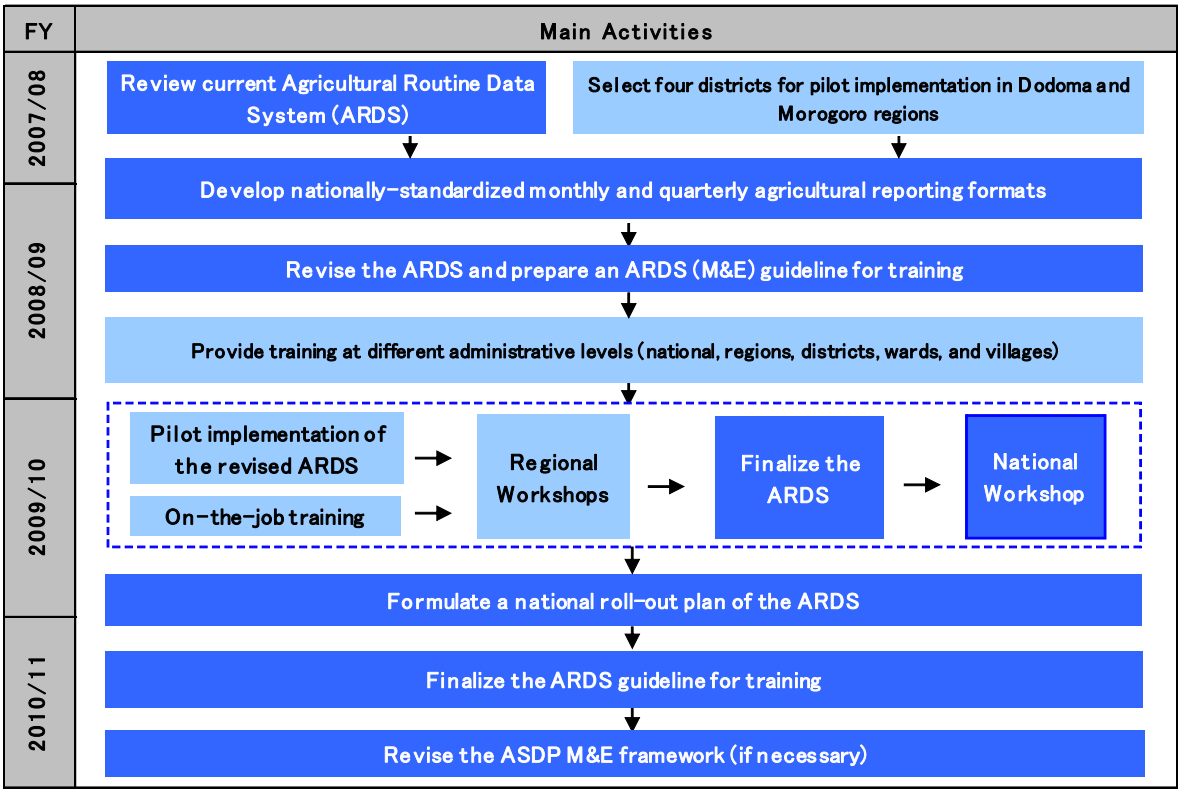

Figure 2.1.1 Main activities of the TC by year

Note: Activities shown in black letters are undertaken in the four selected districts in Morogoro and Dodoma Regions.

2.2. Activities 1 Improvement of the Agricultural Routine Data System (ARDS)

2.2.1. Development of the Common Reporting Formats

In order to develop common reporting formats at each administrative level, the M&E TWG carried out the following tasks.

- Selection of pilot districts
- Analysis of the current practices of the ARDS
- Harmonization of ASLMs' data needs and development of a reporting format for LGAs
- Development of a reporting format for village and ward agricultural extension officers
- Improvement of the ARDS through technical backstopping and field visit in the pilot LGAs
- Other activities pertaining to improvement of the ARDS
- Completion of the ARDS pilot implementation and finalization of the two formats

(1) Selection of Pilot Districts

To facilitate the improvement of the ARDS, two pilot districts were selected in Dodoma and Morogoro Regions, respectively. The two regions had been chosen as a site of pilot implementation of the ARDS. The criteria to select the four pilot districts which had been agreed by the M&E TWG included (i) basic institution (*i.e.,* the number of ward and village agricultural extension officers (WAEO and VAEO) with respect to the number of wards and villages); (ii) current reporting system (*i.e.*, the use of PlanRep2 and LGMD); (iii) assessment of planning and funding (*i.e.*, the recent DADP quality assessment and the Local Government Development Grant (LGDG) System assessments); and (iv) others.

The M&E TWG collected the information on each criterion when the study team visited four LGAs in Morogoro region and five LGAs in Dodoma region[5]. Mpwapwa DC and Kondoa DC in Dodoma Region and Kilosa DC and Morogoro DC in Morogoro Region were selected at the M&E TWG on June 6th 2008.

(2) Analysis of the Current Practices of the ARDS

<u>Analysis of Reporting Formats</u>

To understand the current status of reporting formats used in the districts and regions, a number of agricultural routine reports were analyzed by the M&E TWG members from April to May 2008. Sample reports were collected from all over the country in March 2008. Major findings and recommendations are summarized below.

- Currently reporting formats have not been standardized. There are three types of reporting formats: crop report, livestock report, and crop and livestock report.
- It is observed that there is no particular order of the items in the reports although the items found in

[5] Ulanga DC in Morogoro Region was excluded from consideration because it is difficult to access the district in rainy seasons. Morogoro MC and Dodoma MC were not included because it was thought that they were not representative in the sense that they are "municipal" councils and had different features from "district" councils where agriculture was the main economic activity.

the reports are similar.

- It is found that the same information is stated quantitatively in one report while it is stated qualitatively in another report, particularly in the reports prepared at village and ward levels. As a result, it is difficult to compile the data / information at district level.
- All the information is reported monthly even though some information such as population does not change over a certain period.

A report was prepared by summarizing the analysis, and it was shared with the M&E TWG members at the meeting held on May 16th 2008.

Field Studies

In order to review the current practices of the ARDS at each administrative level, the M&E TWG conducted two field studies from May to June in 2008. The study teams visited (i) PMO-RALG and (ii) Regional Secretariat (RS) and LGAs in Dodoma and Morogoro Regions.

The key findings were that ASLMs and RS do not receive the agricultural performance reports from LGAs on a routine basis, although LGAs produce them regularly. But LGAs' reporting forms are not standardized. On the other hand, ASLMs send a number of questionnaires to LGAs, which cause a lot of burden on district officers. Such key findings are summarized below. A report of the studies was prepared and presented at the M&E TWG meeting on June 6th 2008.

Table 2.2.1 Outline of the Study at PMO-RALG

Date	8th -11th May, 2008
Participants	1 M&ETWG member and 2 RADAG members
Place visited	Department of Sector Coordination (DSC), Department of Local Government (DLG), and Department of Information Communication and Technology (DICT)[6] of PMO-RALG
Key findings	DSC - DSC collects information/data on physical and financial progress of DADPs and other projects in the agricultural sector on a quarterly basis. The reports are consolidated by DSC officers into a national report. DLG - DLG receives physical and financial progress reports from LGAs, and this is the only report DLG receives from LGAs. The report covers all the sectors, and thus information on each sector (*e.g.*, agriculture) is very little. DICT - DICT promotes the use of PlanRep2 not only for planning (budgeting) but also for reporting. DICT may make it compulsory for LGAs to submit physical and financial progress using PlanRep2 soon.

[6] In 2010, the Department of Management Information System (DMIS) was renamed to the Department of Information, Communication and Technology (DICT). In this report, it is referred to as DICT.

Table 2.2.2 Outline of the Study at Regional and District Offices

<table>
<tr><td>Date</td><td>25th May -1st June, 2008</td></tr>
<tr><td>Participants</td><td>8 M&ETWG member and 4 RADAG (M&E) members (including 1 research assistant)</td></tr>
<tr><td>Place visited</td><td>Dodoma RS, Morogoro RS
Chamwino DC, Bahi DC, Kondoa DC, Mpwapwa DC and Kongwa DC
Morogoro DC, Mvomero DC, Kilombero DC and Kilosa DC</td></tr>
<tr><td>Interviewee</td><td>Regional Agricultural/ Livestock/ Trade Advisers (RAA/RLA/RTA)
District Agriculture and Livestock Development Officer (DALDO), Statistical Officer, District Planning Officer (DPLO) and other related officers, VAEO/WAEO</td></tr>
<tr><td>Key findings</td><td>- The main routine reports are Crop and Livestock Development Reports. These reports are prepared and submitted from village, to ward, and then to district every month.
- Crop and Livestock Development Reports produced at LGAs are not regularly transferred to ASLMs through RS, and thus it is difficult for ASLMs and RS to collect agricultural information.
- The questionnaires and reports requested by the national ministries and agencies have caused a lot of burden on district officers. The following table shows the names of these reports.
<table>
<tr><th></th><th>Name of report</th></tr>
<tr><td>1</td><td>(Three times a week) Report on Prices on Five Major Staple Food Crops (20 regions) [Submitted directly to MIT]</td></tr>
<tr><td>2</td><td>(Weekly) Livestock Market Information Report (live animals only) [Submitted Directly to MIT] (from 33 markets in 17 regions)</td></tr>
<tr><td>3</td><td>(Weekly) Reporting System Reports (WRS1-5) (Rainy season only) [Submitted directly to MAFC-DNFS]</td></tr>
<tr><td>4</td><td>(Weekly) Security and Safety Report [submitted to DC and then to RC after consolidation]</td></tr>
<tr><td>5</td><td>(Bi-monthly) Report on Crop and Livestock Commodities and Input Prices (93 Districts) [Submitted directly to MIT]</td></tr>
<tr><td>6</td><td>(Monthly, Quarterly, Bi-annual, Annual) Crop and Livestock Development Report [Submitted to DED]</td></tr>
<tr><td>7</td><td>(Monthly) RRS (Routine Reporting System) Food Assurance Report (Monthly “Pink” report) [Submitted directly to MAFC, DNFS]</td></tr>
<tr><td>8</td><td>(Monthly) Livestock Market Information and Animal Disease Surveillance Report [Submitted to Zonal VIC, and then submitted to MLDF after consolidation]</td></tr>
<tr><td>9</td><td>(Monthly) Fertilizer subsidy report [Submitted directly to MAFC-DCD]</td></tr>
<tr><td>10</td><td>(Monthly) Food Security Questionnaire (FSQ)-1 [Submitted directly to MAFC-DNFS]</td></tr>
<tr><td>11</td><td>(Quarterly, annual) Physical and financial DADP progress report [Submitted to DED and copies submitted to RAS]</td></tr>
<tr><td>12</td><td>(Quarterly) Gross Domestic Product Report [Submitted to NBS]</td></tr>
<tr><td>13</td><td>(Quarterly) Project quarterly progress report (e.g., PADEP, ASSP)</td></tr>
<tr><td>14</td><td>(Quarterly) Cooperative Report [submitted to DED bypassing DALDO]</td></tr>
<tr><td>15</td><td>(Quarterly) BOT Mbeya Branch report</td></tr>
<tr><td>16</td><td>(Bi-annual) Early Warning and Crop Monitoring Report (“White” for Short rain and “Green” for Long rain) [Submitted to MAFC-DNFS]</td></tr>
<tr><td>17</td><td>(Bi-annual and annual) CCM Manifesto implementation report</td></tr>
<tr><td>18</td><td>(Annual) Crops Target and Implementation Report [Submitted to RAS]</td></tr>
</table></td></tr>
<tr><td>Key recommendations</td><td>- Integrate the data needs of the Ministries, Departments and Agencies (MDAs), thereby alleviating the workload of district officers in filling out many questionnaires on the same issues.
- Develop a mechanism in which agricultural performance reports are delivered to ASLMs regularly.
- Develop a national standard format for the agricultural performance reports.
- Incorporate the ASDP M&E short-listed indicators into the Routine Data System.</td></tr>
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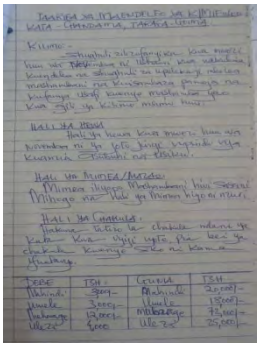

Photo2.2.1 Current Village / Ward Monthly Report and Kondoa District Agricultural Office

(3) Harmonization of ASLMs' Data Needs and Development of a Reporting Format for LGAs

In August 2008, the M&E TWG formed a task force to integrate and harmonize the data needs of ASLMs and develop a common reporting format for LGAs. The taskforce carried out following tasks over the period of six months.

- Integrate and harmonize the data needs of ASLMs,
- Classify the data according to frequency of collection,
- Check availability of data in the pilot LGAs,
- Define clearly the terms used in the format, and
- Discuss with the relevant departments of ASLMs

Having undertaken these tasks, the task force developed a draft Integrated Data Collection Format (annual and quarterly). Table 2.2.3 shows the items in the final version of the format (as of February 2011).

Table 2.2.3 Outline of the Integrated Data Collection Format

Quarterly Report	Annual Report
1. Crops: Planted Area and Total Production	1. Food Situation
2. Plant Health Services	2. Irrigation
3. Livestock/ Products Movement	3. Agricultural Mechanization
4. Livestock Slaughtered	4. Input
5. Meat Inspection/ Hygiene	5. Extension Services
6. Marketing of Livestock Products	6. Associations/ Groups
7. Animal Feeds, Vaccines and Acaricides, Reproduction of improved livestock	7. Contracting Production and Out-growers Schemes
	8. Proportion of Female Members in Finance Management and Planning Committee
	9. Livestock population (large scale farmers)
	10. Livestock population (small scale farmers)
	11. Livestock Products Processing Infrastructure
	12. Livestock Infrastructure and Status
	13. Rangeland
	14. Pastures
	15. Dissemination of Agriculture and Livestock Information

The M&E TWG provided a two-day training to the officers in the pilot regions / LGAs on April 16th and 17th

2009. The purpose of the training was to familiarize them with the draft Integrated Data Collection Format and prepare for pilot implementation. In order to facilitate their understanding of the format, they filled the format with actual data from the agricultural and livestock development report in the third quarter 2008/09 and the annual report in 2007/08. The outline of this training is shown in Table 2.2.4.

Table 2.2.4 Outline of the Training of RS/ LGA Officers in the Pilot Districts

Date	April 16-17, 2009
Venue	Morogoro rural district
Participant	RS: Agricultural Advisor, Livestock Advisor LGA: DALDO, Statistical Officer, M&E Officer
Trainer	M&E TWG member
Agenda	- Presentation of the Integrated Data Collection Format (quarterly and annual) - Exercise (group work) - Presentation of the result of the group work - Discussion on the M&E Guideline regarding reporting flows in a region

Based on the comments received, the M&E TWG modified the format and sent it to all the directors of ASLMs, all the chairpersons of the ASDP TWGs and DPs on May 25th 2009. The use of the format started in July 2009 in the pilot LGAs.

It should be noted that the M&E TWG agreed that the data shown in the table below not to be included in the Integrated Data Collection Format, although it may be reexamined later[7].

Table 2.2.5 The List of Data Not Incorporated into the Integrated Data Collection Format

Data	Institution	Reason
Food security and early warning	Crop Monitoring and Early Warning section, MAFC	The data are collected weekly or bi-weekly, and it is more frequent than the Integrated Data Collection Format (quarterly and annual).
Market price	MIT	The data are collected every other day or weekly, and it is more frequent than the Integrated Data Collection Format.
Fishery	MLDF	As the Department of Fisheries was merged to MLDF recently, how to harmonize with the M&E system of MLDF was not established yet. Nonetheless, some data on fishery were incorporated in the questionnaire.
Irrigation scheme	Department of Irrigation and Technical Services (DITS), MWI	DITS is developing its own database system, and a parallel system should be avoided.
Cooperatives	Cooperative Development Division, MAFC	Since the Division is often transferred from one ministry to another, the division wants to have its own routine data system. The Cooperative Data System (CODAS) is being developed by a project funded by the International Cooperative Alliance.

[7] Later, tables concerning irrigation and cooperatives were incorporated in the Format. DITS requested the M&E TWG to add tables on irrigation to the format because its own database had not functioned well. As for the cooperatives, CODAS had not developed, and the division also requested that the tables on cooperatives be included.

Photo 2.2.2 Training on the Integrated Data Collection Format

(4) Development of a Reporting Format for Village and Ward Agricultural Extension Officers (VAEO/ WAEO)

In order to facilitate the district officers to fill in the Integrated Data Collection Format, it was agreed to develop a national standard reporting format for VAEO/WAEO (hereinafter referred to as VAEO/WAEO Format) and form a taskforce at the M&E TWG meeting on January 23rd 2009.

The taskforce members visited the pilot LGAs twice and developed a draft VAEO/WAEO Format through discussion with district agricultural statistical officers and extension officers, incorporating the data needs of the districts and examining the feasibility of data collection. The draft format was translated to Kiswahili, which was approved at the M&E TWG meeting on May 12th 2009. It was then sent to all the directors of ASLMs, all the chairpersons of the ASDP TWGs and DPs on May 25th 2009. The items included in the format (as of February 2011) are presented in Table 2.2.6.

Table 2.2.6 Outline of VAEO/WAEO Format

Monthly Report	Quarterly Report	Annual Report
1. Introduction (weather condition, summary of activities) 2. Crop: Planted Area, Total Production and Prices 3. Plant Health Services 4. Livestock Slaughtered 5. Meat Inspection 6. Livestock Products 7. Livestock Health 8. Achievements and Challenges/ Problems 9. Visitors	1. Village Food Situation 2. Farmers Groups/ SACCOs 3. Extension Services 4. Biological Control Measures 5. Irrigation (planted area, production, etc.) 6. Soil Erosion (type and extent of erosion, control measures, etc.) 7. Area Cultivated and Means of Cultivation	1. Introduction (Population and number of households) 2. Irrigation (water source, area under irrigation, members of Irrigation Organizations, etc.) 3. Contract Farming 4. Agricultural, Livestock and Fishery Machines 5. Extension Services (FFS) 6. Input Use 7. Livestock Population 8. Livestock Infrastructure 9. Rangeland 10. Pasture 11. Area covered by TV, Radio and Telecommunication

The M&E TWG conducted training on the VAEO/ WAEO Format for the pilot LGAs in June 1st - 5th 2009. The training consisted of two sessions. On the first day, M&E TWG officers gave regional / district officers training on the format. On the second day, the regional / district officers, in turn, explained VAEO/WAEO how to fill out the format. The M&E TWG members supported the regional / district officers as backstopping

on the second day. In total 223 officers (all VAEO/WAEO in the four pilot districts) participated in the training. The training was conducted in Swahili to enhance the understanding of and draw as many comments as possible from VAEO/WAEO. This training is summarized in Table 2.2.7.

Table 2.2.7 Outline of the Training of VAEO/WAEO in the Pilot Districts

Date		Venue		Venue
Region	Dodoma		Morogoro	
June 1	Kondoa DC	DALDO's office	Kilosa DC	DALDO's office
June 2		District community hall		VETA conference hall, Mikumi
June 3	Travel to another district			
June 4	Mpwapwa DC	DALDO's office	Morogoro rural DC	DALDO's office
June 5		District Commissioner's office conference hall		LITI conference hall
Participant	RS: Agricultural Advisor, Livestock Advisor LGA: DALDO, Statistical Officer, M&E Officer, Ward / Village Agricultural Extension Officers			
Trainer	Day 1: M&E TWG members Day 2: RS/ LGA officers, M&E TWG members			
Agenda	Day 1: Training of Trainers Day 2: Training of VAEO/WAEO - Background and purpose of the training - Presentation of Agricultural Monthly Report Format - Discussion and Exercise - M&E Guideline relevant to VAEO/WAEO			

The VAEO/WAEO Format was revised to incorporate the comments received, which was then sent to the pilot LGAs to be used in July 2009.

(5) Improvement of the ARDS through Technical Backstopping and Field Visit in the Pilot LGAs

The M&E TWG provided technical backstopping twice and made field trips to the pilot districts three times in order to improve the ARDS. Each of these activities are explained below.

The First Backstopping Workshop

Photo 2.2.3 First Backstopping Workshop

Following a two-month pilot implementation of the VAEO/WAEO Format, the M&E TWG conducted a

backstopping workshop in order to obtain feedback from VAEO/WAEO in the four pilot districts in September 14th – 16th 2009. Table 2.2.8 summarizes the workshop.

Table 2.2.8 Outline of the first backstopping workshop

Date	September 14-16, 2009	
Venue	September 14 am, 16：Dodoma Regional Secretariat office Conference Room September 14 pm, 15：Dodoma Municipal Council Conference Room	
Participants	Total 50 - Region: RAA, RTA - District: DALDO, Statistical Officer, M&E Officer, WAEO, and VAEO - ASDP M&E TWG: MAFC 2,MLDF 1, MIT 3, PMO-RALG 1 - RADAG (M&E): 3 (including one research assistant)	
Facilitator	Chair person：MAFC, Secretary：MIT, MLDF	
Agenda	14th	1）Introduction 2）Individual exercise: Categorizing/ marking each table / cell of the VAEO/WAEO Format - Data frequency（Annual, Quarterly, Monthly）(by table) - Data reliability and availability (firmly, relatively, not reliable, not available) (by cell) 3）Group discussion and presentation (position-wise)
	15th	1）Discussion on the format based on the categorization and group presentation 2）(After the workshop) Improving the VAEO/WAEO Format by the M&E TWG members
	16th	1）Discussion on the VAEO/WAEO Format (continued) 2）Presentation of the improved format and discussion 3）Way forward 4）Discussion on the Integrated Data Collection Format (district officers and M&E TWG members)
Major points revised	- The formats (originally monthly only) were divided into three types of reports by frequency (monthly, quarterly and annual). - Tables or columns with no data were deleted. - The form was converted from Word to Excel as requested by the district officers. - There were many cells filled with “NA”. The format was revised to write “NA” when the required information is not available and “0” (zero) when the infrastructure / machinery does not exist.	

In addition, feedback on the Integrated Data Collection Format was also given by the district officers in the workshop. It was agreed that instructions be written more clearly and that some tables in the format be modified to be consistent with the changes made in the VAEO/WAEO Format.

The revised VAEO/WAEO Format and Integrated Data Collection Format were approved by the M&E TWG and sent to the pilot LGAs on September 25th. The pilot LGAs started using the revised formats in October 2009 (the second quarter). It was also agreed that the pilot LGAs make enough copies of the format to distribute to all VAEO/WAEO in the LGA.

The First Field Visit

In November 2009, some members of the M&E TWG visited the pilot LGAs to monitor the status of implementation of the VAEO/WAEO Format revised in September. The outline of the visit is presented in Table 2.2.9.

Table 2.2.9 Outline of the First Field Visit

Place visited		Morogoro DC	Kilosa DC	Kondoa DC	Mpwapwa DC
Date		November 16, 2009	November 17	November 25	November 26
Participants	M&E TWG	MAFC 1, RADAG (M&E) 1		MAFC 1, RADAG (M&E) 2	
	Region	IT Specialist		IT Specialist	
	District	Statistical Officer, M&E Officer		Statistical Officer, M&E Officer	
Observations	Distribution status of the VAEO / WAEO Formats	DALDO office made enough copies and distributed them to all 60 VAEO/WAEO.	DALDO office made copies and distributed them to all 35 WAEO, but not to VAEO because of paper shortages.	DALDO office made enough copies and distributed them to all 89 VAEO/ WAEO. It also held an annual meeting with VAEO/WAEO to explain the format.	DALDO office made enough copies and distributed them to all 55 VAEO/WAEO except for a few new officers.
	Rate of submission of the filled-in WAEO format in Oct 2009	56%	86%	75-80%	72%
	Challenges	New VAEO / WAEO are not familiar with the format.	Some WAEO still use old format.	The target figures stated in the format are unrealistic.	New VAEO / WAEO are not familiar with the format.

The pilot LGAs asked the M&E TWG to provide a refresher training on the VAEO/WAEO Format, especially for new officers as the districts did not have sufficient budget for the training.

The Second Backstopping Workshop

The M&E TWG conducted the second backstopping workshop for all the VAEO/WAEO in the pilot LGAs from February 8th, 2010. It had been four months since the pilot implementation of the revised VAEO/WAEO Format started, and the workshop aimed at i) examining the filled-in monthly and quarterly reports, ii) further improving the format, and iii) sharing experiences among VAEO/WAEO on data collection and entry. Before this workshop, the Training of Trainers was provided to the M&E TWG members on February 5th and 19th. The outline of the training is shown in Table 2.2.10.



Photo 2.2.4 Second Backstopping Workshop

Table 2.2.10 Outline of the second backstopping workshop

Place visited		Morogoro DC	Kilosa DC	Mpwapwa DC	Kondoa DC
Date		February 8-10, 2010	February 12-15	February 22-24	February 27-March 1
Venue		Mt. Uluguru Hotel Conference Hall	VETA Mikumi Conference Hall	District Commissioner's Office Conference Hall	Roman Catholic Church Hall
Participants	M&E TWG	MAFC, MLDF, MIT, MWI, RADAG (M&E)		MAFC, MLDF, MIT, MWI, PMO-RALG, RADAG (M&E)	
	Region	RAA、IT Specialist		RAA, Cooperative Officer	
	District	DALDO, Statistical Officer, M&E Officer		DALDO, Statistical Officer, M&E Officer, Crop Officer, Livestock Officer	
	WAEO/VAEO	48	77	47	74
Facilitator		Trainer：MLDF, RADAG (M&E), Secretary：MIT, MWI, PMO-RALG			
Agenda	1st day	1）Introduction 2）VAEO/WAEO Format (Monthly)			
	2nd day	1）VAEO/WAEO Format (Quarterly, Annual) 2）Way forward 3）(for district officers）Excel exercise for data consolidation			
	3rd day	1）(for district officers）Integrated Data Collection Format (Quarterly, Annual) 2）(for district officers）Installation of the latest version of LGMD2 3）Way forward			
Training materials		Filled-in VAEO/WAEO Format (December and Second quarter) Submission record table (Mpwapwa and Kondoa only)			

In the session for VAEO/WAEO, the filled-in monthly format (December) and quarterly format (2nd quarter) were examined by table. VAEO/WAEO shared their experiences actively, giving examples on how they collected data.

The session for district officers covered how to consolidate the data submitted by WAEO at district level. The district officers practiced data entry and data consolidation using Excel (formula and Pivot table function). After the training, the district officers requested that the M&E TWG should develop a manual on data consolidation.

Furthermore, a table for tracking submission status of the format from WAEO to the district office was introduced at the training in Dodoma region. The rate of submission from July 2009 to January 2010 was 61-78% in Mpwapwa and 51-71% in Kondoa. Some filled in formats were not submitted or submitted late partly because the blank forms had not been distributed appropriately[8]. In order to improve the submission, it was suggested that the district officers produce sufficient number of copies for three months and distribute them at once and then conduct a follow-up visit using motorcycles provided by JICA. The pilot districts confirmed that the expenses of fuel, printing and training for VAEO/WAEO were already taken care of in next year's budget.

Based on the comments received in the training, the M&E TWG revised both the Integrated Data Collection

[8] For example, distributing formats through third parties or asking WAEO to make photocopies rather than distributing the necessary copies to them.

Format and the VAEO/WAEO Format on March 19th 2010 and immediately sent them to the pilot LGAs.

The Second Field Visit

The M&E TWG visited the pilot districts to check the progress after the second backstopping from March 24th 2010. The results of the visit are summarized in Table 2.2.11.

Table 2.2.11 Outline of the Second Field Visit

Place visited		Kondoa DC	Mpwapwa DC	Kilosa DC	Morogoro DC
Date		March 24-25, 2010	March 26-27	March29-30	March 31-April 1
Participants	M&E TWG	MITM, MWI, RADAG (M&E)			
	District	DALDO, Statistical Officer, M&E Officer			
	WAEO/VAEO	10	5	10	10
Observations	Format distribution	・The revised format was printed and distributed to VAEO/WAEO to be used in March.			
	Data consolidation	・Excel was utilized for consolidating some data on the January and February reports. ・Degree of understanding of Excel techniques was different from one officer to the other. Therefore, a follow-up training might be required.			

The Third Field Visit

The M&E TWG conducted a follow-up visit to the pilot LGAs from May 17th 2010 to check the progress after the feedback training conducted in April (to be discussed later). The M&E TWG also assisted the district officers in consolidating data with Excel, entering data into LGMD2 and synchronizing them. The outline of the visit is shown in Table 2.2.12.

Table 2.2.12 Outline of the Third Field Visit

Place visited		Kondoa DC	Mpwapwa DC	Kilosa DC	Morogoro DC
Date		May 17-18	May 20-21	May 18-19	May 25-26
Participants	M&E TWG	RADAG (M&E)		RADAG (M&E)	
	District	Statistical Officer, M&E Officer			
Observations	Submission of the format	・Rate of submission in March was 60 - 100%. ・To improve submission, it was agreed that DALDO send a letter or contact by phone the WAEO who had not submitted the format.			
	Data consolidation of the filled in format	・Data entry was in progress or done up to March. ・Monthly and quarterly data consolidation was in progress using the method learned at the feedback training. The knowledge and technique of the district officers were improved.			

Throughout the backstopping workshop and field visits, the district officers and VAEO/WAEO appreciated the two common formats in that they reduce their work load, help them make decisions based on the data, and allow them to easily respond to requests of the District Council etc.

In Morogoro, Kondoa and Mpwapwa, officers in the DALDO office have started to use the data collected through the VAEO/WAEO Format. In addition, some pilot LGAs trained the extension officers who were recently hired on the formats and made follow-up visits to VAEO/WAEO on their own initiatives. Therefore,

it can be concluded that the two common formats match the needs of LGAs, and LGAs are working on the pilot implementation with strong ownership.

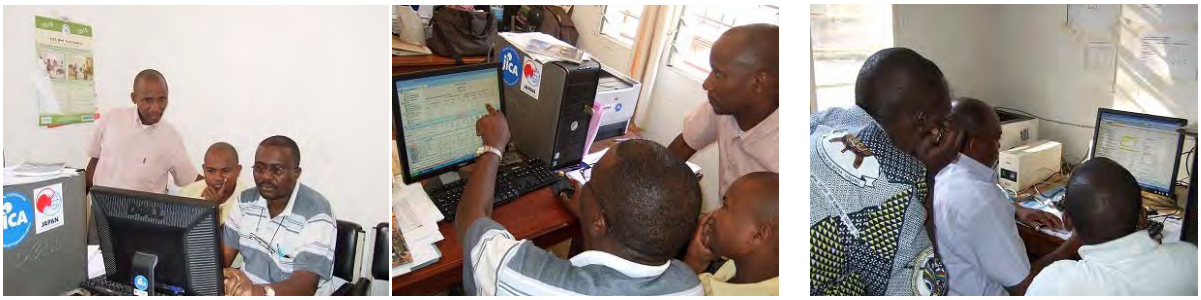

Photo 2.2.5 Third Field Visit

(6) Other Activities pertaining to Improvement of the ARDS

During the backstopping and field visits, officers of the pilot LGAs requested the M&E TWG to compile the experience of the pilot implementation and good practices as manuals. In addition, the mid-term review of the TC (to be explained later) in March 2009 also made similar suggestion. Furthermore, during the discussion between DPP, MAFC and the mid-term review team, the importance of feedback to VAEO/WAEO (including data analysis and reporting to the data suppliers) was emphasized. The M&E TWG decided to add the following activities in the work plan on March 16th 2010.

- Development of a training guide for district officers
- Development of a training guide for VAEO/WAEO
- Feedback training for district officers
- Training of Village Executive Officers (VEO)

Development of a training guide for district officers

In the pilot implementation of the ARDS, it was found that the district officers had difficulties in aggregating data submitted by WAEO. For example, some aggregated data by hand calculation, while others entered data in Excel spreadsheets in an unorganized manner. To this end, the M&E TWG decided to develop a practical manual for district officers to show how to consolidate data efficiently step by step and to ensure better feedback from districts to VAEO/WAEO. A taskforce was set up on March 16th 2010 for this purpose.

The training guide was developed based on the following knowledge and experiences:

- Lessons learned, good and bad practices of the four pilot districts
- Contents of the second backstopping training, including the relationship between the VAEO/WAEO Format and the Integrated Data Collection Format, data entry and data consolidation using Excel functions (such as auto calculation formula and pivot table etc.)

The taskforce developed a draft training guide and circulated it to the M&E TWG members and the pilot RSs/LGAs on April 13th 2010. The guide was utilized in the feedback training (to be explained below) and revised based on comments from the training in May. The outline of the guide is shown in Table 2.2.13.

Table 2.2.13 Training Guide for District Officers: Table of Contents

1. Introduction: Purpose of Training Guide
2. Training of VAEO/WAEO and Format Distribution (lessons learned and good practices of the pilot LGAs)
3. Consolidation of VAEO/WAEO Report (data check, data entry, Excel procedures)
4. Integrated Data Collection Format (LGMD2) (relationship with VAEO/WAEO Format and other data sources)
5. Data Analysis and Reporting (Excel procedures)
6. Feedback

The training guide was later amended to incorporate the changes in both the Integrated Data Collection Format and VAEO/WAEO Format which were made in the workshop on 25 - 26 October 2010 (to be explained later). Then, the guide was finalized in February 2011. The guide is presented in Annex 3.4.

Training Guide for VAEO/WAEO

To assist district officers in training VAEO/WAEO on the VAEO/WAEO Format, the M&E TWG decided to develop a training guide on March 16th 2010, and a task force was formed for this purpose.

The task force developed a draft training guide in Kiswahili, incorporating know-how on how to collect data and fill in the format, along with good practices and lessons learned through the pilot implementation since July 2009. At the second field visit in March 2010, the task force members learned about the actual situation of data collection at village and ward levels from VAEO/WAEO in each pilot district and subsequently used the feedback to improve the guide. The guide was then utilized at the training for Village Executive Officers (VEO) conducted on April 20th – 25th (see the details of the VEO training below). The guide was further revised to incorporate comments from the VEO and approved by the M&E TWG on May 19th. Table 2.2.14 shows the contents of the training guide.

Table 2.2.14 Training Guide for VAEO/WAEO: Table of Contents

1. Purpose of the Training Guide
2. Importance of data collection at village and ward levels
3. How to prepare the Agricultural Sector Report
4. How to fill in the reporting format (Monthly, Quarterly, Annual)
5. Good practices and lessons learned
Annex：Conversion table for units of measurement

The terminal evaluation of the TC in September 2010 (to be explained later) suggested that a standard data collection method be clearly stated in the training guide for VAEO/WAEO in order to improve the quality and reliability of data. In the workshop in October 2010, participants from the pilot LGAs also made a similar suggestion.

The M&E TWG decided to revise the training guide. A member of the M&E TWG and RADAG (M&E) examined the use of a random sampling method and incorporated it in the draft training guide. Then the members visited the four pilot districts to obtain comments from district officers, VAEO/WAEO, VEO and village leaders. Major revisions in the training guide are summarized below.

- Data on planted areas and productivity (yield, especially for maize) should be estimated by interviewing at least 10 farm households which are selected by a random sampling method.
- Domestic consumption of livestock products (chicken meat and milk) are not included / counted.
- Information pertaining to irrigation schemes are available at Irrigators' Organization.

The guide was finalized on January 28th 2011, and it is shown in Annex 3.5 to this report.

The two training guides (one for VAEO/WAEO and the other for LGA officers) were used as training materials in the ARDS roll-out workshops in Morogoro and Dodoma in February 2011.

Feedback Training for District Officers

The M&E TWG conducted a training for the officers of the pilot LGAs in order to improve feedback from the districts to VAEO/WAEO, including data analysis and reporting. An outline of the training is shown in Table 2.2.15. Prior to the training, a training of trainers was undertaken to ensure that the M&E TWG members are conversant with the use of Excel for data consolidation and analysis.

In this training, steps to be taken by the district officers in operating the ARDS were checked one by one, using the draft training guide. The emphasis was placed on the use of Excel so that the district officers would be able to consolidate and analyze the data submitted by WAEO/VAEO efficiently. The participants came with laptop computers, and a group of two - three officers worked together on the same computer. Following the instructions of the facilitator (RADAG (M&E)), they practiced a variety of Excel techniques. The members of the M&E TWG were assigned to each group and gave them an additional explanation.

Table 2.2.15 Summary of the Feedback Training for the Officers in the Pilot Regions/LGAs

Date		April 19, 2010. 8:00 am – 6:00 pm
Venue		EDEMA Conference Centre, Morogoro
Purpose		- The officers of the pilot regions and LGAs become conversant with how to consolidate and analyze agricultural data and give feedback to WAEO/VAEO. - Improve draft training guide for district officers.
Participants	M&E TWG	One officer from MAFC, MLDF, MIT, MWI and PMO-RALG, respectively. 3 from RADAG (M&E) (including a research assistant)
	Region	Morogoro 2, Dodoma 2
	District	Morogoro DC 2, Kilosa DC 1, Kondoa DC 3, Mpwapwa DC 3
Facilitator		MAFC, RADAG (M&E)
Agenda		Introduction Explanation of the training guide Data collection / consolidation / analysis / entry into LGMD2 and feedback Way forward
Handout		Draft training guide for district officers, Excel files for practices

It was found that there is a big difference in Excel skills among the officers, but in general everyone found the training very useful as they were able to learn Excel techniques useful for ARDS operation. Comments for further improvement of the training guide were also given. Overall, the training guide was found to be user-friendly and it would help the training on the ARDS. On the other hand, those who are not very

familiar with Excel commented that one-day training was too short and they wanted to have more exercise.

In May, RADAG (M&E) visited each pilot district as a follow up of this training (as mentioned in the Third Field Visit) and assisted the district officers in consolidating the data submitted by WAEO and entering them into LGMD2.

Photo 2.2.6 Feedback Training for District Officers

VEO Training

Through the experiences derived from the pilot implementation of the VAEO/WAEO Format, it has been learned that in the absence of VAEO in certain villages, WAEO have to visit these villages to collect data (see Table 2.2.16). However, it was also found that since it is very hard for WAEO to visit all villages in a ward to collect data, they usually ask village executive officers (VEO) for assistance. Therefore, it was suggested by the mid-term review team of the TC and agreed that the M&E TWG provide training for VEO in order for them to understand the format and ensure data quality.

Table 2.2.16 Number of VAEO / WAEO (as of February 2010)

	MorogoroDC	Kilosa	Mpwapwa	Kondoa	National
Number of villages	142	164	84	188	12,227
Number of wards	25	37	18	35	2,855
Number of VAEO	54	40	39	69	4,437
Number of WAEO	21	45	18	35	
Ratio of villages with VAEO	38%	24%	46%	37%	29%
Ratio of wards with WAEO	84%	122%	100%	100%	

The training of VEO on the VAEO/WAEO Format was conducted from April 20th to 25th 2010. In this training, the VAEO/WAEO Format was explained using the training guide by the district officers. The M&E TWG members and the regional advisers supported the district officers and gave supplementary explanations. In addition, WAEO, who were actually using the Format already, also actively supported the district officers by giving additional explanations and concrete examples. Table 2.2.17 shows the outline of the training.

Participants commented that they had gained a great deal of knowledge on data collection from the training and now clearly understood the kinds of data that WAEO needed. They also expressed the confidence in supporting WAEO.

Table 2.2.17 Outline of the Training of VEO in the Pilot District

District		Morogoro DC	Kilosa DC	Kondoa DC	Mpwapwa DC
Date		Apr 20-21, 2010	Apr 22-23	Apr 21-22	Apr 24-25
Participants	M&E TWG	MLDF, MIT, PMO-RALG, RADAG (M&E)		MAFC, MWI, RADAG (M&E)	
	Region	RAA, RLA		RAA	
	District	Acting DALDO, Statistical Officer, M&E Officer		DALDO, Statistical Officer, M&E Officer	
	WAEO	5	5	5	5
	VEOs	83	82	42	123
Venue		Mt. Uluguru Hotel Conference Hall	VETA Mikumi Conference Hall	District Commissioner's Office Conference Hall	Roman Catholic Church Hall
Agenda		1st day	- Presentation of the VAEO/WAEO Format (Monthly) - Presentation of the VAEO/WAEO Format (Quarterly)		
		2nd day	- Presentation of the VAEO/WAEO Format (Annual) - Way forward		
Trainer		District Statistical Officer, M&E Officer			
Materials		VAEO/WAEO Format Training guide for VAEO/WAEO			


Photo 2.2.7 VEO Training

(7) Completion of ARDS Pilot Implementation and Finalization of the Two Formats

In order to prepare for roll-out of the ARDS, RADAG (M&E) trained M&E TWG members to operate the ARDS so that they become competent facilitators (trainers). Most members of the TWG participated in the training, which is outlined in Table 2.2.18.

In the training, each step taken by district officers in operating the ARDS (in particular the use of Excel for data consolidation and Pivot Table, and LGMD2) were practiced. As a result, the M&E TWG members were conversant with the ARDS and their understanding of LGMD2 was enhanced. However, it was observed that there was a gap in terms of the capacity in Excel techniques (speed, accuracy) across the officers. Therefore, it was recognized that the aptitude of officers on Excel may need to be taken into account in team formation for ARDS roll-out.

Table 2.2.18 Outline of TOT for the Agricultural Routine Data System

Purpose	- The M&E TWG members become conversant with every step of the ARDS so that they can become competent facilitators in its roll-out. - The M&E TWG members become conversant with a wide range of Excel techniques.	
Date	4th -7th October, 2010	
Venue	EDEMA Conference Centre (Morogoro)	
Participants	In total 22 (MAFC 8, MLDF 5, MIT 3, MWI 1, PMO-RALG 3, DASIP 1, NBS 1)	
Facilitator	RADAG (M&E) 3	
Agenda	Oct. 4	Entry of ward-level data from filled-in VAEO/WAEO Format to Excel Consolidation of the ward level data to the district level data using Excel Data organization using Pivot Table (quarterly)
	Oct. 5	Three month data aggregation and data checking Data organization using Pivot Table (quarterly) Data entry to LGMD2
	Oct. 6	Data organization using Pivot Table (annual) Data entry to LGMD2
	Oct. 7	LGMD2 figure analysis

The M&E TWG conducted a workshop for completion of the ARDS pilot implementation on 25th and 26th October 2010. The purposes of the workshop were to share the experiences of the pilot implementation among the stakeholders as well as to review the current model of the ARDS and improve it. The outline of the workshop is shown in Table 2.2.19.

Table 2.2.19 Outline of the Workshop to Complete the Pilot Implementation of the ARDS

Purpose	- Share and summarize the experiences gained through the pilot implementation - Finalize the two common formats (for village/ward and district levels)	
Date	25-26 October, 2010	
Place	EDEMA Conference Centre, Morogoro	
Participants	M&E TWG: MAFC 7, MLDF 5, MIT 3, MWI 1, DASIP 1, NBS 1 Region: Morogoro and Dodoma, in total 4 LGAs: DALDO, Statistical officer, M&E officer and VAEOs/WAEOs from Morogoro, Kilosa, Kondoa and Mpwapwa, in total 20 RADAG: 5 members (including research assistant)	 Photo 2.2.8 Workshop for Pilot Completion
Chair person	Dodoma RLA	
Agenda	25 Oct.	Presentation by the four pilot districts on the ARDS Review of the Integrated Data Collection Format (Quarterly)
	26 Oct.	Review of the Integrated Data Collection Format (Annual) Review of the VAEO/WAEO Format (Monthly, Quarterly and Annual) Checklist for the completion of ARDS pilot implementation, Way Forward

Key achievements, challenges, lessons learned and recommendations presented by the pilot LGAs are summarized in Table 2.2.20.

Table 2.2.20 Achievements, Challenges, Lessons learned and Recommendations

Achievements

- Previously, district officers were required to produce and submit a number of agricultural reports. However, the improved ARDS has reduced the number of reports.
- The methods of data collection and reporting have been standardized, and the flow of data transfer from districts to ASLMs has been unified.
- The quality of data has been improved, and the kinds of data available at the districts have increased.
- Improvement of ARDS was conducted in a participatory way so that data needs of the districts have been incorporated in the two common formats.
- Traceability of agricultural data has been improved.
- LGMD2 has made it easier to comparison between targets and actual and conduct cross section analysis (across wards, etc.) and time-series analysis.
- Knowledge and techniques on Microsoft Excel by district officers have been notably improved.
- The ARDS has helped district officers prepare DADPs.
- The rates of submitting VAEO/WAEO Format to the district have improved generally as shown in table below.

Table Ratio of WAEO submitted filled-in WAEO Format to district by pilot LGAs

		Morogoro DC	Kilosa	Mpwapwa	Kondoa
Monthly	January, 2010	95%	51%	100%	71%
	February	82%	54%	94%	74%
	March	82%	49%	100%	80%
	April	91%	76%	100%	86%
	May	100%	73%	100%	80%
	June	100%	100%	78%	66%
Quarterly	3rd Qt	81%	38%	100%	34%
	4th Qt	100%	100%	78%	31%
Annual		100%	100%	83%	77%

Source: Pilot LGAs

Challenges

- Data collection is still a challenge in some villages without VAEO, although WAEO work in close cooperation with VEO.
- Extension officers still find it difficult to estimate area planted, productivity and crop production.
  → It was agreed to write a unified method of data collection in the training guide.
- Extension officers should be well equipped with facilities such as motorbikes.
- In order to implement the ARDS, it is necessary for the district to ensure that computers and photocopiers are operating well and to secure budget for papers. However sometimes the district does not have sufficient fund and has to wait for the machines to be repaired for a long time.
  → The district utilize DADP fund to operate the ARDS in addition to Other Charges.
- Sometimes access to internet is not stable, which makes LGMD2 synchronization difficult.
- Entering data from WAEO format into Excel takes a lot of time. The burden is especially augmented due to recent increase in the number of wards.

Lessons learned / good practice

- Data collection and quality are improved when information is shared among extension officers and a ward data integration team is established.
- Cooperation between VAEO/WAEO and VEO has improved. Agricultural data are now utilized by VEO.
- Motivation of extension officers is enhanced when the district prepares a feedback report and sends it to extension officers.

Recommendations

- It is necessary for the district to secure sufficient budget for the operation of the ARDS and its training.
- Conducting regular workshops is important to share experiences among extension officers.

Photo 2.2.9 Workshop to Complete the Pilot Implementation of the ARDS

As for the revision of the Integrated Data Collection Format and VAEO/WAEO Format, changes which had been prepared by the TWG prior to the workshop were explained to the participants and most of them were agreed upon. Then, the formats were finalized in November 2010 (Annex 3.2). The final version of the formats was distributed to the pilot districts in December 2010 and has been utilized since January 2011.

2.2.2. Development of LGMD2

The M&E TWG has worked on improvement of the ARDS in two aspects: the content of the data to be delivered (described in 2.2.1) and the means of data delivery. In this section, the efforts to improve the means of data delivery made during this TC are described.

(1) Examination of a Data Delivery Tool from LGAs to ASLMs：August 2008 – May 2009

Initially, the Integrated Data Collection Format used an Excel file. The Excel file had an advantage in that district officers were accustomed to using it whereas it had shortcomings. For example, it is difficult to consolidate if each of the 133 LGAs submits the data in an Excel file. In addition, sharing the latest Excel files among a variety of stakeholders in different administrative levels would also be difficult. It implied that database software was necessary as a means of data delivery and storage; otherwise nationwide roll-out of the ARDS seemed not to put into practice. In order to identify appropriate data delivery mechanism, the M&E TWG reviewed the existing data system and how other sectors dealt with this issue. Major findings were as follows:

- Local Government Monitoring Database (LGMD), which was introduced by PMO-RALG, only covers a few indicators of each sector and cannot cater to the voluminous data needs of each sector.
- The Ministry of Education and Vocational Training, the Ministry of Health, and the Ministry of Natural Resources and Tourism have developed their own databases for data delivery from LGAs to the central ministries.

The M&E TWG also discussed with DICT, PMO-RALG, which is in charge of database management at district. Then, DICT suggested that the agricultural sector develop its own database (tentatively called LGMD2). It was officially approved at the Change Control Group meeting on November 7th held by DICT, PMO-RALG.

Based on this approval, the M&E TWG requested ASLMs to provide funding for the development of

LGMD2 from the ASDP basket fund. However, it was not possible because it had not been budgeted for FY2008/09. The members of the M&E TWG checked the possibility of getting support from DPs. Then, it was found that the World Bank might be able to provide funding for the development of LGMD2.

Meanwhile, need to integrate and harmonize various database software used by LGAs was widely recognized by the DPs who participate in Local Government Reform Programme II as well as Public Financial Management Reform Programme. To this end, a meeting was held at the World Bank on November 21st with the donors (including RADAG (M&E)) who participate in these programmes, and the participants agreed to commission a study to an IT consultant to examine the above-mentioned issue. It was also agreed that upon completion of the study, the agricultural sector would serve as a pilot to implement the recommendations of the study.

Although the study was initially planned to be conducted in January-February, 2009, it was delayed partly because it took a long time to agree on the TOR among the DPs. The study[9] was finally carried out in April - May 2009 by an IT consultant hired by the Embassy of Finland. The members of the M&E TWG had a few meetings with the consultant. The recommendation in the study report said, "In order to harmonize various data systems, it is realistic for each sector to develop and use its own database and ensure their interoperability rather than developing a single data system for all sectors. LGMD2[10] is a viable solution as both an M&E system and data portal. PMO-RALG and donors should promote the use of LGMD2 as the M&E solution for sectors not undertaking harmonization activities at this juncture"[11].

(2) Beginning of the Software Development for Data Delivery from LGAs to ASLMs (LGMD2): June 2009

The idea of LGMD2 development was confirmed to be compatible with the recommendations of the consultant. However, the World Bank raised difficulty to disburse funds for it immediately. In order to expedite the development of the ASDP M&E system and national dissemination of the improved ARDS, there was an urgent need to develop LGMD2. Finally, JICA Tanzania Office decided to provide money for the development of LGMD2.

The M&E TWG prepared a TOR for LGMD2 development, incorporating the comments of the members as well as DICT, PMO-RALG. In the meantime, it was decided that the development of LGMD2 be commissioned to the University Computing Centre (UCC) Ltd. as the UCC which previously developed LGMD and PlanRep2, has rich experiences in software development in Tanzania and is familiar with the IT situations at LGAs. On 25 June 2009, JICA Tanzania Office made a contract with UCC and development of LGMD2 commenced.

(3) Development of LGMD2: August – December 2009

<u>Development of LGMD2 and Implementation of the Training</u>

[9] Assessment of options for integration and streamlining of the multiple LGA information systems in Tanzania.
[10] It is referred to as Local Government Performance Monitoring System (LGPMS) in the report.
[11] Bitz, M., 2009, Tanzania LGA M&E Systems Assessment.

When RADAG (M&E) returned to Tanzania at the beginning of the third year of the TC in August 2009, it was found that the development lagged behind schedule because of the following two reasons.

- At the Inception Meeting in July 2009 (RADAG (M&E) was not present), it was agreed to include the VAEO/WAEO Format in LGMD2 and to also develop LGMD2 in Swahili version, in addition to English version, although these tasks were outside the original TOR[12].
- Due to the delay caused by the above reason, the timing of the scheduled LGMD2 installation and training would conflict with the 4th ASDP Joint Implementation Review.

RADAG (M&E) discussed with the JICA Tanzania Office and UCC, and decided to revise the work plan and extend the original contract for two months. The amendment of the contract was signed on 26 October 2009 to extend the contract period to 17 December 2009.

In November 2009, LGMD2 training was conducted at the UCC office in Dar es Salaam. A total of 35 IT, M&E and statistical officers from ASLMs and the pilot LGAs/RSs participated in the training. Table 2.2.21 outlines the training.

Table 2.2.21 Outline of LGMD2 Training

Date	November 2 - 6, 2009		
Venue	UCC Office		
Participant	IT staff, M&E officer and statistician at ASLMs and the pilot RSs/LGAs (Total 35)		
Day	Objective	Content	Facilitator
Day 1	Training of IT specialists	• Technical specifications of LGMD2 • Set up LGMD2 • Synchronization with the main server • Backup procedures and manual transfer of data • LGMD2 functionality at regional and national levels	UCC
Day 2	Training of ASLMs' M&E officers	• Loading LGMD2 on computers • Technical description of LGMD2 • Functionality at regional and national levels • Data analysis using LGMD2 • Exporting data to Excel • General discussion on linking with other software such as TSED, CountryStat, etc.	UCC
Day 3, 4	Training of the Pilot LGAs/RSs officers	• Introduction to LGMD2 by ASLMs' M&E officers • Loading LGMD2 on computers • Data entry • Data synchronization • Back up procedures • Manual transfer of data • Exporting data to Excel • Role of the RSs in approving the data	IT Specialist, Morogoro Region
Day 5	Plenary	• Overall discussion on LGMD2 • Questions and answers • Way forward	M&E TWG members

[12] At the later stage, it was agreed that these two features would not be included in LGMD2 for the time being.

Based on the comments received at the training, UCC completed the development of prototype LGMD2 in December 2009. Table 2.2.22 and Figure 2.2.2 show the major functions of LGMD2 and its screen.

Table 2.2.22 Major Functions of LGMD2

Function	Overview
Data entry	• LGAs enter data in three reports (Annual, Quarterly, and Annual Target) • Data entry can be done only by LGAs
Data transmission	• Data transfer is done online between the user and the main server from the LGMD2 screen without using an internet browser (synchronization). • If a LGA does not have access to stable internet, the data can be exported to a zip file and sent via email or flash memory.
Data view and scrutinization	• RSs and ASLMs can receive LGA data online from the main server for viewing. Each report is presented as either “approved” or “unapproved.” • RSs scrutinize the LGA reports and send approval or comment online.
Save data	• Data transmitted are stored at the main server. • The data stored in the user’s computer can be used without internet connection. • If the data are lost due to the users’ computer problems, the data can be retrieved from the main server. • The users can also use the backup function.
Data output	• The data can be presented in an output report. • Reports can be created for LGA, regional and national levels by automatic aggregation. • Reports can be printed, saved as PDF, and exported to Excel file.
Data analysis	• The user can conduct data analysis similar to pivot table function to select and aggregate data for time and/or geographical series. • Further analysis and chart drawing can be done by exporting data to Excel file.

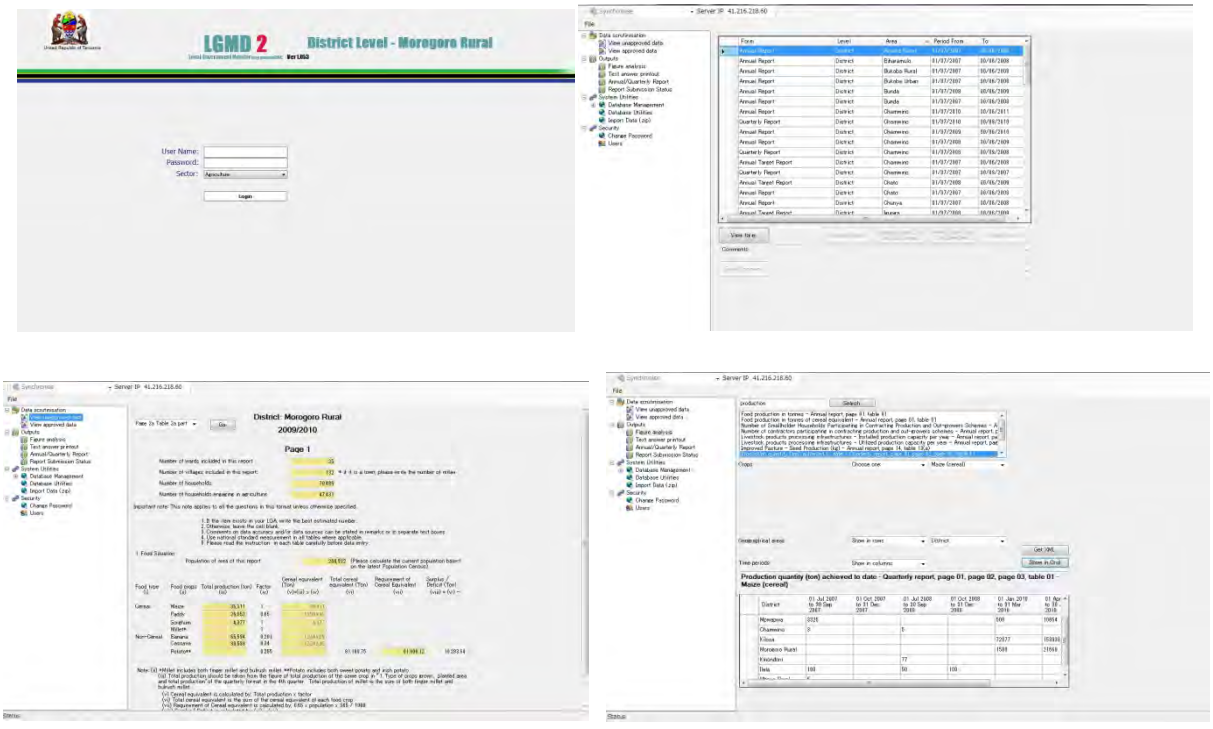

Figure 2.2.2 LGMD2 Screen

Meanwhile, UCC tried to install LGMD2 to the MAFC server. Then, it was revealed that the capacity of the server was too small to serve as the LGMD2 main server. MAFC started planning for procurement of a new server only to find it was impossible for the ministry to finance it in the current fiscal year. Considering the urgency of the matter, the JICA Tanzania Office agreed in December 2009 to procure a new server dedicated to the LGMD2 main server for MAFC.

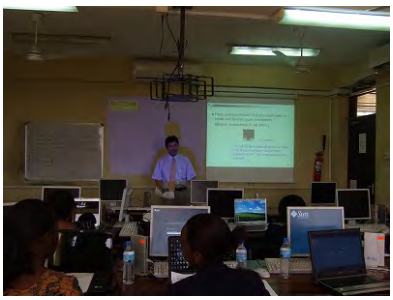
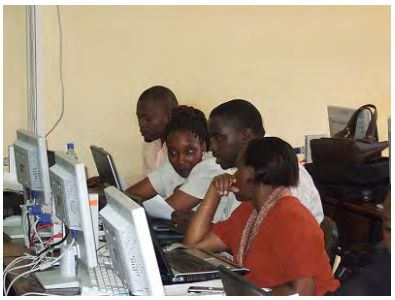


Photo 2.2.10 LGMD2 Training

(4) Trial and Improvement of LGMD2: January – June 2010

Installation of the Main Server for LGMD2

Since the shortage in capacity of the MAFC main server was found, MLDF temporarily had hosted the LGMD2 main server. However, due to several troubles and instability in operation, the main server was shifted to UCC in March 2010. The new server procured by JICA was only partly delivered on March 17th, and its installation had to wait until the delivery of the remaining parts in May 2010. In June 2010, MAFC IT Unit and UCC jointly worked on setup of the new server and LGMD2 installation in order to transfer the main server function from UCC to MAFC. However, the transfer did not complete in the month since it required time for decision making and technical setting within MAFC to allow data communication between MAFC LAN and outside users such as other ASLMs and LGAs/RSs.

Software Troubleshooting

After the LGMD2 training held in November 2009, the M&E TWG conducted operational test of LGMD2 at ASLMs at central level, and pilot LGAs/RSs. However, various issues for modification were identified through pilot implementation of LGMD2. In particular, there was a problem that the existing data entered were lost when LGAs/RSs updated the version of LGMD2. Therefore, the M&E TWG requested the pilot LGAs/RSs to continue the pilot implementation of the ARDS with Excel format. In the mean time, LGMD2 was only used at the pilot LGAs/RSs by entering a few dummy data for testing synchronization. RADAG (M&E) repeatedly checked these problems at the central and pilot RS/LGA levels, compiled requests to UCC for improvement, and checked the revised versions. In March 2010, two additional tasks were requested to UCC with financial facilitation of RADAG (M&E): 1) Adding/revising tables based on the changes made in the Integrated Data Collection Format, 2) Adding “Rebuild” function with which LGAs can retrieve data from the main server in case they lose it due to computer breakdown, etc. Table 2.2.23 shows major troubles found between January and June 2010.

Table 2.2.23 Major Troubles Found between January and June 2010

• Data submission from the LGA level takes long time. • Text entered information is not transmitted to the main server. • The message “synchronization successfully completed” is shown even when it failed. • Output report format is different from the original format and difficult to read. • Report submission status shows that the report is synchronized after just a few data are entered and before it is synchronized. • Pre-entered existing database cannot be used when LGMD2 version is renewed.

In April 2010, LGMD2 was modified so that the pre-entered data were no longer lost following updating. At this juncture, RADAG (M&E) assisted the pilot LGAs to enter real data of the third quarter FY 2009/10 in LGMD2 during the third field visit (for details, see the previous section). Of these, three LGAs also tested synchronization. Though Kilosa DC could successfully send the data, synchronization failed in Morogoro DC and Mpwapwa DC. Possible reasons of the failure included:

- The volume of data was too big compared to the network strength,
- The main server located at UCC was not stable.

Indeed, RADAG (M&E) had requested UCC to improve this data transmission problem for months. However, it was difficult for UCC to identify the actual reason and solution for the problem unless the new server described above could be used. On the other hand, the pilot LGAs/RSs expressed positive response toward LGMD2 in that it allows them to manage agricultural data at one place. For example, Morogoro DC already started data entry of the 2009/10 annual report to be submitted in July 2010, and when RADAG (M&E) requested the officer for the number of extension officers, he simply referred RADAG (M&E) to the data stored in LGMD2.

(5) Improvement and Finalization of LGMD2: July 2010 – February 2011

Main Server Installation and Test of Data Synchronization

The LGMD2 main server was still not in operation in August 2010 when RADAG (M&E) returned to Tanzania at the beginning of the fourth year of TC. It resulted from the fact that MAFC IT Unit downgraded Microsoft Server Enterprise 2008 which had been installed in the LGMD2 main server, to that of 2003 version due to incompatibility of the version 2008 with the software in MAFC server which controlled entire system of MAFC. Then, UCC reinstalled LGMD2 to the main server and it started running[13].

In the middle of September 2010, the M&E TWG and UCC intensively work on improvement of synchronization speed. After the various trials, it concluded that it would be better to adopt the previous stable system to ensure synchronization rather than pursuing further time reduction for synchronization.

Then, from 24 September to 1 October 2010, M&E TWG visited the four pilot LGAs and installed the latest version of LGMD2 and tested data synchronization. Upgrading of LGMD2 and the existing database were

[13] As of March 3rd, the backup server and the main server are not connected yet. When the backup server arrived in May 2010, it was found that a connecting cable was not compatible. Afterwards, the supplier is stuck at finding an alternative cable.

successful in all four LGAs. Actual time duration of synchronization and file size are shown in Table 2.2.24.

Table 2.2.24 Testing Result of Synchronization in the Pilot LGAs

	Quarterly Report 1	Quarterly Report 2	Annual Target	Annual Report	National Database download
Kondoa	6 min.	4 min.	1 min.	14 min.	30 sec.
Mpwapwa	10 min.	12 min.	1 min.	2 min.*	30 sec.
Morogoro Rural	6 min.30 sec.	3 min. (107.95 KB)	3 min.15 sec.	12 min. (394.64KB)	30 sec.
Kilosa	11 min.20 sec. (318 KB)	7 min. (232 KB)	9 min.** 5 sec.***	24 min. (759 KB)	1 min.30 sec.
Average	7.5 min. (Average of all eight reports)		1.75 min. (Except Kilosa)	16.7 min. (Except Mpwapwa)	45 sec. (Average of all four cases)

* Only 2 pages were filled with data.

** Connecting by Zain's phone (Data size is not available)

*** Connecting by Vodacom but only remaining portion was uploaded in data (2KB)

Based on the above time durations and data sizes, the followings were found.

- The average transfer speed is calculated as 3.0 – 3.5 KB/minute.
- If the current price rate of Vodacom charge card (i.e., 50 MB by Tsh. 10,000) is applied, the cost for transferring a full annual report (e.g., 750 KB) seems to be in acceptable range (e.g., Tsh. 150).

In parallel with the test in the pilot LGAs/RSs, LGMD2 installation and synchronization test were conducted at ASLMs. Although there were small troubles sometimes, LGMD2 installation and synchronization were successfully achieved in all computers of the M&E TWG members at their ministries except for MAFC. As a result, members became able to access to all data, which pilot LGAs entered, through their office computers.

The reason why the computers in MAFC failed to synchronize was that they had to access to the LGMD2 main server through internal network in MAFC. A private IP should be set in the main server in order to allow access. However, even after private IP setup, synchronization still failed. After consultation with UCC, MAFC IT Unit decided to allocate a new IP address which has sufficient speed and bandwidth, to LGMD2 main server. The setup was completed in December 2010, and synchronization was successful.

On the other hand, the other factors, which hindered synchronization, had arisen;

- MAFC changed Internet Service Provider (ISP) in November 2010. The service quality of the new ISP such as stability and speed of connection was inferior to that of the previous ISP.
- Electric power outage happened very frequently. Although MAFC owns a generator which is capable to cover the whole building, fuel is not sufficient to cover necessary power supply.

The quality of the ISP service improved in some degree in 2011, but its instability coupled with sporadic blackout made synchronization failure for several days. Head of IT Unit, MAFC, is now considering changing ISP at the beginning of next financial year (FY 2011/12) because it is not possible to switch an ISP in this financial year due to contact with the current ISP (As of 3 March 2011).

Software Troubleshooting

As mentioned in (4), RADAG (M&E) had repeated the process of troubleshooting with UCC from January to June 2010: testing software, identifying the problems, requesting modification, and checking the revised version. As of 25 June 2010, correction of annual report format did not complete yet, so UCC promised to continue its work during the absence of RADAG (M&E) members.

However, its work had not progressed at all when RADAG (M&E) returned to Tanzania at the beginning of the 4th year of the TC in August 2010. Later, as well, the work made very little progress because UCC's technical staff in charge had other assignments. Finally, RADAG (M&E) and M&E TWG secretariat explained dereliction of UCC to director of DICT, PMO-RALG and he called for UCC supervisor to take an adequate measure. Then, UCC intensively performed remaining tasks from September through October 2010.

Modification of Software in accordance with Correction of the Integrated Data Collection Format

In November 2010, the Integrated Data Collection Format was modified after having completed the pilot implementation in the four LGAs. Accordingly, data tables and some functions in LGMD2 also need to be changed. In the middle of November, the M&E TWG asked UCC for further modification of LGMD2 software with additional charge borne by RADAG (M&E). Major tasks were as follows.

1) To modify data entry form, view form, and report form in LGMD2 according to the changes in the Integrated Data Collection Format.
2) To add a function that enables regions to remove the approval status to allow districts to correct data in the reports which they already submitted once, if necessary[14].
3) To update configuration of the main server to reflect the modifications made in the software mentioned above.

RADAG (M&E) repeated a process of testing a revised version, listing problems and asking UCC for further modification, and checking the next version. Since work progressed very slowly, RADAG (M&E) again called for UCC supervisor and technical staff in charge to speed up the work. Problems remained as of the end of January 2011 are listed in Table 2.2.25.

Then, UCC concentrated on working but frequent electric outage prevented them from carrying out the tasks which require synchronization. At the M&E TWG meeting held on 8 February 2011, UCC supervisor promised that they would solve remaining problems right when stable power supply is provided. By the end of February 2011, the tasks were almost completed.

[14] This function enables districts to correct data even after they submitted the reports and received region's approval.

Table 2.2.25 Problems remained in LGMD2 software (As of January 2011)

Level	Form	Problems
District	Entry Form	• In some tables, entered data disappear after saving. • In the quarterly report, cumulative data are not shown correctly. (Calculating formula must be wrong in the programme.)
	Report Form	• The table headings, description in the notes, table layout, and order of the items are still not corrected properly in accordance with the Integrated Data Collection Format. • In some tables, data are not displayed as entered in the entry form. • Unnecessary blank row is inserted in some tables. • Some parts of the tables are not displayed. • Cumulative data are not displayed correctly in the quarterly report. • In the quarterly report, cumulative values from the first quarter are displayed in some tables where the value only in the corresponding quarter should be shown.
Region	Report Form	• It should be checked whether summation of districts' data are displayed correctly on the regional level report form. If not, modification is required.
All levels	--	• The message "Synchronization successfully completed" appears even when synchronization failed.

The remaining tasks are 1) to make synchronization more stable, and 2) to create LGMD2 software "MAFC edition" to enable all users in MAFC to login to use LGMD2[15]. As for 1), the M&E TWG seeks possibility of shifting the main server function from MAFC to UCC for several months in order to avoid risk of server down due to blackout and to cope with the poor service of the current ISP provider. UCC, ensuring a 24 hour service with a backup generator, has already submitted a quotation to the M&E TWG, but the decision has not been made yet. On the other hand, as for 2), it was found possible to solve the problem technically thanks to intensive work of UCC and MAFC IT official. However, it requires a substantial amount of works to set computer configurations so that LGMD2 installed by an administrator can be used by those who enter as a user, and a more simplified method may need to be explored (as of 4 March 2011).

(6) Establishment of LGMD2 Management System

In April 15th 2010, the M&E TWG set up a taskforce to develop a proposal for operation and management structure of LGMD2. The taskforce met on May 17th and 24th and drafted a proposal. As the M&E TWG members, especially a member from DICT, PMO-RALG, MAFC IT section, and regional IT specialists have been very much familiarized with operation of LGMD2 through the trainings and pilot implementation, the structure proposed take advantages of these officers for sustainable use of LGMD2. The major points of the proposal are as follows:

- One M&E TWG member from each ASLM will constitute the operational committee. One IT officer from each ASLM will form the technical committee.
- The operational committee will ensure timely data submission and approval by LGAs/RSs and data use by ASLMs. The committee will send the annual progress reports of each ASLM and the

[15] In MAFC, in order to assure computer security, only IT Unit staff can install software as administrator in the computers. MAFC officials login as a user to use these software. Since it was found that LGMD2 could not adjust to this system, some programme in LGMD2 should be modified. Other ASLMs and RSs/LGAs do not have such a problem.

ASDP Performance Report every year to RSs/LGAs as a feedback to the data submitted.

- Technical support to LGAs/RSs will be done by Regional IT specialists. When the specialists cannot solve the problem, they consult the technical committee. The technical committee provides technical support to ASLMs.
- Each committee will be led by MAFC members, who will maintain the main server and import data submitted by manual transfer.
- The M&E TWG will review the Integrated Data Collection Format and functions of LGMD2 every year and contract necessary modification to UCC.
- MAFC will sign a yearly LGMD2 maintenance contract with UCC.

Based on the above proposal, LGMD2 Operational Committee and Technical Committee were established. At the first joint committee meeting held on October 28th 2010, the proposal was approved. With regard to yearly maintenance contract with UCC, it was agreed that MAFC, MLDF and MIT would take turn bearing annual costs and that the secretary of Operational Committee would draft a cost proposal in order to explain it to DPP, MAFC for his approval.

LGMD2 management structure and roles of each member are shown in Figure 2.2.3 and Table 2.2.26.

Table 2.2.26 Role of Members in LGMD2 Management

Member		Roles
ASDP M&E TWG		• Oversee the activities of the Operational and Technical Committees. • Organize trainings of ASLMs and regional ICT specialists. • Ensure necessary time and budget allocated for LGMD2-related activities. • Regularly review the format and LGMD2. • Arrange the service contract between MAFC and UCC. • Arrange the contract with UCC for major update, when necessary.
Operational Committee		• Inform relevant officers in the ministry of the data update status and ensure data utilization. • Ensure timely submission and approval by RSs/LGAs through necessary follow up.
	Secretary	• Regularly check LGMD2 email account and import zipped files to LGMD2.
Technical Committee		• Provide training and technical support to the ministry. • Provide technical support to Regional ICT specialist.
	MAFC member	• Ensure that the LGMD2 server is always operational. • Post latest software and manual online after revision is made.
Regional ICT specialist		• Provide training and technical support to LGAs and regional officers.
RAA		• Ensure timely submission by LGAs. • Check, comment and approve the report submitted by LGAs within 2 weeks of submission.
DALDO		• Submit the report within 2 weeks of the end of each quarter. • Check if RS has approved or commented the report and respond to comment when necessary. • Secure budget for necessary training.

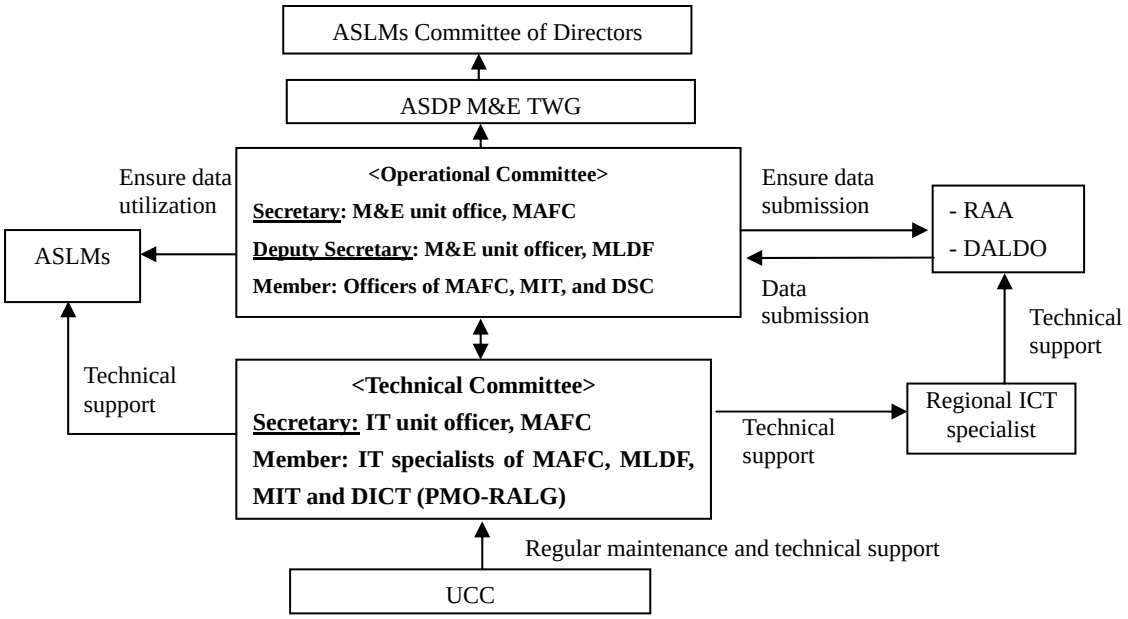

Figure 2.2.3 Management Structure of LGMD2

(7) Development of LGMD2 Manuals

In parallel with development of LGMD2 software, UCC prepared 3 versions of LGMD2 Operating Manual, each of which is respectively for national level, regional level, and district level officers, and a LGMD2 Technical Manual for IT specialists. Although the first edition of the Operating Manuals was utilized for the first training session held in November 2009, it was still not so user-friendly. Meanwhile, RADAG (M&E) made LGMD2 Quick Guide which illustrated step-by-step instructions for district officers to understand more easily.

RADAG (M&E) had repeatedly checked Operating and Technical Manuals revised by UCC and requested further improvement. However, UCC was so busy to improve LGMD2 software that manual revising was often interrupted.

UCC continued the work revising LGMD2 manuals until February 2011 but the products were still not satisfactory. On the other hand, LGMD2 Quick Guide which was made by RADAG (M&E) and more user-friendly, duplicated some contents in the Operating Manuals. In order to avoid possible confusion of users, it was decided to incorporate the Quick Guide into the Operating Manuals. RADAG (M&E) did this work and finalized LGMD2 Operating Manuals in February 2011 while UCC completed finalization of Technical Manual.

2.2.3. Preparation of the National Roll-Out Plan of the ARDS

The initial plan of the M&E TWG was to roll out the ARDS in FY 2010/11 after the pilot implementation in the four districts is complete and the TWG has made necessary revisions to the ARDS. However, there has been strong interest in the ARDS, and the National Bureau of Statistics (NBS) and the African Development Bank (AfDB) contacted the TWG about rolling out of the ARDS. In this section, rolling-out of the ARDS

supported by NBS/DFID and AfDB is discussed first, and then preparation of the ARDS national roll-out plan is explained.

(1) ARDS roll out supported by NBS and DFID

In October 2009, NBS informed MAFC that the UK Department for International Development (DFID) might be able to assist the improvement of the ARDS within the framework of the Tanzania Statistical Master Plan (TSMP). On October 19th, a meeting was held by DPP (MAFC), NBS, and the M&E TWG members, and it was agreed to roll out the ARDS to the remaining 8 districts in Dodoma and Morogoro regions using the fund supported by DFID. The M&E TWG developed a draft concept note of the roll-out, which was submitted to NBS in November. On December 11th, a meeting was held by the members of the M&E TWG, NBS and DFID, and DFID suggested that a concise plan for national roll-out of the ARDS be prepared. The M&E TWG revised the concept note by incorporating the national roll-out plan and submitted it to NBS on December 17th.

No information had been given to the M&E TWG until April 20th when NBS informed that DFID had disbursed Tsh. 246 million on March 19th. Upon discussion with an NBS officer at the M&E TWG meeting on April 29th, the M&E TWG members helped the NBS reformulate the budget for this activity in the MTEF form. The money was transferred to MAFC in August 2010 upon conclusion of the Memorandum of Understanding (MoU) between NBS and MAFC in June 2010.

The two common formats of the ARDS were complete in November 2010, and it was agreed on January 26th 2011 that the M&E TWG would launch the rolling-out of the ARDS to the remaining districts in Morogoro and Dodoma regions in February. The details of the trainings such as dates, venue, facilitators, participants and training materials were finalized on February 1st when regional agricultural advisers in the two regions came to Dar es Salaam to discuss the issue. Most preparations for the training were done by the member of the M&E TWG, and the training was conducted as scheduled (Table 2.2.27). It is expected that the VAEO/WAEO will start to use the VAEO/WAEO Format in March.

Table 2.2.27 Schedule of the rolling-out of the ARDS in Dodoma and Morogoro Regions

Dates	Activity	Facilitators	Participants
February 14 and 15, 2011	Integrated Data Collection Format and VAEO/WAEO Format (8 LGAs jointly)	Members of M&E TWG, Regional agricultural advisers, Pilot district officers	District officers
February 17, 18	VAEO/WAEO Format (4 LGAs)	District officers	VAEO/WAEO
February 21 - 22	VAEO/WAEO Format (4 LGAs)	District officers	VAEO/WAEO
February 24 - 27	Use of Excel (Data consolidation, Pivot Table) and LGMD2 (8 LGAs jointly)	LGMD2 Management Committee members, M&E TWG members, Pilot district officers	District officers

LGMD2 will be installed in the computers at district offices when the procurement of the computers is completed. Members of the M&E TWG and regional advisers will visit the eight districts to provide technical backstopping in early 2011/12 when the districts have completed at least one quarterly report.

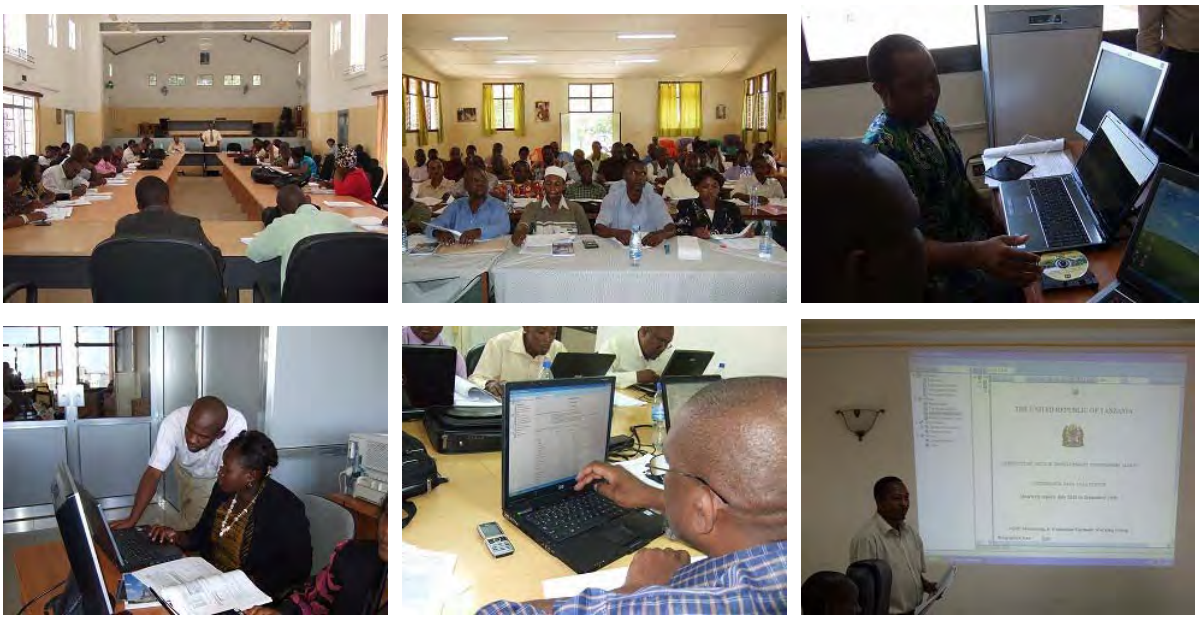

Photo 2.2.11 ARDS Roll-out in Morogoro and Dodoma Regions

(2) ARDS roll out supported by the African Development Bank

AfDB has been implementing the District Agricultural Sector Investment Project (DASIP) in 28 LGAs in 5 regions[16] in Lake Zone. The project has adopted the same framework as the ASDP, and the DASIP has had a plan to adopt the ASDP M&E framework as it has not developed one yet and also a single M&E system should be adopted by all the programs in the agricultural sector. DASIP asked MAFC to assist them in adopting the ASDP M&E system. In February 2010, when the mid-term review team for the TC met DPP, MAFC, he suggested that the M&E TWG assist DASIP in training the officers in DASIP areas to operate the ARDS. RADAG (M&E) was asked to provide backstopping.

The DASIP M&E coordinator attended the M&E TWG meeting on April 15th, and the M&E TWG formally agreed to help the DASIP adopt the ARDS. On April 17th, three M&E TWG members explained to the DASIP M&E officer the ASDP M&E system and the trainings to be conducted. The expenses for the training would be facilitated by the DASIP. The DASIP works with only 28 LGAs out of 34 in the 5 regions. Within the 28 LGAs, the DASIP works with only a part of the wards and villages. The DASIP is not able to facilitate the training of the officers in non-DASIP LGAs, wards and villages. It was agreed that when rolling-out of the ARDS is conducted in the 5 regions, the training would be conducted to all the districts, wards and villages rather than offering two sets of trainings: one for DASIP areas and the other for non-DASIP areas. For this purpose, a well-coordinated approach is needed so that DASIP funds and ASLMs funds are used concurrently.

Since then the DASIP M&E coordinator joined the M&E TWG as a member. However, on November 30th, in the M&E TWG meeting, the DASIP M&E coordinator informed that due to budget constraint the DASIP would be able to provide no more than Tsh. 25 million for the training of the ARDS. The amount is not

[16] Kagera, Mwanza, Shinyanga, Mara and Kigoma.

sufficient to cover the costs of the training in the region. It was agreed that the DASIP submit a letter indicating the amount they can contribute and then the M&E TWG examine how the remaining amount would be financed by the ASDP or others.

On January 2nd – 5th 2011, an M&E workshop was conducted by the DASIP in Bukoba, and four M&E TWG members presented the two common formats and LGMD2. The participants were DASIP coordinators of DASIP districts only, and they were to explain the VAEO/WAEO Format to VAEO/WAEO in the DASIP participating wards / villages. The M&E TWG had not been informed of the workshop, and the members of the M&E TWG who presented in the workshop were notified of the workshop immediately before it. The agreement made in the M&E TWG meeting on November 30th was not observed, and the plan to coordinate the trainings so that both DASIP participating and non-participating LGAs receive the training of the ARDS concurrently was not realized. This workshop is indeed a part of the rolling out of the ARDS in Lake Zone, but non-DASIP participating districts, wards and villagers were excluded. In addition, DASIP coordinators are not necessarily district agricultural statistical officers or M&E officers who are in charge of the ARDS. It seems necessary for the M&E TWG to conduct a series of trainings in Lake Zone again.

(3) Development of a national roll-out plan of the ARDS

The roll-out of the ARDS started with Dodoma, Morogoro and Lake Zone regions thanks to cooperation of DFID/NBS and AfDB. An official planning of the national roll-out of the ARDS by the M&E TWG started in November 2010. After a series of meetings, it was agreed that the training of the ARDS would be conducted as a package as shown in Table 2.2.28 and the national roll-out would take three years as shown in Table 2.2.29.

Table 2.2.28 Training package of the national roll-out of the ARDS

	Activity	Duration
1	Training of Regional IT specialists on the technical aspects of LGMD2	2 days
2	Training of regional and district officers on the common formats (Integrated Data Collection Format and VAEO/WAEO Format) (Training of trainers)	2 days
3	Training of VAEO/WAEO on VAEO/WAEO Format by district officers	2 days
4	Training of regional and district officers on the use of Excel (Data consolidation and Pivot Table) and LGMD2	4 days
5	Installation of LGMD2 in regional/district computers by regional IT specialists	1 day
6	Backstopping by M&E TWG officers for regional and district officers	2 days

Table 2.2.29 Schedule of the national roll-out of the ARDS

Year	Regions to be rolled out
2010/11	Dodoma, Morogoro, Mwanza, Kigoma, Mara, Shinyanga and Kagera (7)
2011/12	Ruvuma, Iringa, Mbeya, Rukwa, Arusha, Kilimanjaro, Manyara, Tabora, Pwani, Tanga, Lindi, Mtwara, Singida and DSM (14)
2012/13	VAEO/WAEO training continued in some LGAs and Backstopping

Initially, total cost of the national roll-out was estimated to be Tsh. 1.5 billion (excluding the procurement

of motorbikes, computers etc. for the LGAs in Morogoro and Dodoma regions, which is facilitated by DFID). After review, it was agreed to adopt a different approach for the training of VAEO/WAEO (No.3), and the total budget was reduced to approximately Tsh. 0.9 billion. The plan of the M&E TWG is to allocate this budget to ASLMs and LGAs (both from ASDP Basket Fund), and at the same time seek financial support from other sources. The national roll-out plan is shown in Annex 3.3 to this report[17].

2.3. Activities 2 Assisting the Works of the M&E Thematic Working Group

RADAG (M&E) members also assisted other works of the M&E TWG particularly in the following areas.

- Revision of ASDP M&E Framework and Guideline
- Development of ASDP M&E Baseline Report and Performance Report
- Regional Workshop
- Participation in ASDP Joint Implementation Review (JIR)
- Agricultural Sample Surveys
- Development of Newsletters
- Assisting the M&E TWG Secretariat

2.3.1. ASDP M&E Framework and Guideline

(1) ASDP M&E Framework

The ASDP M&E framework presents the outline of M&E for the ASDP. It was formulated by the M&E TWG with assistance of JICA and other DPs and was approved by the ASLMs Committee of Directors in August 2007. The framework explains, among others, the indicators to track the progress of the ASDP, mechanism for data collection and reviews, the roles of each stakeholder and actions to be taken to operationalize the framework.

Several years have passed since the ASDP started, and there is a need to revise the framework to incorporate the changes and development in the ASDP. In the M&E TWG meeting held on April 15th 2010, it was agreed to revise the framework and a taskforce was formed. The taskforce modified the framework by revising the ASDP shortlisted indicators, explaining how the outcome of each DADP project / activity is collected and transferred, and incorporating the recent development in the ARDS. The revised M&E framework was submitted to the M&E TWG on January 26th, 2011. On January 31st, the task force further modified the framework based on the comments given by the members. The complete M&E framework was sent to the chairperson of the M&E TWG on the same day. Incorporating the comments of the chairperson in the middle of February, the TWG completed its work. The document will be submitted to the ASLMs Committee of Directors by the chairperson. The revised ASDP M&E framework is presented in Annex 3.7 to this report.（As of March 3rd, 2011）

[17] When RADAG (M&E) met a DFID officer on December 17th 2010, it was suggested that the Tanzania Statistical Master Plan might be able to provide financial support for the rolling-out of the ARDS in FY 2011/12. The M&E TWG submitted a proposal to the Secretariat for the TSMP on January 24th, 2011.

Table 2.3.1 The ASDP M&E Shortlisted Indicators (as of February 2011)

	Indicators	Frequency	Disaggregation			Data source
			District	Region	National	
Impact (IM)	1. Real GDP growth rate per annum [MKUKUTA]	Annual			√	NBS
	2. Headcount ratio in rural areas – basic needs poverty line [MKUKUTA]	Periodical		√	√	NBS (HBS)
	3. Value of agricultural exports	Annual			√	TRA
Outcome (OC)	1. Food self-sufficiency ratio [MKUKUTA]	Annual		√	√	MAFC
	2. Production and productivity of crops and livestock.	Periodical	√	√	√	NBS (NSCA),
		Annual			√	MLDF
	3. Proportion of smallholder households using improved technologies	Periodical	√	√	√	NBS (NSCA)
	4. Flow of lending into the agricultural sector	Annual			√	BOT
	5. Proportion of smallholder households using mechanization	Periodical	√	√	√	NBS (NSCA)
	6. Ratio of processed exported agricultural products to total exported agricultural products	Annual			√	TRA
	7. Number of smallholder households participating in contracting production and out-growers schemes [MKUKUTA]	Annual	√	√	√	LGAs
	8. Proportion of LGAs that qualify to receive top-up grants	Annual			√	PMO-RALG
	9. Proportion of LGAs that qualify to receive performance bonus	Annual			√	PMO-RALG
	10. Proportion of farmers having visits from public or private extension staff	Periodical	√	√	√	NBS (NSCA)
	11. Amount of fertilizer consumed [PAF]	Annual			√	MAFC
	12. Number of households using irrigation infrastructure	Annual			√	MAFC
Output (OP)	1. Number of agricultural production infrastructure	Annual	√	√	√	LGAs, MLDF
	2. Number of agricultural marketing infrastructure and machinery	Annual	√	√	√	LGAs
	3. Number of extension officers trained on improved technological packages	Annual	√	√	√	LGAs
	4. Number of SACCOs, its members and value of loans provided for agriculture	Annual	√	√	√	LGAs
	5. Number of agricultural marketing regulations and legislation in place	Annual			√	MIT (MAFC, MLDF)
	6. Number of markets where wholesale or retail prices are collected	Annual			√	MIT
	7. Number of ASDP Basket Fund Steering Committee meetings held	Annual			√	ASDP Secretariat
	8. Proportion of regions which submitted DADP quarterly progress reports on time	Annual			√	Regions, ASLMs
	9. Proportion of female members of Planning and Finance Committee	Annual	√	√	√	LGAs
	10. Number of research projects conducted through ZARDEF	Annual			√	MAFC MLDF

On the other hand, changes have been made to the ASDP Shortlisted indicators. For example, the World Bank developed its own ASDP Results Framework and suggested that a few indicators be added to the Shortlisted indicators so that the most indicators in the two frameworks are identical. After discussion at the M&E TWG meetings, it was agreed to add "the number of farmers visited by extension officers" and "the number of projects funded by ZARDEF". Likewise, two PAF[18] indicators for the agricultural sector, "Amount of fertilizer consumed" and "Number of households using irrigation infrastructure (Number of members of the Irrigation Organizations" were added to the shortlisted indicators. The latest list of the ASDP M&E Shortlisted indicators is shown in Table 2.3.1.

(2) ASDP M&E Guideline

To operationalize the M&E framework, the M&E TWG developed the draft zero (0) of ASDP M&E Guideline in July 2007. In October 2008, the M&E TWG decided to resume the development of the M&E Guideline and a task force was formed. The task force revised the draft reflecting the progress of the on-going improvement of the ARDS and ensuring that the document serves as an easy-to-understand practical guideline for the LGA officers.

The revised draft was presented at the regional workshops in March 2009, and integrating comments from the TWG members and LGAs, the draft was finalized with the Integrated Data Collection Format and the VAEO/WAEO Format as annex. In May 2009, the final draft of M&E Guideline was approved by the M&E TWG. The document was then circulated to the Directors of ASLMs, all the chairpersons of ASDP TWGs and DPs.

In September 2009, the M&E TWG formed a task force again to further revise the M&E Guideline. The task force decided to keep only "Tasks of Each Stakeholder" in the main text to keep it short. The revised M&E Guideline was approved by the M&E TWG on December 16th, 2009. The task force began translating the M&E Guideline into Swahili in February 2010. Each member was assigned to a chapter and ten task force meetings were held through February into March to consolidate all the translated parts and to make sure translations were accurate. The draft Swahili version of the M&E Guideline was circulated to the M&E TWG members for comments in March and May, and distributed among stakeholders at the regional workshops in June 2010.

2.3.2. ASDP M&E Baseline and Performance Reports

(1) ASDP M&E Baseline Report

Upon the approval of the M&E Framework by the Committee of ASLMs Directors in August 2007, the M&E TWG worked on the finalization of the ASDP short-listed indicators and the preparation of the ASDP M&E Baseline Report. The preparation of the ASDP M&E Baseline Report was supposed to be completed by the time the TC started, but the report had not been completed because the M&E TWG had to wait for two months to conduct workshops for questionnaire distribution due to late disbursement of FY2007/08 budget.

[18] Performance Assessment Indicators which are used to monitor the progress of the Tanzanian economy and poverty reduction in association with the General Budget Support (GBS).

Thus, RADAG (M&E) helped the M&E TWG prepare the Baseline Report.

A draft ASDP M&E Baseline Report which includes national and regional level tables for each indicator and their analyses was prepared in August 2008. The report was presented at the Plenary for the third ASDP Joint Implementation Review (JIR). The report was revised based on the comments received and was finalized on September 25th 2008.

(2) ASDP M&E Progress Report 2008/09

In January 2009, the M&E TWG started to collect the latest data on the ASDP short-listed indicators and compile them as an ASDP M&E Progress Report 2008/09 so that the progress of the ASDP since the Baseline Data Report can be tracked. For the indicators whose data are collected at national level organizations, the members were assigned to specific indicators to be submitted to the TWG Secretariat. RADAG (M&E) was responsible for indicators related to export and investment. Together with an M&E TWG member, RADAG (M&E) collected the data from Tanzania Revenue Authority and Bank of Tanzania and analyzed them.

For six indicators which are to be collected from LGAs, the questionnaire was revised in February based on the comments obtained from the dissemination workshop in December 2008. The questionnaire was explained and distributed to the LGA officers at the regional workshops held in March 2009. Though the deadline for submission of the filled-in questionnaire was April 15th, few LGAs submitted it in April. The M&E TWG members rigorously followed up with the LGAs, and PMO-RALG officially sent a follow-up letter to the LGAs. As a result, 110 LGAs out of 132 submitted the questionnaire by June 18th, 2009.

Although the demand for the M&E Progress Report among the government and DPs was high as it is an important document to assess the progress of the ASDP, preparation of the report did not proceed as fast as planned. But the document was supposed to be presented at the fourth JIR scheduled to start in September. To this end, the M&E TWG agreed to fast track development of the report in the TWG meeting in August, and established a small group for it. The group collected data from respective officers, analyzed and compiled them into a report. RADAG (M&E) assisted these works as a member of the small group.

The draft report was discussed among the M&E TWG in September and was presented to ASLMs and DPs at the fourth JIR Plenary on September 25th. Comments from participants were generally positive that the document shows the progress of the ASDP. Incorporating these comments, the report was finalized at the M&E TWG meeting on November 20th. In 2010, the report was further revised to improve presentation and analysis based on the comments of DPP, MAFC.

(3) ASDP Performance Report 2009/10

Following the M&E Progress Report 2008/09, the M&E TWG embarked on the preparation of the M&E Progress Report 2009/10 (later it was renamed to ASDP Performance Report). Due to revision of the short-listed indicators, seven of the 23 short-listed indicators are to be collected from LGAs through a questionnaire. The questionnaire was revised and distributed to each LGA by the members of the M&E TWG and DADP Planning and Implementation (P&I) TWG who participated in the DADP follow-up study from March to April 2010. Although the deadline for submission of the completed questionnaire was April 15th,

only six LGAs submitted the questionnaire in time. The M&E TWG assigned members to communicate with regions / LGAs and submission gradually improved. For LGAs not submitted the questionnaire by May 21st, PMO-RALG sent an official follow-up letter. The members of the M&E TWG also explained how to fill out the questionnaire in the Regional Workshops in June and asked LGAs to submit the completed questionnaire as soon as possible. On the other hand, for the indicators whose data sources are national institutions, the TWG members in charge collected the data and submitted them to the M&E TWG Secretariat.

The report was not complete by the fifth JIR opening Plenary in August 2010. But the summary of the analysis for the national level indicators were presented at the JIR closing Plenary in September. For those indicators whose data sources are LGAs, the completed questionnaire was collected from 129 LGAs by the end of August. A draft performance report was completed after revising it based on the comments of the M&E TWG members. It was approved by the M&E TWG on November 18th 2010.

In November, DPP, MAFC, suggested that more in-depth analysis be presented in the report. The Secretariat for the M&E TWG and RADAG (M&E) worked to add more analyses and also obtained some complementary information, in particular, for the indicators with which negative changes are observed[19]. With this amendment, the report was presented at the stakeholder workshop held on December 15th, 2010. The improved report was submitted to the M&E TWG on January 26th, 2011. The report was further revised based on the comments of the members and the final version was completed on January 31st. The report was sent to the chairperson of the TWG on the same day. Incorporating the comments of the chairperson and DPP, MAFC, the TWG completed its work. The report will be submitted to the Committee of ASLMs Directors by the chairperson (as of March 3rd 2011).

2.3.3. Regional and National Workshops

(1) DADP Backstopping Training

During the third ASDP Joint Implementation Review in 2008, it was pointed out that the ASDP M&E system was not known to the district officers. In response to this concern, the M&E TWG decided to utilize the opportunity of the DADP backstopping workshop[20] which would be held by the DADP P&I TWG in December 2008 and disseminate the ASDP M&E Framework and the Baseline Data Report among stakeholders in the whole country.

The DADP backstopping workshop was conducted by the DADP P&I TWG for five days in each region from December 1st. At each region, a three-hour session was allocated to the M&E TWG in which the M&E TWG members explained the ASDP M&E Framework and the M&E Baseline Data Report. The questionnaire of six ASDP short-listed indicators was also presented at the workshop. The workshop served as feedback to LGAs for filling-in the questionnaire for the M&E Baseline Data Report and contributed to enhancing collaboration between the two working groups.

[19] For example, the proportion of farmers using mechanization was not as high as expected in the latest survey. On the other hand, the number of agricultural machinery imported such as power tillers and tractors has been increasing. Such additional information were incorporated in the report.

[20] In order to improve DADPs, district officers were trained on, for example, benefit-cost analysis and preparation of a log-frame in order to improve the quality / selection of interventions to be made within DADPs.

(2) The First Regional Workshop

The M&E TWG held 10 regional workshops for stakeholders in all regions and LGAs on March 24th and 27th 2009. The workshop aimed to:

- Familiarize RS/LGA officers with the ASDP M&E Framework and M&E Baseline Data Report,
- Receive the comments on the M&E Guideline and the Integrated Data Collection Format, and
- Distribute the questionnaire for six ASDP short-listed indicators to collect updated data.

More than 300 participants from all regions and districts except for a few districts were present at the workshops. The details on the workshops are shown in the table below. Prior to the workshops, a training of trainers for the M&E TWG members was conducted in order to establish common understanding on the content of the presentation among trainers on March 17th and 18th.

Table 2.3.2 Outline of the First Regional Workshops

Date		1	2	3	4	5
March 24	Region	Tabora Kigoma	Shinyanga Mara	Iringa Ruvuma	Lindi Mtwara	Kilimanjaro Tanga
	Venue	Tabora	Shinyanga	Njombe	Lindi	Moshi
March 27	Region	Dodoma Singida	Mwanza Kagera	Mbeya Rukwa	Morogoro Coast, DSM	Arusha Manyara
	Venue	Dodoma	Mwanza	Mbeya	Kibaha	Arusha
Participants		RS: Agricultural Advisor, Livestock Advisor, Trade Advisor LGA: DALDO, DPLO, Statistical Officer				
Trainer		Five teams consisting of three members of the M&E TWG and RADAG (M&E)				
Agenda		Objective				
1. ASDP M&E Baseline Data Report		- Familiarize RSs/LGAs officers with the ASDP Baseline Data Report as a feedback to the data collection in the previous year.				
2. ASDP Short-listed Indicators		- Improve the understanding on the questionnaire for the six ASDP short-listed indicators. - Facilitate the data collection exercise.				
3. Integrated Data Collection Format		- Present the Integrated Data Collection Format for future national roll-out. - Receive comments for its national adoptability.				
4. M&E Guideline		- Present the M&E Guideline for future national roll-out. - Receive comments on the draft M&E Guideline for its national adoptability.				

Photo 2.3.1 First Regional Workshop

(3) The Second Regional Workshop

The M&E TWG held 10 regional workshops from June 4th to 9th 2010 in the similar way as 2009. The objectives were to:

- Inform RS/LGA officers of the progress of the ASDP as feedback,
- Inform RS/LGA officers of the latest improvement of the ARDS, and
- Improve the data submitted by LGAs on seven ASDP short-listed indicators.

The details on the workshops are shown in the table below. The training of trainers (TOT) for the M&E TWG members was conducted on May 31st and June 1st in order to establish common understanding on the content of the presentation among trainers. The DASIP M&E officer also participated in the TOT.

Table 2.3.3 Outline of the Second Regional Workshops

Date / Team		1	2	3	4	5
June 4, 5	Region	Tabora Kigoma	Mwanza Kagera	Mbeya Rukwa	Morogoro Coast, DSM	Kilimanjaro Tanga
	Venue	Kigoma	Kagera	Rukwa	Morogoro	Tanga
June 8, 9	Region	Dodoma Singida	Shinyanga Mara	Iringa Ruvuma	Lindi Mtwara	Arusha Manyara
	Venue	Singida	Mara	Ruvuma	Lindi	Manyara
Participants		RS：Agricultural Advisor, Livestock Advisor (2) LGA： DALDO, Statistical Officer, M&E Officer (3)				
Trainer		Five teams consisting of three members of the M&E TWG including RADAG (M&E). DASIP M&E officer participated in Team 2.				
Agenda		Objective				
1. Present ASDP M&E Progress Report 2008/09		- To provide feedback to LGA officers by sharing the Progress Report, because the data on six indicators were collected from LGAs.				
2. Collect filled-in questionnaire and improve data quality		- A questionnaire on seven short-listed indicators for the ASDP Performance Report 2009/10 was distributed to all LGAs in March/April, but only 74 LGAs returned complete questionnaire. In addition, the data quality was low. Thus, the objective is to explain how the tables are filled and to promote the submission of complete questionnaire.				
3. Explain the ARDS improvement		- To present the Integrated Data Collection Format, VAEO/WAEO Format and LGMD2 to get comments and to make the participants aware of the ARDS improvement. - To encourage the LGA/RS to start using the two common formats and LGMD2.				

As for the questionnaire for the short-listed indicators, appropriateness of the data is examined by table using filled-in questionnaire as an example. As a result, improvement has been seen in the data which was submitted after the workshop.

In some regions, the officers of the pilot districts presented the common formats and LGMD2. Many regions/LGAs have shown interests in them and some participants mentioned that they would start to use them immediately. On the other hand, some participants stated that a lot of training of district and ward/village extension officers would be needed, and it is important to reduce the number of questionnaire to be sent by ASLMs to LGAs when LGMD2 is in place. Comments for further improvement of the common

formats were also obtained.

(4) Stakeholder workshop

Following the completion of the ARDS pilot implementation, the M&E TWG conducted a workshop to inform ASDP stakeholders of the improved ARDS on December 15th, 2010.

The M&E TWG had conducted two regional workshops since 2009, inviting officers from all regions and LGAs to inform them of the improvement of the ARDS. However, the M&E TWG had not had a chance to share it with national level stakeholders, even though they are the primary users of the information transmitted through the ARDS. It is therefore important to inform them before launching the national roll-out.

In addition, officials of ministries, department and agencies (MDAs) other than ASLMs were also invited to participate in the workshop in order to help them become familiar with LGMD2. It was because the study on LGAs information systems (see 2.3.2) suggested that LGMD2 be adopted by the sectors that have not developed sectoral database yet.

More than 70 officers of ASLMs, DPs and other MDAs participated in the workshop, at which the M&E TWG members mainly took charge of the presentation on the ARDS and its national roll-out plan. The outline of the workshop is shown in Table 2.3.4.

Table 2.3.4 Outline of the Stakeholder Workshop

Purpose	To familiarize ASDP stakeholders with improvement in the ARDS including LGMD2 and ASDP M&E.	
Date	December 15, 2010	
Venue	Ubungo Plaza in Dar es Salaam	
Chair person	DPP, MLDF	
Participants	ASLMs: MAFC, MLDF, MIT, PMO-RALG, NBS, DASIP Other ministries: President Office Planning Commission, Ministry of Finance and Economic Affairs, Ministry of Natural Resource and Tourism, Bank of Tanzania etc. DPs: JICA、FAO、IFAD Pilot RS/LGAs: Morogoro, Dodoma, Morogoro DC, Kilosa DC, Kondoa DC, Mpwapwa DC	 Photo 2.3.2 Stakeholder Workshop
Agenda	Opening Remarks	JICA Tanzania Deputy Resident Representative
	1. ASDP M&E Progress Report 2009/10	M&E TWG member (MAFC)
	2. ASDP M&E and ARDS improvement	M&E TWG member (RADAG)
	3. VAEO/WAEO Format	M&E TWG member (MITM)
	4. Integrated Data Collection Format	M&E TWG member (MAFC)
	5. LGMD2	M&E TWG member (MAFC)
	6. Experiences from pilot implementation of the ARDS	Morogoro DC and Kondoa DC
	7. Way Forward	M&E TWG member (MLDF)
	Closing remarks	Acting DPP, MAFC

"Daily News" an English daily newspaper in Tanzania had an article on this workshop on December 17th which appreciated the efforts of the M&E TWG supported by JICA.

2.3.4. ASDP Joint Implementation Review

The ASDP conducts an annual review of its program to monitor its progress and identify the issues to be addressed. Both the members of the GoT and DPs participate in this review. RADAG (M&E) participated in the reviews in 2009 and 2010 as members of the M&E TWG.

(1) The Fourth Joint Implementation Review (Sep. – Oct. 2009)

The fourth Joint Implementation Review (JIR) was undertaken for about one month from September 25th, 2009. The objective of the JIR was to assess the outcome of the ASDP. Eight members of the M&E TWG (including two from RADAG (M&E)) were divided into four teams, and each team participated in the field studies conducted by other four TWGs, respectively. In addition, two members were assigned to work on national level review. The field studies were conducted for about two weeks from September 27th to October 11th. On October 12th and 13th, the members of the M&E TWG who participated in the JIR gathered and developed an M&E report for the JIR.

The report was shared with stakeholders at the 4th JIR Plenary held on October 21st. Incorporating the comments provided in the plenary, the M&E TWG submitted the final report on October 26th. Subsequently, the JIR secretariat asked each TWG to select five key recommendations with priority. The M&E TWG selected them at the M&E TWG meeting held on November 20th and submitted them to the secretariat.

Photo 2.3.3 ASDP Fourth Joint Implementation Review

(2) The Fifth Joint Implementation Review (Aug. – Sep. 2010)

In March 2010, the JIR secretariat circulated a draft generic TOR for the 5th JIR and also asked each TWG to prepare its own TOR. The secretariat of the M&E TWG and RADAG (M&E) examined the draft generic TOR and found possible duplication in the activities which would be done in the JIR and those of the M&E TWG. Thus, they submitted comments to the JIR secretariat, which were subsequently incorporated in the modified TOR. In the meantime, the M&E TWG prepared and submitted its own TOR for the fifth JIR on May 5th. The TOR was revised based on the comments received at the JIR preparation meeting on June 8th.

The fifth JIR was conducted for about one month from August 13th 2010. Members of the M&E TWG were divided into four teams, and each team participated in the field studies conducted by other four TWGs.

RADAG (M&E) participated in the national level review. The national level review team gathered twice and examined, among others, to what extent the recommendations in the past reviews have been implemented and the status of operationalization of the ASDP M&E framework. On August 31st and September 1st, all the members who participated in the review gathered and developed an M&E report for the fifth JIR.

The report was presented at the JIR closing Plenary on September 2nd. Incorporating the comments received in the plenary, the report was finalized and submitted to the JIR Secretariat on September 7th. The reports from each TWG were consolidated into the Aide Memoire for the fifth JIR, which was reported to the Agricultural Sector Consultative Group Meeting held on September 30th.

2.3.5. Agricultural Sample Surveys

(1) Rapid Appraisal Agricultural Survey (RAAS)

Agricultural sample surveys play an important role in providing data for ASDP M&E. Of the ASDP shortlisted indicators, seven outcome indicators (e.g., production and productivity (yield) of key crops, proportion of farmers using improved technologies / mechanization) are obtained by the National Sample Census of Agriculture (NSCA). The NSCA is conducted by NBS in collaboration with ASLMs every 5 year. But it is difficult to track the progress of the ASDP if the data are collected with an interval of 5 years. In addition, given that the Tanzanian agriculture is susceptible to weather conditions, it is necessary to obtain data on an annual basis at least for key indicators.

RADAG (M&E) discussed this issue with statistical officers of MAFC and JICA expert to NBS and examined the possibility of implementing Rapid Appraisal Agricultural Survey (RAAS) which was suggested by a MAFC statistician[21]. The original RAAS was successfully implemented, according to its report, in 1999/2000 with the assistance of the World Bank. Its features are as follows.

- The questions are limited to a few key agricultural indicators.
- The survey is conducted every year when the NSCA is not undertaken.
- 30 percent of the samples in each stratified stage (village and household levels) of the NSCA are selected to be surveyed in the RAAS. The total sample size is about 5,300 households in the country (Approximately 10 percent of the sample size of the NSCA).
- The same households are repeatedly surveyed every year (panel survey).
- The RAAS provides not only national level estimates but also rough district level estimates.

The idea of RAAS was presented at the M&E TWG meeting on March 8th 2009, and it was agreed that the TWG would propose the implementation of the RAAS to the Committee of ASLMs Directors. It was also agreed that key questions on livestock and marketing be added. However, not much progress had been made until the M&E report for the fourth JIR recommended the introduction of the RAAS. The M&E TWG was assigned to develop a concept note for the RAAS by March 2010. The M&E TWG formed a task force in November 2009 and agreed to examine, among others, i) whether a same sampling framework is used for

[21] Then not much was known about the National Panel Survey.

both crop and livestock, ii) simpler questionnaire, iii) a schedule for nation-wide implementation, and iv) detailed budget.

The task force had a series of discussion with NBS officers, but due partly to different ideas suggested by them, it took a long time before the concept note was prepared. On the other hand, the budget for the RAAS was assessed to be much higher at Tsh. 524 million in the first year (Tsh. 229 million / year from the second year). In addition, it was found that livestock estimates would not likely to be so reliable if the same sampling framework were used for both crop and livestock. The TWG also learned that the National Panel Survey would be planned to be undertaken annually. Due to these reasons, although a concept note for the RAAS was prepared, the TWG is not certain if the RAAS should be implemented, and not much progress has been made since then.

(2) Cooperation concerning the National Sample Census of Agricultural 2007/08

The NSCA 2007/08 was implemented by NBS in collaboration with MAFC and MLDF. Two members of the M&E TWG from MAFC participated in the preparation for the survey. In October 2008, the M&E TWG obtained the final draft questionnaire of the survey and reviewed it on the following two points: 1) whether it included the ASDP short-listed indicators which are to refer to this survey as the data source, and 2) whether the gender perspective is reflected in these indicators. The comment was submitted to the technical committee in November.

As DPP, MAFC was informed of the exercise above, he requested the questionnaire to be circulated to all departments of MAFC and MLDF for further comments. As a result, 21 comments were compiled and submitted to the committee, many of which were then incorporated into the questionnaire. It can be said that the active collaboration of the M&E TWG with the NSCA resulted in soliciting many contributions from MAFC and MLDF, the users of the result of the NSCA.

Preliminary results of the NSCA 2007/08 became available in 2010, and they were incorporated in the ASDP Performance Report 2009/10. The NSCA 2007/08 Preliminary Report will be released on March 9th (as of March 3rd 2011).

(3) Cooperation concerning the National Panel Survey

NBS has been tasked to implement the National Panel Survey (NPS) annually since 2008 with the aim to monitor the progress in poverty reduction in Tanzania. Due to the importance of the agricultural sector in poverty reduction, an agricultural module was added to the NPS to obtain national level estimates for key agricultural indicators. In June 2008, RADAG (M&E) coordinated a meeting for NBS and the M&E TWG to provide comments to the questionnaire of the NPS agricultural component.

The first wave of the NPS was conducted from October 2008, and the result of the survey was released in November 2010. Although there are many questions concerning agriculture in the questionnaire, only 5 pages of the report is assigned to agriculture. The plan of NBS is to distribute the raw data of the NPS and ask the stakeholders to do the analysis for themselves. The M&E TWG received the raw data from NBS, but processing the data to get the estimates was not feasible for the officers of the M&E TWG due partly to

the lack of statistical software. Thus, RADAG (M&E) converted the files to excel and trained them to carry out the analysis.

It was found, however, that there is a big discrepancy between the estimates of the NPS and the NSCA on key agricultural indicators such as the amount of maize / paddy produced although the two surveys targeted the same season in the same year22. The M&E TWG decided to use the estimates of the NSCA only for the ASDP Performance Report 2009/10.

(4) CountrySTAT

CountrySTAT, a web-based statistical database system or a one-stop repository of agricultural data for all internet users, is developed and introduced by FAO globally. In 2008, FAO introduced this data system to 17 Sub-Saharan African countries including Tanzania. The committee for CountrySTAT consists of statisticians and IT officers of NBS, ASLMs, MNRT, and the Ministry of Agriculture and the National Bureau of Statistics of Zanzibar. Some members of the ASDP M&E TWG are also the members of the committee.

In Tanzania, the CountrySTAT started in 2009 (http://countrystat.org/tza/en). It is expected that some data obtained through the ARDS will be posted in the CountrySTAT in the future. For this purpose, RADAG (M&E) participated in some of the activities concerning the CountrySTAT such as training and data processing.

2.3.6. M&E Newsletters

In order to disseminate information regarding ASDP M&E, the M&E TWG published a newsletter mainly covering activities and outputs of the M&E TWG. On June 2009, 8,520 copies of the newsletter were distributed among the stakeholders including ASLMs, other TWGs and DPs. In 2010, 2,000 copies were distributed at “Public Service Week” in June and “Nanenane Agricultural Festival” in August.

Photo 2.3.4 ASDP M&E Newsletter

2.3.7. Assisting the M&E TWG Secretariat

(1) Formulating the work plan and budget of the M&E TWG

RADAG (M&E) assisted the M&E TWG Secretariat in formulating the work plan and budget of the M&E TWG. The primary tasks of the M&E TWG in each financial year are shown in Table 2.3.5.

[22] This issue is further elaborated in 3.3.2 in this report.

Table 2.3.5 Primary Tasks of the M&E TWG

Year	Tasks
2008/09	Improvement of the Agricultural Routine Data System Assist NBS in implementing 2008/09 NSCA (in particular indicator selection) Improve M&E guideline Formulate an annual calendar of ASDP M&E at national level
2009/10	Improvement of the Agricultural Routine Data System Dissemination of M&E Guideline Preparation of ASDP Performance Report FY 2009/10 Review and improvement of M&E Framework Development of newsletters Collaboration with NBS in implementing agricultural survey 2007/08 Updating Country STAT
2010/11	Completion of pilot implementation of the Agricultural Routine Data System Dissemination of the improved Agricultural Routine Data System Development of the ASDP Performance Report 2010/2011 Review and improvement of the ASDP M&E Framework Development of newsletters

(2) Holding of the M&E TWG Meetings

During the period of TC, the M&E TWG held a total of thirty one meetings excluding the Secretariat meeting and ad hoc meetings. Compared to other ASDP TWGs which usually a meeting every quarter, it is evident that the M&E TWG is one of the most active working groups in the ASDP. RADAG (M&E) assisted the TWG Secretariat in, but not limited to, arranging the meeting, setting agenda and preparing the minutes.

Table 2.3.6 List of M&E TWG Meetings

Year	Date	Major Agenda
2007/08	Apr. 4	TOR for FY 2008/09
	May 16	Preparation for ASDP M&E Baseline Report, report of analysis of reporting format, preparation for field studies
	Jun. 6	Report of field studies, draft M&E Baseline Report
2008/09	Aug.12	Finalization of M&E Framework and Baseline Report
	Sep.19	Harmonization of ASLMs data needs, information gathering on data delivery system
	Oct. 17	Draft Integrated Data Collection Format, dissemination of M&E Framework and Baseline Report, revision of M&E Guideline
	Nov. 14	Revision of Integrated Data Collection Format, direction of improvement of data delivery system, dissemination of M&E Framework and Baseline Report
	Jan. 23	Revision of ASDP M&E short-listed indicators and collection of the latest data
	Mar. 6	Plan of the regional workshop, revision of questionnaire for short-listed indicators, progress of LGMD2 development
	Apr. 3	Report of the regional workshop, demonstration of proposed LGMD2
	Apr. 9	Revision of Integrated Data Collection Format, plan of trainings, revision of M&E Guideline
	Apr. 24	Draft VAEO/WAEO Format, collection of short-listed indicators questionnaire, impact assessment study, TOR for FY 2009/10

	May 12	Revision of VAEO/WAEO Format, preparation for LGMD2 development, Preparation of ASDP M&E Progress Report 2008/09
	May 28	Preparation for WAEO/VAEO training, TOR of LGMD2 development
	Jun. 17	Assessment of the proposal for LGMD2 development, finalization of VAEO/WAEO Format
2009/10	Aug. 21	Preparation of ASDP M&E Progress Report 2008/09, preparation for the 4th JIR
	Sep. 8	Preparation of ASDP M&E Progress Report 2008/09, preparation for the 4th JIR, preparation for the 1st backstopping workshop
	Oct. 23	Preparation for LGMD2 training, discussion on DFID funding, plan of the work in FY2009/10, report of the counterpart training
	Nov. 20	Revision of M&E Guideline, progress of LGMD2 development, finalization of JIR recommendation, and introduction of MWI member
	Dec. 16	Discussion on DFID funding, revision of M&E Guideline, discussion on RAAS, revision of short-listed indicators, plan for next year
	Jan. 27	Preparation for the 2nd backstopping workshop, preparation for LGMD2 training for PMO-RALG, revision of short-listed indicators
	Mar. 16	Report of the 2nd backstopping workshop, progress of LGMD2 development, discussion on distribution and collection of short-listed indicator questionnaire, report of JICA's mid-term review, discussion on RAAS
	Apr. 15	Preparation for feedback training and VEO training, collection of short-listed indicator questionnaire, discussion on LGMD2 management, dissemination to DASIP area
	Apr. 29	Report of feedback training and VEO training, preparation for the regional workshops, collection of short-listed indicator questionnaire, discussion on DFID funding
	May 13	Preparation for the regional workshops, collection of short-listed indicator questionnaire
	Jun. 15	Report of the regional workshops, collection of short-listed indicator questionnaire.
2010/11	Sep. 8	ASDP performance report 2009/10, progress of LGMD2 improvement, status of ARDS pilot implementation, check list for completion of pilot implementation, preparation for TOT
	Oct. 20	Preparation for the completion workshop of pilot implementation, report of joint meeting with DADP P&I WG
	Nov. 18	ReSAKKS report, TOR for FY 2010/11, finalization of ASDP performance report 2009/10, preparation for stakeholders workshop, analysis of NPS raw data
	Nov. 30	Revision of ASDP performance report 2009/10, revision of ASDP M&E framework, preparation for stakeholders workshop, ARDS roll-out plan, finalization of VAEO/WAEO Format, revision of training guide for VAEO/WAEO
	Jan. 26	Finalization of ARDS roll-out plan, finalization of training guide for VAEO/WAEO, revision of ASDP M&E framework
	Feb. 8	Preparation of ARDS roll-out training in Morogoro and Dodoma regions

2.4. Activities 3 Other Activities

2.4.1. Counterpart Training

Members of the ASDP M&E TWG were given opportunities to attend JICA's training programs in the course of the TC. The following officers participated in the training programs. The counterpart training for this TC was conducted twice for two weeks in 2008 and 2009, respectively. The objective of the training was to learn the M&E system, especially data collection and policy evaluation, at national and district levels in Japan and to utilize the lessons learned in developing an M&E system in Tanzania. These training programs were successfully undertaken thanks to cooperation of, among others, the ministries, prefectural governments,

universities, agricultural cooperatives, wholesale market and farmers in Japan. After returning to Tanzania, the participants shared what they learned in Japan with other M&E TWG members and exchanged their views. They also shared the system of data collection and its uses in Japan with the officers of regions and LGAs at the regional workshops.

Table 2.4.1 JICA's Training Program and Participants

Planning and Designing of Agricultural Statistics for Agricultural Policy Making	2008 2009 2010	MAFC, DPP, Head of M&E Statistics Unit MLDF, DPP, Statistician MWI (then), DITS, M&E officer	Charles Wambura Da Silva Mlau Andrew Norman
IT System Techniques for Agriculture	2010 2011	MAFC, DPP, Statistical Unit MIT, DCM	Malemi Nyanda Genya C. Genya
Counterpart Training for the TC	2008	MAFC, DPP, M&E Unit MLDF, DPP, Head of M&E Unit MIT, DCM PMO-RALG, DSC, Agricultural Unit	John Maige Sophia Mlote Julian Gutta Ramadhani Mwaliko
	2009	MAFC, DPP, M&E Unit MLDF, DPP, M&E Unit MIT, DPP, M&E officer PMO-RALG, DICT, Statistician	Robert Chacha Furaha Kabuje Exaud Kigahe Yasinta Tabu

2.4.2. JICA's Mid-Term Review and Terminal Evaluation of the TC

(1) Mid-term Review

The mid-term review for this TC was undertaken from February 17th to March 3rd, 2010 by a joint team of the Japanese and Tanzanian officers. The objectives of the reviews included:

- Review the activities and progress of the TC and exchange opinions between the Japanese and Tanzanian officials concerned,
- Make comments and advice on the plan of activities based on the results of the review,
- Revise Logical Framework of the TC in order to properly monitor the progress and activities, if necessary.

RADAG (M&E) facilitated the implementation of the review by carrying out the following tasks.

- Prepared documents outlining the TC and explained them to the review team
- Distributed and collected the questionnaire prepared by the review team
- Suggested the offices to be visited by the review team
- Made appointment with the Tanzanian officers,
- Participated in field studies (Morogoro and Dodoma regions) and some meetings in DSM

The review found that the TC was implemented smoothly, and the officers concerned were capacitated for operationalization of the ARDS. Although it was too early to assess the impact and sustainability of the TC, it was on the right track toward the establishment / improvement of the ARDS. It is suggested that in the remaining period of the TC, the activities be implemented as planned, taking into account the

recommendations of the review (shown in the table below). The Logical Framework of the TC was modified and the minutes were concluded between GoT and JICA.

Table 2.4.2 Recommendations of the Mid-Term Review Team

Time period	Recommendations
Short-term (to be done within the TC period)	1) Ensure the establishment of the ARDS in pilot districts, taking into account data quality and sustainability. 2) Prepare a training guide for VAEO/WAEO by documenting lessons learned and good practices. 3) Operation and management of LGMD2. 4) Establish a feedback mechanism from central to local (VAEO/WAEO) levels. 5) Review and modify LGMD2 as need arises. 6) Formulate a plan of rolling-out in new districts.
Long term (to be done after the TC is over)	1) Integrate other agricultural sub-sectors into LGMD2. 2) Introduce rapid appraisal agricultural survey.

These recommendations were presented at the mid-term review workshop on March 2nd. The number of participants from the M&E TWG, however, was limited, and thus, they were again explained by RADAG (M&E) on March 16th in the M&E TWG meeting. It was decided that the TWG would immediately take the following actions in response to the recommendations of the review team (the details are explained in 2.3 in this report).

- Prepare two training guides, explaining each step to operate the ARDS, documenting lessons learned and good practices in the pilot LGAs. One for VAEO/WAEO and the other for district officers.
- As for the training guide for district officers, emphasis is placed on how to consolidate and analyze data provided by VAEO/WAEO and feedback the report to them because it is important to motivate them in data collection.
- Where VAEO are absent, Village Executive Officers (VEO) play an important role in data collection. Thus, training should be provided to them.

(2) Terminal evaluation

The terminal evaluation for the TC was conducted from September 13th to September 29th 2010, six months prior to the completion of the TC, by a joint team of Japanese and Tanzanian officers. The objectives of the terminal evaluation included:

- Evaluate the TC's activities and progress and discuss the results of the evaluation between the Japanese and Tanzanian officials concerned, and
- Make comments and advice on the plan of activities based on the results of the review,

RADAG (M&E) facilitated the evaluation by carrying out the similar tasks as the mid-term review.

The evaluation found that the TC is expected to achieve its purpose. The TC has contributed to establishing the ARDS, strengthening the stakeholders in charge of ARDS operation, and building foundation for the national roll-out of the ARDS. In rolling out, good practices and know-how obtained in the pilot

implementation would be very useful. It is suggested that the GoT take an initiative to roll out the ARDS effectively utilizing the experiences of the pilot implementation. The team made recommendations as shown in Table 2.4.3.

Table 2.4.3 Recommendations of the Terminal Evaluation Team

Time period	Recommendations
Short-term (to be done within the TC period)	1) Strengthen data collection and reporting system of the ARDS at ward and village levels. - Review the items to be included in the common formats. - Add tables concerning irrigation to the Integrated Data Collection Format. - Review the current practice of data collection by VAEO/WAEO, suggest a unified method and incorporate it in the training guide. - ASLMs to accelerate VAEO/WAEO recruitment. - LGAs to supply VAEO/WAEO with sufficient transportation for data collection. 2) Make sure that at least two officers in each district are conversant with technical aspects of ARDS. 3) Promote the sharing of experiences and good practices concerning ARDS among the stakeholders.
Long term (to be done after the TC is over)	1) Improve IT conditions for stable operation of LGMD2. 2) Roll out the ARDS to the entire country. - Complete the revision of the national roll-out plan. - Enhance reliability of data collected through the ARDS. - Strengthen the capacity of the M&E TWG. - Train new extension officers to operate VAEO/WAEO Format at MATI/LITI. 3) Strengthen regional technical backstopping functions for the ARDS. 4) Enhance capacity for effective use of data collected through the ARDS.

These recommendations were shared at M&E TWG meeting. It was decided that the TWG would immediately take the following actions in response to the recommendations (the details are explained in 2.3 in this report).

- The VAEO/WAEO Format was reviewed to reduce the workload of VAEO/WAEO. On the other hand, two tables concerning irrigation were added.
- The VAEO/WAEO training guide was improved by specifying the methods of data collection including a random sampling method.
- Each pilot district was informed that it is necessary to have at least two officials who are conversant with the operation of the ARDS. It was found that this request meets the needs of the district officers because it would alleviate the workload of the officers in terms of data entry and consolidation.
- Good practices and lessons learned concerning ARDS operation were presented by each pilot district at the workshop in November, and they were incorporated in the training guides.

2.4.3. Meetings / Workshops concerning the ASDP

(1) Participation in Meetings / Workshops concerning the ASDP

RADAG (M&E) actively participated in the meetings / workshops concerning the ASDP to keep updated with the latest development of the ASDP and share the progress of the M&E TWG. The key meetings /

workshops which RADAG (M&E) participated are shown in Table 2.4.4.

Table 2.4.4 Key Meetings/Workshops in which RADAG (M&E) Members Participated

Year	Date	Meeting
2007/08	Apr. 11	ASDP TWG Plenary Meeting
	Apr. May	A-WG meeting (DPs, monthly)
	May, Jun	ASDP Basket Fund Steering Committee meeting
	May 14	DASIP Baseline Survey Report Workshop (DASIP/AfDB)
	May 15	Reference Group Meeting
2008/09	Sep, Oct, Nov, Jan, Mar, Apr, May	A-WG meeting (DPs, monthly)
	Nov, Feb, May	ASDP Basket Fund Steering Committee meeting
	Sep-Oct	ASDP Joint Implementation Review meetings
	Nov. 4	Agriculture Sector Review meeting
	Feb. 6	Meeting with DFID on Tanzania Statistical Master Plan (TSMP)
	Feb. 10	Meeting with a Zambia mission on ASDP M&E
	Apr. 20	ASDP Budget Consultation Meeting
	Apr. 20	Training on Building Sustainable M&E System by World Bank
	May 26	Agriculture Sector Consultative Meeting
2009/10	Aug, Oct, Dec, May	A-WG meeting (DPs, monthly)
	Sep, Nov, Feb	ASDP Basket Fund Steering Committee meeting
	Sep-Oct	ASDP Joint Implementation Review meetings
	Sep, Apr	Agriculture Sector Consultative meeting
	Aug. 19	Workshop on Harmonization of Agricultural Statistics held by MAFC
	Feb. 24	FAO CountrySTAT Launching Ceremony
	Jun. 4	PADEP Closing Workshop
2010/11	Aug-Sep	ASDP Joint Implementation Review meetings
	Sep. 30	Agriculture Sector Consultative Meeting
	Nov. 16	ASDP Basket Fund Steering Committee meeting
	Nov, Dec	ASDP TWG Plenary Meeting
	Nov, Jan, Feb	A-WG meeting (DPs, monthly)
	Jan. 27	MIT M&E Framework Finalization Workshop

(2) Participation in JICA's Meetings

RADAG (M&E) shared information with other JICA experts especially RADAG (DADP) and those working in the fields of, but not limited to, agriculture, statistics, local governance and health. RADAG (M&E) also contributed articles to the newsletter "Pamoja" of the JICA Tanzania Office so as to enhancing collaboration and information sharing among Japanese experts. RADAG (M&E) participated in the following meetings in this regard.

Table 2.4.5 Key JICA's Meetings / Workshops in which RADAG (M&E) Members Participated

Year	Date	Meeting
2007/08	Apr, May	Agricultural Sector Program Coordination Meeting
	May 14	Pamoja Meeting
2008/09	Dec, Feb, Jun	Agricultural Sector Program Coordination Meeting
	Jan. 16	Program's Advisory Committee to JICA (RADAG)
	Jan. 21	Pamoja Meeting
2009/10	Aug.20-21	Meeting on Programs related to Coalition for African Rice Development (CARD)
	Aug.27	Discussion with the evaluation mission on Japan's Overseas Development Assistance
	Sep.8	Final seminar by JICA expert in NBS
	Sep.17	Exchange workshop of JICA experts
	Sep, Oct	Pamoja Meeting
	Oct.28	Workshop on GBS
	Dec.21	Public Seminar on aid coordination held in Japan.
	Jan, Mar, June	Agricultural Sector Program Coordination Meeting
2010/11	Aug, Jan	Agricultural Sector Program Coordination Meeting
	Oct. 8	Exchange workshop of JICA experts

2.5. Assignment of RADAG (M&E)

The following consultants participated in the TC as members of RADAG (M&E).

Table 2.5.1 Assignments of the Japanese Members (man-month)

Name	Position	Work in Japan	Work in Tanzania				Total
			2007/ 08	2008/ 09	2009 /10	2010/ 11	
Michio Watanabe	Chief adviser/ Institutional development	0.13	3.00	7.33	6.43	5.50	22.39
Ryo Sasaki	Deputy chief adviser/ Monitoring and evaluation 1	0.13	1.33	4.00	4.00	2.00	11.46
Mana Takasugi	Monitoring and evaluation 2	0.13	0.00	5.67	6.17	0.00	11.97
Naomi Imase	Monitoring and evaluation 2	0.10	0.00	0.00	0.00	3.67	3.77
Kyoko Akasaka	Administrative data management/ Programme administration	0.00	3.00	9.50	6.83	6.27	25.60
Total		0.49	7.33	26.50	23.43	17.44	75.19

3. Achievements and Challenges

3.1. Attainment of Project Purpose and Output

Table 3.1.1 shows current status of attainment of purpose and output of the TC as stated in its logical framework. It indicates that overall the TC has attained its purpose and output.

Table 3.1.1 Attainment of Project Purpose and Output

Purpose, Output	Objectively Verifiable Indicators	Current Status
Overall Goal		
The Agricultural Routine Data System is effectively used nationwide for Monitoring and Evaluation of the ASDP.	1. Agricultural routine data collected through the ARDS are analyzed in the Joint Implementation Review (JIR) and Agricultural Sector Reviews (ASR).	The ARDS has not been rolled out nationally yet, and therefore the data have not been used in the JIR or ASR.
	2. A number of the DADPs planned or revised based on the results of analyzing the data collected through the ARDS.	According to the pilot districts, they are using the data collected through the ARDS for formulating DADP FY 2011/12.
Purpose		
An effective ARDS of the ASDP M&E framework to be deployed from villages to national levels is established	1. Routine agricultural reports at each level are made available, and finally reach the central level.	Agricultural reports of the pilot districts are available at each administrative level including the members of the M&E TWG (ASLMs officials).
	1.1 ASLMs' officials are able to access the data which are submitted by the pilot Districts through LGMD2.	Members of the M&E TWG are able to access the data of the pilot districts through LGMD2.
	1.2 Within the determined period, the pilot regions check and approve the data which are submitted by the pilot Districts through LGMD2.	The pilot regions check the data submitted by the pilot districts through LGMD2.
	1.3 The 4 pilot districts check the data which are submitted by WAEO/WAEO, and request respective WAEO/WAEOs to review mistaken figures and errors in order to improve the data. Within the determined period, required data is entered to LGMD2 utilizing the submitted format, and submit it to respective pilot Region in the form of "Integrated Data Collection Format."	The pilot districts check the data submitted by WAEO/VAEO and ask for revision as necessary. They also submit the data to the pilot regions using LGMD2.
	1.4 Village and ward extension officers submit data using the latest version of WAEO/WAEO format to respective district.	VAEO/WAEO in the pilot districts submit the VAEO/WAEO format in its latest form regularly.
	2. Progress and final results of ARDS development is reported to Committee of ASLMs Directors, and finally submitted to ASDP Basket Fund Steering Committee.	The improved ARDS has been approved by the M&E TWG. It will be submitted to the ASLMs Committee of Directors through the Chairperson of the TWG.
Output		
1. A provisional model of the ARDS is developed by means of streamlining and	1.1 Comments of the stakeholders are reflected in developing the provisional model of the ARDS.	The provisional model of the ARDS was developed, incorporating data needs of ASLMs and comments of M&E TWG, regions and districts.

coordinating ASLMs' routine data system	1.2 Completion of the provisional model of the ARDS.	The provisional model of the ARDS was completed in June 2009. (LGMD2 prototype was completed in December 2009).
2. Local Government officials concerned in the pilot districts in Morogoro and Dodoma Regions are conversant with how to operate the provisional model of the ARDS.	2.1 All the relevant officials from villages to the RS levels in Morogoro and Dodoma Regions are trained on the provisional model of the ARDS.	All the relevant officials in the pilot districts and regions in Morogoro and Dodoma Regions received training to operate the provisional model of the ARDS. Additional trainings on feedback and the reporting formats were also conducted.
	2.2 Degrees of understanding of the training participants.	The degree of understanding improved.
3. The model of ARDS is completed by carrying out necessary modifications to the provisional model through implementation in the pilot districts in Morogoro and Dodoma Regions	3.1 A report on the on-the-job training and assessment on the pilot implementation of the provisional model of the ARDS is submitted to the ASDP M&E TWG meeting.	Two backstopping workshops and three field visits (OJT) to the pilot regions/LGAs were conducted. Their reports were prepared and shared at the M&E TWG meetings.
	3.2 A report on the stakeholder workshop on the pilot implementation of the provisional model of the ARDS is submitted to the ASDP M&E TWG meeting.	The stakeholder workshops of the ARDS were conducted and their reports were submitted to the M&E TWG meetings.
	3.3 A report on the model of the ARDS is completed.	The ASDP M&E Guideline, outlining the ARDS, was finalized.
4. The ASDP M&E guideline is improved to incorporate the revision of the ARDS through the results of pilot implementation.	4.1 A plan for nationwide deployment of the ARDS including institutional arrangements and budget implication completed.	The national roll-out plan of the ARDS is complete.
	4.2 A revised ASDP M&E guidelines is submitted to the ASDP M&E TWG.	The revised ASDP M&E Guideline was submitted to the M&E TWG and was approved..
	4.3 A revised ASDP M&E Framework Document is submitted to the ASDP M&E TWG meeting, if necessary.	The revised ASDP M&E Framework was submitted to the ASDP M&E and was approved.
5. A wide range of capacities of the M&E TWG are enhanced for smooth and effective operation of all M&E related activities under the ASDP.	5.1 ASDP M&E Baseline and Progress Reports equipped with necessary information and data are completed by the officials of the M&E TWG, and those reports are submitted to the Committee of ASLMs Directors.	The ASDP M&E Baseline Report, Progress Report 2008/09 and ASDP Performance Report 2009/10 were prepared and approved by the M&E TWG. The report will be submitted to the Committee of ASLMs Directors.
	5.2 ASDP M&E TWG meetings are held regularly, and do better coordinating and management.	M&E TWG meetings were held regularly, and the TWG Secretariat arranged the meeting and prepared the minutes.
6. Progress and achievements of the TC are shared with Central and Local Government officials and Development Partners.	6.1 The progress and achievements are regularly shared in the ASDP M&E TWG meetings.	All the activities of the TC were conducted by the ASDP M&E TWG. The activities were always shared by the member of the TWG.
	6.2 Records of reporting the progress and achievements to the ASDP M&E TWG meetings in seminars, workshops, and meetings.	The activities of the M&E TWG (the TC) were always reported to the stakeholders through ASDP meetings, national workshops, donor meetings, etc.

3.2. Achievements

(1) Steady progress in ARDS improvement

The M&E TWG has successfully improved the ARDS through pilot implementation and developed a national roll-out plan. It is expected that the ARDS will contribute to improving the M&E for the ASDP. In addition, it will also have a positive effect on planning of ASDP and DADP by providing data through the ARDS. The four pilot districts have already started to use the data collected through the ARDS.

In June 2010, regional workshops were conducted with participation of agricultural officers of all regions and LGAs in the country. The common formats and LGMD2 were explained and their soft / hard copies were distributed. Now the regional / district officers are aware of the improved ARDS. In addition, a website for ASDP M&E was created (http://www.kilimo.go.tz/M&E.html) in June 2010, and all the latest key documents concerning ASDP M&E can be downloaded from there. It is expected that these development will make the roll-out more smooth and effective.

(2) Capacity development for ARDS operation

National, regional and district officers concerned have been capacitated with regard to the operation of the ARDS. For example, RADAG (M&E) trained national, regional and district officers several times to use Microsoft Excel effectively for ARDS operation. In particular, a series of technical training were provided to the officers of the pilot districts through OJT and backstopping, and the officers are now capable of consolidating the data provided by VAEO using Excel and its pivot table functions. As a result, they served as facilitators (trainers) in the regional workshops held in June 2010 and also in the roll-out in Dodoma and Morogoro in February 2011.

RADAG (M&E) also provided technical backstopping to assist the M&E TWG members in carrying out general tasks more smoothly and effectively. It includes, but not limited to, organizing electronic files in computers, preparation for and implementation of field studies / workshops, preparation of questionnaire / reports, and data analysis. Some tips to operate M&E TWG meetings such as early notification of a meeting, being punctual to start meetings, keeping your mobile phone in the manner mode during a meeting, preparing a minute of a meeting were also shared.

(3) A model for other sectors

The M&E TWG worked closely with PMO-RALG so that the ARDS is to be consistent with its policy on decentralization. For example, PMO-RALG was fully involved when the M&E TWG examined the flow of information from LGAs to ASLMs in the ARDS. Likewise, when the LGMD2 was to be developed, the TWG paid due attention to harmonization across sectors and made sure that the development is approved by DICT, PMO-RALG. In Tanzania, some sectors develop a mechanism of its own involving LGAs but without fully consulting PMO-RALG. On the contrary, the M&E TWG fully respected the policy of PMO-RALG in improving the ARDS, which has been highly appreciated by them.

(4) Launching of national roll-out of the ARDS

The ARDS was rolled out to all the districts in Dodoma and Morogoro regions in February 2011, thanks to DFID's financial support through NBS. Similarly, officials in the DASIP participating districts in the Lake Zone were trained to operate the ARDS in January 2011. These were not anticipated when the TC started, and therefore they are a positive impact of the TC.

(5) Development of training guides

In response to the recommendations of the pilot regions / LGAs, the mid-term review and terminal evaluation of the TC, two training guides were developed for VAEO/WAEO and district officers, respectively. The guides were already used in several trainings and were improved based on the comments received. The guides have been appreciated by the officers of the pilot regions / LGAs as they make training easier and more effective. They will be fully used in the national ARDS roll-out.

(6) Strong ownership of the Government of Tanzania

The Government of Tanzania has a strong ownership of the activities pertaining to ARDS improvement. It has been the main activity of the M&E TWG since the TC started, and most expenses of the activities were supported by the government. There was no representative from NBS when the TC started, but eventually, one officer was nominated and regularly attended M&E activities. The pilot regions/LGAs also have strong ownership, which shows that the improved ARDS also meets their needs. It is also because the improvement has been undertaken in a participatory manner since the beginning.

(7) Harmonization of the mechanisms between the government and donors

In aid harmonization, it is encouraged that donors adopt the mechanisms of recipient countries as much as possible. The Shortlisted indicators in the ASDP M&E Framework are one of the mechanisms of the GoT. Some DPs have already adopted the same indicators in their own M&E systems. For example, the World Bank uses a result framework to monitor the progress of the ASDP. Most indicators in the framework are the same as the ASDP shortlisted indicators. This was made possible thanks to the efforts of the World Bank and the M&E TWG facilitated by RADAG (M&E). If the indicators were different, the government would have to collect the data for the indicators which have little value to them. Since the indicators have already been harmonized, all the government needs to do is simply to collect the data for its own indicators and share them with the DPs.

3.3. Lessons Learned from the TC

(1) Adoption of a participatory approach

The M&E TWG improved the ARDS in a very participatory manner. For example, in developing the Integrated Data Collection Format, the needs of ASLMs were consolidated. But the data are provided by LGAs, and therefore unless LGAs also need the data, they have little motivation to collect them. Thus, the TWG made sure that each indicator is needed by LGAs as well. Although this step was time consuming, the format now adequately meets the needs of LGAs as well as ASLMs, and they have a strong ownership

of the format.

The TC also made sure that all the activities are undertaken jointly by the officers of the M&E TWG and RADAG (M&E). Some M&E TWG members mentioned that they had never had a project in which both parties work as closely as this TC. In Tanzania, several mechanisms and software were developed with donor assistance, but some are not used after the projects. According to the GoT officers, it is because the officers were not fully involved in the process and the GoT does not have ownership of the mechanism. In this TC, the GoT officers always participated in the activities, which contributed to building a strong ownership of the output.

(2) Participation in all the activities of the M&E TWG

The primary task of the TC is to improve the ARDS, and RADAG (M&E) was supposed to work primarily on the activities pertaining to the task. However, the M&E TWG to which RADAG (M&E) belongs have a variety of activities, and ARDS improvement is a major but one of the activities. The title of the TC is "Technical Cooperation in Capacity Development for the ASDP M&E system", and GoT officials and DPs thought that the purpose of the TC is to support the activities of the M&E TWG in general. In this situation, RADAG (M&E), after consultation with JICA Tanzania Office, decided to assist all kinds of activities of the TWG as long as it can. As a result, about 30 percent of RADAG (M&E) work was those which are not directly related to ARDS improvement.

Working on all kinds of activities of the TWG has greatly enhanced the trust of the M&E TWG members on RADAG (M&E). In addition, as RADAG (M&E) worked on other activities, it earned a lot of insights and information which it would not have gained if it had worked solely on the ARDS. Thus, there has been a positive effect for RADAG (M&E). The logical framework of the TC was amended to include the activities not directly related to ARDS improvement at the mid-term review for the TC.

(3) Active communication with donors

Donor assistance to the agricultural sector in Tanzania has been conducted under aid harmonization / coordination. RADAG (M&E) actively communicated with a wide variety of stakeholders and participated in sector meetings. It informed the participants of the development of ASDP M&E and the activities of the M&E TWG. As a result, the activities of the M&E TWG have been known to a variety of stakeholders, which led to the support by DFID and AfDB to rolling out of the ARDS.

In LGMD2 development, the recommendations of a study conducted by an IT consultant were very important for the M&E TWG to decide to develop the software. This study was facilitated by the Embassy of Finland and the World Bank. Prior to the study, there were several meetings between the World Bank and RADAG (M&E). Without active communication, the study could have focused on something different. In ARDS roll out, a substantial amount of budget will be needed and it will be necessary for the M&E TWG to continue to communicate with DPs to seek financial / technical support.

(4) Information collection through JICA Tanzania office

In improving the ARDS, it was important to know how the data are transferred in other sectors and the policy of PMO-RALG toward decentralization (whether it is alright for each sector to have its own mechanism or one single mechanism to be used across sectors). In this regard, very useful information was available at the JICA Tanzania office. Information sharing through JICA office can be quite effective, particularly in a country like Tanzania where aid harmonization / coordination is actively pursued.

(5) Close communication with the officers in charge of agriculture at JICA Tanzania office

This TC is one of the two TCs aimed at supporting the implementation of the ASDP. It is under JICA's advisor to the ASDP and an officer in charge of agriculture at JICA Tanzania office, and a frequent communication between the two JICA officers and the two TCs has taken place. Every week the TC informed the JICA officers of current progress, challenges and way forward. On the other hand the advisor informed RADAG (M&E) of, among others, overall progress of the ASDP, activities of JICA and other donors in the agricultural sector. This close communication was very important for RADAG (M&E) in understanding the overall picture of the ASDP, which led to more effective and efficient implementation of the TC.

The TC decided to develop new software and purchase a server for LGMD2, although they had not been planned at the time of project formulation. The TC was able to deal with these challenges thanks to an immediate action taken by the JICA Tanzania office. It was possible because the advisor always understood the situation of the TC. Frequent communication with JICA office is very important in undertaking the TC.

(6) Being accountable to other donors for the works of the M&E TWG

There are 9 TWGs in the ASDP, and donors support key TWGs through the division of labor. JICA is in charge of the M&E TWG, and JICA's advisor shares the progress of the TWG with other donors at a monthly agricultural donor (A-WG) meeting. RADAG (M&E) prepares a memo summarizing the progress of the TWG and also supports the advisor in discussion at the A-WG.

Donors have been keen to ASDP M&E, and there has always been discussion related to it. Sometimes DPs commented that the M&E TWG is slow in carrying out its tasks or the data needed are not provided by the TWG. RADAG (M&E) in collaboration with JICA's advisor are required to respond to the questions and at the same time deliver DPs' messages to the M&E TWG. To help DPs better understand ASDP M&E, sometimes RADAG (M&E) met DPs individually or prepared a special memo to facilitate the explanation in A-WG meetings. JICA's advisor and RADAG (M&E) are accountable to the DPs for the works of the M&E TWG. Fulfilling this role was an important task in the TC.

(7) Difficulty due to involvement of many stakeholders

Involving a lot of stakeholders is not without difficulties. For example, when the development of LGMD2 was being examined, there were donors who were very careful in developing new software. Thus, although the development had been approved by PMO-RALG, the M&E TWG had to wait for more than 6 months

until recommendations of a study by an IT consultant became available. Likewise, there are many meetings, workshops and conferences in the agricultural sector, and it is difficult to participate in all of these. It is essential to have a good communication with a variety of stakeholders to carry out a TC in aid coordination / harmonization, but it is also important that you prepare well so that delay is minimized.

3.4. Challenges

In this section, first challenges which the M&E TWG may encounter in the upcoming national roll-out of the ARDS are discussed. Then challenges concerning overall ASDP M&E are explored.

3.4.1. ARDS National Roll-Out

(1) Follow up LGMD2

LGMD2 which transfers data from LGAs to ASLMs has been complete, but its verification has not been sufficient due to delay in LGMD2 development. An unforeseen problem might occur in the course of national roll-out. Good communication with the developer of the software (UCC) will need to be maintained. The LGMD2 operational and technical committees which are in charge of the operation and management of LGMD2 will be responsible for this task. There are six month free follow-up period, and the committees should make the most of it.

In addition, further improvement in the following areas will be needed in the near future.

- Synchronization is successfully conducted more frequently.
- Synchronization is done more quickly particularly at the district level.

(2) National roll out with deliberate preparation

Implementing the national roll-out plan of the ARDS will be one of the most important activities for the M&E TWG in the next few years. It will be a new challenge for the TWG as it will require careful preparation and good coordination with a wide variety of stakeholders including regions and districts.

Good financial management will also be important in two aspects. The first is to budget it appropriately in each office (ASLMs, regions and LGAs). The second is to obtain cash well in advance for each activity. The task of the M&E TWG is not only to budget and plan the activities appropriately at ASLMs but also to inform regions and LGAs of activities in advance so that they can obtain money (cash) in time for the activities.

(3) Increase in the number of VAEO/WAEO and improve their mobility

Most data transmitted in the ARDS originate in VAEO/WAEO. However, the number of VAEO/WAEO is not sufficient and, even if they are assigned, their mobility is limited. ASLMs have made substantial efforts to increase the number of extension officers, and as a result, it has increased significantly in the LGAs. In addition, mobility of the extension officers has been given priority, and most WAEO in the pilot LGAs will be equipped with motorbikes shortly. However, mobility of VAEO is still limited. Even for WAEO, the fuel for motorbike is not fully provided in many LGAs. Continued efforts to increase the number of extension officers and to facilitate their mobility are needed.

(4) Improve the quality of output data

The ARDS includes both output and outcome information, and it is necessary to improve the quality of both types of data. But first it should aim to improve the quality of output data. The M&E TWG has so far produced ASDP Baseline and Performance Reports three times, but the following constraints were observed.

- The quality of data submitted by LGAs through the questionnaire is low. Timely submission is also a problem.
- It takes a lot of time for the M&W TWG to compile data, analyze them and prepare a report.

As for the former, the M&E TWG improved the questionnaire every year and explained district officers how to fill it out. Most questions are concerned with output information such as the number of agricultural infrastructure and the number of extension officers trained, and therefore it should be easy to answer. However, there were many wrong answers. The TWG required DALDO's approval before submission and the quality has been improving since then, but overall the quality is not satisfactory.

When the ARDS is introduced, the questionnaire will be replaced by LGMD2. In the ARDS, the format used by VAEO/WAEO and the way of data consolidation at districts are standardized. In addition the officers in charge of data submission are specified. Thus, data quality is expected to improve. Priority should be given to complete the roll-out of the ARDS as soon as possible to ensure that output data are adequately collected, consolidated and transferred.

(5) Ensure smooth operation of daily activities

Smooth operation of daily activities is a prerequisite for good performance of any works including ARDS roll out. For example, to hold an M&E TWG meeting or workshop, the following actions, among others, are needed: the secretariat reserve a conference room, inform members of the meeting/workshop, print and copy the documents to be distributed, etc. However, sometimes it is difficult to carry out these activities smoothly. For example, members are not informed of the meeting well in advance due to a problem of internet access, telephones in the offices cannot make an outside call, facsimile machine is out of order, cannot find the document to be printed in your computer, print out a wrong (maybe old) document, there is no printing paper, a printer or a photocopying machine is out of order, there is a power cut, a vehicle you have reserved to go to the venue is used by someone else, the venue is occupied for other meeting, the meeting started late and now you have to leave in the middle of it. These involve both individual and organizational challenges, and some are even beyond ASLMs. It is true that the government has been putting a lot of efforts to prevent these things from happening, and actually much improvement has been observed as the TC is implemented.

In ARDS roll-out, these works will need to be operated smoothly not only at ASLMs but also with regions and LGAs. It is very important that at each administrative level, working conditions be improved so that daily activities are operated smoothly.

(6) Improve the environment for the use of computers and internet

For consolidating and analyzing agricultural data submitted by VAEO/WAEO, a good use of computers is

necessary. In many districts, however, the environment is not so friendly for computer users. For example, electricity blackout is frequent recently and computer viruses are rampant. As for the latter, even if an officer is very keen on scanning for the virus, his/her computer may be easily infected if he/she shares the computer with someone else. Anti-virus computer management should be taken care of not only by individual officers / departments / districts but also at a higher level. A clear guidance on anti-virus procedures should be developed by the central ministry in charge and implemented as soon as possible.

It is also important to have a stable access to internet. Mobile phone companies have expanded their service areas, and access to internet is now possible if we use wireless modems. However, access to internet is not so stable in some places. Likewise, some regional offices have LAN now, but the service is not stable, either. Some ASLMs also have the same problem. At present, an optical fiber network is being introduced in Tanzania, and it is important to continue these efforts so that officers have stable access to internet wherever they are.

3.4.2. Operationalization of the ASDP M&E

(1) Capture project-based outcome of the ASDP

As explained in chapter 1, there are two levels in effects of the ASDP: the effects of each ASDP / DADP project and overall agricultural performance as a sector. The ARDS and agricultural sample surveys primarily address the second aspect. At present the DADP Planning and Implementation TWG in collaboration with the M&E TWG is working on establishing a mechanism to capture the effects of each ASDP / DADP project. The mechanism will need to be in place as soon as possible. The information collected would include, but not limited to, the number of beneficiaries of the ASDP and the changes in the standards of living of farmers in addition to normal agricultural indicators such as production, productivity and use of improved technologies / mechanization. The changes in farmers' standards of living are typically first observed in the number of meals farmers take in a day, the materials used for their houses (the use of tin roofs etc.), and payment of school fees for their children. It is important to capture such information as they show the contribution of the ASDP to food security and poverty reduction.

(2) Review and revise the ASDP Shortlisted Indicators

The ASDP Shortlisted Indicators have been modified as the ASDP is implemented. These reviews and revisions will need to be continued to adequately address the development in the agricultural sector. For example, priority areas of new programs such as Kilimo Kwanza (Agriculture First), CAADP and SAGCOT will need to be taken into account. Likewise key policies in agricultural development such as commercial farming, irrigated farming and gender will also need to be reflected in the indicators. In this way, a wide variety of information will become available to decision makers, and thereby they will be able to examine their policies based on the "results". While it is important to capture a variety of aspects concerning agriculture, it is also important to minimize the number of indicators so that annual review is feasible.

(3) Improve data collection by extension officers

The extension officers of the pilot districts have been trained, and with effective supervision of the district officers, the rate of submission of VAEO/WAEO Format has been improving. However, the quality of data in the format will need to be improved to make the analysis more meaningful. For this purpose, the capacity of extension officers to measure and collect data as accurately as possible and keep the record will need to be enhanced through training. Some equipment may also need to be provided. The VAEO/WAEO training guide which explains a standard method for data collection may need to be further improved. Training of the district officers on effective supervision and guidance of the extension officers may also be needed.

(4) Improve data consolidation by district officers

With the introduction of the VAEO/WAEO Format, the volume of data the district officers receive from extension officers will increase. The district officers will need to be conversant with the use of Microsoft Excel in consolidating and managing the data properly. In addition, skills to manage many electronic files using folders in the computer are also important. The M&E TWG has developed a training guide for district officers and trained them with it. As a result, the capacity of the district officers to use Excel has been enhanced. But further improvement will be helpful.

(5) Improve data analysis at all administrative levels

Data collection is not an end. It is futile unless the data are effectively used for evaluation, planning and policy making. For this purpose, data analysis, interpretation and reporting to decision makers are very important. However, few LGAs conduct quantitative analysis in their DADPs so far. As for ASLMs, the data on the short-listed indicators have been collected, but the analysis still needs to be improved. Skills for report-writing will also need to be improved. In order to make the most of ARDS improvement, the capacity of the officers concerned to conduct a more in-depth analysis will need to be further improved.

(6) Examine how to obtain reliable outcome information of the ASDP

Collecting and analyzing outcome information of the ASDP is very important. The ASDP shortlisted indicators include several outcome indicators such as crop production and productivity (yield), the proportion of farmers that have adopted improved technologies and/or mechanization. Both the GoT and DPs require such information. The outcome information can be collected through the ARDS and/or agricultural sample surveys. In the ARDS, there are tables for outcome information such as production and productivity. However, there are many villages without VAEO and the mobility of VAEO/WAEO is very limited, and thus, the reliability of the outcome information in the ARDS is not so high. It will take a long time before the ARDS produces reliable outcome data[23].

Outcome information should be collected by means of sample surveys. At present, there are two types of

[23] The VAEO/WAEO training guide suggests that extension officers adopt random sampling method in estimating productivity (yield). But the roll out of the ARDS is expected to take a long time, and transportation facilities of VAEO/WAEO are limited. In addition, in the absence of VAEO in many villages, it is not certain to what extent random sampling method is being adopted by extension officers.

surveys: the National Sample Census of Agriculture (NSCA) and the National Panel Survey (NPS) both undertaken by NBS in collaboration with ASLMs. The NSCA is conducted every 5 year. But Tanzanian agriculture is very susceptible to weather, and the NSCA is not well designed to examine the effects of the ASDP partly because if the weather is unusual in survey year, it is extremely difficult to measure the effects of the ASDP. In addition, the next NSCA will be conducted in 2012/13, and the results will be released in around 2015. It will be too late to measure the progress of the ASDP which will end in June 2013. The NSCA is not so useful for estimating agricultural GDP, either[24]. Thus, the NPS which provides national level estimates on key agricultural indicators annually is expected to play an important role as a source of outcome information for the ASDP and also for computing agricultural GDP. However, there are concerns with regard to the NPS as the following.

- There is big discrepancy in the estimates of the NSCA and NPS although the two surveyed the same season in the same year (Table 3.4.1). Members of the M&E TWG asked NBS for clarification, but were told that it is due to differences in survey methods.

Table 3.4.1 Discrepancy in estimates between the National Sample Census of Agriculture and the National Panel Survey[25]

(Unit: ton)

Year, season	Crop	National Panel Survey	National Sample Census of Agriculture
2008 long rain	Maize	2,628,430	4,404,841
	Paddy	692,506	1,068,686
2007/08[26]	Maize	2,993,055	5,406,088
	Paddy	956,767	1,396,163

- The NPS is planned to be an annual survey, but it has not been so. It was first implemented in 2008/09, but it was not undertaken in 2009/10 due to budget shortage. At present (February 2010) the NPS for 2010/11 is being implemented. However, it is not certain if the NPS for 2011/12 is implemented.

It is important for the agricultural sector to obtain reliable outcome information annually at least for key indicators. But uncertainty concerning the NPS and big gaps between the two surveys are a serious setback. Some may propose to conduct a special (ad-hoc) survey in a limited area to obtain outcome information of the ASDP every year. However, it might be necessary to examine if this new survey is really needed when there are two types of surveys being conducted by the NBS, regardless of who bears the cost of the survey. It seems important to re-examine how agricultural sample surveys be conducted in such a way that the results of the survey meets the needs of the GoT and DPs.

[24] At present, NBS sends a questionnaire to LGAs every quarter to get information on key crops and their prices. The data source for the districts is agricultural monthly report submitted by VAEO/WAEO. However, the format is not standardized in most districts and there are VAEO/WAEO who fail to submit. The reliability of the information is very low.

[25] Discrepancies are found not only in crops but also in livestock.

[26] Annual production in 2007/08 is the sum of the production in 2008 long rain season and 2007 short rain season. The NSCA estimates are the sum of these two seasons. On the other hand, NPS was conducted from October 2008 to October 2009, and until March 2009, the amount of production in 2008 long rain season and 2007 short rain season were asked. After April 2009, however, the amount of production in 2008 long rain season and 2008 short rain season was asked. Thus, in a strict sense, annual estimates for NSCA and NPS are not comparable. On the contrary, it is safe to compare the estimates for 2008 long rain season.

ANNEX

Annex 1. Logical Framework Version 1

Title: Technical Cooperation in Capacity Development for the ASDP Monitoring and Evaluation-System
Target Area: Tanzania mainland
Target Groups: Agricultural officials of the Agricultural Sector Lead Ministries (ASLMs), Regional Secretariats (RSs), and LGAs (District, Wards and Villages)
Period: March 2008 to March 2011 (3 0 years)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal The ASDP is implemented effectively	The outcome indicators of the ASDP are evaluated as "satisfactory"	An evaluation document of the ASDP	
Overall Goal Agricultural routine data system is effectively used nationwide for Monitoring and Evaluation (M&E) of the ASDP	1 Agricultural routine data collected through the ARDS are analyzed in the Joint Implementation Reviews (JIR) and Agricultural Sector Reviews (ASR) 2 A number of the DADPs planned or revised based on the results of analyzing the data collected through the ARDS (# of DADPs / # of Districts)	1-1 Reports on JIRs and ASRs 1-2 Interviews with the GoT officials, consultants and DPs in charge of the reviews 2-1 Questionnaire to LGAs officials	Agricultural investments under the ASDP are implemented as programmed
Purpose An effective Agricultural Routine Data System (ARDS) of the ASDP M&E framework to be deployed from village to central levels is established	1 Results of analyzing the data collected through the revised ARDS are reflected in the planning and revising DADPs in all the pilot DADPs (for FY2011/12) 2 Punctuality and quality of routine agricultural reports of pilot Districts in Morogoro and Dodoma Regions submitted through the PMO-RALG to the sector ministries are evaluated as "satisfactory" by the officials concerned of the sector ministries 3 A plan for national deployment of the ARDS is included in the ASDP Annual Work Plan (for FY 2011/12)	1 Questionnaire and interviews with LGA officials 2 Questionnaires and interviews with ASLM officials concerned 3 The ASDP AWP for the FY 2011/12	The model of ARDS is authorized by the ASLMs Committee of Directors Training is implemented nationwide based on the deployment plan
Outputs			
1 A provisional model of the ARDS is developed by means of streamlining and coordinating ASLMs' routine data system	1-1 Comments of the stakeholders (*) are reflected in developing the provisional model of the ARDS 1-2 Completion of the provisional model of the ARDS (by March 2009)	1-1 Records of comments from the stakeholders 1-2 A report on the provisional model of the ARDS	Pilot districts and villages allocate and execute budgets necessary for collecting and reporting the agricultural routine data
2 Local Government officials concerned in the pilot districts in Morogoro and Dodoma Regions are conversant with how to operate the provisional model of the ARDS	2-1 All the relevant officials from villages to the RS levels in Morogoro and Dodoma Regions are trained on the provisional model of the ARDS 2-2 Degrees of understanding of the training participants	2-1 A list of training participants 2-2 Results of a test after the training	
3 The model of ARDS is completed by carrying out necessary modifications to the provisional model through implementation in the pilot districts in Morogoro and Dodoma Regions	3-1 A repot on the on-the-job training and assessment on the pilot implementation of the provisional model of the ARDS is submitted to the ASDP M&E WG meeting (by June 2010) 3-2 A report on the stakeholder workshop on the pilot implementation of the provisional model of the ARDS is submitted to the ASDP M&E WG meeting (by June 2010) 3-3 A repot on the model of the ARDS is completed (by June 2010)	3-1 A report on the On-the-Job Training and assessment on pilot implementation 3-2 A report on the stakeholder workshop 3-3 A report on the model ARDS	
4 The ASDP M&E guideline is improved to incorporate the revision of the ARDS through the results of pilot implementation	4-1 A plan for nationwide deployment of the ARDS including institutional arrangements and budget implication completed (by Oct 2010) 4-2 A revised ASDP M&E Guideline is submitted to the ASDP M&E WG meeting (by Nov 2010) 4-3 A revised ASDP M&E Framework Document is submitted to the ASDP M&E WG meeting if necessary (by Dec 2010)	4-1 A plan for nationwide deployment 4-2 The revised ASDP M&E Guideline 4-3 The revised ASDP M&E Framework Document	
5 Progress and achievements of the TC are shared with Central and Local Government officials and Development Partners	5-1 The progress and achievements are regularly shared in the ASDP M&E WG meetings 5-2 Records of reporting the progress and achievements to the ASDP M&E WG meetings in seminars, workshops, and meetings	5-1 Minutes of the ASDP M&E WG meetings 5-2 Records of the TC	

Activities	**Inputs Japanese Side**	**Inputs Tanzanian side**	
1-1 Prepare and finalize an ASDP M&E Baseline Report 1-2 Analyze in detail the practices of the current ARDS from villages to the ASLMs including the use of the PlanRep2 and the LGMD 1-3 Based on the results of 1-1 and 1-2 above, as part of the provisional model of the ARDS, draft common reporting formats to be used on each administrative level from villages to the ASLMs 1-4 Based on the results of 1-1 through 1-3 above, design a provisional model of the ARDS which includes a feedback mechanism to improve DADPs planning 1-5 Make necessary modifications to the PlanRep2 and LGMD in order to make them consistent with the provisional model of the ARDS if necessary 1-6 Convene a national workshop to solicit comments on the provisional model of the ARDS 2-1 Considering the consistency with the LGCDG and DADP systems, revise the M&E guideline to incorporate the provisional model of the ARDS 2-2 Select two pilot districts in Morogoro and Dodoma Regions, respectively 2-3 Based on the guidelines of 2-1 above, plan training on pilot implementation for the officials concerned at each administrative level from villages to the ASLMs 2-4 Provide the national level facilitators with training on the provisional model of the ARDS 2-5 Provide officials in Morogoro and Dodoma Regions with training on the provisional model of the ARDS 2-6 Provide officials in pilot districts (including ward and village agricultural extension officers) with training on the provisional model of the ARDS 3-1 Assist the officials of Morogoro and Dodoma Regions and pilot districts in implementing the provisional model of the ARDS through on-the-job training 3-2 Assess the punctuality, quality and consolidating process of the provisional model of the ARDS from villages in pilot districts to the ASLMs 3-3 Hold workshops for the officials concerned in the pilot distrcts in Morogoro and Dodoma Regions to identify the challenges of implementing the provisional model of the ARDS 3-4 Based on the results of pilot implementation, finalize the model of ARDS by carrying out necessary modifications to the provisional model 4-1 Based on the model of ARDS of 3-4 above, draft a plan for nationwide deployment of the ARDS 4-2 Based on the model of ARDS, revise the M&E guideline of 2-1 above 4-3 In line with the plan for nationwide deployment of 4-1 above and revised guideline of 4-2 above, revise the ASDP M&E Framework Document if necessary 5-1 Share the progress and achievements of the TC in the ASDP M&E Working Group meetings 5-2 Report the achievements of the TC in the sector level meetings including the ASDP Basket Fund Steering Committee 5-3 Present the achievements of the TC in the national workshops and seminars for local government officials held by the ASLMs	1 Assignment of Japanese Experts The experts with the following assignment titles and expertise will be assigned upon necessity: [Experts] - Chief adviser / institutional development - Deputy chief adviser / monitoring and evaluation 1 - Monitoring and evaluation 2 2 - Administrative data management 3 Allocation of operational costs of the TC 4 Provision of machinery and equipment Training of Tanzanian government officials involved in the TC in Japan and/or in third countries	1 Assignment of counter personnel and administrative personnel 2 Allocation of implementation costs for the TC such as salaries of task members and necessary expenses for training (ASDP Basket Fund) 3 Provision of working spaces and necessary facilities for Japanese experts to perform their duties in MAFC, PMO-RALG, Morogoro RS, and Dodoma RS	Should the government officials involved in the TC or officials in charge of operating the provisional model of the ARDS in the pilot RSs and LGAs transfer or retire from their positions, their successors shall take over their duties and know-how appropriately without delay **Pre-condition** The ASDP M&E Framework complete

(*) Note: The stakeholders shown in the indicator 1-1 above include: relevant departments of the ASLMs, Regional Secretariats, and LGAs in Morogoro and Dodoma Regions and DPs

Logical Framework Version 2

Title Technical Cooperation in Capacity Development for the ASDP Monitoring and Evaluation System
Target Area Tanzania mainland
Target Groups Agricultural officials of the Agricultural Sector Lead Ministries (ASLMs), Regional Secretariats (RSs), and LGAs (District, Wards and Villages)
Period March 2008 to March 2011 (3.0 years)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal The ASDP is implemented effectively.	The outcome indicators of the ASDP are evaluated as "satisfactory".	An evaluation document of the ASDP.	
Overall Goal Agricultural routine data system is effectively used nationwide for Monitoring and Evaluation (M&E) of the ASDP.	1 Agricultural routine data collected through the ARDS are analyzed in the Joint Implementation Reviews (JIR) and Agricultural Sector Reviews (ASR). 2 A number of the DADPs planned or revised based on the results of analyzing the data collected through the ARDS (# of DADPs / # of Districts).	1-1 Reports on JIRs and ASRs. 1-2 Interviews with the GoT officials, consultants and DPs in charge of the reviews. 2-1 Questionnaire to LGAs officials.	Agricultural investments under the ASDP are implemented as programmed.
Purpose An effective Agricultural Routine Data System (ARDS) of the ASDP M&E framework to be deployed from village to central levels is established.	1 Routine agricultural reports (latest version of WAEO/VAEO format & Integrated Data Collection Format) at each level (pilot Regions=Morogoro and Dodoma Regions/ 4 pilot Districts/ all the village and ward level at pilot Districts) are made available, and finally reach the central level (ASLMs officials). *Sub-indicators will be described below in order to assure the punctuality and quality of data in the reports. 1-1 ASLMs' Officials are able to access the data which are submitted by the pilot Districts through LGMD2. 1-2 Within the determined period, the pilot Regions check and approve the data which are submitted by the pilot Districts through LGMD2. 1-3 The 4 pilot districts check the data which are submitted byWAEO/VAEOs, and request respective WAEO/VAEOs to review mistaken figures and errors in order to improve the data. Within the determined period, required data is entered to LGMD2 utilizing the submitted format, and submit it to respective pilot Region in the form of "Integrated Data Collection Format". 1-4 Villages and ward extension officers submits data using the latest version of WAEO/VAEO format to respective District. 2 Progress and final results of ARDS development is reported to Committee of ASLMs Directors, and finally submitt	1(1) Interviews with LGA officials about the submission rate of WAEO/VAEO format. 1(2) Questionnaires and interviews with ASLM & Regional officials concerned. 1(3) Monthly/Quarterly/Annual reports submitted by WAEO/VAEOs 1(4) Quarterly/Annual Integrated Data Collection reports 1(5) LGMD2 Data 2 Minutes of the ASDP Basket Fund Steering Committee Meeting	The model of ARDS is authorized by the Committee of ASLMs Directors. Training is implemented nationwide based on the deployment plan.
Outputs			
1 A provisional model of the ARDS is developed by means of streamlining and coordinating ASLMs' routine data system.	1-1 Comments of the stakeholders (*) are reflected in developing the provisional model of the ARDS. 1-2 Completion of the provisional model of the ARDS (by June 2009).	1-1 Records of comments from the stakeholders. A report on the provisional model of the 1-2 ARDS.	Pilot districts and villages allocate and execute budgets necessary for collecting and reporting the agricultural routine data.
2 Local Government officials concerned in the pilot districts in Morogoro and Dodoma Regions are conversant with how to operate the provisional model of the ARDS.	2-1 All the relevant officials from villages to the RS levels in Morogoro and Dodoma Regions are trained on the provisional model of the ARDS. 2-2 Degrees of understanding of the training participants.	2-1 A list of training participants. 2-2 Results of a test after the training.	Members of ASDP M&E WG and the role is not changed drastically.
3 The model of ARDS is completed by carrying out necessary modifications to the provisional model through implementation in the pilot districts in Morogoro and Dodoma Regions.	3-1 A report on the on-the-job training and assessment on the pilot implementation of the provisional model of the ARDS is submitted to the ASDP M&E WG meeting (by June 2010). 3-2 A report on the stakeholder workshop on the pilot implementation of the provisional model of the ARDS is submitted to the ASDP M&E WG meeting (by June 2010). 3-3 A report on the model of the ARDS is completed (by September 2010).	3-1 A report on the On-the-Job Training and assessment on pilot implementation. 3-2 A report on the stakeholder workshop. 3-3 A report on the model ARDS.	
4 The ASDP M&E guideline is improved to incorporate the revision of the ARDS through the results of pilot implementation.	4-1 A plan for nationwide deployment of the ARDS including institutional arrangements and budget implication completed (before the completion of the Project). 4-2 A revised ASDP M&E Guideline is submitted to the ASDP M&E WG meeting (by Nov. 2010) 4-3 A revised ASDP M&E Framework Document is submitted to the ASDP M&E WG meeting, if necessary (by Dec. 2010).	4-1 A plan for nationwide deployment. 4-2 The revised ASDP M&E Guideline. 4-3 The revised ASDP M&E Framework Document.	
5 A wide range of capacities of M&E Thematic Working Group are enhanced for smooth and effective operation of all M&E related activities under the ASDP.	5-1 ASDP M&E Baseline and Progress Reports equipped with necessary information & data are completed by the officials of the M&E WG, and those reports are submitted to the Committee of ASLMs Directors. 5-2 ASDP M&E WG meetings are held regularly, and do better coordinating and management (i.e. Numbers of WG meetings, Minutes of the meetings, Participants list).	5-1 ASDP Baseline and Progress Reports. 5-2 Minutes of the ASDP M&E WG meetings.	
6 Progress and achievements of the TC are shared with Central and Local Government officials and Development Partners.	6-1 The progress and achievements are regularly shared in the ASDP M&E WG meetings. Records of reporting the progress and achievements to the ASDP M&E WG meetings in seminars, workshops, and 6-2 meetings.	6-1 Minutes of the ASDP M&E WG meetings. 6-2 Records of the TC.	

Activities	**Inputs Japanese Side**	**Inputs Tanzanian side**	
1-1 Analyze in detail the practices of the current ARDS from villages to the ASLMs including 1-2 the use of the LGMD. Based on the results of 1-1 and 1-2 above, as part of the provisional model of the ARDS, 1-3 draft common reporting formats to be used on each administrative level from villages to the ASLMs. Based on the results of 1-1 through 1-3 above, design a provisional model of the ARDS 1-4 which includes a feedback mechanism to improve DADP planning. Make necessary modifications to the LGMD or develop a new software in order to make it 1-5 consistent with the provisional model of the ARDS. Convene a national workshop to solicit comments on the provisional model of the ARDS 2-1 Considering the consistency with the LGDG and DADP systems, revise the M&E guideline to incorporate the provisional model of the ARDS. 2-2 Select two pilot districts in Morogoro and Dodoma Regions, respectively. 2-3 Based on the guidelines of 2-1 above, plan training in pilot implementation for the officials concerned at each administrative level from villages to the ASLMs. 2-4 Provide the national level facilitators with training in operating the provisional model of the ARDS. 2-5 Provide officials in Morogoro and Dodoma Regions with training in operating the provisional model of the ARDS. 2-6 Provide officials in pilot districts (including ward and village agricultural extension officers) with training in operating the provisional model of the ARDS. 3-1 Assist the officials of Morogoro and Dodoma Regions and pilot districts in implementing the provisional model of the ARDS through on-the-job training. 3-2 Assess the punctuality, quality and consolidating process of the provisional model of the ARDS from villages in pilot districts to the ASLMs. 3-3 Hold workshops for the officials concerned in the pilot districts in Morogoro and Dodoma Regions to identify the challenges of implementing the provisional model of the ARDS. Based on the results of pilot implementation, finalize the model of ARDS by carrying out 3-4 necessary modifications to the provisional model. 4-1 Based on the model of ARDS of 3-4 above, draft a plan for nationwide deployment of the ARDS. 4-2 Based on the model of ARDS, revise the M&E guideline of 2-1 above. 4-3 In line with the plan for nationwide deployment of 4-1 above and revised guideline of 4-2 above, revise the ASDP M&E Framework Document, if necessary. 5-1 Assist the Secretariat of the ASDP M&E Working Group in planning and implementing the M&E WG meetings. 5-2 Prepare and finalize an ASDP M&E Baseline Report. 5-3 Assist the officials of the M&E WG in preparing and finalizing ASDP M&E Progress 5-4 Reports. Participate in the activities of the ASDP (e.g., Joint Implementation Reviews) as a member 5-5 of the ASDP M&E WG. Assist the officials of the M&E WG in preparing concept notes for rapid appraisal 5-6 agricultural survey (RAAS). Provide technical advices to the officials of the M&E WG in disseminating ARDS in other areas according to the requests from GoT. 6-1 Share the progress and achievements of the TC in the ASDP M&E Working Group meetings. 6-2 Report the achievements of the TC in the sector level meetings including the ASDP Basket Fund Steering Committee. 6-3 Present the achievements of the TC in the national workshops and seminars for local government officials held by the ASLMs.	1 Assignment of Japanese Experts The experts with the following assignment titles and expertise will be assigned upon necessity [Experts] - Chief adviser / institutional development - Deputy chief adviser / monitoring and evaluation 1 - Monitoring and evaluation 2 - Administrative data management Allocation of operational costs of the TC. 2 Provision of machinery and equipment 3 Training of Tanzanian government officials involved in the TC in Japan and/or in third countries. 4	1 Assignment of counter personnel and administrative personnel. 2 Allocation of implementation costs for the TC such as salaries of task members and necessary expenses for training (ASDP 3 Basket Fund). Provision of working spaces and necessary facilities for Japanese experts to perform their duties in MAFC, PMO-RALG, Morogoro RS, and Dodoma RS.	Should the government officials involved in the TC or officials in charge of operating the provisional model of the ARDS in the pilot RSs and LGAs transfer or retire from their positions, their successors shall take over their duties and know-how appropriately without delay. **Pre-condition** The ASDP M&E Framework complete.

Note (*) The stakeholders shown in the indicator 1-1 above include relevant departments of the ASLMs, Regional Secretariats, and LGAs in Morogoro and Dodoma Regions and DPs.

Annex 2. List of Inputs

2-1. Inputs from Tanzanian Side

(1) Arrangement of C/P personnel

The ASDP Monitoring and Evaluation Thematic Working Group (M&E TWG) was the counterpart of the TC. The M&E TWG is composed of 28 members as shown below.

Name of C/P	Position of C/P	Speciality of C/P
Charles Wambura	MAFC, DPP, Assistant director/ M&E TWG Secretariat	Economics
John Maige	MAFC, DPP/ M&E WG Secretariat	Economics
Irene Lucas	MAFC, DPP/ M&E WG Secretariat	Agriculture
Elias Masunga	MAFC, DPP	Economics
Oswald Ruboha	MAFC, DPP	Statistics
A. Lamosai	MAFC, DPP → Retired in 2009	Agriculture
Jumanne Msuya	MAFC, DPP	Economics
Robert Chacha	MAFC, DPP	Economics
Malemi S.M Nyanda	MAFC, DPP	Statistics
Tumaini S. Maganga	MAFC, DPP	Economics
Happy Pascal	MAFC, DPP	Economics
Norman Mushi	MAFC, DITS	Economics
Loyce Lubonera	MAFC, DITS	Economics
Catherine Joseph	MLDF, DPP, Director/ Chair person of M&E TWG	Economics
Sophia Mlote	MLDF, DPP	Economics
Furaha Kabuje	MLDF, DPP → Secretary of the Minister (since 2011)	Economics
Da Silva Mlau	MLDF, DPP → On leave (since 2011)	Statistics
Stephen Michael	MLDF, DPP	Economics
Antony M. Abel	MLDF, DPP	Statistics
Julian Gutta	MIT, DTM → Retired in 2010	Economics
Genya C. Genya	MIT, DTM	Statistics
Chassama John	MIT, DTM	Economics
Exaud Kigahe	MIT, DPP	Statistics
R. Mwaliko	PMO-RALG, DSC, Agricultural unit	Agriculture
Cyplian Mpemba	PMO-RALG, DICT, Assistant director	Evaluation
Yasinta Tabu	PMO-RALG, DICT	Statistics
Joyce Urasa	NBS	Statistics
Israel Mwakilasa	DASIP	M&E

(2) Allocation of Local Cost

Most expenses of the activities in the TC (trainings, workshops, field visits etc.) were supported by the Government of Tanzania. The total amount is estimated at Tsh 220,429,000.

FY	Item	Responsibility	Estimated amount
2008/09	Workshop expenses（November）	ASLMs	Tsh 2,300,000
	Workshop expenses (March)	LGAs	Tsh 55,440,000
	Workshop expenses (March)	ASLMs	Tsh 10,130,000
	Training expenses (April)	MIT	Tsh 7,076,000
	Training expenses (May-June)	MIT	Tsh 10,970,000
	Photocopy for WAEO/VAEO Format	MIT	Tsh 1,500,000
2009/10	Workshop expenses (September)	LGAs	Tsh 10,840,000

	Workshop expenses (September)	ASLMs	Tsh 4,410,000
	Backstopping training expenses (February)	Pilot LGAs	Tsh 3,722,000
	Backstopping training expenses (February)	ASLMs	Tsh 9,765,000
	Regional workshops expenses (June)	Pilot LGAs	Tsh 78,960,000
	Regional workshops expenses (June)	ASLMs	Tsh 18,274,300
2010/11	Workshop expenses (December)	ASLMs	Tsh 7,042,000
		In total	**Tsh 220,429,300**

(3) Other Bearings from Tanzania Side

MAFC DPP and PMO-RALG DICT provided an office space for the TC within their ministry buildings, respectively. In addition, they provided vehicles for field trips as necessary.

2-2. Inputs from Japanese Side

Inputs from the Government of Japan have been made as planned.

(1) Dispatch Japanese Experts

Name of the expert	Profession	Duration of dispatch
Michio Watanabe	Chief adviser/ Institutional development	- 24 March-21 June, 2008 (90 days) - 18 August-26 September, 2008 (40 days) - 11 November-20 December, 2008 (40 days) - 5 January-10 April, 2009 (80 days) - 15 May-27 June, 2009 (60 days) - 17 August-4 November, 2009 (80 days) - 14 February-20 March, 2010 (35 days) - 9 April-25 June, 2010 (78 days) - 16 Aug – 8 Oct, 2010 (54 days) - 23 Oct – 18 Dec, 2010 (57 days) - 24 Jan – 18 Mar, 2011 (54 days)
Ryo Sasaki	Monitoring and evaluation 1	- 12 May-19 June, 2008 (40 days) - 18 September-16 November, 2008 (60 days) - 16 March-14 May, 2009 (60 days) - 25 October-23 December, 2009 (60 days) - 21 January-21 March 2010 (60 days) - 6 Sep – 4 Nov, 2010 (60 days)
Mana Takasugi	Monitoring and evaluation 2	- 15 September-13 December, 2008 (90 days) - 2 April-20 June, 2009 (80 days) - 17 August-18 October, 2009 (63 days) - 1 February- 17 April 2010 (76 days) - 5 May-19 June, 2010 (46 days)
Naomi Imase	Monitoring and evaluation 2	- 22 Oct – 18 Dec, 2010 (58 days) - 16 Jan – 5 Mar, 2011 (49 days)
Kyoko Akasaka	Administrative data management/ Programme administration	- 24 March-21 June, 2008 (90 days) - 18 August-20 December, 2008 (125 days including 35 days for programme administration) - 12 January-20 June, 2009 (160 days including 10 days for programme administration) - 16 October-20 December, 2009 (66 days) - 13 January-19 June 2010 (158 days including 19 days for programme administration)

Name of the expert	Profession	Duration of dispatch
		- 9 Aug – 28 Oct, 2010 (81 days including 8 days for programme administration) - 14 Nov – 23 Dec, 2010 (40 days for programme administration) - 11 Jan – 18 Mar, 2011 (67 days)

(2) Acceptance of Trainees in Japan

FY	Name of trainee	Duration	Field	Training institution	Contents of the training
2009/10	John Maige Sophia Mlote Julian Gutta Ramadhani Mwaliko	25 Oct-9 Nov, 2008	Counterpart training	JICA Tsukuba	Monitoring and evaluation system and data collection system in Japan
	Charles Wambura	22 Jul-6 Sep, 2008	JICA training course	JICA Tsukuba	Planning and Designing of Agricultural Statistics for Agricultural Policy Making
2010/11	Robert Chacha Furaha Kabuje Exaud Kigahe Yasinta Tabu	26 Sep-11 Oct, 2009	Counterpart training	JICA Tsukuba	Monitoring and evaluation system and data collection system in Japan
	Da Silva Mlau	23 Aug-10 Oct, 2009	JICA training course	JICA Tsukuba	Planning and Designing of Agricultural Statistics for Agricultural Policy Making
	Malemi Nyanda	17 Jan-22 Apr, 2010	JICA training course	JICA Obihiro	IT system techniques for agriculture
2010/11	Norman Mushi	22 Aug-9 Oct, 2010	JICA training course	JICA Tsukuba	Planning and Designing of Agricultural Statistics for Agricultural Policy Making
	Genya C. Genya	16 Jan-24 Apr, 2011	JICA training course	JICA Obihiro	IT system techniques for agriculture

(3) Provision and Procurement of Equipment

Date of arrival	Date of inspection	Name of equipments	Model	Maker	Place	No of equipment	Status/ Condition
18,Mar,08	18,Mar,08	Projector	EMP-X5	Epson	MAFC, DPP	1	Good
18,Mar,08	18,Mar,08	Projector	EMP-X5	Epson	PMO-RALG, DICT	1	Good
18,Mar,08	18,Mar,08	Digital camera	Optio E50	Pentax	MAFC, DPP	1	Good
18,Mar,08	18,Mar,08	Digital camera	Optio E50	Pentax	PMO-RALG, DICT	1	Good
10,Jun,08	10,Jun,08	Computer	A205-S5801	Toshiba	MAFC, DPP	2	Good
10,Jun,08	10,Jun,08	Computer	A205-S5801	Toshiba	PMO-RALG, DICT	2	Good
10,Jun,08	10,Jun,08	Printer	Laser Jet P2015dn	HP	MAFC, DPP	1	Good
10,Jun,08	10,Jun,08	Printer	Laser Jet P2015dn	HP	PMO-RALG, DICT	1	Good
10,Jun,08	10,Jun,08	Back up UPS		APC	MAFC, DPP	2	Good
10,Jun,08	10,Jun,08	Back up UPS		APC	PMO-RALG, DICT	2	Good
10,Jun,08	10,Jun,08	Fax	3050	HP	MAFC, DPP	1	Good
10,Jun,08	10,Jun,08	Fax	3050	HP	PMO-RALG,	1	Good

Date of arrival	Date of inspection	Name of equipments	Model	Maker	Place	No of equipment	Status/ Condition
					DICT		
10,Jun,08	10,Jun,08	Software	Office 2007 Professional	Microsoft	MAFC, DPP	2	Good
10,Jun,08	10,Jun,08	Software	Office 2007 Professional	Microsoft	PMO-RALG, DICT	2	Good
19,Jun,08	19,Jun,08	Photocopier	iR2022	Canon	MAFC, DPP	1	Good
19,Jun,08	19,Jun,08	Stabilizer			MAFC, DPP	1	Good
5,Jun,08	5,Jun,08	Desk			MAFC, DPP	5	Good
18,Nov,08	18,Nov,08	Photocopier	iR2022	Canon	PMO-RALG, DICT	1	Good
18,Nov,08	18,Nov,08	Stabilizer			PMO-RALG, DICT	1	Good
01,Dec,08	01,Dec,08	Computer	Optiplex 330	Dell	Morogoro DC	1	Good
01,Dec,08	01,Dec,08	Computer	Optiplex 330	Dell	Kilosa	1	Good
01,Dec,08	01,Dec,08	Computer	Optiplex 330	Dell	Mpwapwa	1	Good
01,Dec,08	01,Dec,08	Computer	Optiplex 330	Dell	Kondoa	1	Good
01,Dec,08	01,Dec,08	Computer	Optiplex 330	Dell	Morogoro RS	1	Good
01,Dec,08	01,Dec,08	Computer	Optiplex 330	Dell	Dodoma RS	1	Good
01,Dec,08	01,Dec,08	Printer	Laser Jet P2015dn	HP	Morogoro DC	1	Good
01,Dec,08	01,Dec,08	Printer	Laser Jet P2015dn	HP	Kilosa	1	Good
01,Dec,08	01,Dec,08	Printer	Laser Jet P2015dn	HP	Mpwapwa	1	Good
01,Dec,08	01,Dec,08	Printer	Laser Jet P2015dn	HP	Kondoa	1	Good
01,Dec,08	01,Dec,08	Printer	Laser Jet P2015dn	HP	Morogoro RS	1	Good
01,Dec,08	01,Dec,08	Printer	Laser Jet P2015dn	HP	Dodoma RS	1	Good
01,Dec,08	01,Dec,08	Back up UPS		APC	Morogoro DC	1	Good
01,Dec,08	01,Dec,08	Back up UPS		APC	Kilosa	1	Good
01,Dec,08	01,Dec,08	Back up UPS		APC	Mpwapwa	1	Good
01,Dec,08	01,Dec,08	Back up UPS		APC	Kondoa	1	Good
01,Dec,08	01,Dec,08	Back up UPS		APC	Morogoro RS	1	Good
01,Dec,08	01,Dec,08	Back up UPS		APC	Dodoma RS	1	Good
01,Dec,08	01,Dec,08	Software	Office 2007 Professional	Microsoft	Morogoro DC	1	Good
01,Dec,08	01,Dec,08	Software	Office 2007 Professional	Microsoft	Kilosa	1	Good
01,Dec,08	01,Dec,08	Software	Office 2007 Professional	Microsoft	Mpwapwa	1	Good
01,Dec,08	01,Dec,08	Software	Office 2007 Professional	Microsoft	Kondoa	1	Good
01,Dec,08	01,Dec,08	Software	Office 2007 Professional	Microsoft	Morogoro RS	1	Good
01,Dec,08	01,Dec,08	Software	Office 2007 Professional	Microsoft	Dodoma RS	1	Good
01,Dec,08	01,Dec,08	Antivirus software	Anti Virus 2009	Norton	Morogoro DC	1	Expired
01,Dec,08	01,Dec,08	Antivirus	Anti Virus	Norton	Kilosa	1	Expired

Date of arrival	Date of inspection	Name of equipments	Model	Maker	Place	No of equipment	Status/ Condition
		software	2009				
01,Dec,08	01,Dec,08	Antivirus software	Anti Virus 2009	Norton	Mpwapwa	1	Expired
01,Dec,08	01,Dec,08	Antivirus software	Anti Virus 2009	Norton	Kondoa	1	Expired
01,Dec,08	01,Dec,08	Antivirus software	Anti Virus 2009	Norton	Morogoro RS	1	Expired
01,Dec,08	01,Dec,08	Antivirus software	Anti Virus 2009	Norton	Dodoma RS	1	Expired
30,Jan,09	30,Jan,09	Car	PAJERO GL 5-Door	MITSUBISHI	MAFC, DPP	1	Good
30,Jan,09	30,Jan,09	Car	PAJERO GL 5-Door	MITSUBISHI	PMO-RALG, DICT	1	Good
16,Nov,09	16,Nov,09	Wireless Modem	EC121 CDMA 1X	HUAWEI	Morogoro DC	1	Good
16,Nov,09	16,Nov,09	Wireless Modem	EC121 CDMA 1X	HUAWEI	Morogoro RS	1	Good
16,Nov,09	16,Nov,09	Wireless Modem	EC121 CDMA 1X	HUAWEI	Dodoma RS	1	Good
16,Nov,09	16,Nov,09	Wireless Modem	K3565-Z	Vodafone	Kondoa	1	Good
16,Nov,09	16,Nov,09	Wireless Modem	K3565-Z	Vodafone	Mpwapwa	1	Good
16,Nov,09	16,Nov,09	Wireless Modem	K3565-Z	Vodafone	Kilosa	1	Good
21,Jan,10	21,Jan,10	Motorbike	TF125	SUZUKI	Morogoro DC	1	Good
21,Jan,10	21,Jan,10	Motorbike	TF125	SUZUKI	Kilosa	1	Good
21,Jan,10	21,Jan,10	Motorbike	TF125	SUZUKI	Kondoa	1	Good
21,Jan,10	21,Jan,10	Motorbike	TF125	SUZUKI	Mpwapwa	1	Good
17,Mar,10	17,Mar,10	Server	DL385G6	HP	MAFC	1	Good
28,May,10	28,May,10	Software for server	Windows Server 2008 R2 Enterprise	HP	MAFC	1	Good

(4) Bearing Cost from Japanese Side

The total expense for the TC activities was 27,186,000 yen (equivalent to Tsh 503,444,000). This includes operating costs (e.g. hiring of secretary / drivers, maintaining office equipments, purchasing office supplies etc.), procurement of equipment, training / workshop expenses and allowances for field trips. The year-wise expenses are shown below.

FY	Amount
2007/08 (March-June 2008)	2,315,000 yen
2008/09 (August 2008-June 2009)	8,342,000 yen
2009/10 (August 2009-June 2010)	12,869,000 yen
2010/11 (August 2010-March 2011)	3,660,000 yen
In total	**27,186,000 yen**
In Tanzania Shillings	**Tsh 503,444,000**

Tsh1=0.054 yen (exchange rate as of 1 March, 2011)

Annex 3.1 Integrated Data Collection Format (Quarterly)

THE UNITED REPUBLIC OF TANZANIA

AGRICULTURAL SECTOR DEVELOPMENT PROGRAMME (ASDP)

FORMAT FOR INTEGRATED DATA COLLECTION

QUARTERLY

Version 28 December 2010

IDENTIFICATION DETAILS

Region _____

District _____

Quarter _____

First Quarter: *(July - September)*

Second Quarter: *(October - December)*

Third Quarter: *(January - March)*

Fourth Quarter: *(April - June)*

Financial Year _____

Name (contact person) _____

Address *P.O.Box* _____

E-mail _____

Mobile _____

Date of submission _____

ASDP Monitoring & Evaluation Thematic Working Group
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Format for Integrated Data Collection (Quarterly)

Name of LGA: _____ Quarter: _____ Financial Year: _____

Important note: This note applies to all the questions in this format unless otherwise specified.

1. **If the item in question does not exist in your LGA, write 0 (zero).**
2. **If the item exists in your LGA, write the best estimated number.**
3. **Otherwise, leave the cell blank.**
4. **Comments on data accuracy and/or data sources can be stated in remarks or in separate text boxes.**
5. **Use national standard measurement in all tables where applicable.**
6. **Please read the instruction in each table carefully before data entry.**

1 Types of Crops Grown, Planted Area and Total Production

Name of Crop	Planted Area (Hectare)		Production Qty (Ton)		Remarks
	Annual Target	Achieved to Date	Annual Target	Achieved to Date	
(i)	(ii)	(iii)	(iv)	(v)	(vi)
1.1: Cereals					
Maize					
Paddy					
Sorghum					
Bulrush Millet					
Finger Millet					
Wheat					
Barley					
1.2: Roots and Tubers					
Cassava					
Sweet Potato					
Irish Potato					
Yam					
Coco Yam					
1.3: Industrial Crops					
Seed Cotton					
Tobacco					
Coffee					
Tea					
Pyrethrum					
Cocoa					
Rubber					
Wattle					
Sugar Cane					
Jute					
Sisal					
Cashew nut					
1.4: Oil Crops					
Sunflower					
Simsim/ Sesame					
Groundnut					
Palm Oil					
Coconut					
Soya Bean					
Castor Oil Seed					
Jatropha					
1.5: Pulses					
Cow Pea (Kunde)					
Pigeon Pea (Mbaazi)					
Green/Black Gram (Choroko)					
Garden Pea (Njegere)					
Chick Pea/ Lenti (Dengu)					
Bambara Nut (Njugu Mawe)					
Bean (Maharage)					

Note: (i) If you have other crops than those listed above, please write their names in "1.10 others".

(ii), (iv) Annual target should be set at the beginning of the year (July).
Write how you set the target values in the Remarks.

(iii) Planted area achieved to date is defined as total planted area from July to the end of the quarter.

(v) Total production achieved to date is defined as the sum of production from July to the end of the quarter.
In the 4th quarter report, write the estimated amount of production in this crop year (Vuli and Masika).

Name of Crop	Planted Area (Hectare)		Production Qty (Ton)		Remarks
	Annual Target	Achieved to Date	Annual Target	Achieved to Date	
(i)	(ii)	(iii)	(iv)	(v)	(vi)
1.6 Spices					
Ginger (Tangawizi)					
Black Pepper (Pilipili Manga)					
Coriander (Giligiliani)					
Cinnamon (Mdalasini)					
Turmeric (Binzali)					
Vanilla					
Chilli Pepper (Pilipili kali)					
Clove (Karafuu)					
Garlic (Vitunguu swaumu)					
Cardamom (liki)					
Paprika					
1.7 Vegetables					
Cucumber (Matango)					
Mushroom (Uyoga)					
Cauliflower					
Cabbage					
Amaranthus (Mchicha)					
Spinach					
Chinese Cabbage					
Tomato					
Eggplant (Biringanya)					
Onion					
Sweet Pepper (Pilipili hoho)					
Carrot					
African Eggplant (Nyanyachungu)					
Black Night Shade (Mnafu)					
Kale (Figiri)					
Leek					
Swiss Chard (Salad)					
Okra (Bamia)					
1.8 Fruits					
Sweet Banana					
Banana (Plantain)					
Mango					
Paw paw					
Orange					
Tangerine (Machenza)					
Guava (Mapera)					
Apple					
Pineapple					
Avocado (Parachichi)					
Water Melon (Tikiti maji)					
Lemon (Limau)					
Lime (Ndimu)					
Plum (Tunda damu)					
Pear					
Passion Fruit					
1.9 Flowers					
Rose					
Chrysanthemum					
Carnation					
Aster					
Gypsophylla					
Ginger rose					
Helisianthus					
1.10 Others					
Rosella					

Note: (i) If you have other crops than those listed above, please write their names in "1.10 others".

(ii), (iv) Annual target should be set at the beginning of the year (July).
Write how you set the target values in the Remarks.

(iii) Planted area achieved to date is defined as total planted area from July to the end of the quarter.

(v) Total production achieved to date is defined as the sum of production from July to the end of the quarter.
In the 4th quarter report, write the estimated amount of production in this crop year (Vuli and Masika).

2 Plant Health Services

Name of Pests/Diseases (i)	Name of Crop Affected (ii)	Severity (large, average, small) (iii)	Area Attacked (ha) (iv)	Number of Villages Attacked (v)	Name of Pesticide Applied (vi)	Amount of Pesticide applied (kg/litre) (vii)	Number of Villages Served (viii)	Number of Households Received Service (ix)	Area Rescued (ha) (x)	Comments (xi)
Total for this quarter										

Note: (i) Write the name of the pest/disease broke out during the quarter.
(ii) Write the name of crop affected by the pest/disease. Use one row for each crop.
(vi) Write the name of the most applied pesticides.
(x) Area rescued is estimated based on the number of households received service (ix).

3. Livestock/ Products Movement

3 (a) Livestock Movement

Type of Livestock (i)	Animals moved into the district from other areas			Animals moved to other areas from the districts			Animals translocated within the district	
	Non-trade (ii)	Trade		Non-trade (v)	Trade		Non-trade (viii)	Trade (ix)
		From other LGAs in Tanzania (iii)	From other countries (imported) (iv)		To other LGAs in Tanzania (vi)	To other countries (exported) (vii)		
Cattle (number)								
Sheep (number)								
Goat (number)								
Pig (number)								
Other (specify)								

Note: (ii), (v) and (viii) Non-trade includes the movement of animals looking for pasture/ranch and for the purpose of dowry.
(viii) and (ix) t means movement of animals from one place in a district to another place in the same district.

3 (b) Livestock Products Movement

(i)	Livestock products movement in the district		
	Products sold within the district (ii)	Products sold to other districts (iii)	Products sold to other countries (exported) (iv)
Beef (kg)			
Others (specify)			

4. Livestock Slaughtered (Short-listed indicator OC2)

Type of Livestock (i)	Total number		Total carcass weight (kg)	
	This quarter (ii)	Cumulative to date* (iii)	This quarter (iv)	Cumulative to date* (v)
Cattle				
Sheep				
Goat				
Pig				
Chicken (local)				
Chicken (improved)				
Others (specify)				

Note: Information on chicken can be collected at the markets and slaughter houses. Domestic consumption is not included.
Note: * Please write the amount cumulative from the 1st quarter.

5. Meat Inspection/ Hygiene

Type of Animal (i)	Number affected (ii)	Condemnations	
		Reasons for Condemnations (iii)	Number of cases for each reason (iv)

Note: (iii) Please write a reason (name of disease) in each row.

6. Marketing of Livestock Products

6 (a) Meat from Commercial Farms

Type of Product (i)	Volume Handled						Comments (viii)
	Warm		Chilled		Frozen		
	This Quarter (ii)	Cumulative to Date* (iii)	This Quarter (iv)	Cumulative to Date* (v)	This Quarter (vi)	Cumulative to Date* (vii)	
Beef (kg)							
Goat Meat (kg)							
Mutton (kg)							
Pork (kg)							
Indigenous Chicken Meat (kg)							
Improved Chicken Meat (kg)							

Note: * Please write the amount cumulative from the 1st quarter.

6 (b) Milk

Type of Product (i)	This Quarter (ii)	Cumulative to Date* (iii)
Milk- Indigenous Cattle (litre)		
Milk - Dairy Cattle (litre)		
Cheese (kg)		
Butter (kg)		
Ghee (kg)		

Note: Focus on the amount of products marketed. Domestic consumption is not included.

Note: * Please write the amount cumulative from the 1st quarter.

6 (c) Hide and Skin

Type of Product (i)	Raw (piece)				Processed (piece)	
	Dry Suspended		Dry Salted		Wet Blue	
	This Quarter (ii)	Cumulative to Date* (iii)	This Quarter (iv)	Cumulative to Date* (v)	This Quarter (vi)	Cumulative to Date* (vii)
Hide						
Skin						

Note: * Please write the amount cumulative from the 1st quarter.

(vi) Wet blue: semi finished leather.

7 (a) Animal Feeds, Acaricides, Vaccines and Treatment

Generic Name (i)	Trade name (ii)	Source (iii)	Measure-ment Unit (iv)	Quarterly Requirement (v)	Quarterly Amount Used (vi)	Low Price (vii)	High Price (viii)	Remarks (ix)
Animal Feeds								
Acaricides								
Vaccines								
Treatment (Drugs)								

Note: (i) Animal feeds include hey, silage, concentrates, etc.

(i), (ii) Write the most common generic and trade names in each category.

(iii) Source= government subsidy or privately acquired

(iv) Measurement Unit should be standard unit - kg, litre, dose etc.

(vi) Amount used is estimated from subsidies and VAEO/WAEO report.

(vii)~(viii) Low and high prices are retail prices.

7 (b). Inputs for reproduction of improved livestock

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				

Note: (iii) and (iv) Number of doses for semen; numbers for bulls and heifer.

Annex 3.1 Integrated Data Collection Format (Annual)

THE UNITED REPUBLIC OF TANZANIA

AGRICULTURAL SECTOR DEVELOPMENT PROGRAMME (ASDP)

FORMAT FOR INTEGRATED DATA COLLECTION

ANNUAL

Version February 2011

IDENTIFICATION DETAILS

Region _____

District _____

Financial Year _____

Name (contact person) _____

Address *P.O.Box* _____

E-mail _____

Mobile _____

Date of submission _____

ASDP Monitoring & Evaluation Thematic Working Group
P.O.Box 9192, Dar es Salaam
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Format for Integrated Data Collection (Annual)

Name of LGA: _____ Financial Year: _____

Number of wards in LGA: _____

Number of villages* in LGA: _____ * if it is a town, please write number of mitaa.

Number of household: _____

Number of household engaging in agriculture: _____

Important note: This note applies to all the questions in this format unless otherwise specified.

1. **If the item in question does not exist in your LGA, write 0 (zero).**
2. **If the item exists in your LGA, write the best estimated number.**
3. **Otherwise, leave the cell blank.**
4. **Comments on data accuracy and/or data sources can be stated in remarks or in separate text boxes.**
5. **Use national standard measurement in all tables where applicable.**
6. **Please read the instruction in each table carefully before data entry.**

1. Food Situation

District population: _____ (Please calculate the current population based on the latest Population Census)

Food Type	Food Crops	Total Production (Ton)	Factor	Cereal Equivalent (Ton)	Total Cereal Equivalent (Ton)	Requirement of Cereal Equivalent (Ton)	Surplus/ Deficit (Ton)
(i)	(ii)	(iii)	(iv)	(v) = (iii) x (iv)	(vi)	(vii)	(viii) = (vi) - (vii)
Cereal	Maize		1				
	Paddy		0.65				
	Sorghum		1				
	Millet*		1				
Non-cereal	Banana		0.201				
	Cassava		0.34				
	Potato**		0.255				

Note: (ii) *Millet includes both finger millet and bulrush millet. **Potato includes both sweet potato and irish potato.

(ii) Total production should be taken from the figure of total production of the same crop in "1. Type of crops grown, planted area and total production" of the quarterly format in the 4th quarter. Total production of millet is the sum of both finger millet and bulrush millet.

(v) Cereal equivalent is calculated by; Total production x factor

(vi) Total cereal equivalent is the sum of the cereal equivalent of each food crop.

(vii) Requirement of Cereal equivalent is calculated by; 0.65 x population x 365 / 1000

(viii) Surplus/ Deficit is calculated by; (vi) - (vii)

2. Irrigation

2 (a) Irrigation scheme

Name of the Scheme	Name of water source (e.g., Rufji river)	Potential Area (ha)	Area under irrigation (ha)	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
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
Improved scheme									
Traditional scheme									

Note: (iii) "Potential area" is the total area of the scheme which has been brought under irrigation and which can be planned for irrigation on the basis of water availability.
(iv) "Area under irrigation" is the area developed for irrigation within the scheme.
(v), (vi) Write an applicable number.

2 (b) Crops harvested under irrigation

Type of Crops harvested under irrigation	Planted area (ha) (i)		Yield (ton/ha) (i)		Production (tons) (iii)	
	Rainy season (iv)	Dry season (v)	Rainy season (vi)	Dry season (vii)	Rainy season (viii) = (iv)*(vi)	Dry season (ix) = (v)*(vii)

(iv) (vi) (viii) Rainy season - Fill out the cells with data on planted area, yield, and production for respective crop under irrigation during rainy seasons.
(v) (vii) (ix) Dry season - Fill out the cells with data on planted area, yield, and production for respective crop under irrigation during dry seasons.

3. Agricultural Mechanization

In this section, mechanization equipment refers to those which are basically stationed in your district. The machines which farmers rent from other districts are not included.

3 (a) Number of Agricultural Machines and Equipment

Type of machines and equipment	Working		Not working		Reasons for not working
	Individually owned	Group-owned	Individually owned	Group-owned	
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Tractor					
Power Tiller					
Combine Harvester					
Mower					
Baler					
Feeder					
Drinker					
Milking Machine					
Chiller					
Electric Meat Cutter					
Patrol Boat					
Fishing Boat with Engine					
Fishing Boat without Engine					
Others (specify)					

3 (b) Number of Working Agricultural Implements: Machinery Drawn (Tractor/ Power tiller)

Type of Implements	Individually owned	Group-owned
(i)	(ii)	(iii)
Harrow		
Planter		
Disk Plough		
Sub-soiler		
Weeder		
Boom Sprayer		
Ripper		
Rake for Hay Making		
Trailer		
Other (specify)		

3 (c) Number of Working Agricultural Implements: Animal Drawn (Draught Animals)

Type of Implements	Individually owned	Group-owned
(i)	(ii)	(iii)
Harrow		
Planter		
Plough		
Sub-soiler		
Weeder		
Ripper		
Ridger		
Cart		
Other (specify)		

3 (d) Number of Equipment / Implements

Type of Equipment / implements	Number
(i)	(ii)
Flaying Knives	
Fishing Nets	
Branding Iron	

3 (e) Number of Agricultural Processing Machines (Short-listed Indicator OP2 d,e)

Type of Machines	Working		Not working		Reasons for not working
	Individually owned	Group-owned	Individually owned	Group-owned	
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Milling Machines					
Dehulling Machines					
Oil Extractor					
Kernel Opening					
Pulperies					
Ginneries					
Shellers					
Hay Making Machines					
Small holder 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)					

Note: Count the number of machines in the factory/ plant.

3 (f) Area Cultivated and Means of Cultivation

Short rain season

(i)	By Machine (Tractor/ Power Tiller/ Combine Harvester) (ii)	By Draught Animal (iii)	By Hand (iv)	Zero tillage (v)	Total Area (vi) = (i)+(iii)+(iv)+(v)
Area Cultivated (ha)					
Area Planted (ha)					
Area Weeded (ha)					
Area Harvested (ha)					

Note: (ii)~(v) Do not double-count if the same land is cultivated more than once in one season.

Long rain season

(i)	By Machine (Tractor/ Power Tiller/ Combine Harvester) (ii)	By Draught Animal (iii)	By Hand (iv)	Zero tillage (v)	Total Area (vi) = (i)+(iii)+(iv)+(v)
Area Cultivated (ha)					
Area Planted (ha)					
Area Weeded (ha)					
Area Harvested (ha)					

Note: (ii)~(v) Do not double-count if the same land is cultivated more than once in one season.

3 (g) Number of Oxenization Centres and Tractor Hiring Services (Short-listed indicator OP1 e)

Type of Centres (i)	Working (i)	Not working (ii)	Reasons for not working (iv)
Oxenization Centre			
Tractor Hiring Service			

4 Input

4 (a) Inorganic Fertilizer Requirements and Availability

Type of Fertilizer (i)	Annual Requirement for the Reporting Year (tons) (ii)	Amount Used in the Reporting Year (tons) (iii)	Remark (iv)
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			
MOP			
Others (specify)			

Note: Fertilizer should be for both crops and pastures.

4 (b) Agrochemicals Requirements and Availability

Type of agrochemicals (i)	(Generic or Trade) Name of Chemicals (ii)	Measurement unit (kg / litre) (iii)	Amount Used in the Reporting Year (iv)	Remark (v)
Insecticides				
Fungicides				
Herbicides (Chemicals to control weeds)				
Rodenticides (Chemical to kill rodents (e.g. rats, mice))				
Avicides (Chemical to kill avian (e.g. quelea-quelea))				

Note: (ii) Write about the most common brand (trade) names in each category.

4 (c) Requirements for and Amount Used of Improved Seed Variety

Type of Crop	Annual requirement for the reporting year (kg)	Name of Improved Variety	Amount used in the reporting year (kg)		Remark
			Quality Declared Seeds	Certified Seeds	
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Maize					
Paddy					
Beans					
Sorghum					
Wheat					
Sunflower					
Others (Specify)					

Note: (iii) Write about the most common varieties of improved seeds for each crop.

5 Extension Services

5 (a) Number of Extension Officers

Area of Specialization	Number of Extension Officers Available						Total	Total Registered/ Enrolled/ Enlisted
	District HQ		Wards		Villages			
	Male	Female	Male	Female	Male	Female		
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
Crop								
- Crop Production								
- Land Use								
- Irrigation								
- Nutrition								
- Horticulture								
- Agro Mechanization								
- Others (Specify)								
Livestock								
- Animal Production								
- Animal Health								
- Veterinarians								
- Livestock officers								
- Others (Specify)								
Agro Vet								
Cooperatives								
Fishery								
Total								

5 (b) Level of Education

Level of Education	Number of Extension Officers						Total
	District HQ		Ward		Village		
	Male	Female	Male	Female	Male	Female	
(i)	(i)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
Non-Certificate							
Certificate							
Diploma							
1st Degree							
2nd Degree							
Ph D							

5 (c) Working Facilities/ Equipment

Station	Vehicle		Motorcycle		Bicycle		Housing	
	Required	Available	Required	Available	Required	Available	Required	Available
(i)	(i)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
District HQ								
Ward								
Village								
Total								
Station	Extension Kit		Photocopier		Computer		Other (specify)	
	Required	Available	Required	Available	Required	Available	Required	Available
(i)	(i)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
District HQ								
Ward								
Village								
Total								

Note: Write the number of "available" facilities/equipment which are "in operation" or "not in operation but repairable".

5 (d) IT Facilities

Q. Do you have an access to Internet (whatever means) in your office?

Write the number which best describes the situation in a box in the right.

1) Yes, access to Internet is stable.
2) Yes, it is available sometimes.
3) Yes, but it is not good at all
4) No, we don't have an access to Internet.
5) No, but it is available out of office e.g. internet café etc.

5 (e) Number of Extension Officers Trained (Short-listed Indicator OP3)

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

Topic of Training	Total Number of Officers Trained			Number of Officers Trained for		Training methods	Training providers	Remarks
	Male	Female	Total	Equal to or Less than Six Month	More than Six Month			
(i)	(i)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
Crop								
Livestock								
Fishery								
Marketing and Processing								
Irrigation								
Others								

Note: For i) Both short and long courses are included.

vii) Training method includes study tour, workshop, courses at agricultural colleges, etc.

viii) Write the names of training providers

5 (f) Training of farmers through Farmers' Field Schools

Purpose of FFS	Number of Field Schools	Number of Farmers Completed			Average Duration (days)	Number of Villages Covered	Remarks
		Male	Female	Total			
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
Crop							
Livestock							
Fishery							
Marketing and Processing							
Others							

Note: (i) Write the purpose of FFS.
(ii) Write the number of FFS that were actually held.

5 (g) Farmers Trained through other methods than FFS

Topic of Training	Total number of farmers trained			Number of farmers trained for		Training methods	Training providers	Remarks
	Male	Female	Total	Equal to or less than one week	More than one week			
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
Crop								
Livestock								
Fishery								
Marketing and Processing								
Irrigation								
Others								

Note: (i) List all topics of training for farmers which were conducted this year.
(vii) Training method includes study tour, workshop, courses at agricultural colleges, etc.
(viii) Write the names of training providers

5 (h) Non-Government Agricultural Extension Service Providers

Name of Service Provider (i)	Type of Service Providers (ii)	Type of Service (ii)	Number of Villages Served by Providers (iv)

Note: (ii) Type of service providers: NGOs, Religious Organizations, Private companies, Individuals (e.g. stockist) etc.
(iii) Type of service: Crop, Livestock, Cooperatives, Financial services etc.
(iv) Number of villages which received extension service from service providers

6. Associations/ Groups

6 (a) SACCOs

Number of SACCOs (i)	Number of Members				Amount of Loans (Tsh)				
	Male (ii)	Female (iii)	Group (iv)	Total (v)	Crop (vi)	Livestock (vii)	Fishery (viii)	Marketing (ix)	Total (x)

Note: (x) If the breakdown of the loan (crop, livestock etc.) is not available, write the total amount only.

6 (b) Other Associations/ Groups

Type of Associations/ Groups (i)	Number of Associations/ Groups		Number of Members			Total Number Registered (vii)	Total Number with Bank Account (vii)
	Urban (ii)	Rural (iii)	Male (iv)	Female (v)	Total (vi)		
Crop							
Livestock							
Fishery							

7. Number of Smallholder Households Participating in Contracting Production and Out-growers Schemes (Short-listed Indicator OC7)

Type of Product (i)	Contracting Production			Out-Growers Schemes		
	Number of Smallholder Households (ii)	Number of Contractors Involved (iii)	Major Products (iv)	Number of Smallholder Households (v)	Number of Contractors Involved (vi)	Major Products (vii)
Crop						
Livestock						
Fishery						

Note: (ii) Contracting production is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products detailed in formal contracts.
(iii) Out-growers schemes is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products that may not involve formal contracts. The company may provide smallholders some services e.g. input credits, tillage, spraying and harvesting.

8. Proportion of Female Members in Finance Management and Planning Committee (District Council) (Short-listed Indicator OP9)

(i)	Number (ii)	Percentage (%) (iii)
Male		
Female		
Total		

9. Livestock Population (Large Scale Farmers) (on June 30th)

Note; Large scale farmers should have more than 50 head of cattle, and/or more than 100 head of sheep/ goats/pigs, and/or more than 1000 chickens/turkeys/ducks/rabbits. They should also have permanent stations/farm, use machines such as milking machine, drinker, etc., practice commercial farming (with modern facilities) and usually have title of the land they own.

Name of Farm /Farmer (i)	Type of Ownership (ii)	Registration Number (iii)	Number of Livestock						
			Cattle (iv)	Sheep (v)	Goats (vi)	Pigs (vii)	Layers (viii)	Broilers (ix)	Remarks (x)

Note: (ii) Write the type of ownership: Public, CBO, NGO, Individual, or Private.
(xi) If there are important livestock other than listed here, please write their names in Remarks.

10. Livestock Population (Small Scale Farming) (June 30th)

Note; Count all livestock population except for those owned by large scale farmers defined in Table 9 above.

Type of Animal	Number of Indigenous	Number of Improved		Total	Total Registered
		Meat	Dairy		
(i)	(ii)	(iii)	(iv)	(v)	(vi)
1. Cattle					
Bull*					
Cow **					
Steer***					
Heifer****					
Male Calf*****					
Female Calf*****					
Ox					
Sub Total Cattle					
2. Sheep					
Male Sheep					
Female Sheep					
Sub Total Sheep					
3. Goat					
Male Goat					
Female Goat					
Sub Total Goat					
4. Others					
Pig					
Water Buffalo					
Donkey					
Horse					
Camel					
Dog					
Cat					
Rabbit					
5. Avian	Number of Indigenous	Number of Improved		Total	Total Registered
		Broiler	Layer		
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Chicken					
Duck					
Turkey					
Guinea Fowl					

Note: (i) Rabbit refers to domesticated ones only.

(i) The numbers in the sub-total cells for cattle/sheep/goat may not be equal to the sums of each type of cattle/sheep/goat, respectively, because there may be extension officers who report sub-total only.

* Bull is 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

**** Heifer is female cattle of 1 year up to the first calving

***** Calf is young cattle under 1 year of age

11. Livestock Products Processing Plants / Units

Name of Business/ Owner	Registration Number	Type of Product	Measurement unit (piece, kg, litre, ton, number etc.)	Installed Production Capacity per year	Utilized Production Capacity per year
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Milk and Milk Product					
Meat and Meat Product					
Hide and Skin					
Animal Feed					

Note: (ii) Write the registration number of national livestock registry for traceability

(ii) If there are more than one product, please use one row for each product.

12. Livestock Infrastructure and Status (Short listed Indicator OP1 b,c, OP2a,c)

Type of Infrastructure	Number of infrastructure		Number Required	Number Registered	Reasons for not working
	Working	Not working			
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Slaughter House *					
Slaughter Slab **					
Butcher					
Hide and Skin Banda					
Permanent Crash					
Charco (malambo) ***					
Water Trough					
Cattle Dip					
Dog Dip					
Spray Race					
Hatchery ****					
Mlk 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					
Artificial Insemination Centre					
AI kit					
Meat Processing Facility/ Plant					
Mlk Processing Facility/ Plant					
Fish Processing Facility/ Plant					
Others (specify)					

Note: * Slaughter house is defined as a facility where animals are slaughtered to carcasses (no processing).

** Slaughter slab is defined as a flat concrete floor where animals are slaughtered in an open air.

*** Dam (excluding hydro-power dams) is a barrier that impounds water and bigger in size relative to a charco. Charcos are usualy excavated and smaller than dams.

**** Hatchery includes a facility for producing one day chicks of any size.

13. Grazing land

Type of Animals	Number of Animals	Number of animals in livestock unit	Total Number of animals in livestock unit [Total of (iii)]	Total Grazing Land (ha)	Utilized Land (ha)	Stocking Rate (ha) (Current status on area per livestock unit)	Carrying Capacity (ha) (potential)	Number of animals (livestock unit) that can be kept in the District	Total Demarcated Area (ha)	Total Area Leased (ha)	Remarks
(i)	(ii)	(iii)	(iv)	(v)	(v)	(vii) = (vi)/(iv)	(viii)	(ix) = (v)/(viii)	(x)	(xi)	(xii)
Cattle											
Goat											
Sheep											
Donkey											

Note:

(ii) Livestock unit (LU): 1 cattle = 0.8 LU, 1 goat/sheep = 0.15 LU, 1 donkey = 0.6 LU.

(v) Total area avalable for grazing in the district.

(vi) Area actually used for grazing.

(vi) Number of hectares each livestock unit consumes currently. It is calculated as "Utilized land (vi)"divided by "Total number of animals in livestock unit (iv)".

(vii) Number of hectares that can potentially support one livestock unit per year. This depends on the ecological zone. (The larger, less fertile the land is.)

(ix) Maximum potential number of animals in livestock unit that can be grazed. It is calculated by "Total grazing land in the district (v)" divided by "Carrying capacity (viii)".

(x) Total area specifically demarcated for grazing.

(xi) Area officially leased to individuals or groups by village and certified by Ministry of Land.

14. Pasture

14 (a) Improved pasture

Number of Farms/ Plots	Area (ha)	Seed Production (kg)	Amount of Hay Bales/ Bundles Produced (Tonnes)	Remarks
(i)	(ii)	(ii)	(iv)	(vi)

Note (iv) One hay bale is equal to 20 kg.

14 (b) Crop residues

Type of Crop	Planted Area (ha)	Amount of Hay Bales/ Bundles Produced (Tonnes)	Area of Farms/ Plots Grazed in Situ (ha)	Remarks
(i)	(ii)	(iii)	(iv)	(v)

Note (iii) One hay bale is equal to 20 kg.

15. Dissemination of Agricultural Information

15 (a) Radio and TV Station

Name of TV Station Available (i)	Number of villages covered (ii)
TBC	
ITV	
Star TV	
Local, specify:	

Name of Radio Station Available (i)	Number of villages covered (ii)
Radio 1	
TBC Taifa	
Radio free Africa	
Local, specify:	

If the LOCAL radio or TV station air any program on agriculture, please write.

Name of Station (i)	Name of Program (ii)	Frequency (times in a week) (iii)	Type of Information (iv)

Note: (iv) Type of information: Crop, Livestock or Fishery

15 (b) Telecommunication

Name of Telecommunication Company (i)	Number of Villages Covered (ii)
Sasatel	
Tigo	
TTCL	
Vodacom	
Airtel	
Zantel	
Others, specify	

16. Number of Ward Agricultural Resource Centres

Annex3.2 VAEO/WAEO Format (Monthly)

OFISI YA WAZIRI MKUU - TAWALA ZA MIKOA NA SERIKALI ZA MITAA (OWM-TAMISEMI)
FOMU YA TAARIFA YA MWEZI YA MPANGO WA MAENDELEO YA KILIMO WA KIJIJI/KATA Revised January 2011

Jina la Kijiji/ Mtaa/ Kata _____

Jina la Afisa Ugani _____

Mwezi _____ Mwaka wa Fedha _____ Tarehe ya kuwasilisha _____

(Iwasilishwe 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) 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

1.1 Hali ya hewa

a) Mvua: Jaza idadi ya siku ambazo mvua imenyesha 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, chagua na ujaze maelezo katika safu wima ya tatu tu.

b) Matukio: Tafadhali eleza matukio muhimu (ukame, mafuriko, njaa, magonjwa ya mimea na mifugo n.k.) yaliyojitokeza kwa kipindi cha mwezi huu.

1.2 Kazi zilizofanyika

Tafadhali eleza shuguli za sekta ya kilimo zilizofanyika katika kipindi cha mwezi huu.

2. Malengo, Utekelezaji na Bei ya Mazao

Kabla ya kujaza sehemu hii, soma maelezo yaliyopo chini ya jedwali hili.

Malengo ya mwaka yaandikwe kwenye mwezi wa Julai tu na kuacha wazi miezi inayofuata.

Utekelezaji wa malengo msimu

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko		Maelezo
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kipimo	Tsh	
Nafaka									
Mahindi									
Mpunga									
Mtama									
Uwele									
Ulezi									
Ngano									
Shayiri									
Jumla ndogo									
Mazao yatokanayo na mizizi									
Mihogo									
Viazi vitamu									
Viazi mviringo									
Viazi vikuu									
Gimbi									
Jumla ndogo									
Mazao ya viwandani									
Pamba									
Tumbaku									
Kahawa									
Chai									
Pareto									
Kakao									
Mpira									
Miwati (Wattle)									
Miwa									
Jute									
Katani									
Korosho									
Jumla ndogo									

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko		Maelezo
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kipimo	Tsh	
Mazao ya mafuta									
Alizeti									
Ufuta									
Karanga									
Mawese									
Nazi									
Maharage ya Soya									
Mbegu za Nyonyo									
Mibono									
Jumla ndogo									
Mazao ya jamii ya kunde									
Kunde									
Mbaazi									
Choroko									
Njegere									
Dengu									
Njugu mawe									
Maharage									
Jumla ndogo									
Viungo									
Tangawizi									
Pilipili manga									
Giligiliani									
Mdalasini									
Binzari									
Vanilla									
Pilipili kali									
Karafuu									
Vitunguu swaumu									
Iiki									
Paprika									
Jumla ndogo									

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko		Maelezo
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kipimo	Tsh	
Mbogamboga									
Matango									
Uyoga									
Cauliflower									
Kabichi									
Mchicha									
Spinachi									
Kabichi china (Chinese cabbage)									
Nyanya									
Biringanya									
Vitunguu									
Pilipili hoho									
Karoti									
Nyanya chungu									
Mnafu									
Figiri									
Leek									
Saladi									
Bamia									
Jumla ndogo									
Matunda									
Ndizi mbivu									
Ndizi mbichi									
Embe									
Papai									
Chungwa									
Chenza									
Pera									
Apple									
Nanasi									
Parachichi									
Tikiti maji									
Limau									
Ndimu									
Tunda damu									
Mapeasi (Pear)									
Mapesheni (Passion fruit)									
Jumla ndogo									

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko		Maelezo
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kipimo	Tsh	
Maua									
Waridi (Rose)									
Chrysanthemum									
Carnation									
Aster									
Gypsophylla									
Ginger rose									
Helianthus									
Jumla ndogo									
Mengineyo									
Choya (Rozella)									

Note:

i) Lengo la eneo litakalopandwa kwa hekta katika kipindi cha mwaka mzima liandaliwe mwanzoni mwa mwaka (Julai).

iii) Lengo la matarajio ya mavuno kwa tani katika kipindi cha mwaka mzima liandaliwe mwanzoni mwa mwaka (Julai)

iv) Utekelezaji wa eneo lililopandwa linamaanisha ni jumla ya eneo lililopandwa kutoka mwezi Julai mpaka mwishoni mwa mwezi husika wa taarifa.

vi) Utekelezaji wa mavuno linamaanisha ni jumla ya uzalishaji toka mwezi Julai mpaka mwishoni mwa mwezi husika wa taarifa.

3. Afya ya mimea

3.1 Kuzuia magonjwa/visumbufu kwa kutumia kemikali

Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani, kidogo) (iii)	Eneo lililoathiriwa (ha)	Idadi ya vijiji vilivyoathirika	Dawa iliyotumika (iv)	Kiasi cha dawa (kg/lita)	Idadi ya vijiji viliwyo hudumiwa	Idadi ya kaya zilizohudumiwa	Eneo lililookolewa (ha) (v)	Maelezo
Jumla										

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
Ng'ombe		
Kondoo		
Mbuzi		
Nguruwe		
Kuku wa asili		
Kuku wa kisasa		
Mengineyo (Taja)		

5. Ukaguzi wa nyama

Jina la eneo la machinjio/ ukaguzi	Aina ya mfugo (i)	Idadi ya wanyama walioathirika (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).

ii) Hesabu kila mnyama mara moja. Acha kisanduku kilichobaki wazi kwa mnyama wa aina moja.

iii) Andika kila sababu moja iliyojitokeza kwa kila mstari (row).

iv) Andika idadi ya matukio kwa kila sababu.

6. Mazao yatokanayo na mifugo

6.1 Maziwa

Aina ya mazao	Kiasi cha maziwa yaliyozalishwa (Whole milk) kwa mwezi huu
Maziwa ya ng'ombe wa asili (lita)	
Maziwa ya ng'ombe wa kisasa (lita)	
Jibini (Cheese) (kg)	
Siagi (Butter) (kg)	
Samli (Ghee) (kg)	

6.2 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/ kondoo				

7. Afya ya Mifugo

7.1 Tiba

Aina ya mifugo	Aina ya ugonjwa	Idadi ya walioathirika	Idadi ya waliotibiwa	Idadi ya waliopona	Idadi ya waliokufa	Matibabu/ Dawa iliyotumika

7.2 Uogeshaji, kunyunyizia na chanjo

Aina ya mifugo	Idadi ya walioogeshwa	Dawa iliyotumika	Idadi ya walionyunyiziwa	Dawa iliyotumika	Idadi ya waliochanjwa	Chanjo iliyotumika

7.3 Huduma za mifugo

Aina ya mifugo	Kukata kwato	Kuhasi	Kuhamilisha (AI)	Kukata pembe	Kuweka alama	Kukata mikia	Kukata meno	Kukata midomo
Ng'ombe								
Mbuzi								
Kondoo								
Nguruwe								
Kuku								
Bata								

Maelezo: Utekelezaji kufikia mwezi huu

8. Maoni ya Afisa Ugani wa kijiji/ kata kuhusu sekta ya kilimo katika eneo lake

Mafanikio:
Changamoto/ Matatizo:

9. Wageni waliotembelea kijiji/kata kwa shughuli za Kilimo au ufugaji

Tarehe	Jina la mgeni	Anuani	Shughuli iliyomleta	Maagizo/ ushauri wa mgeni

Annex3.2 VAEO/WAEO Format (Quarterly)

OFISI YA WAZIRI MKUU - TAWALA ZA MIKOA NA SERIKALI ZA MITAA (OWM-TAMISEMI)
FOMU YA TAARIFA YA ROBO MWAKA YA MPANGO WA MAENDELEO YA KILIMO WA KIJIJI/KATA

Revised January 2011

Jina la Kijiji/ Mtaa/ Kata:

Jina la Afisa Ugani:

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) 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. Hali ya chakula kijijini

	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 cha ziada

2. Vikundi/Ushirika wa wakulima
2.1 Vyama vya kuweka na kukopa (SACCOs)

Idadi ya SACCOs	Idadi ya wanachama				Kiasi cha mkopo (Tsh)				
	Mwanachama mmojammoja		Vikundi *	Jumla	Mazao	Ufugaji	Uvuvi	Biashara	Jumla
	Wanaume	Wanawake							

Maelezo: * Kikundi kimoja kihesabike kama mwanachama mmoja.

2.2 Vikundi vingine vya wakulima

Aina ya Vikundi		Idadi ya Vikundi	Idadi ya wanachama			Idadi ya vikundi vilivyosajiliwa	Idadi ya vikundi vyenye akaunti za benki
			Wanaume	Wanawake	Jumla		
Mazao	Uzalishaji						
	Usindikaji						
	Biashara						
Ufugaji	Uzalishaji						
	Usindikaji						
	Biashara						
Uvuvi	Uzalishaji						
	Usindikaji						
	Biashara						

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/ Mwezeshaji wa mafunzo	Maelezo
	Wanaume	Wanawake	Sawa au pungufu ya wiki moja	Zaidi ya wiki moja			
Mazao							
Ufugaji							
Uvuvi							
Masoko na Usindikaji							
Umwagiliaji							

Maelezo: i) Orodhesha mada zilizofundishwa kwa wakulima.

4. Afya ya mimea

4.1 Kuzuia magonjwa/visumbufu kwa njia za kibaiolojia

Aina ya ugonjwa/ kisumbufu	Aina ya zao	Njia zilizotumika	Eneo lililodhibitiwa (ha)	Kaya zilizohusika	Maelezo

5. Umwagiliaji

5.1 Mazao yanayolimwa katika eneo la umwagiliaji

Aina ya mazao (i)	Eneo lililopandwa (ha) (ii)		Uzalishaji/ Tija (tani/ha) (iii)		Mavuno (tani) (iv) = (ii) x (iii)	
	Masika/ Vuli (iv)	Kiangazi (v)	Masika/ Vuli (vi)	Kiangazi (vii)	Masika/ Vuli (viii)	Kiangazi (ix)

Maelezo:

(iv) (vi) (viii) Masika/ Vuli - Jaza takwimu za eneo lililopandwa (ha), uzalishaji (tani/ha) na mavuno (tani) katika eneo la skimu zinazotegemea umwagiliaji kipindi cha Masika/ Vuli.

(v) (vii) (ix) Kiangazi - Jaza takwimu za eneo lililopandwa (ha), uzalishaji (tani/ha) na mavuno (tani) katika eneo la skimu zinazotegemea umwagiliaji kipindi cha Kiangazi.

6. Mmomonyoko wa ardhi

Aina ya mmomonyoko (i)	Jina la kijiji/ vijiji vilivyohusika	Eneo lililoharibiwa (ha)	Mbinu zilizotumika	Eneo lililokaraba iwa (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/ trekta la mkono (ha) (i)	Kwa kutumia wanyamakazi (ha) (ii)	Kwa jembe la 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 ka ika msimu mmoja

7.2 Masika

Eneo	Kwa trekta/ trekta la mkono (ha) (i)	Kwa kutumia wanyamakazi (ha) (ii)	Kwa jembe la 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 ka ika msimu mmoja

Annex3.2 VAEO/WAEO Format (Annual)

OFISI YA WAZIRI MKUU - TAWALA ZA MIKOA NA SERIKALI ZA MITAA (OWM-TAMISEMI)
FOMU YA TAARIFA YA MWAKA YA MPANGO WA MAENDELEO YA KILIMO WA KIJIJI/KATA

Revised January 2011

Jina la Kij ji/ Mtaa/ Kata: _____

Jina la Afisa Ugani: _____

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) 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

	Zinazoongozwa na wanaume	Zinazoongozwa na wanawake	Jumla	Zinazoshiriki kazi za kilimo
Idadi ya kaya				
	Wanaume	Wanawake	Jumla	Zinazoshiriki kazi za kilimo
Idadi ya watu				

2. Kilimo cha mkataba na makubaliano wa soko

Aina ya shughuli	Mkataba wa soko (Contract farming) (i)			Makubaliano ya soko (Out-growers scheme) (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 kuhifadhia mavuno.
v), viii) Andika jina la zao kuu/bidhaa ka ika 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 marekebisho, 4=haijulikani)	Idadi ya wanachama katika chama cha wamwagiliaji (IO)		Idadi ya wamwagiliaji (wanachama na wasiowanachama)	
						Wanaume	Wanawake	Wanaume	Wanawake
Skimu iliyoendelezwa									
Skimu ya asili									

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	Nzima		Mbovu		Sababu ya ubovu wa mashine/kifaa
	Binafsi	Kikundi	Binafsi	Kikundi	
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 meet catter)					
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) Andika jina la 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 zinazokokotwa 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 zinazokokotwa na wanyamakazi

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)		
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

Aina ya mashine	Nzima		Mbovu		Sababu ya ubovu wa mashine
	Binafsi	Kikundi	Binafsi	Kikundi	
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: i) Hesabu idadi ya mashine zilizopo kijijini/ katani.

ii) Andika idadi ya mashine kama haijatajwa kwenye orodha iliyopo juu kwenye jedwali.

iii) 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	Maelezo
		Wanaume	Wanawake		Wanaume	Wanawake			
Mazao									
Ufugaji									
Uvuvi									

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	Maelezo
		Wanaume	Wanawake		Wanaume	Wanawake			
Masoko na Usindikaji									
Mengineyo									

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/ Viuadudu

Aina ya kiatilifu/ kiuadudu	Jina la kiatilifu/ kiuadudu *	Kipimo (kg/ lita)	Matumizi kwa mwaka	Maelezo
A: Dawa za kuua wadudu				
A: Dawa za kuua wadudu				
A: Dawa za kuua wadudu				
A: Dawa za kuua wadudu				
A: Dawa za kuua wadudu				
B: Dawa za fangasi				
B: Dawa za fangasi				
B: Dawa za fangasi				
B: Dawa za fangasi				
B: Dawa za fangasi				
C: Dawa za magugu				
C: Dawa za magugu				
C: Dawa za magugu				
C: Dawa za magugu				
C: Dawa za magugu				
D: Sumu ya panya				
D: Sumu ya panya				
D: Sumu ya panya				
D: Sumu ya panya				
D: Sumu ya panya				
E: Dawa za kudhibiti ndege uharibifu				
E: Dawa za kudhibiti ndege uharibifu				
E: Dawa za kudhibiti ndege uharibifu				
E: Dawa za kudhibiti ndege uharibifu				
E: Dawa za kudhibiti ndege uharibifu				
F: Mengineyo (taja)				
F: Mengineyo (taja)				
F: Mengineyo (taja)				
F: Mengineyo (taja)				
F: Mengineyo (taja)				

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		
1. Ng'ombe					
Ng'ombe dume*					
Ng'ombe jike**					
Maksai***					
Mtamba****					
Ndama dume					
Ndama jike					
Maksai wa kulima					
Jumla ndogo ng'ombe					
2. Kondoo					
Kondoo dume					
Kondoo Jike					
Jumla ndogo kondoo					
3. Mbuzi					
Mbuzi dume					
Mbuzi jike					
Jumla ndogo mbuzi					
4. Mifugo Mingine					
Nguruwe					
Nyati maji					
Punda					
Farasi					
Ngamia					
Mbwa					
Paka					
Sungura					
5. Ndege	Idadi ya wa asili	Wa nyama	Wa Mayai	Jumla	
Kuku					
Bata					
Bata mzinga					
Kanga					

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.

* Ng'ombe dume ni ambaye hajahasiwa anatumiwa kwa kuzalisha mbegu.

** Ng'ombe jike ni ambaye amewahi kuzaa 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.

8. Miundombinu katika mifugo

Aina ya miundombinu	Nzima	Mbovu	Mahitaji halisi	Idadi ya zilizosajiliwa	Sababu ya ubovu wa miundombinu
Jengo la machinjio (Slaughter House) *					
Karo (Slaughter Slab) **					
Bucha					
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)					
Kituo cha kutotolea vifaranga ***					
Kituo cha kukusanyia maziwa					
Mnada					
Ghala					
Mengineyo (Taja)					

Maelezo: i) Andika jina la miundo mbinu kama ipo zaidi ya hiyo iliyotajwa hapo juu

* Jengo la Machinjio ni mahali ambapo wanyama wanachinjwa na kuwa nyama (hakuna usindikaji)

** Karo ni mahali pa kuchinjia wanyama, kwenye sakafu katika eneo la wazi

*** Kituo cha kutotolea vifaranga kinahitaji vitendea kazi ambavyo vitatumika kuzalisha vifaranga kwa siku moja katika ukubwa wowote.

9. Eneo la malisho (Grazing land)

Aina ya mfugo (i)	Idadi ya wanyama (ii)	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:

(ii) Idadi ya wanyama waliopo kwenye eneo la malisho.

(iii) Eneo linalofaa na linajumlisha linalotumika na lisilotumika.

(iv) Eneo halisi ambalo linatumika kulishia wanyama.

(vi) Eneo lililopewa hati.

10. Malisho ya wanyama

10.1 Malisho ya wanyama yaliyopandwa na kuendelezwa

Idadi ya mashamba	Eneo (ha)	Uzalishaji wa mbegu (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 (Hei*)	Eneo la mashamba yaliyotumika kwa malisho (grazed in situ) (ha)	Maelezo

* Robota moja la hei 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	

Annex 3.3 Agricultural Routine Data System (ARDS) National Roll-Out Plan

ASDP M&E TWG

Version December 12, 2010

Draft 3

1. Introduction

1.1 Background

The ASDP M&E TWG has improved agricultural Routine Data System (ARDS) in which agricultural performance information are collected and transmitted from LGAs to the Agricultural Sector Lead Ministries (ASLMs) through regions. The ARDS is composed of 1) the VAEO/WAEO format (Village/ward format), 2) the Integrated Data Collection Format (District format) and 3) the Local Government Monitoring Database 2 (LGMD2, computer software which transmits data in the Integrated Data Collection Format from LGAs to ASLMs via regions) as depicted in Figure 1.1.

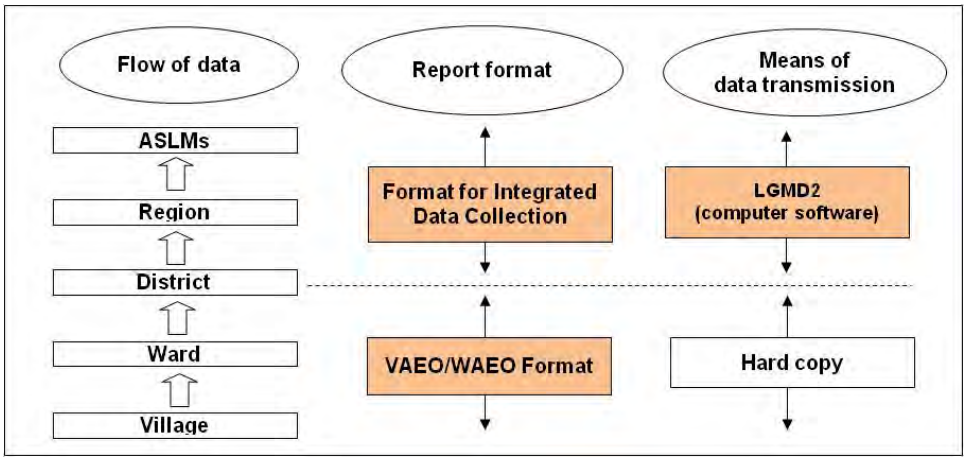


Figure 1.1 Agricultural Routine Data System

Note: VAEO: village agricultural extension officer
WAEO: ward agricultural extension officer

In ASDP M&E, the ARDS plays an important role in collecting and transmitting information, particularly on output at district, regional and national levels (See Figure 1.2).

The draft model of the ARDS had been implemented since July 2009 in the four pilot districts: Morogoro Rural and Kilosa in Morogoro Region and Mpwapwa and Kondoa in Dodoma Region. Their comments / suggestions were incorporated, and the final version of the ARDS was agreed at the Morogoro workshop in October 2010 when the ARDS pilot implementation was completed. Now the ARDS is ready for national roll-out. This document explains how the national roll-out will be conducted.

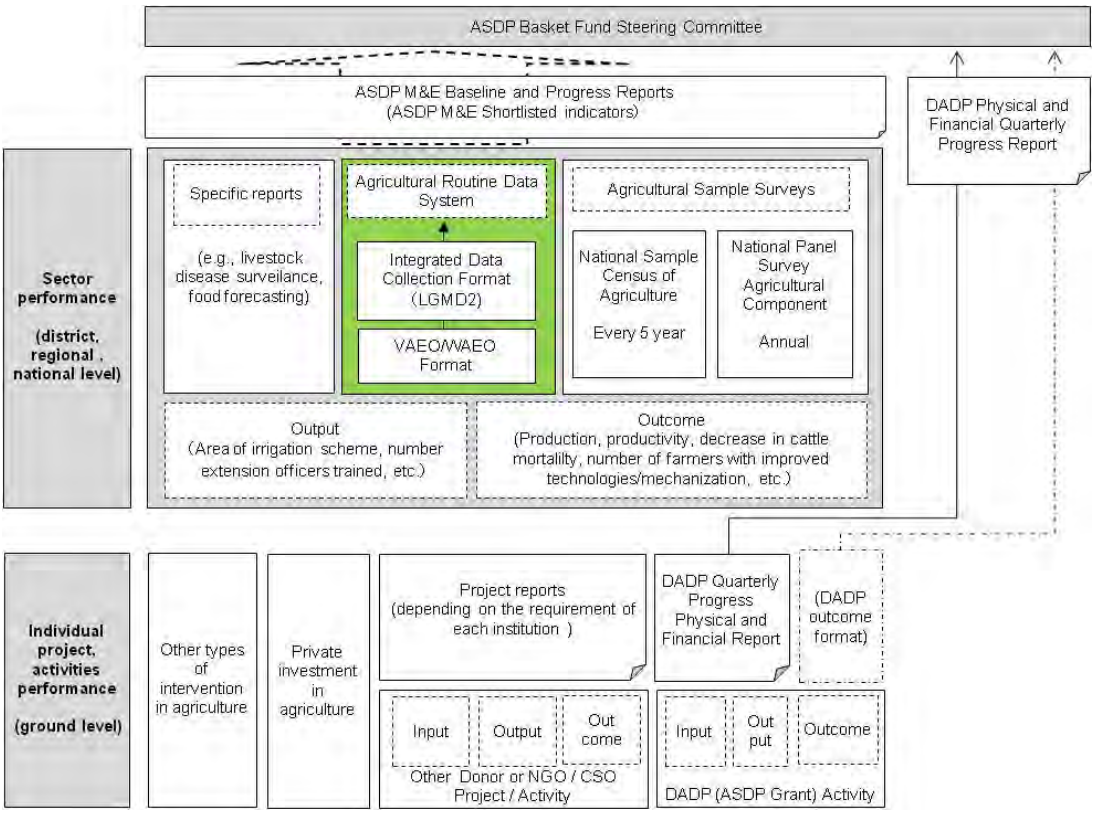


Figure 1.2 Roles of ARDS in ASDP M&E

1.2 Overall roll-out plan

It is expected that ARDS national roll-out will take three years (2010/11 – 2012/13): the first two years will provide training and the third year will primarily provide backstopping. The roll-out training will be conducted in the following regions in each year (Table 1.1).

Table 1.1 Regions to be rolled-out in each year

Year	Regions to be rolled out
2010/11	Dodoma, Morogoro, Mwanza, Kigoma, Mara, Shinyanga and Kagera (7)
2011/12	Ruvuma, Iringa, Mbeya, Rukwa, Arusha, Kilimanjaro, Manyara, Tabora, Pwani, Tanga, Lindi, Mtwara, Singida and DSM (14)
2012/13	VAEO/WAEO training continued in some LGAs and Backstopping

Based on the experiences of the pilot implementation, at least six trainings / backstopping as shown in Table 1.2 need to be conducted.

Table 1.2 Training / backstopping on ARDS in each region/district

	Topics	Trainee	Facilitator	Venue
1	✓ Technical aspects of LGMD2	Regional IT specialists	LGMD2 technical and operational committee	UCC
2	✓ Integrated Data Collection Format ✓ VAEO/WAEO Format	Regional and district officials	M&E TWG members	Region

3	✓ VAEO/WAEO format	VAEO/WAEO	District officials	Each LGA
4	✓ Excel consolidation ✓ Functions of LGMD2	Regional and district officials	LGMD2 committee, M&E TWG members Regional IT specialist	UCC or equivalent facility
5	✓ Installation of LGMD2 ✓ Check synchronization	Regional and district officials	Regional IT specialists	Each LGA / Region
6	✓ Backstopping on all aspects	LGAs officials	M&E TWG members Regional officials	Each LGA / Region

UCC: University Computing Centre

The trainings will be conducted using a cascade method as shown in Figure 1.3. The details of each training / backstopping is explained in the next section.

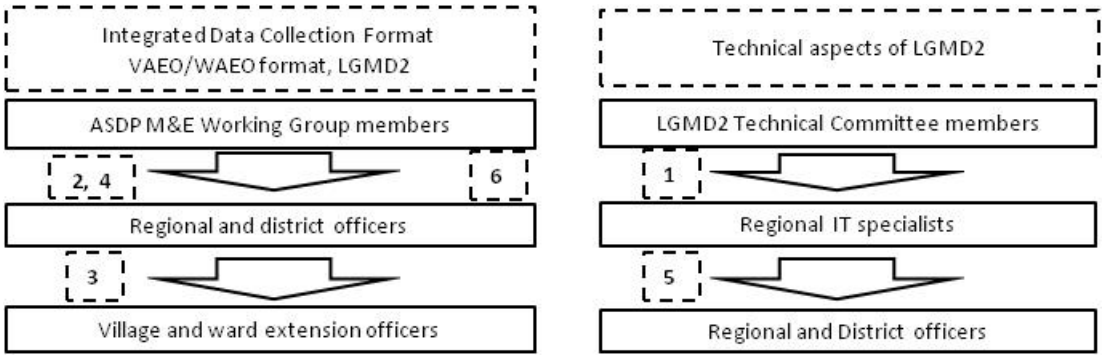


Figure 1.3 Training on ARDS through cascade method

Note: The numbers in the figure correspond to the trainings / backstopping shown in Table 1.2.

2. Training and backstopping of Regional/LGA officers

The details of each training / backstopping stated in Table 2 are explained here. The following assumptions are made.

- Each region has 6 LGAs.
- Each LGA has DALDO, District agricultural statistical officer (DS), M&E officer, and a planning officer (DPLO).
- Each LGA has 50 extension officers (average of Dodoma, Morogoro, Kagera, Mwanza, Kigoma, Mara and Shinyanga).
- Each region has an agricultural adviser (RAA), a livestock adviser (RLA), a trade adviser (RTA), and an IT specialist.

1. Training of Regional IT Specialist on LGMD2

At the beginning of each year, all regional IT specialists to which ARDS is rolled-out in the year receive training on technical aspects of LGMD2 at UCC.

Table 2.1 Outline of training of regional IT specialists on technical aspects of LGMD2

Purpose	Regional IT specialists become conversant with technical aspects of LGMD2
Trainee	Regional IT specialists to which ARDS is rolled-out in that year
Facilitators	1 x UCC 2 x LGMD2 Technical / Operational Committee members In total 3
Venue	UCC (Dar es Salaam)
Duration	2 day

Table 2.2 shows suggested agenda of the training.

Table 2. 2 Agenda of training of regional IT specialists on technical aspects of LGMD2

Day	Topics	Facilitator	Text
1	Role of LGMD2 Technical specification for LGMD2 Set up LGMD2 Synchronization with main server Backup procedures and manual forwarding of data	UCC, LGMD2 technical and operational committee	LGMD2 technical and operational manuals, LGMD2 quick guide,
2	LGMD2 functionality at regional and national levels Data analysis using LGMD2 Exporting data to Excel		

2. Training of Regional and district officers on the two common reporting formats

Regional and district officers are provided with training on the two common reporting formats. In principle, the training is conducted for the officials of two regions together.

Table 2.3 Outline of training of regional and district officers on ARDS

Purpose	- Regional and district agricultural officers become conversant with VAEO/WAEO format, and Integrated Data Collection Format. - TOT for district officers
Trainee	District officers (DALDO, DS, M&E, DPLO) of all the LGAs in two regions Regional officers (RAA, RLA, RTA) in two regions In total 52 LGAs: 4 officers x 6 LGAs x 2 Regions = 48 officers Region: 2 officers x 2 Regions = 4 officers
Facilitators	2 x ASDP M&E TWG members, (1 x pilot LGA official in Morogoro and Dodoma)
Venue	One of the regional offices
Duration	2 days
Remark	The number of regions to participate in the training may vary depending on the number of LGAs in each region.

Table 2.4 presents suggested agenda of the training.

Table 2.4 Agenda of training of regional and district officers on ARDS

Day		Topics	Facilitator	Text
1	am	Explanation of ASDP and ARDS	M&E TWG members	ASDP M&E Framework (30) / Guideline (30) ASDP M&E Progress Report (45)
	pm	Explanation of Integrated Data Collection Format		Integrated Data Collection Format (17) LGA training guide (100)
2		Explanation of VAEO / WAEO Format		VAEO/WAEO format (23) VAEO/WAEO training guide (26)

3. Training of VAEOs / WAEOs on VAEO / WAEO format

Once the training of regional and district officers is completed, the training of VAEO / WAEO on the VAEO / WAEO format is conducted in each LGA with district officers being facilitators. If sufficient amount of budget is available, the training is most effectively conducted in a two-day workshop inviting all VAEO/WAEO as shown in Table 2.5 and Table 2.6.

Table 2.5 Outline of training of VAEOs / WAEOs

Purpose	VAEO / WAEOs become conversant with VAEO/WAEO format
Trainee	All VAEOs / WAEOs in each LGA In total 50 VAEOs/WAEOs
Facilitators	3 x District officers who received training in 2.2.
Supervisors	2 x ASDP M&E TWG members 1 x Regional officer (1 x pilot LGA officer in Morogoro and Dodoma)
Venue	District office
Duration	2 days
Remark	If budget is available, it is encouraged that VEOs of the villages where VAEOs are absent be also invited.

Table 2.6 shows suggested agenda of the training.

Table 2.6 Agenda of training of VAEOs / WAEOs

Day		Topics	Facilitator	Text
1	AM	Explanation of ASDP and ARDS	ASDP M&E TWG	ASDP M&E Guideline
	PM	Explanation of VAEO / WAEO format (Monthly)	District officers	VAEO/WAEO format VAEO/WAEO training guide
2		Explanation of VAEO / WAEO format (Quarterly, annual)	Same as above	Same as above

However, the VAEO/WAEO training can be very costly, and it might be difficult to hold a workshop in which all VAEO/WAEO participate at district centre. In this case, the experiences of the pilot implementation suggest that it is effective to have training in each division: district officers visit each division center, and VAEO/WAEO in each division receive receive training on the VAEO/WAEO format from the district officers. It is also suggested that a member of the M&E TWG and a regional adviser also attend at least the first divisional training as supervisors.

4. Training of regional and district officers on LGMD2 and Excel

Before VAEO / WAEO submit filled-in VAEO/WAEO formats to districts, regional and district officers should receive training on the functions of LGMD2 and Excel. Certain Excel techniques are necessary to obtain district level data from the filled-in VAEO/WAEO format (ward level data). In principle, the maximum number of participants in each training should be around 30, otherwise it will be difficult for facilitators to pay full attention to each participant.

Table 2.7 Outline of training of regional and district officers on LGMD2 and Excel

Purpose	Regional and district officers become conversant with the functions of LGMD2 and Excel
Trainee	2 x district officers from DALDO, DS, M&E of all the LGAs in a region 2 x regional officers from RAA, RLA, and RTA. In total 14 (2 x 6 LGAs + 2 x 1 region)
Facilitators	2 x ASDP M&E TWG members 1 x LGMD2 committee member 1 x Regional ICT specialist in each region
Supervisors	UCC (if necessary)
Venue	PMO-RALG Dodoma training facility or UCC facilities at DSM, Arusha and / or Mwanza (where each participant can use a computer.)
Duration	4 days
Remark	It is suggested that each participant brings a lap top computer and use it, if available.

Table 2.8 shows suggested agenda of the training.

Table 2.8 Agenda of training of regional and district officers on LGMD2 and Excel

Day	Topics	Facilitator	Text
1	LGMD2 installation Data entry from VAEO/WAEO format to Excel. Data consolidation for quarterly report and data entry in LGMD2	LGMD2 technical and operational committee,	LGA training guide LGMD2 operation

2	Pivot Table functions Three month data aggregation	Regional ICT specialist ASDP M&E TWG members	manual / quick guide
3	Data consolidation for annual report Data entry to LGMD2		
4	Use and functions of LGMD2		

5. Installation of LGMD2

Once the training of regional and district officers have been conducted, regional IT specialists will install LGMD2 to the computers at regional and district offices.

Table 2.9 Outline of the installation of LGMD2 in computers at regional/district offices

Purpose	Install LGMD2 in computers used by regional and district officers
LGMD2 installation	All the computers of regional advisers concerning agriculture All the computers in DALDO's office.
Facilitator	Regional IT specialist
Backstopping	If necessary, UCC sends a technician to support LGMD2 installation.
Venue	Each region / district office
Duration	At most 1 day in each office
Remark	

6. Backstopping

Providing backstopping is very important to follow up ARDS implementation. It is suggested that the backstopping team consists of 2 ASDP M&E TWG members and 1 regional officer. They visit each district and provide backstopping for the district officers.

Table 2.10 Outline of backstopping

Purpose	Respond to questions of district officers and improve their understanding and operation of ARDS.
Trainee	District officers (DALDO, DS, M&E) in each district
Facilitators	2 ASDP M&E TWG members, 1 Regional agricultural officer
Venue	District office
Duration	2 days in each district (depending on the needs of the district)
Remark	Backstopping should be conducted after ARDS has been practiced at least for a quarter (3 months) and district has experienced data consolidation and entry to LGMD2. Backstopping on Excel techniques such as Pivot Table and data aggregation which are necessary for data entry to LGMD2 is particularly important.

3. Institutional set up

In general, the following stakeholders are involved in the national roll-out of ARDS.

- ASDP M&E TWG members
- LGMD2 operational and technical committee members
- Regional agricultural / livestock / trade advisors
- Regional IT specialists
- District officers (DALDO, DS, M&E, DPLO)
- VAEO/WAEO
- UCC

It is important to communicate well among the stakeholders to plan, prepare and implement each training / backstopping smoothly. The initiatives should be taken by the ASDP M&E TWG.

4. Equipment

From the experiences of the pilot implementation, it is suggested that the following equipment be provided or should be available at regional / district offices to implement ARDS.

Table 4.1 Equipment necessary for ARDS

	Region	District
Absolutely necessary	Computer, Access to internet (wireless modem or LAN)	Computer, Access to internet (wireless modem or LAN) Photocopying machines (for printing VAEO / WAEO format)
Will help		Motorbikes (follow-up) Cardboard (store filled-in VAEO/WAEO format)

In rolling-out, one wireless model shall be provided to each region / district to ensure access to internet.

5. Schedule of the training and backstopping package

Figures 3 and 4 in the following pages show suggested schedule of ARDS roll-out in FY 2010/11 and 2011/12, respectively. The numbers of the training in the figures correspond to those in Section 2.

6. Budget

Budget for the roll-out is shown in Annex 1 (attached excel file).

In Annex 1, each training is numbered, and it corresponds to those in Section 2. In addition, the numbers with alphabet are undertaken simultaneously. For example, the following trainings (3.1a - 3.1d) for VAEO/WAEO are undertaken simultaneously. Thus, it is important

to have sufficient number of M&E TWG officers who participate in these trainings as supervisors.

3.1a Morogoro MC and Mvomero
3.1b Kilombero and Ulanga
3.1c Dodoma MC and Kongwa
3.1d Bahi and Chamwino

Overall budget needed for ARDS national roll-out is summarized in Table 6.1, although it still is a ballpark figure. The following assumptions were made in estimating the budget for each stakeholder.

- All the officers will travel by bus (no vehicles used.) in FY 2011/12.
- The expenses of rolling-out to the remaining districts (in total 8) of Dodoma and Morogoro regions will be facilitated by DFID/NBS.
- A part of the expenses for rolling-out to 28 DASIP districts in the regions of Lake Zone and Kigoma will be supported by AfDB.
- The expenses for VAEO/WAEO training (No. 3) shall be facilitated by LGAs. It is assumed that a simpler method (district officers visit each division center rather than inviting all VAEO/AEOs to district centers) is used. It is also assumed that the first divisional training is supervised by a M&E TWG member and a regional officer. For the remaining 8 districts in Morogoro and Dodoma Regions, a formal method (all VAEO/WAEO gather at district centers) shall be adopted.
- The expenses for regional IT specialists to visit each districts for LGMD2 installation shall be facilitated by respective region.
- All the other expenses shall be facilitated by ASLMs.

Table 6.1 Estimated budget for ARDS national roll-out in FY 2010/11 – 2012/13

	FY2010/11	FY2011/12	FY2012/13	Total	Per RS/LGA
DFID	238,332,500	6,734,000	0	245,066,500	
DASIP	45,563,500	0	0	45,563,500	
LGAs	0	306,011,000	0	306,011,000	2,593,314
RS	0	20,595,000	0	20,595,000	1,471,071
ASLMs	47,936,500	357,007,000	24,753,000	429,696,500	
Grand Total	331,832,500	690,347,000	24,753,000	1,046,932,500	
1. LGMD2 Technical Training	5,942,500	5,483,500	0	11,426,000	
2. Two Common Formats Training	50,690,000	104,819,000	0	155,509,000	
3. VAEO/WAEO Training	98,643,500	386,592,000	0	485,235,500	
4. Excel and LGMD2 Training	52,196,500	109,752,500	0	161,949,000	
5. LGMD2 Installation	2,860,000	6,365,000	0	9,225,000	
6. Backstopping	0	67,015,000	24,753,000	91,768,000	
Procurement	121,500,000	10,320,000	0	131,820,000	
Grand Total	331,832,500	690,347,000	24,753,000	1,046,932,500	

The ASDP M&E TWG will instruct LGAs and regions through PMO-RALG to allocate sufficient budget for ARDS roll-out as specified in this document and budget plan (annex 1).

Figure 3: Schedule of the ARDS roll-out in FY 2010/11

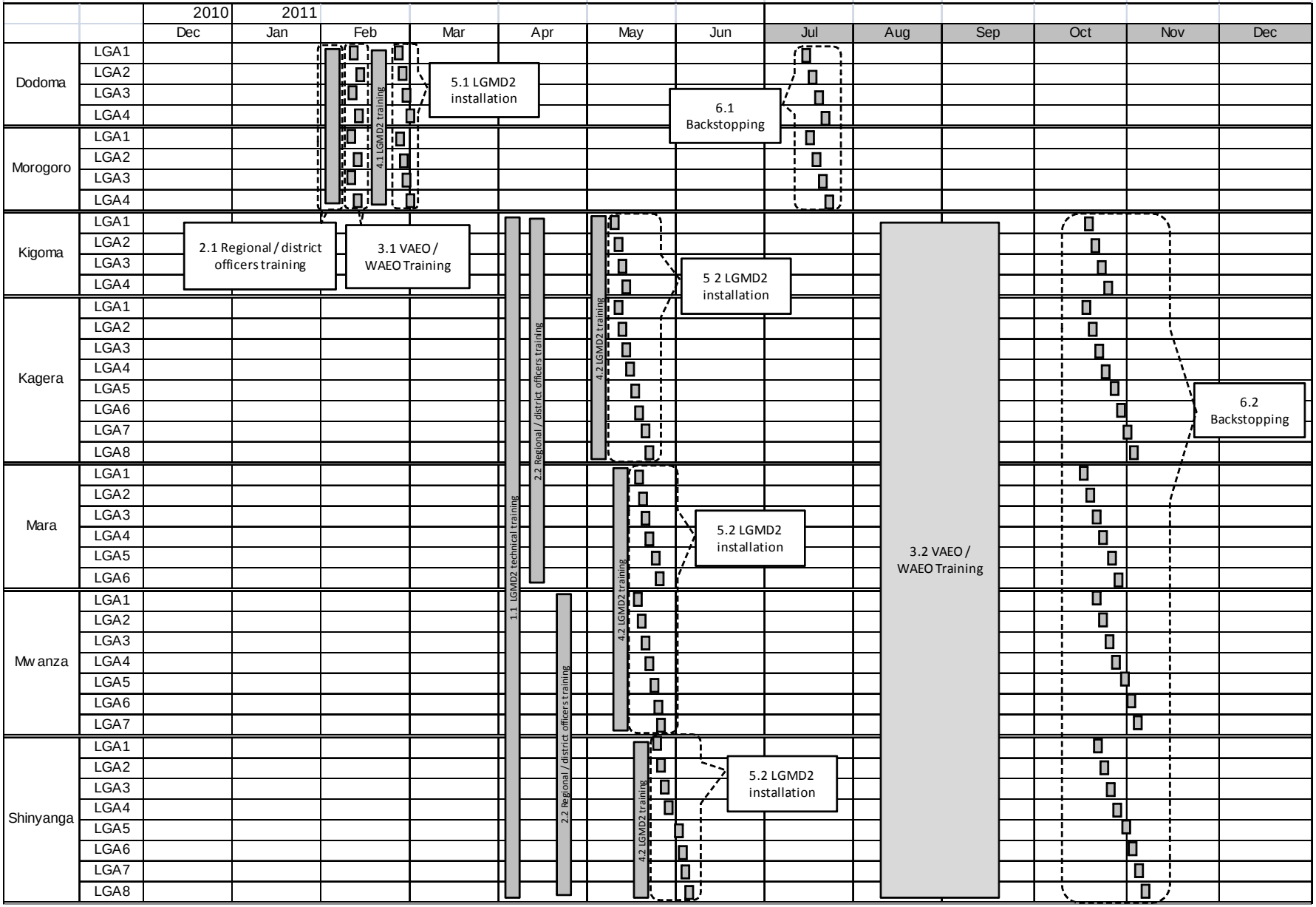


Figure 4-1: Schedule of the ARDS roll-out in FY 2011/12

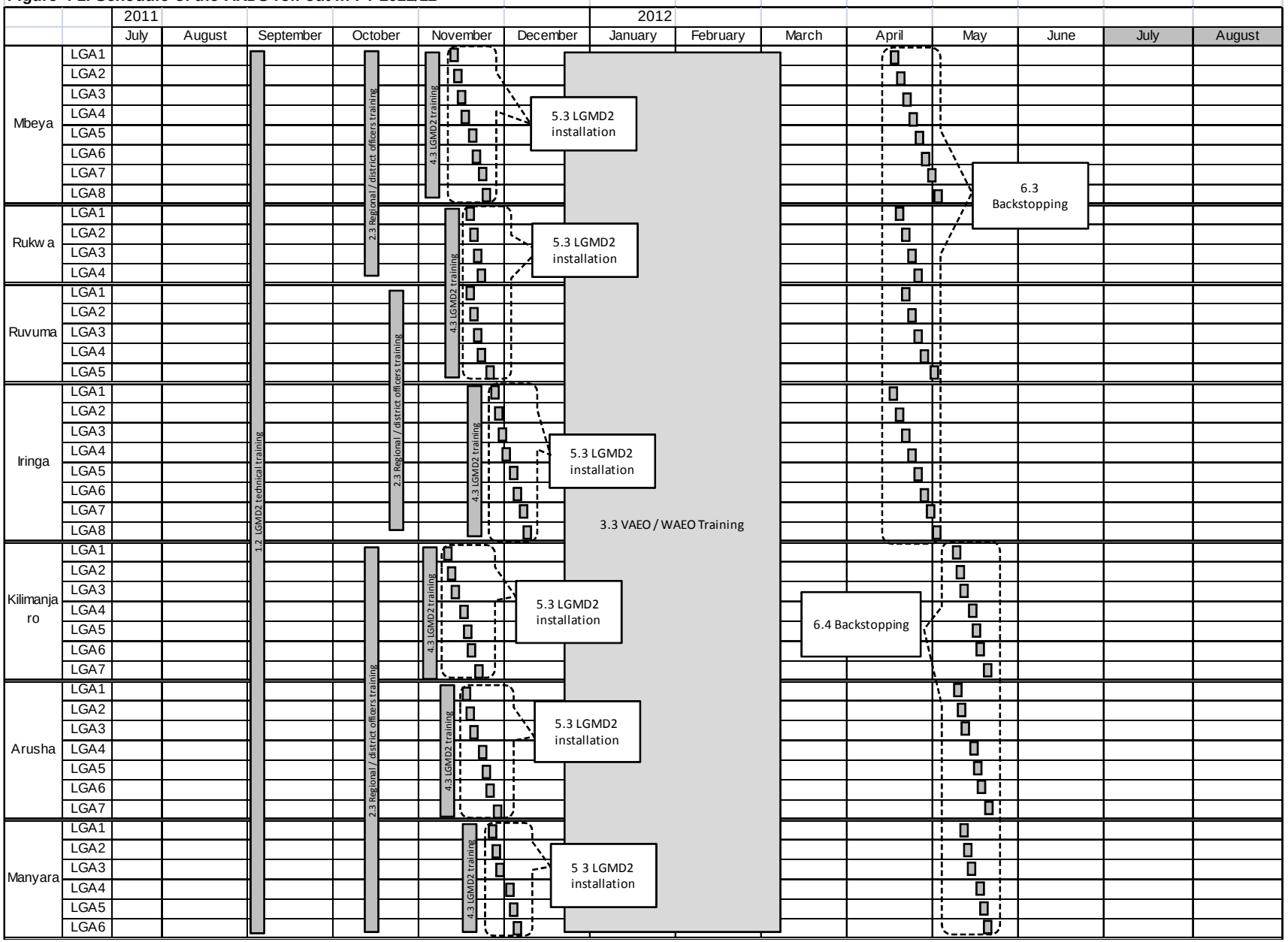
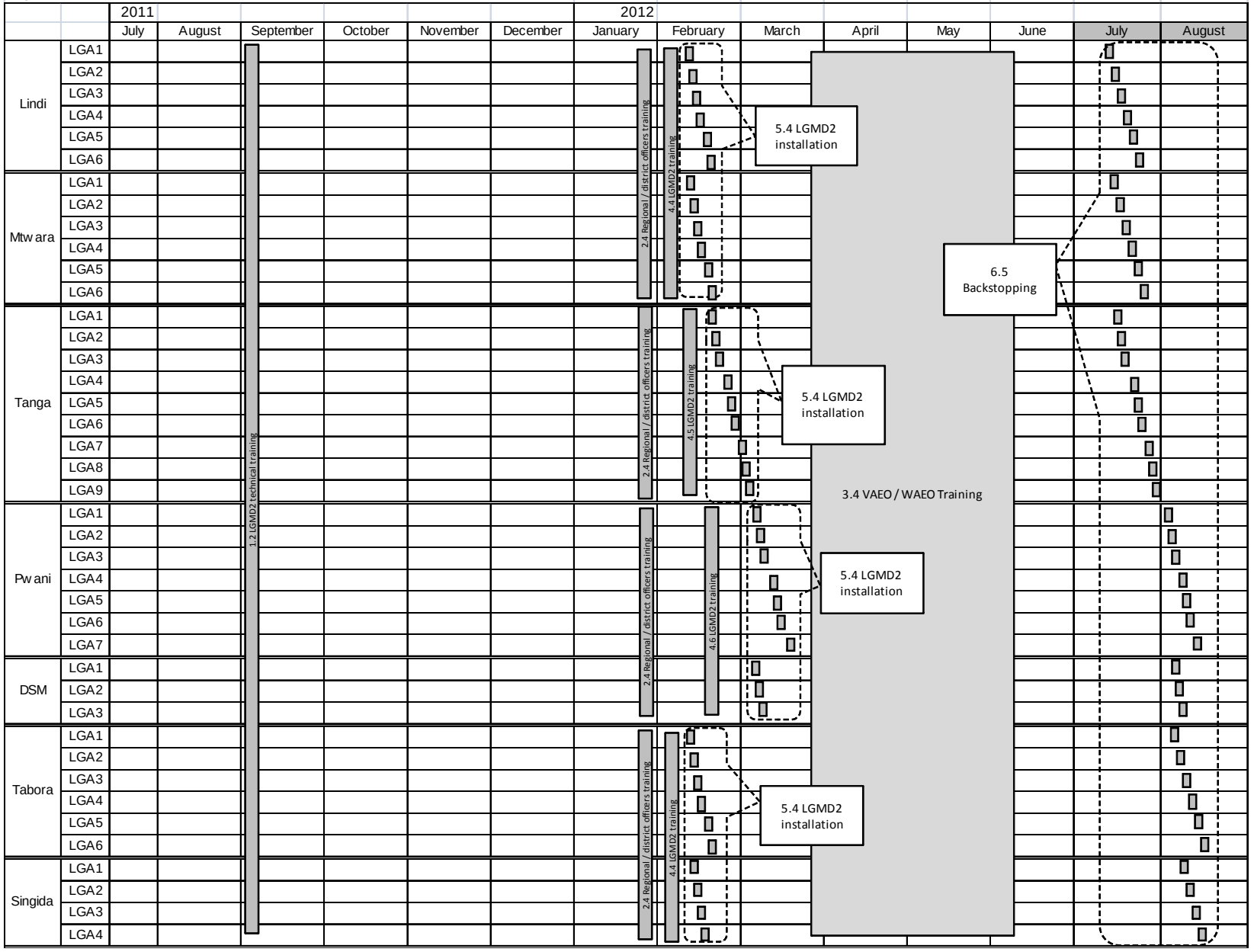


Figure 4-2: Schedule of the ARDS roll-out in FY 2011/12 and FY 2012/13



Annex 3.4 LGA Training Guide

Training Guide for District Officers on Data Consolidation, Analysis and Feedback in Agricultural Routine Data System (ARDS)

ASDP M&E Thematic Working Group
February 2011

Table of Contents

1. Introduction

1.1 Purpose of Training Guide

The purpose of this Training Guide is to guide district officers involved in data consolidation/ analysis, particularly but not limited to statisticians and M&E officers, on:

- How to collect and consolidate data from VAEO/WAEO,
- How to fill the Integrated Data Collection Format in LGMD2,
- How to create tables and charts with the data, and
- How to provide feedback to VAEO/WAEO.

This guide is developed based on the lessons learned and good practices from the pilot implementation at the four districts (Morogoro DC, Kilosa DC, Mpwapwa DC, and Kondoa DC). National and Regional officers can also utilize this manual for data check, analysis and feedback at their levels.

Another Training Guide has been prepared for VAEO/WAEO on how to fill the VAEO/WAEO format. The district officers are recommended to be familiar with both guides.

In this guide, the term "district" is used to refer to all districts, municipalities, towns and cities[1]. Chapter 3, 4, and 5 include instruction on Excel procedure, covering both Excel 2003 and 2007. If procedure is different between the two versions, it is explained separately. Readers are recommended to check which Excel version your computer has.

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 decision, and taking necessary action. 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, consolidate the data collected from wards, utilize them and provide the consolidate data to the regional and national levels.

Not only data collection, consolidation and provision, district officers should also play two more important roles: data analysis and provision of feedback. As a decision making body itself, district should analyze the data to develop and monitor its policy, plan and program. Feedback to village and ward officers is also essential in order to enhance their understanding and motivation in data collection.

[1] This is to avoid confusion by using the term "LGA" which includes ward and village, or the term "council" where some councils share one DALDO office.

2. Training of VAEO/ WAEO and Format Distribution

2.1 Training of VAEO/WAEO

When introducing VAEO/WAEO format, district should conduct a 2-day training of VAEO/WAEO (and if necessary VEO in villages which do not have VAEO) on the VAEO/WAEO format. Suggested program of the training is shown in Table 1.

Table 1: Overview of VAEO/WAEO Training

Purpose	VAEO/WAEO understand the VAEO/WAEO reporting format and become able to use it.	
Facilitators	District officers (DALDO, statistician, M&E officer, etc.)	
Participants	All WAEO and VAEO (if necessary VEO in villages without VAEO*)	
Materials	VAEO/WAEO reporting format VAEO/WAEO Training Guide	
Budget items	Per diem, transportation, venue, refreshment, printing, stationery	
Suggested Agenda		
Day 1	8:00-8:30	Registration
	8:30-8:45	Opening remarks, Self-introduction
	8:45-9:00	Introduction: Purpose of the training
	9:00-10:00	- Session 1 (monthly format)
	10:00-10:30	Refreshment
	10:30-13:00	- Session 2 (monthly format continued)
	13:00-14:00	Lunch break
	14:00-15:00	- Session 3 (quarterly format)
	15:00-15:30	Wrap up for Day 1
Day 2	8:30-10:00	- Session 4 (annual format)
	10:00-10:30	Refreshment
	10:30-13:00	- Session 5 (data entry exercise)
	13:00-14:00	Lunch
	14:00-15:00	- Session 6 (Continue data entry)
	15:00-15:30	Way forward: How to distribute and collect format
	15:30-16:00	Closing remarks

*: VEO in a village without VAEO is expected to collaborate with WAEO in charge of the village in filling out the format.

Box 1. Good Practice from Pilot LGAs: Follow Up Training

In January 2010, M&E Officer of Morogoro DC visited each division to conduct a refresher training of VAEO/WAEO on the format. This was the district's own initiative. The M&E Officer went with the filled-in format and showed participants some areas for improvement as a feedback. The refresher training was also a good opportunity for experienced extension officers to share how to collect data with newly recruited extension officers.

2.2 Format Distribution

For each month, quarter, and year, district officers should print necessary copies of VAEO/WAEO format and distribute them to VAEO/WAEO. District should prepare the copies well in advance so that there is enough time for distribution.

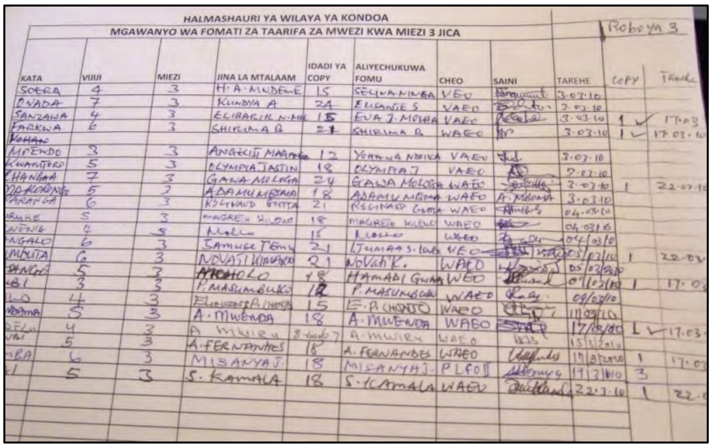
Direct distribution in person is highly recommended rather than passing them through other people/bus. Distribution should be completed before the end of the month so that VAEO/WAEO has enough time to fill and consolidate the form. Distribution can be done in the following manners:

- (Priority 1) Responsible district officer distributes the format to VAEO/WAEO by directly visiting them. This is especially important if VAEO/WAEO is not visiting the district headquarters regularly.
- VAEO/WAEO pick up the format utilizing any opportunity to visit the district headquarters. In this case, it is recommended to identify one specific place at DALDO office to distribute the blank format and collect the filled-in report.
- If district officer do not visit village/ ward and VAEO/WAEO do not come to the district headquarters, district officer may deliver the format to the WAEO at division center, who in turn will distribute it to the other VAEO/WAEO in the same division or ask VAEO/WAEO to pick them up there.

Box 2. Good Practice from Pilot Districts: Format Distribution

- Kondoa DC has photocopied the format for three months and distributed them at once between 20th to 30th of the last month of a quarter (for next quarter). Quarterly format is also distributed together. Annual format is distributed together with the fourth quarter format in March. This way, the district can avoid late distribution and save time and energy for monthly photocopying and distribution.

- In Kondoa, Mpwapwa and Kilosa, district officers prepared a distribution list to which VAEO/WAEOs sign once they receive the format. This helps them to avoid forgetting any ward (See example here). Annex 1 provides a suggested format of distribution list.



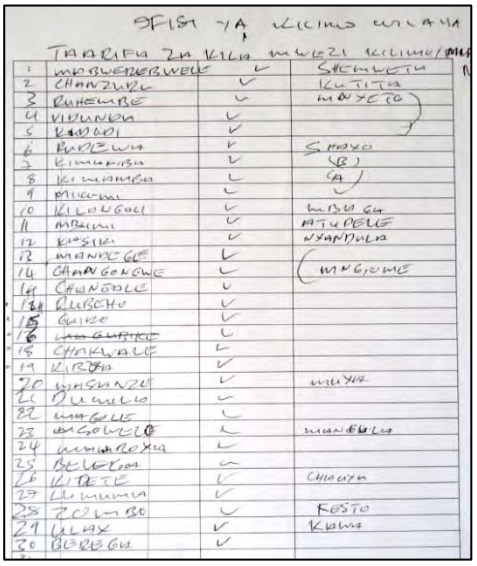
2.3 Collection and Follow Up

For report collection, again, district officers should advise WAEOs that they should not submit the report through bus. They should submit it directly or through reliable fellow extension officers. In order to collect filled-in reports, follow up is very important. In the pilot districts, officers make phone calls to WAEOs if they fail to submit the report in time. Especially for quarterly and annual reports, experience of pilot implementation suggests that VAEO/WAEOs tend to forget about them as they are not required every month. It is recommended for districts to monitor the status of format distribution and report collection. Annex 1 and 2 provides a suggested table format to do this task.

Also, proper feedback is a key to motivate VAEO/WAEOs to fill out the format with reliable information and submit it on time. For details on feedback, see Chapter 6.

Box 3. Good Practice from Pilot LGAs: Report Collection

- Kondoa, Mpwapwa and Kilosa DCs keep status of submission in a list for each report so that they can track who has submitted and follow up with those who have not (See example here). Suggested format for this list is provided in Annex 1 of this guide.
- Experiences of the pilot districts suggest that the submitted report is on high demand among officers in DALDO office. Sometimes officers borrow a few reports and do not return them for a long time. To avoid misplacement of any report, LGAs should keep record on who has taken which report.



2.4 Budget

During the budget preparation for the next fiscal year, DALDO should ensure that the budget include the following items:

- Training of VAEO/WAEO format for newly recruited officers or for retraining
- Follow-up cost (fuel, etc.)
- Printing (paper, toner, etc.)
- Budget for internet access (in order to fully utilize LGMD2)
- Budget for technical support of Regional ICT staff (communication, transportation, etc.)
- Training for LGA officers on, for example, Excel

3. Consolidation of VAEO/WAEO Report

3.1 Data Check and Revision

When the district officer receives the report from WAEO, s/he should check the data in the following points. If there are mistakes or questionable data, s/he should visit or make phone call to WAEO and clarify the question or provide instruction.

- Are all tables filled (except for those not applicable)?
- Are the data period appropriate in each table (data for the particular month/quarter or cumulative)?
- Are the data using appropriate unit of measurement (i.e. not bundle but kg)? [2]
- Are the data realistic compared to the following?
    - Previous report data
    - District total data
    - Latest National Sample Census Agriculture data (i.e. 2002/03, 2007/08)
    - Your field observation
- Cross check the data with relevant officers at the district: officers in charge of crop, livestock, cooperative, extension, marketing, irrigation, etc.

Box 4. Good Practice from Pilot Districts: Sharing within DALDO Office

After they returned from the training of district officers on the format, officers of Morogoro DC have shared the content of the training with fellow officers in a small training of their own. As a result, other officers are now helping M&E Officer in report collection and data entry. Moreover, this helped other officers recognize the presence of useful data in the format. Now, M&E Officer can easily consult these officers to check the data of their specialization.

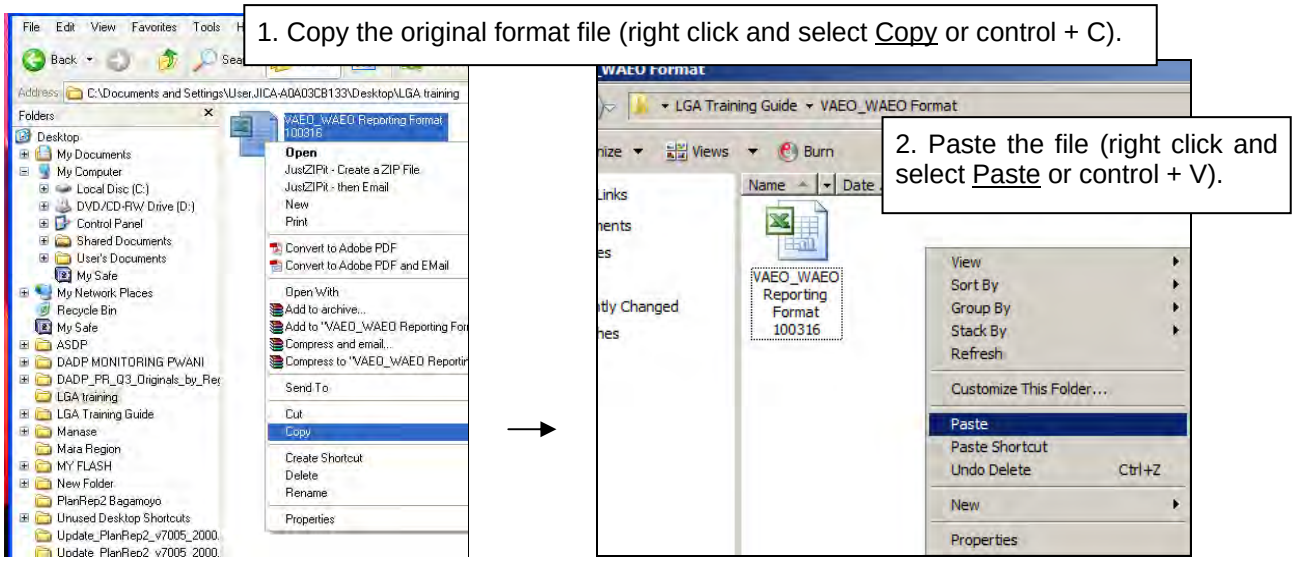
[2] Training guide for VAEO/WAEO has a conversion table in its annex.

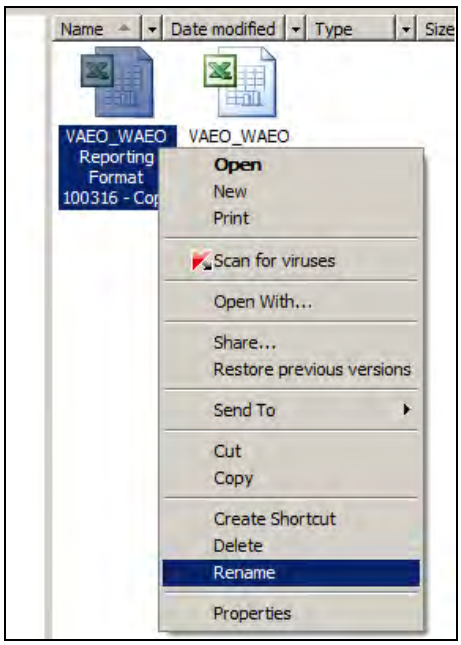
3.2 Data Entry

3.2.1 Creating Excel file

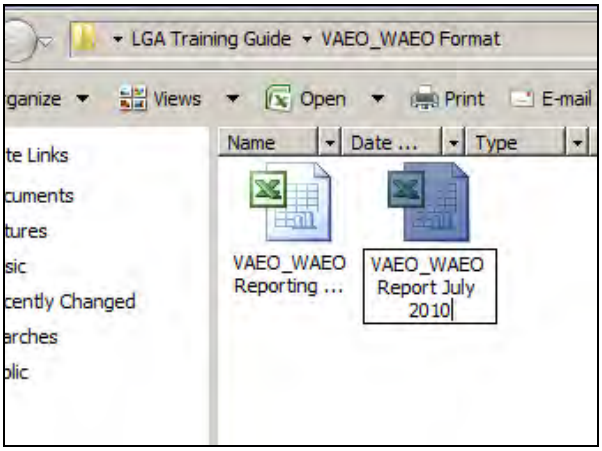
After checking and revising the data collected from WAEO, let's enter data in Excel.

First, create a file for each month, quarter and year.



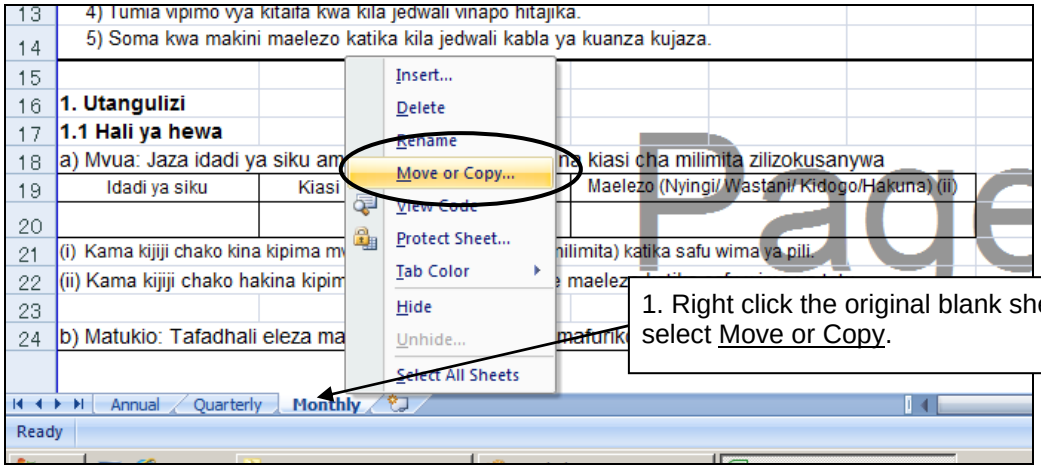


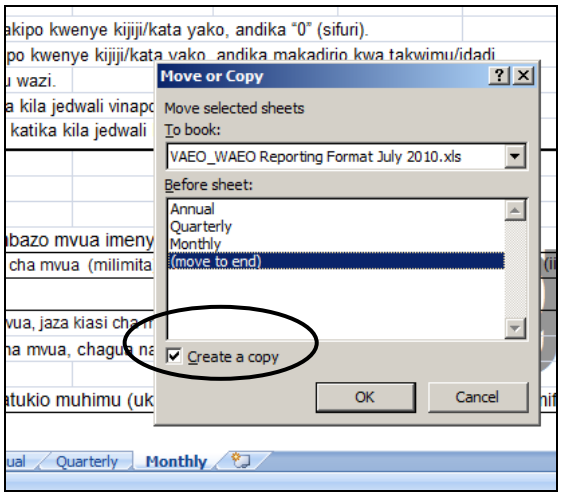
3. Rename the file (right click and select Rename or double click the name).
For example, "VAEO_WAEO Report July 2010."



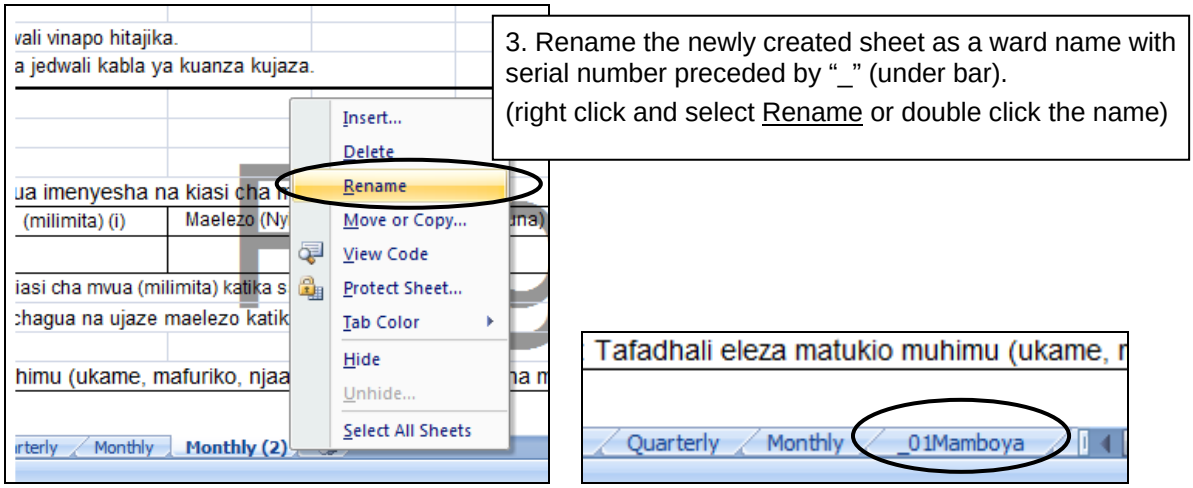
3.2.2 Creating data entry sheet

Open the file and create one data entry sheet for each ward.



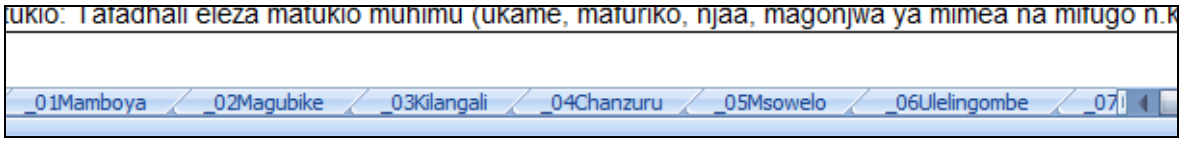


Now, you have created a new sheet with the same contents as the original sheet.



IMPORTANT NOTE:	- Do not start a worksheet name with a number (i.e. “1Mamboya”), as this will block formula calculation. Put under bar “_” before the number. - Be careful not to add any space and be consistent with capital/small letter across wards.

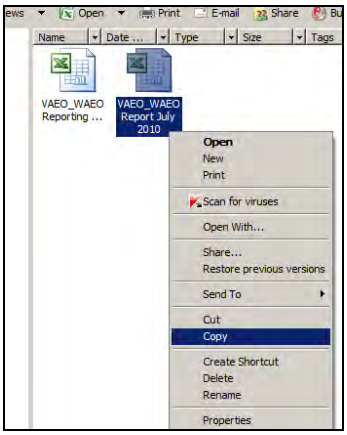
Repeat the above action until you create one sheet each for all wards in your district. Create one sheet for each of all wards even though some wards have not submitted the filled-in VAEO/WAEO format. The order of wards should be division-wise. Assign serial number with “_” to ward names. Serial number should be always the same for the same ward in any reports. For your convenience, write the same number on the hard copy of the filled-in format.



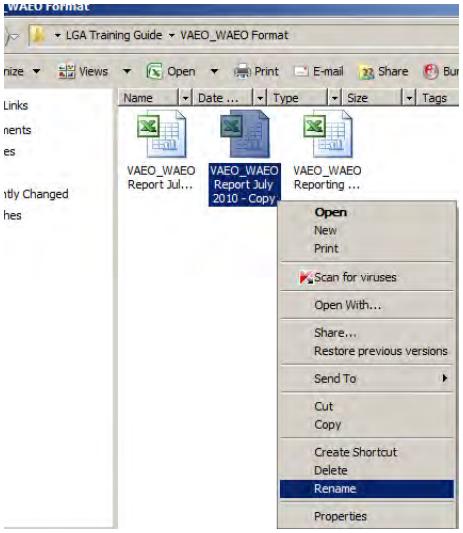
Repeat the step 1) and 2) for quarterly and annual reports.

3.2.3 Creating file for the following month

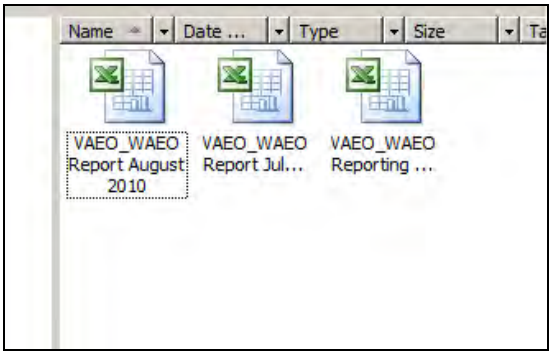
In order to avoid repeating the above step 3.2.2 every month, let’s copy the file for the following month now.



1. Copy and paste the file that you have just created (right click and select Copy and Paste or control + C and P).



2. Rename the file (right click and select Rename or double click the name)
For example, “VAEO_WAEO Report August 2010.”



3.2.4 Entering data

Now, let's enter data from WAEO report one by one.

Utekelezaji wa malengo msimu

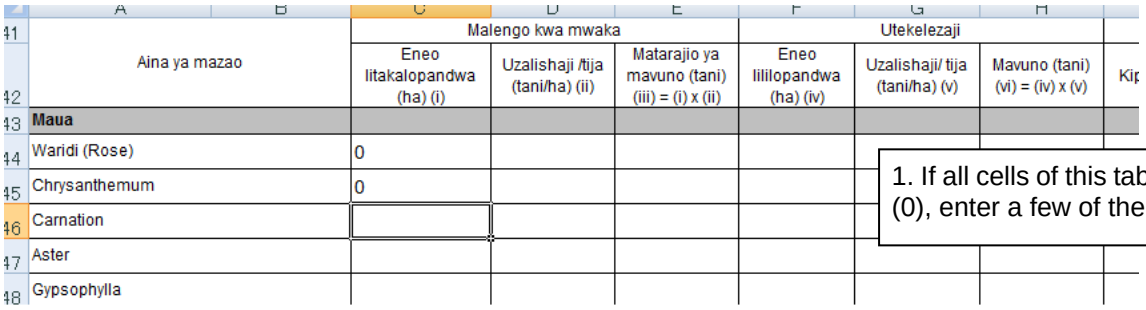
Aina ya mazao	Malengo kwa mwaka			Utekelezaji		
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavu (vi) =
Nafaka						
Mahindi	1575	1.5	2362.5	2645	1	
Mpunga						
Mtama						

IMPORTANT NOTE: Once you enter data, do not forget to save the data frequently. The easiest way to save is to press Control and S simultaneously. Save as often as possible to prevent your data from disappearing due to unexpected blackout, etc.

IMPORTANT NOTE: Do not insert any row or column!
Otherwise, aggregation in later stage will become difficult.
If you want to write additional information, write it in "remarks", "others" or somewhere outside the table.

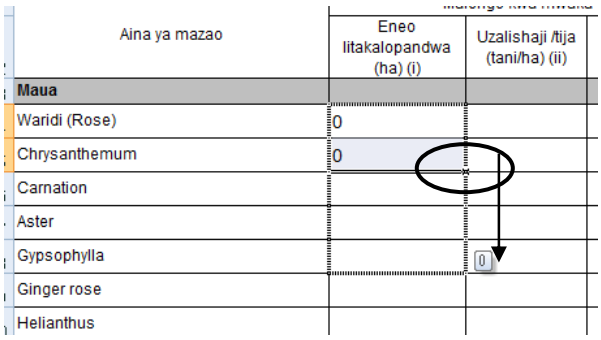
A. How to copy data in many cells

When many cells have same data, rather than typing one by one, use copy function effectively.



Aina ya mazao	Malengo kwa mwaka			Utekelezaji			
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kip
Maua							
Waridi (Rose)	0						
Chrysanthemum	0						
Carnation							
Aster							
Gypsophylla							

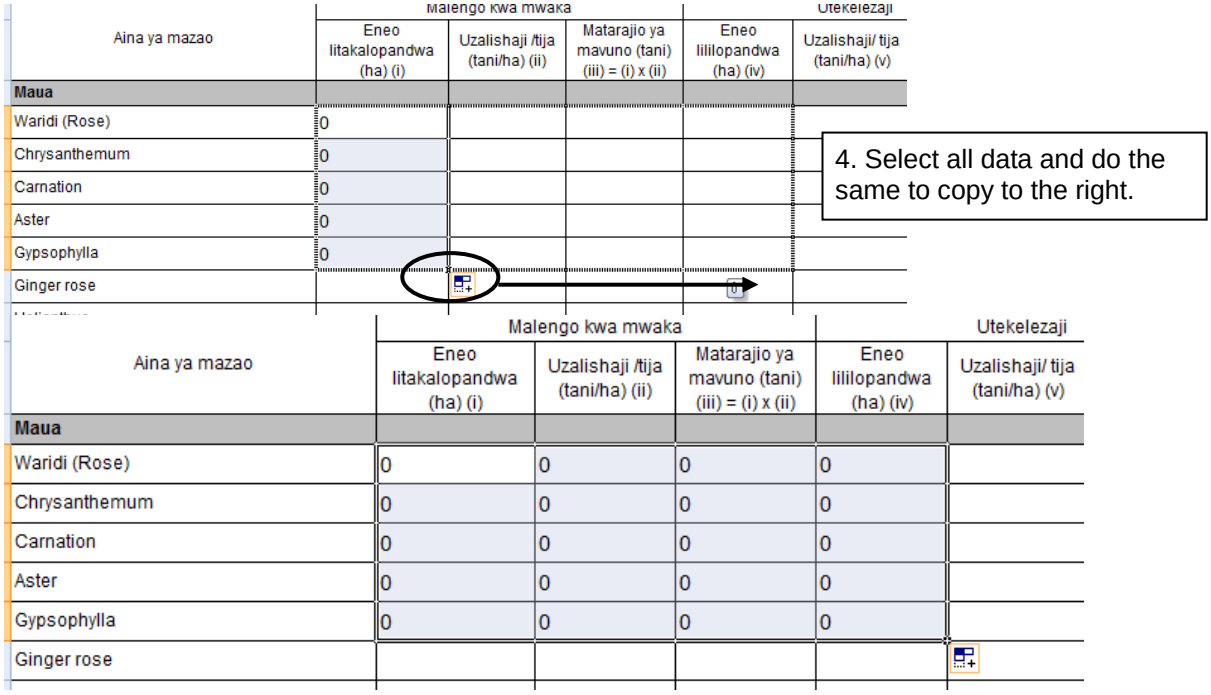
1. If all cells of this table are zero (0), enter a few of them.



Aina ya mazao	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)
Maua		
Waridi (Rose)	0	
Chrysanthemum	0	
Carnation		
Aster		
Gypsophylla		0
Ginger rose		
Helianthus		

2. Select both of them. Then, click the bottom right corner of the cell and drag down.

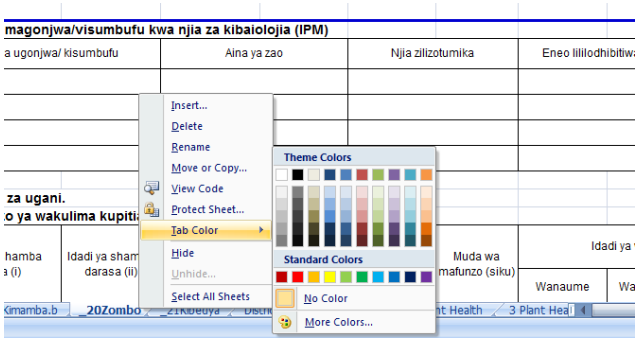
3. Then, release the click. You see the data are now copied to these cells.



Aina ya mazao	Malengo kwa mwaka			Utekelezaji	
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)
Maua					
Waridi (Rose)	0	0	0	0	
Chrysanthemum	0	0	0	0	
Carnation	0	0	0	0	
Aster	0	0	0	0	
Gypsophylla	0	0	0	0	
Ginger rose					

B. Tips for data entry

It is a good idea to color the tabs of the sheets (wards) in which the data are already entered. To do so, move the cursor to the sheet of the ward (_20Zombo, in this case), right click, choose “Tab color” and the color you want to put as shown in the figure below.



C. Tips for Quarterly report table 1 “Hali ya chakula kijijini” (Village food situation)

In this table, there is a column where VAEO/WAEO are asked to mark a check among “nzuri (good)”, “wastani (average)”, or “mbaya (bad).” In data entry, it is recommended to type “1” for the check. This will make summation easy in the later stage.

1. Hali ya chakula kijijini		
	Weka alama	Maelezo
Nzuri		
Wastani	1	
Mbaya		

D. Checking data

After data entry, check if there is no typing mistake.

Common mistakes to be avoided:

- Mistyping of letter “o” for number zero “0”. Check if, for example, “20” (twenty) is not typed as “2o” (two o).

- Do not write text (such as “kg”) and number together in the same cell. Instead of typing “50kg,” type “50.” Otherwise, this will not be counted when you consolidate the data. The unit of measurement is either stated in the table heading or written in separate cell.

- Do not enter data with different unit of measurement. For example, do not enter “500” kg in a cell for ton. Instead, enter “0.5” after conversion.

3.3 Two Types of Consolidation

There are two ways to consolidate the tables in VAEO/WAEO format (excel formula and pivot table), depending on the type of tables. Each method is explained in the following sections. The table below shows which type of consolidation each table uses.

Table 2: Consolidation Method for Tables in VAEO/WAEO Format

Tables in VAEO/WAEO Format	Method
Monthly Report	
1. Utangulizi 1.1 Hali ya hewa a) Mvua	Pivot table
b) Matukio, 1.2 Kazi zilizofanyika	Copy and paste
2. Malengo, utekelezaji na bei ya mazao	Formula
3. Afya ya mimea (Kutumia kemikali)	Pivot table
4. Mifugo iliyochinjwa	Formula
5. Ukaguzi wa nyama	Pivot table
6. Mazao yatokanayo na mifugo	Formula
7. Afya ya Mifugo 7.1 Tiba 7.2 Uogeshaji, kunyunyizia na chanjo	Pivot table
7.3 Huduma za mifugo	Formula
8. Maoni ya afisa ugani wa kijiji/ kata kuhusu sekta ya kilimo katika eneo lake	Copy and paste
9. Wageni waliotembelea kijiji/ kata kwa shughuli za kilimo au ufugaji	
Quarterly Report	
1. Hali ya chakula kijijini	Formula
2. Vikundi/Ushirika wa wakulima	Formula
3. Huduma za ugani	Pivot table
4. Afya ya mimea (njia za kibaiolojia)	Pivot table
5. Umwagiliaji	Pivot table
6. Mmomonyoko wa ardhi	Pivot table
7. Eneo la uzalishaji katika kijiji/ kata na njia iliyotumika kulima	Formula
Annual Report	
1. Utangulizi, Taarifa za msingi za Kijiji/ Kata	Formula
2. Kilimo cha mkataba na makubaliano	Formula

3. Umwagiliaji	Pivot table
4. Mashine, zana na vifaa vya kilimo/ ufugaji na uvuvi	Formula
5. Huduma za ugani	Pivot table
6. Pembejeo 6.1 Mbolea	Formula
6.2 Viuatilifu/ Viuadudu 6.3 Mbegu	Pivot table
7. Idadi ya mifugo	Formula
8. Miundombinu katika mifugo	Formula
9. Eneo la malisho (Grazing land)	Formula
10. Malisho ya wanyama 10.1 Malisho ya wanyama yaliyopandwa na kuendelezwa	Formula
10.2 Masalia ya mazao	Pivot table
11. Njia mbalimbali za mawasiliano (TV, radio, simu, nk.) 11.1 TV na Radio	Formula
Program on Agriculture / livestock	Pivot table
11.2 Simu	Formula

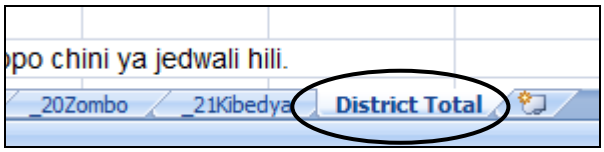
3.4 Consolidation with Excel Formula

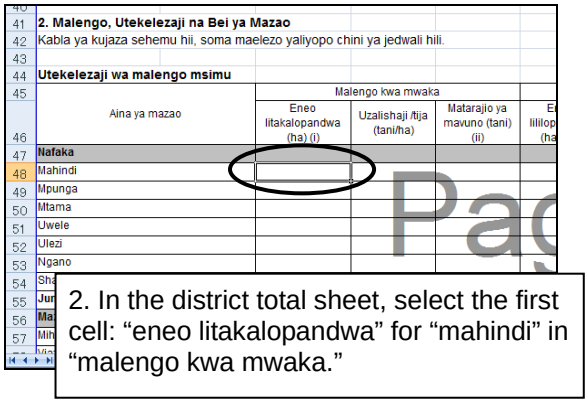
3.4.1 Summation

Let's take an example of Table 2 "Malengo, Utekelezaji na Bei ya Mazao" in the monthly format to conduct summation of ward level data into district total. In this example, we have 21 wards starting from "_01Mamboya" to "_21Kibedya."

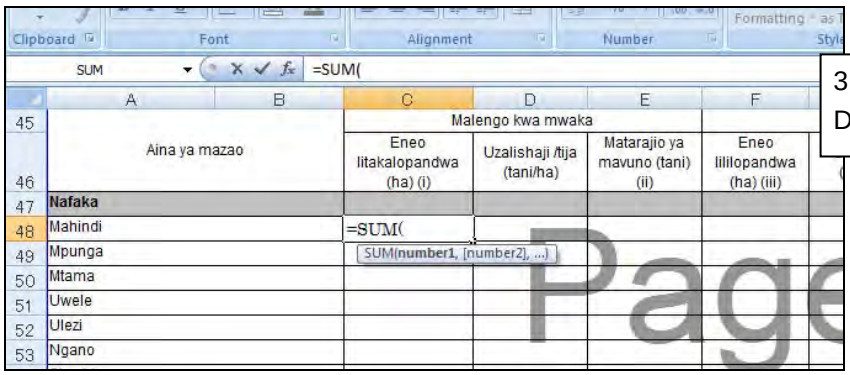
1. Create a new sheet at the end by copying the original blank format and rename it as "District Total." [See 2.3.2]

It is a good idea to color the tab as you will be able to find the sheet easily.

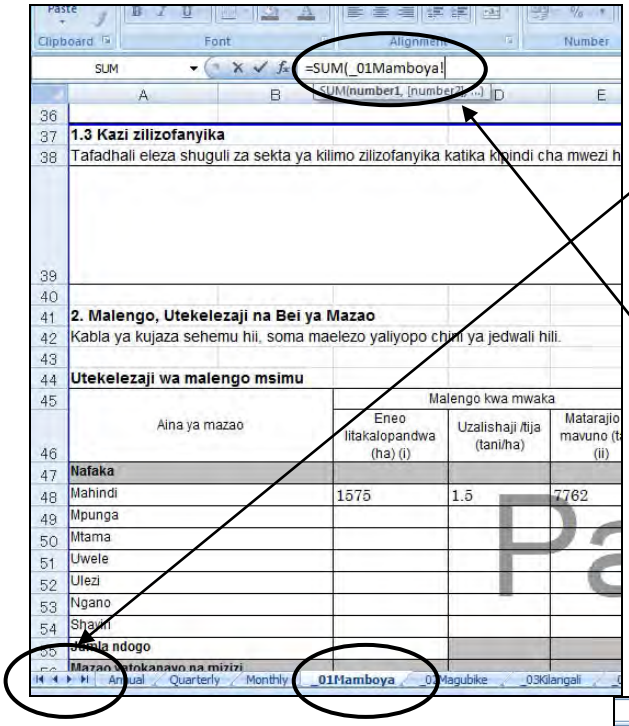




2. In the district total sheet, select the first cell: "eneo litakalopandwa" for "mahindi" in "malengo kwa mwaka."



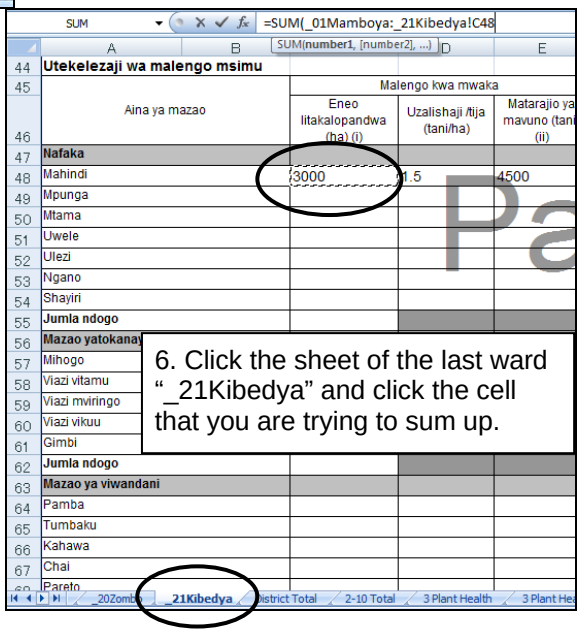
3. Type " =SUM(" in the cell.
Do NOT press Enter key.



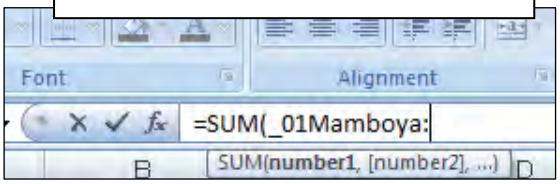
Use the arrow here to find a sheet of the first ward

4. Click the sheet of the first ward "_01Mamboya."

Then, the formula bar will show " =SUM(_01Mamboya! "

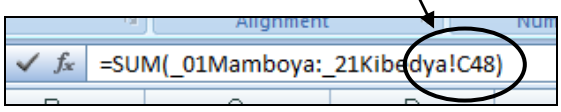


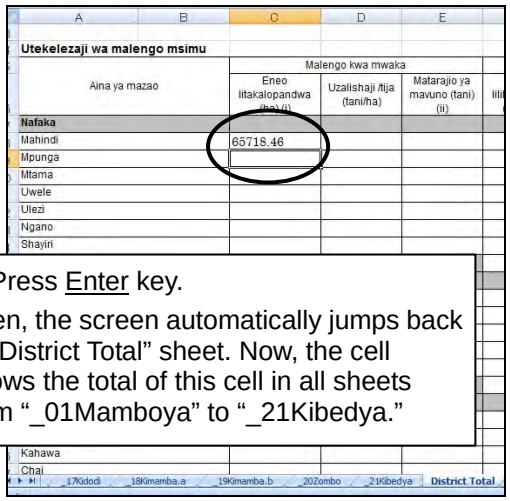
5. In the formula bar, delete " ! " and type " : ". It should now show " =SUM(_01Mamboya: "



6. Click the sheet of the last ward "_21Kibedya" and click the cell that you are trying to sum up.

7. Type the closing bracket ") " in the formula bar.



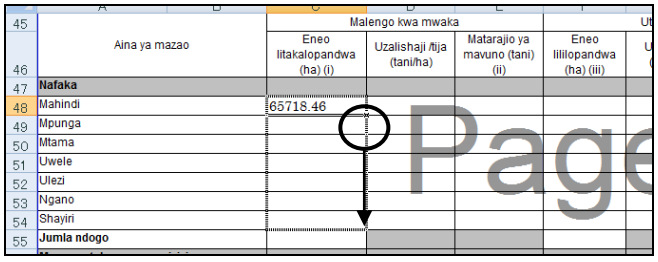


8. Press Enter key.

Then, the screen automatically jumps back to "District Total" sheet. Now, the cell shows the total of this cell in all sheets from "_01Mamboya" to "_21Kibedya."

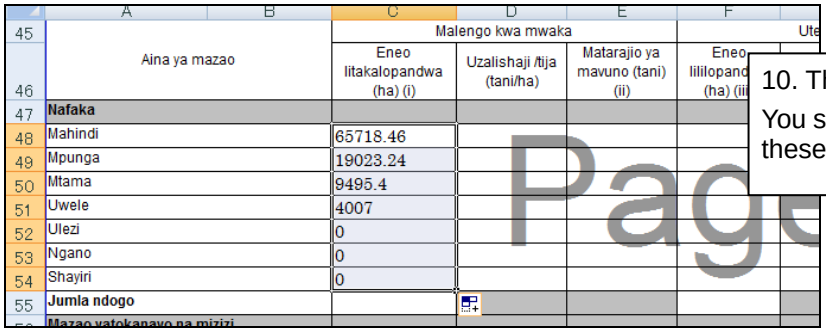
To summarize, in order to conduct summation of the data in same cell across many sheets, use the formula: =SUM("first sheet name":"last sheet name"!cell number).

Now, let's copy this formula in other cells.



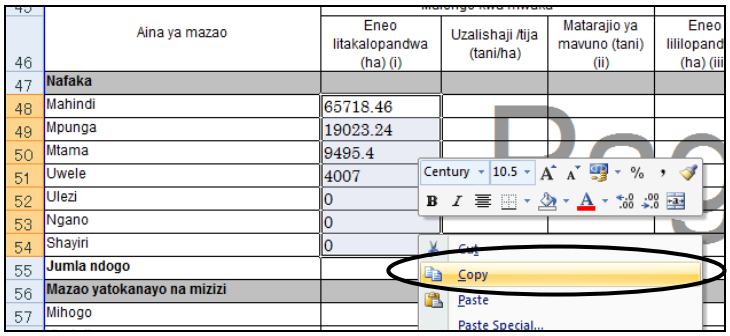
	Aina ya mazao	Malengo kwa mwaka: Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Eneo lililopandwa (ha) (iii)
47	**Nafaka**				
48	Mahindi	65718.46			
49	Mpunga				
50	Mtama				
51	Uwele				
52	Ulezi				
53	Ngano				
54	Shayiri				
55	**Jumla ndogo**				

9. Select the cell you want to copy.
Then, click the bottom right corner of the cell and drag down.



	Aina ya mazao	Malengo kwa mwaka: Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Eneo lililopandwa (ha) (iii)
47	**Nafaka**				
48	Mahindi	65718.46			
49	Mpunga	19023.24			
50	Mtama	9495.4			
51	Uwele	4007			
52	Ulezi	0			
53	Ngano	0			
54	Shayiri	0			
55	**Jumla ndogo**				

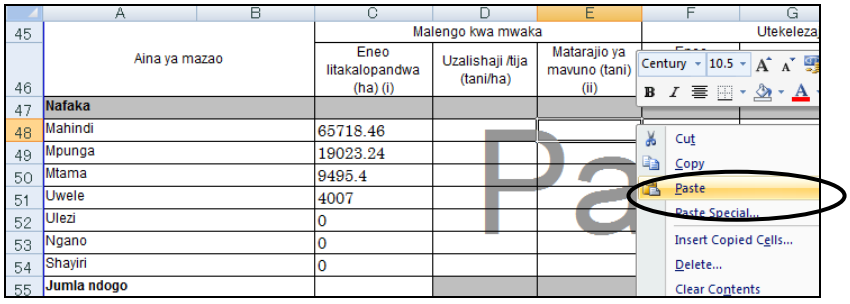
10. Then, release the click.
You see the formula is now copied to these cells.



	Aina ya mazao	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Eneo lililopandwa (ha) (iii)
47	**Nafaka**				
48	Mahindi	65718.46			
49	Mpunga	19023.24			
50	Mtama	9495.4			
51	Uwele	4007			
52	Ulezi	0			
53	Ngano	0			
54	Shayiri	0			
55	**Jumla ndogo**				
56	**Mazao yatokanayo na mizizi**				
57	Mihogo				

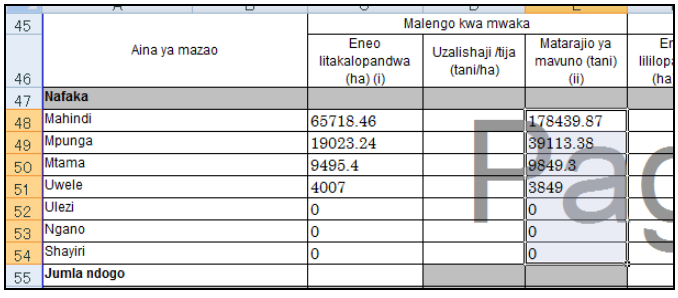
Century 10.5 | Cut | Copy | Paste | Paste Special...

11. Copy and paste also works to copy the formula to other cells.



	Aina ya mazao	Malengo kwa mwaka: Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Utekeleza
47	**Nafaka**				
48	Mahindi	65718.46			
49	Mpunga	19023.24			
50	Mtama	9495.4			
51	Uwele	4007			
52	Ulezi	0			
53	Ngano	0			
54	Shayiri	0			
55	**Jumla ndogo**				

Century 10.5 | Cut | Copy | Paste | Paste Special... | Insert Copied Cells... | Delete... | Clear Contents

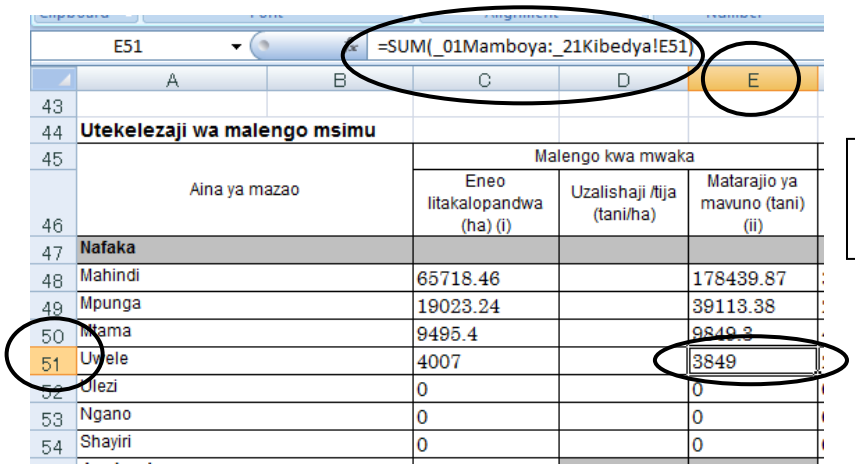


	Aina ya mazao	Malengo kwa mwaka: Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Er lililop (ha
47	**Nafaka**				
48	Mahindi	65718.46		178439.87	
49	Mpunga	19023.24		39113.38	
50	Mtama	9495.4		9849.8	
51	Uwele	4007		3849	
52	Ulezi	0		0	
53	Ngano	0		0	
54	Shayiri	0		0	
55	**Jumla ndogo**				

12. Copy the formula to all cells applicable for summation.

	Aina ya mazao	Malengo kwa mwaka			Utekelezaji		
		Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Eneo lililopandwa (ha) (iii)	Uzalishaji (tani/ha)	Mavuno (tani) (iv)
47	**Nafaka**						
48	Mahindi	65718.46		178439.87	30749.9		
49	Mpunga	19023.24		39113.38	2952.3		
50	Mtama	9495.4		9849.3	4371.3		
51	Uwele	4007		3849	2750		
52	Ulezi	0		0	0		
53	Ngano	0		0	0		
54	Shayiri	0		0	0		
55	**Jumla ndogo**						
56	**Mazao yatokanayo na mizizi**						
57	Mihogo	14756.7		84241.9	1744.2		
58	Viazi vitamu	7380.05		53091.95	1117		
59	Viazi mviringo	1138		30539	450		
60	Viazi vikuu	0		0	0		0
61	Gimbi	106		0	102		0

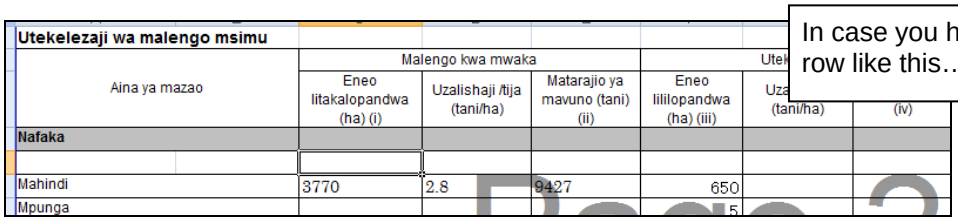
Note: Even though some wards were left blank at the time of aggregation and later entered with data, the total table will automatically show the total with the newly entered data, as long as the sheet exist between the first and last sheets.



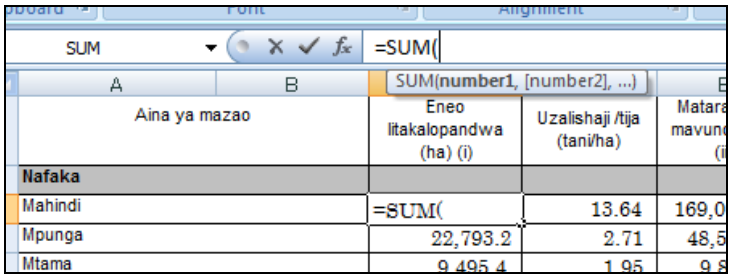
13. Select some cells and check that the formula reflects correct cell number.

Note: In case you inserted a row / column and the formula does not work:

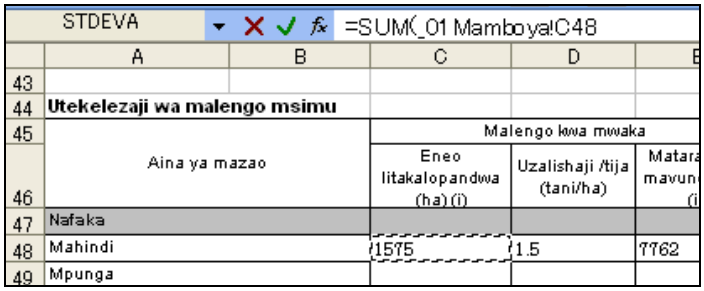
The formula above works only when the cells to be consolidated are located at exact same column and row throughout the sheet (ward). So, if this is not adhered to, the following can be used to consolidate the data.



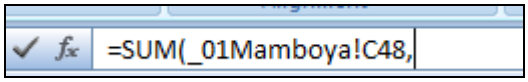
In case you have inserted a row like this…



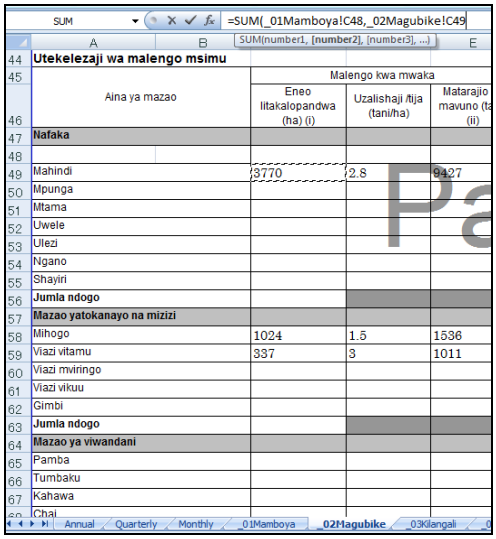
1. At “District Total” sheet, type “ =SUM(“ in a cell.



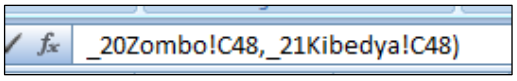
2. Go to the first ward sheet and select the cell.



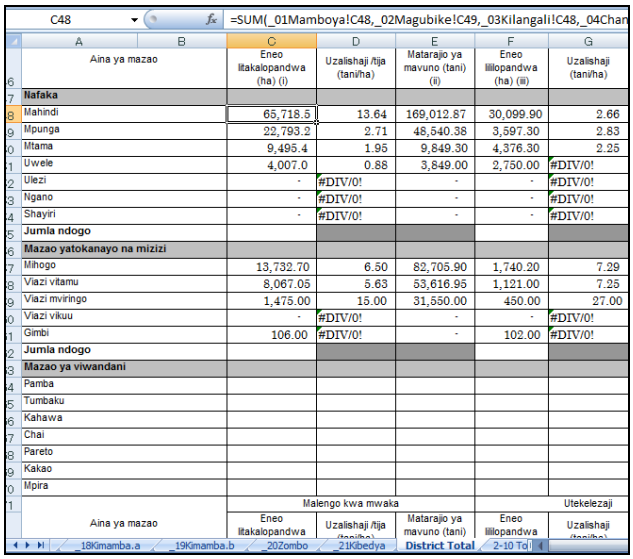
3. Type comma “,” in the formula bar.



4. Go to the next ward sheet and select the cell. Type comma “,” .



5. Continue until the final ward sheet. Then, type closing bracket “)”. Press Enter key.

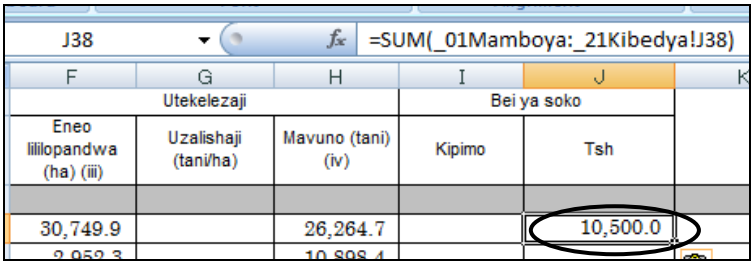


The screen automatically jumps back to “District Total” and show the total.

6. Copy the formula to all the other cells.

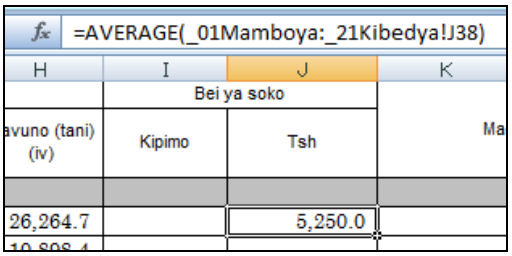
3.4.2 Average

To consolidate items such as “productivity” and “price,” you need to calculate average instead of summation. For “price,” take the following steps.



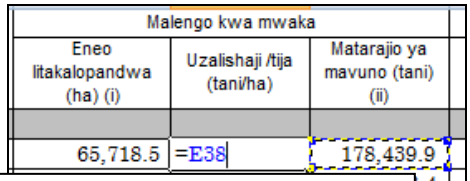
1. Copy the cell which has already the summation formula. Paste it in the cell for “Tsh.”

2. In the formula bar, delete “SUM” and type “Average.”

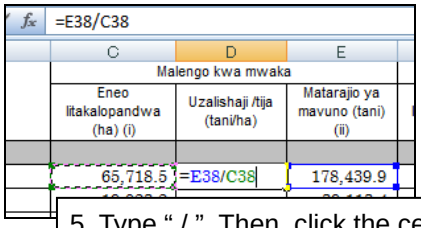


3. Press Enter key.
Now, the cell shows the average of this cell in all sheets from “_01Mamboya” to “_21Kibedya.”

For “productivity,” you cannot simply calculate average of all wards to get district productivity, as the weight (amount of production or planted areas) of each ward is different. Calculate the district productivity average as follows.



4. Type “ = ” in the cell for “uzalishaji / tija.” Then, click the cell of “matarajio ya mavuno.”



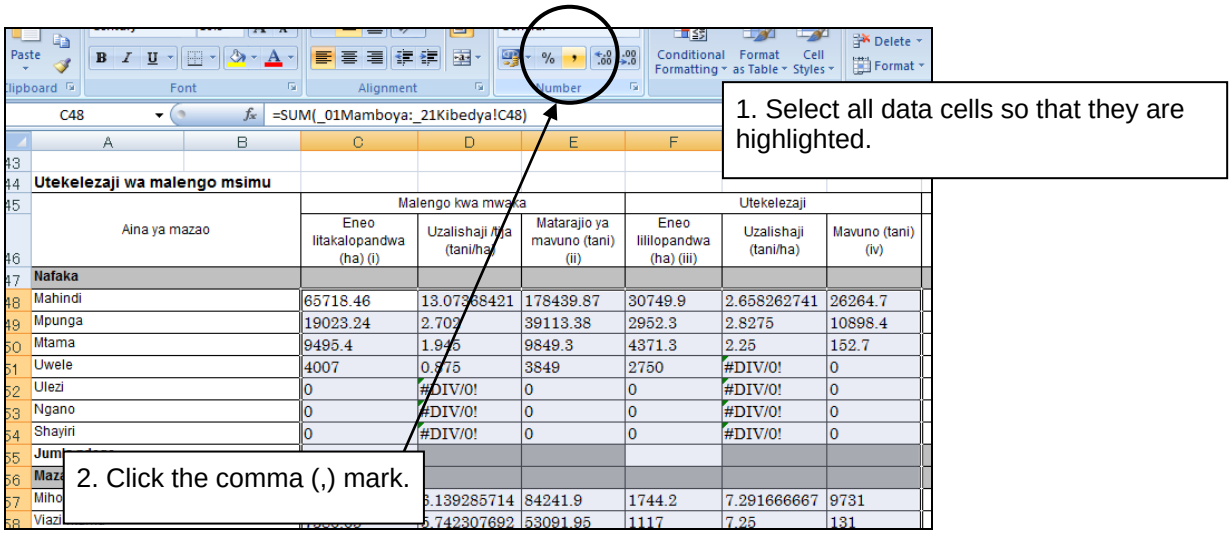
5. Type “ / ”. Then, click the cell of “eneo litakalopandwa.” Press Enter.

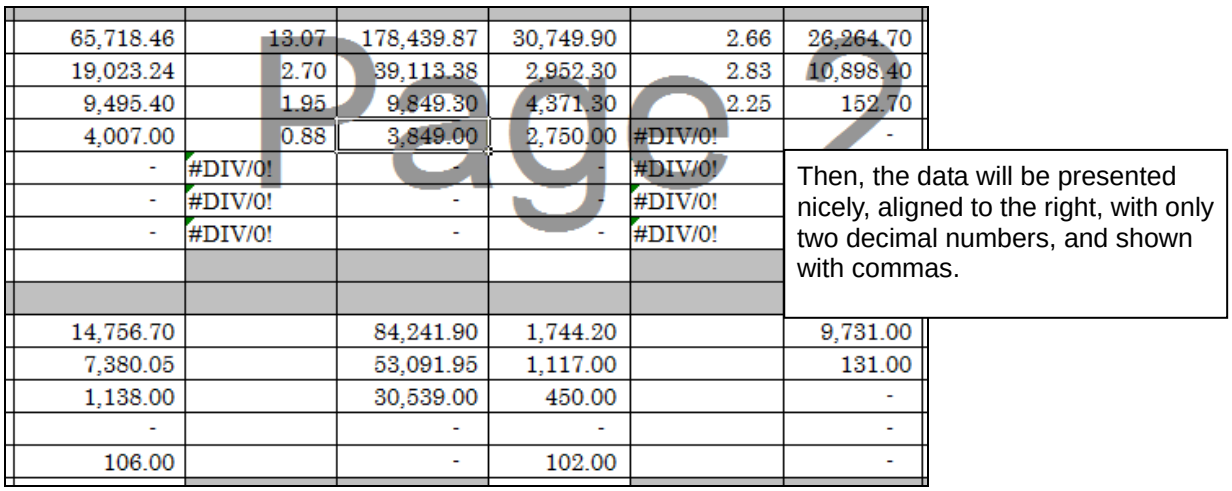
Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko	
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Eneo lililopandwa (ha) (iii)	Uzalishaji (tani/ha)	Mavuno (tani) (iv)	Kipimo	Tsh
Nafaka								
Mahindi	65,718.5	2.72	178,439.9	30,749.9	0.85	26,264.7		5,250.0
Mpunga	19,023.2	2.06	39,113.4	2,952.3	3.69	10,898.4		5,500.0
Mtama	9,495.4	1.04	9,849.3	4,371.3	0.03	152.7		#DIV/0!
Uwele	4,007.0	0.96	3,849.0	2,750.0	-	-		#DIV/0!
Ulezi	-	#DIV/0!	-	-	-	-		
Ngano	-	#DIV/0!	-	-	-	-		
Shayiri	-	#DIV/0!	-	-	-	-		
Jumla ndogo								

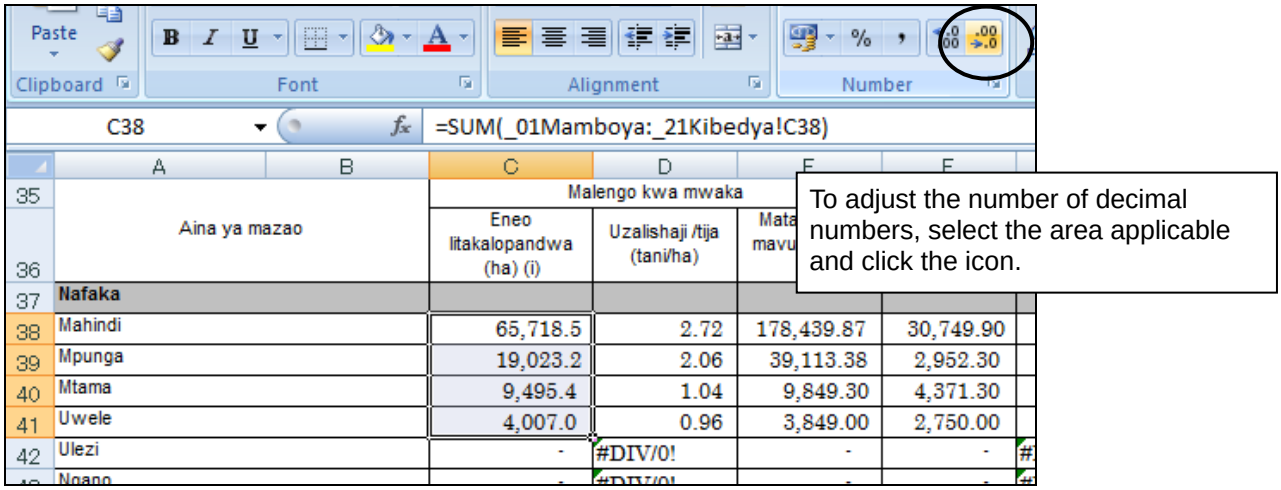
6. Copy and paste the formula to all relevant cells. If there is no data, it shows “ #DIV/0! ”.

3.4.3 Presentation

Once the data are consolidated, you can also improve the presentation of the tables to make them look nicer.







3.4.4 Checking

After data consolidation, you should check if there is any strange data. If a cell shows "#VALUE!," there may be some error. Check the formula and original data in each ward. Randomly select a few items and check the excel calculation by hand calculation. If there is a strange figure even if the formula is correct, check back the ward level data. For example…

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko	
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Eneo lililopandwa (ha) (iii)	Uzalishaji (tani/ha)	Mavuno (tani) (iv)	Kipimo	Tsh
Nafaka								
Mahindi	65,718.5	2.72	178,439.87	30,749.90	0.85	26,264.70		5,250
Mpunga	19,023.2	2.06	39,113.38	2,952.30	3.69	10,898.40		23,500

1. "Bei ya soko" of "mpunga" is "Sh 23,500"? Is this realistic?

1704			KG	5,500
115			KG	40,000
11				

_18Kimamba.a _19Kimamba.b **_20Zombo** _21Kibedya

2. After checking each ward, there is one strange figure in this ward: "Tsh 40,000/kg".

Utekelezaji			Bei ya soko	
Eneo lilopandwa (ha) (iii)	Uzalishaji (tani/ha)	Mavuno (tani) (iv)	Kipimo	Tsh
1704			KG	5,500
115			KG	4,000
11				

a.b **_20Zombo** _21Kibedya District Total 2-10 To

3. Check the original report submitted by WAEO and correct the figure. For example, from "40,000" to "4,000".

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko	
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha)	Matarajio ya mavuno (tani) (ii)	Eneo lililopandwa (ha) (iii)	Uzalishaji (tani/ha)	Mavuno (tani) (iv)	Kipimo	Tsh
Nafaka								
Mahindi	65,718.5	2.72	178,439.87	30,749.90	0.85	26,264.70		5,250
Mpunga	19,023.2	2.06	39,113.38	2,952.30	3.69	10,898.40		5,500
Mtama	9,495.4	1.04	9,849.30	4,371.30	0.03	152.70		#DIV/0!
Uwele	4,007.0	0.96	3,849.00	2,750.00	-	-		#DIV/0!
Ulezi	-	#DIV/0!	-					

_18Kimamba.a _19Kimamba.b _20Zombo _21Kibedya **District Total** 2-1

4. Now, go back to "District Total" sheet. The figure is automatically recalculated and not strange any more!

Check average carcass weight per head as below. If you find that something is strange, check the information in each ward.

3.4.5 Text entry information

It should be noted that text data in such columns as "remarks" and "unit" cannot be aggregated. They should be hand typed.

ezaji		Bei ya soko	
shaji /ha)	Mavuno (tani) (iv)	Kipimo	Tsh
2.66	26,264.70	Kg	5250
2.83	10,898.40	Kg	5500
2.25	152.70		#DIV/0!

For Table 2 “Malengo, Utekelezaji na Bei ya Mazao“ in VAEO/WAEO Monthly format, the information filled by each ward under “mengineyo” cannot be aggregated using the method described above (except for “rosella”) because each ward may have different crops in different rows. In order to aggregate information in “others,” you need to create a list of all the information provided in “others” and aggregate with the Pivot Table method explained in the next section.

158	Ginger rose		
159	lisianthus		
160	**Jumla ndogo**		
161	**Mengineyo**		
162	Choya (Rozella)		
163	jackfruit	50	6
164	rambutan	20	0.5

Do not aggregate these rows with the excel formula shown above.

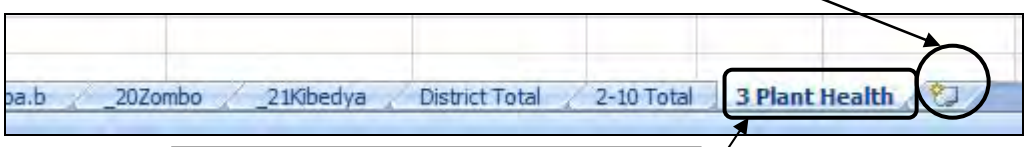
3.5 Consolidation with Pivot Table

Pivot table function is useful when you want to consolidate tables which have not only numeric information but also text information such as the name of disease, purpose of training, etc (listed in Table 2, page 12, of this guide). Let’s take an example of Table 3.1 “Kuzuia magonjwa/ visumbufu kwa kutumia kemikali” in the monthly VAEO/WAEO format to conduct pivot table analysis.

3.5.1 List preparation

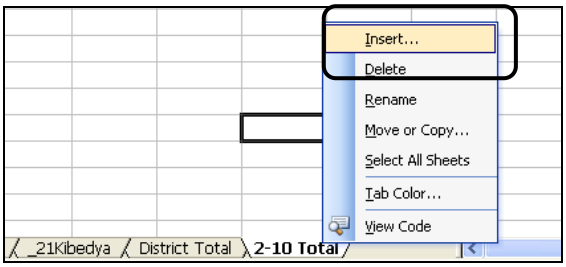
First, you need to create a list in a new blank sheet by copying all rows into the sheet. (If there is “*” in procedure explanation, Excel 2003 uses different steps shown in dashed boxes).

1. Create a new blank sheet at the end by clicking this icon. *

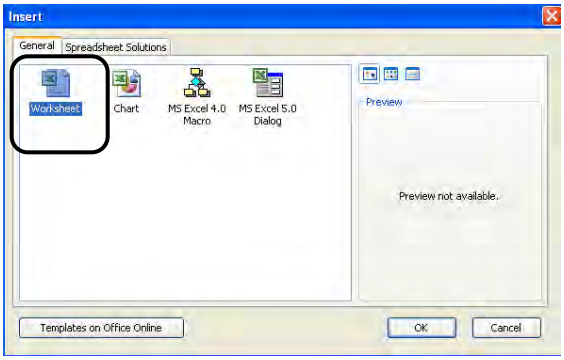


2. Then, rename the sheet as the name of the table that you want to consolidate.

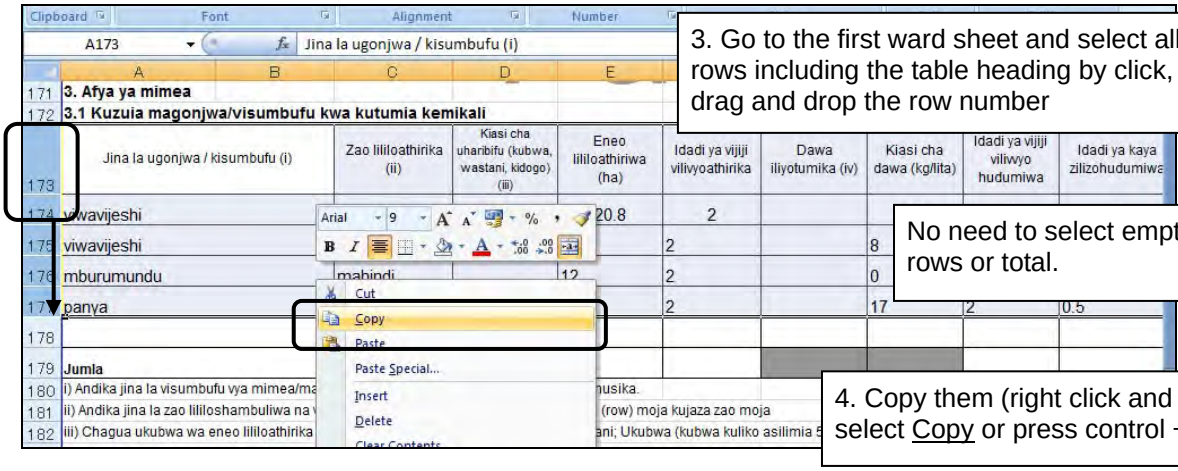
* For Excel 2003, a new blank sheet can be created in the following manner:



(1-1). Right click the existing sheet name and select Insert.



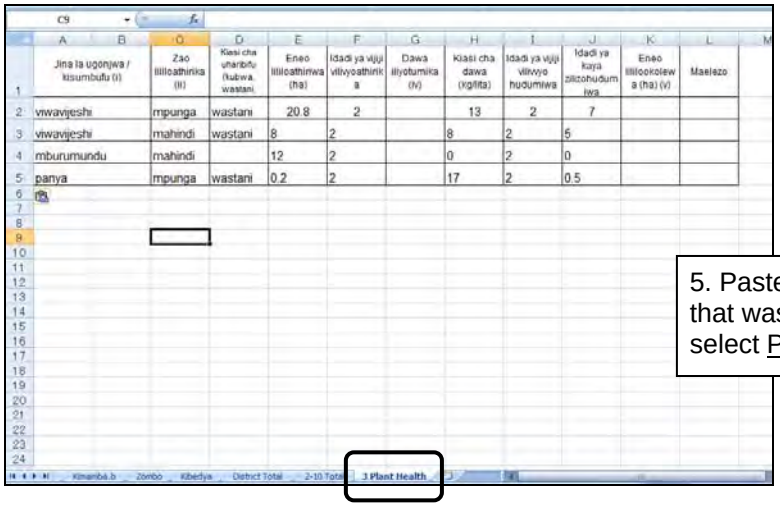
(1-2). Once Insert window pops up, select Worksheet. Then, click OK.



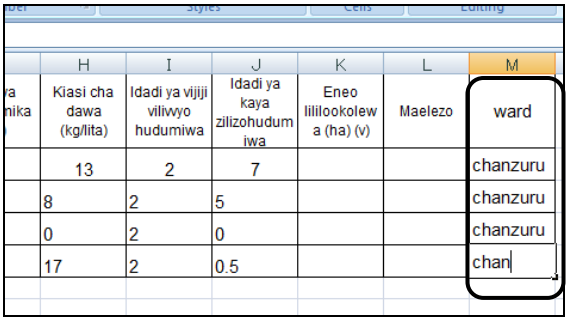
3. Go to the first ward sheet and select all rows including the table heading by click, drag and drop the row number

No need to select empty rows or total.

4. Copy them (right click and select Copy or press control +C)



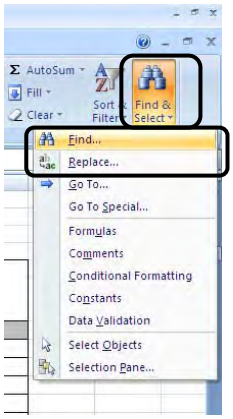
5. Paste them in the new blank sheet that was just created (right click and select Paste or press control + V).



	H	I	J	K	L	M
	Kiasi cha dawa (kg/lita)	Idadi ya vijiji vilivyo hudumiwa	Idadi ya kaya zilizohudumiwa	Eneo lililookolewa (ha) (v)	Maelezo	ward
	13	2	7			chanzuru
	8	2	5			chanzuru
	0	2	0			chanzuru
	17	2	0.5			chan

6. Add one column at the end of the table to write the name of ward.

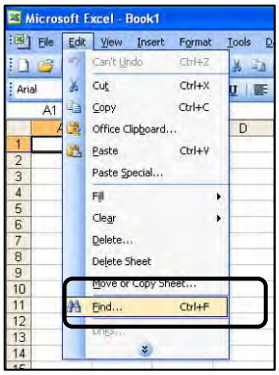
7. Continue to copy and paste rows with data in the following wards.



8. To find Table 3.1 quickly in the following wards, it is convenient to use "Find" function.

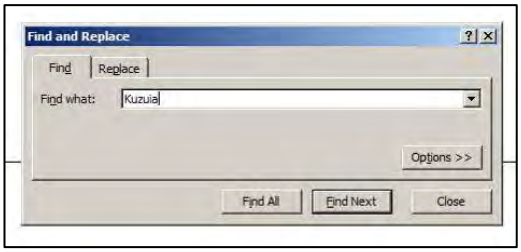
To do so, in Home, left-click Find & Select and left-click Find again. *

* For Excel 2003, Find can be found under Edit in the menu bar.

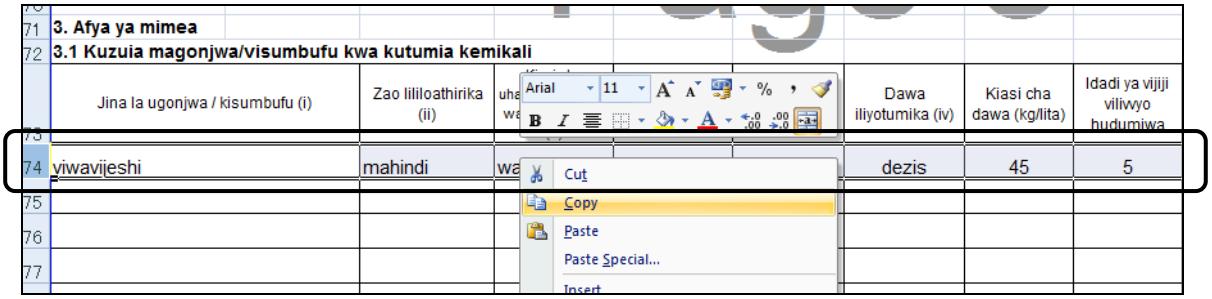


9. Type "kuzuia" and click Find Next.

Then, automatically a cell containing a word "Kuzuia" is shown.



10. From the second ward, no need to copy the table heading.



Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani,	Eneo lililoathiriwa (ha)	Idadi ya vijiji vilivyoathirika	Dawa iliyotumika (iv)	Kiasi cha dawa (kg/lita)	Idadi ya vijiji vilivyo hudumiwa	Idadi ya kaya zilizohudumiwa	Eneo lililookolewa (ha) (v)	Maelezo	ward
viwavijeshi	mpunga	wastani	20.8	2		13	2	7			chanzuru
viwavijeshi	mahindi	wastani	8	2		8	2	5			chanzuru
mbururumundu	mahindi		12	2		0	2	0			chanzuru
panya	mpunga	wastani	0.2	2		17	2	0.5			chanzuru
viwavijeshi	mahindi	wastani	824.4	5	dezis	45	5	36	36		Ulaya
viwavi	mahindi	wastani	26	3	karate	0	3				Mikumi
viwavi	mahindi	wastani	3.5	3	karate	180	3	2.5			Berega
viwavi	mpunga	kidogo	2	1	thionex	2		1			Kisanga
thrips	vitunguu	wastani	80	3	karate	279	3		81		Malolo
magugu	miwa	kidogo	25	2		20	2	150			Kidodi
ukungu	nyanya	kidogo	2	1		3	1	480			Kidodi
wadudu	mpunga	kidogo	25	3		16	3	25000			Kidodi

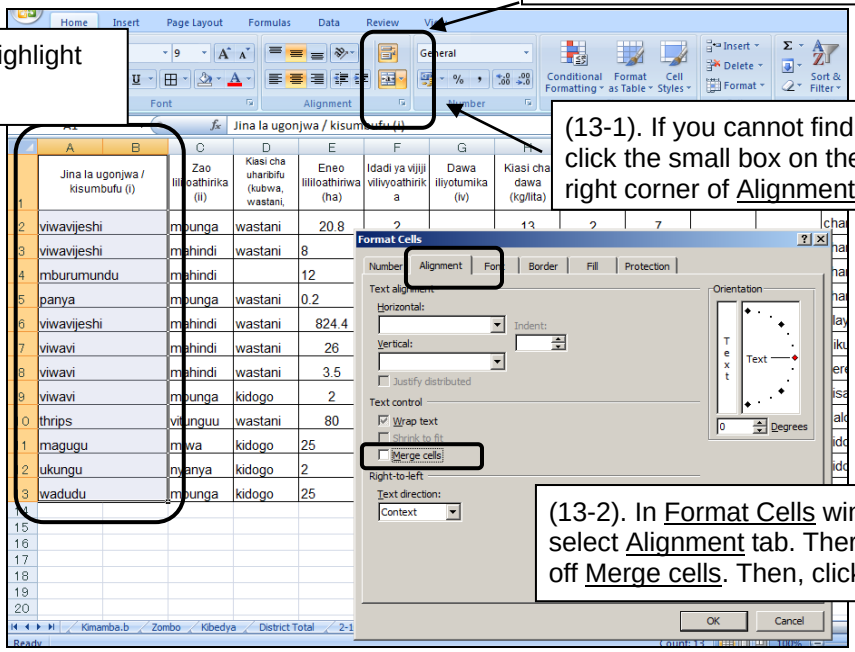
11. Now, data from all wards are copied in the list.

Pivot table function cannot be used if there are merged cells in the list. So if there are merged

cells, you need to unmerge them.

13. Click this icon in a Home tab. 

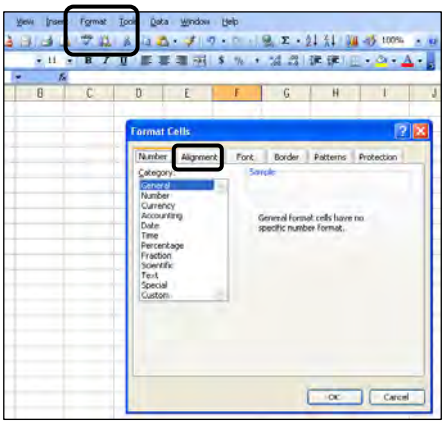
12. Select and highlight merged cells.



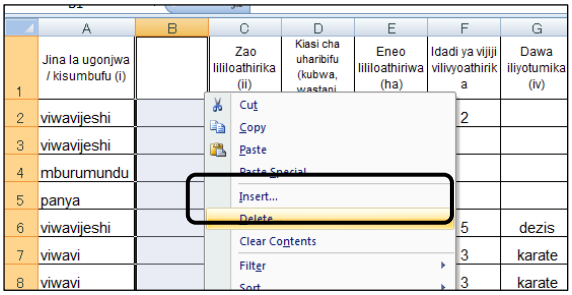
(13-1). If you cannot find the icon, click the small box on the bottom right corner of Alignment. *

(13-2). In Format Cells window, select Alignment tab. There, click off Merge cells. Then, click OK.

* For Excel 2003, the following step should be taken to open Format Cells window.



(13-1). Go to Format on the menu bar and select Cells.

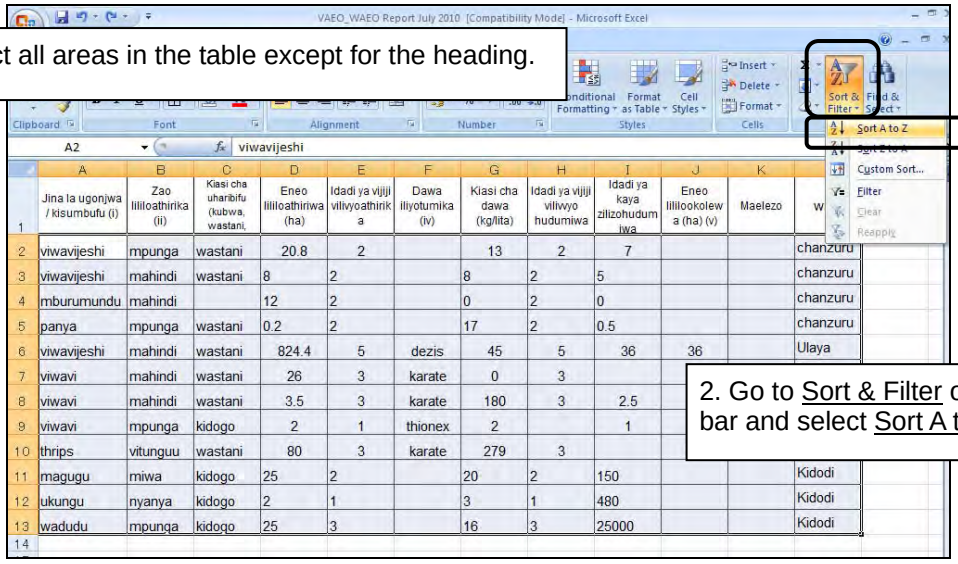


14. After the cells are unmerged, select and delete the blank column (right click and select Delete).

3.5.2 Sorting and standardizing the names

In order to consolidate text entry, the spellings of the same item need to be exactly the same. To do this easily, you should first sort the rows in alphabetical order.

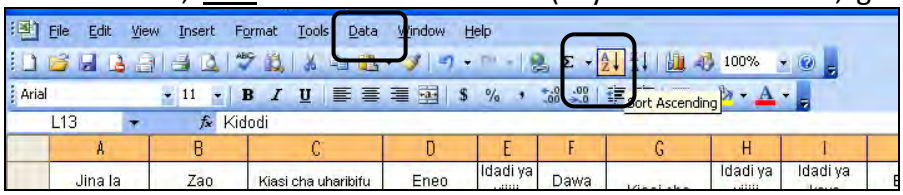
1. Select all areas in the table except for the heading.



	Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani,	Eneo lililoathiriwa (ha)	Idadi ya vijiji vilivyoathirika	Dawa iliyotumika (iv)	Kiasi cha dawa (kg/lita)	Idadi ya vijiji vilivyo hudumiwa	Idadi ya kaya zilizohudumiwa	Eneo lililookolewa (ha) (v)	Maelezo	W
2	viwavijeshi	mpunga	wastani	20.8	2		13	2	7			chanzuru
3	viwavijeshi	mahindi	wastani	8	2		8	2	5			chanzuru
4	mburumundu	mahindi		12	2		0	2	0			chanzuru
5	panya	mpunga	wastani	0.2	2		17	2	0.5			chanzuru
6	viwavijeshi	mahindi	wastani	824.4	5	dezis	45	5	36	36		Ulaya
7	viwavi	mahindi	wastani	26	3	karate	0	3				
8	viwavi	mahindi	wastani	3.5	3	karate	180	3	2.5			
9	viwavi	mpunga	kidogo	2	1	thionex	2		1			
10	thrips	vitunguu	wastani	80	3	karate	279	3				
11	magugu	miwa	kidogo	25	2		20	2	150			Kidodi
12	ukungu	nyanya	kidogo	2	1		3	1	480			Kidodi
13	wadudu	mpunga	kidogo	25	3		16	3	25000			Kidodi
14												

2. Go to Sort & Filter on the tool bar and select Sort A to Z. *

* In Excel 2003, Sort icon is located here (If you cannot find it, go to Data on the menu bar:



IMPORTANT NOTE: Always select all areas of the table. If you select only a few columns, the connection between the selected columns and unselected columns will be lost.

	Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani, kidogo) (iii)	
2	magugu	miwa	kidogo	25
3	mburumundu	mahindi		12
4	panya	mpunga	wastani	0.2
5	thrips	vitunguu	wastani	
6	ukungu	nyanya	kidogo	2
7	viwavijeshi	mpunga	kidogo	
8	viwavijeshi	mahindi	wastani	
9	viwavijeshi	mahindi	wastani	
10	viwavijeshi	mahindi	wastani	8
11	viwavijeshi	mahindi	wastani	
12	viwavijeshi	mpunga	wastani	
13	wadudu	mpunga	kidogo	25

Only this column will be sorted while other columns remain unchanged.

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani,	Eneo lililoathiriwa (ha)	Idadi ya vijiji vilivyoathirika	Dawa iliyotumika (iv)	Kiasi cha dawa (kg/lita)	Idadi ya vijiji vilivyo hudumiwa	Idadi ya kaya zilizohudumiwa	Eneo lililookolewa (ha)	Maelezo	ward	
2	magugu	miwa	kidogo	25	2		20	2	150				
3	mburumundu	mahindi		12	2		0	2	0				
4	panya	mpunga	wastani	0.2	2		17	2	0.5				
5	thrips	vitunguu	wastani	80	3	karate	279	3		81		Malolo	
6	ukungu	nyanya	kidogo	2	1		3	1	480			Kidodi	
7	viwavi	mahindi	wastani	26	3	karate	0	3				Mikumi	
8	viwavi	mahindi	wastani	3.5	3	karate	180	3	2.5			Berega	
9	viwavi	mpunga	kidogo	2	1	thionex	2		1			Kisanga	
10	viwavijeshi	mpunga	wastani	20.8	2								
11	viwavijeshi	mahindi	wastani	8	2								
12	viwavijeshi	mahindi	wastani	824.4	5	dezis							
13	wadudu	mpunga	kidogo	25	3								
14													

Then the rows are sorted in alphabetical order of the entry in the first column.

3. Check if there are same items written in different word or spelling. For example, “viwavi” and “viwavijeshi” are the same.

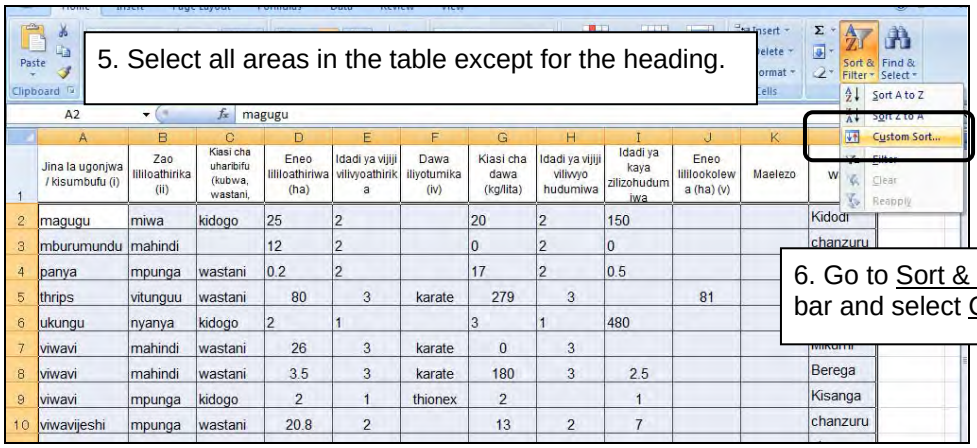
magugu	miwa	kidogo	25
mburumundu	mahindi		12
panya	mpunga	wastani	0.2
thrips	vitunguu	wastani	80
ukungu	nyanya	kidogo	2
viwavijeshi	mpunga	kidogo	2
viwavijeshi	mahindi	wastani	26
viwavijeshi	mahindi	wastani	3.5
viwavijeshi	mahindi	wastani	8
viwavijeshi	mahindi	wastani	824.4
viwavijeshi	mpunga	wastani	20.8

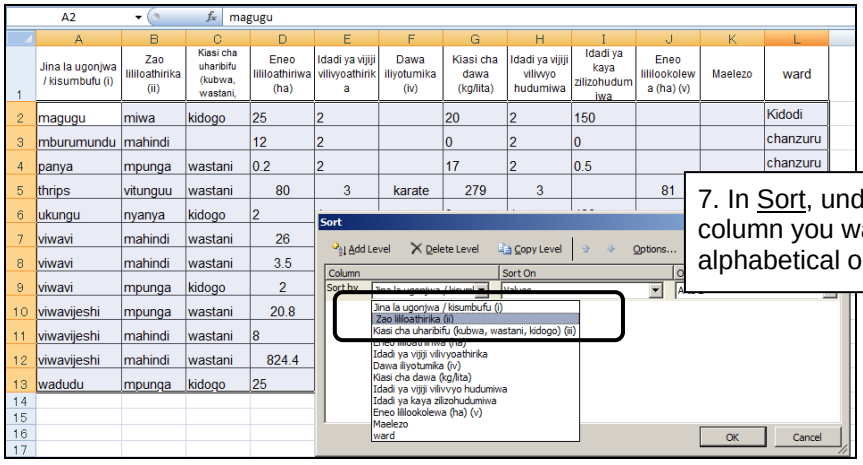
4. Standardize the names of same items.
For example, “viwavi” is changed to “viwavijeshi”

Examples of same items in different word / spelling:

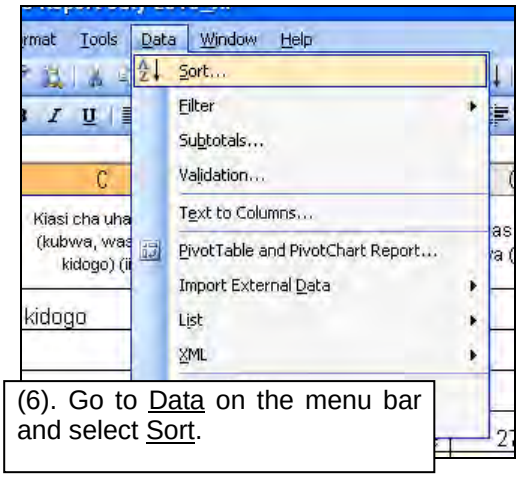
- “mbegu bora” and “mbegubora”
- “mandalizi” and “mandaliziyashamba”
- “ngombe”, “n’gombe”, and “ng’ombe”

In order to standardize spellings / names in other columns, you can also sort the rows based on the alphabetical order of other columns.

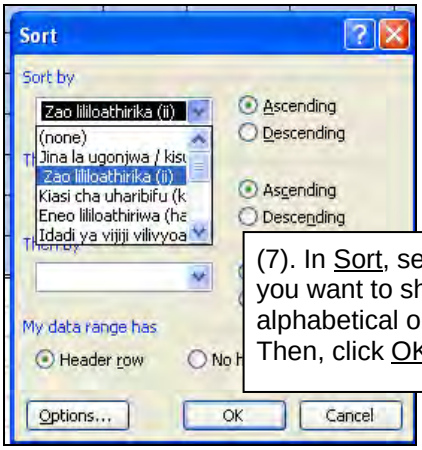




* For Excel 2003, this custom sort is done in the following way:



(6). Go to Data on the menu bar and select Sort.



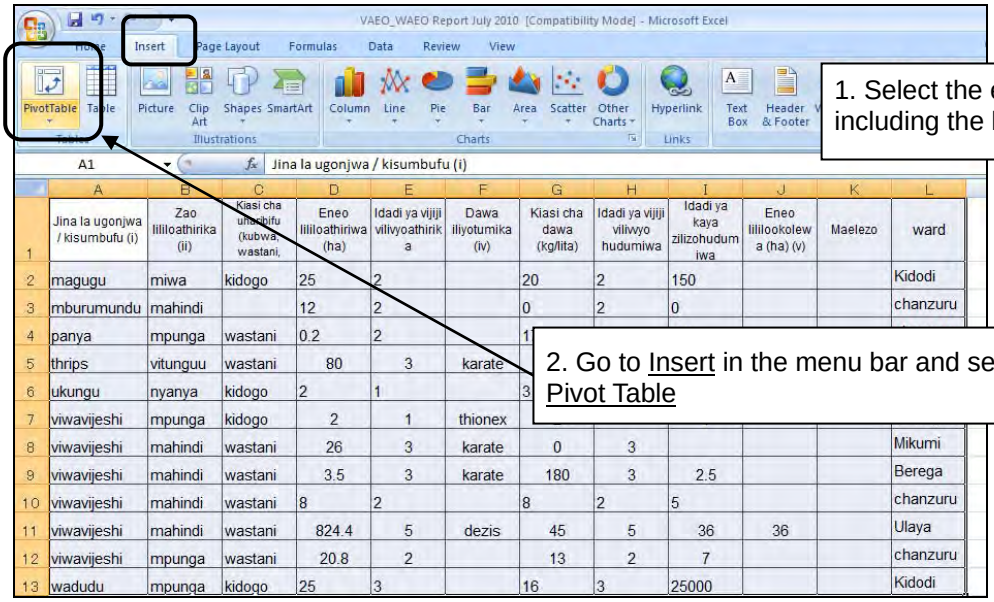
(7). In Sort, select the column you want to show in the alphabetical order at Sort By. Then, click OK.

After standardizing words and spellings of same items in each column, the list is ready for pivot table analysis.

3.5.3 Pivot table analysis

Here let us examine the area attacked by disease in each ward.

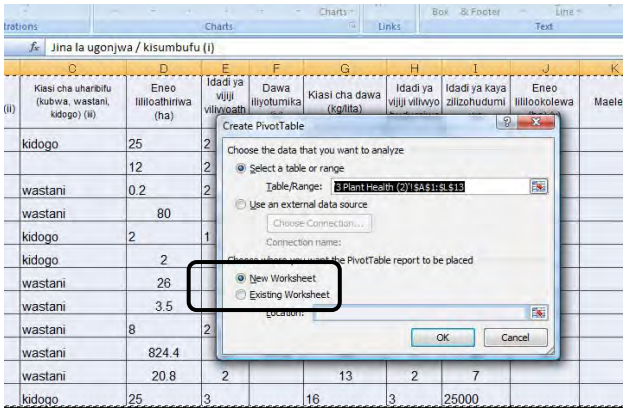
*If you are using Excel 2003, go to page 32.



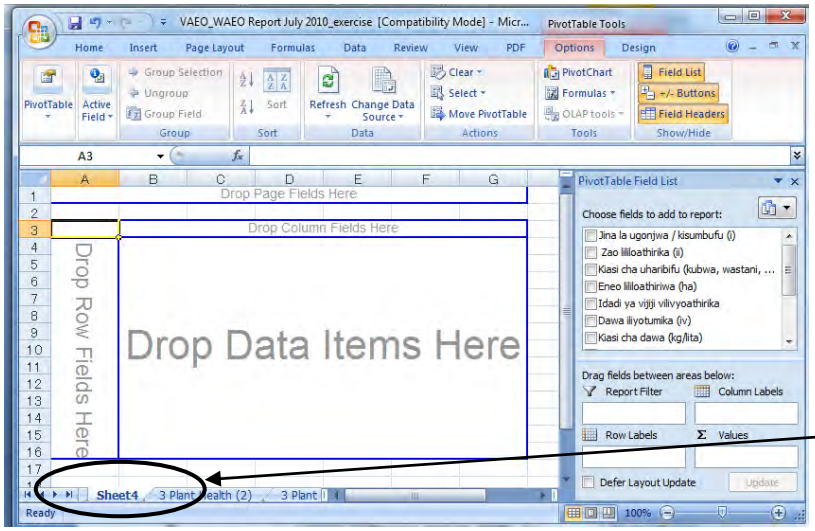
	A	B	C	D	E	F	G	H	I	J	K	L
1	Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani,	Eneo lililoathiriwa (ha)	Idadi ya vijiji vilivyoathirika	Dawa iliyotumika (iv)	Kiasi cha dawa (kg/lita)	Idadi ya vijiji vilivyo hudumiwa	Idadi ya kaya zilizohudumiwa	Eneo lililookolewa (ha) (v)	Maelezo	ward
2	magugu	miwa	kidogo	25	2		20	2	150			Kidodi
3	mburumundu	mahindi		12	2		0	2	0			chanzuru
4	panya	mpunga	wastani	0.2	2		1					
5	thrips	vitunguu	wastani	80	3	karate						
6	ukungu	nyanya	kidogo	2	1		3					
7	viwavijeshi	mpunga	kidogo	2	1	thionex						
8	viwavijeshi	mahindi	wastani	26	3	karate	0	3				Mikumi
9	viwavijeshi	mahindi	wastani	3.5	3	karate	180	3	2.5			Berega
10	viwavijeshi	mahindi	wastani	8	2		8	2	5			chanzuru
11	viwavijeshi	mahindi	wastani	824.4	5	dezis	45	5	36	36		Ulaya
12	viwavijeshi	mpunga	wastani	20.8	2		13	2	7			chanzuru
13	wadudu	mpunga	kidogo	25	3		16	3	25000			Kidodi

1. Select the entire list including the heading.

2. Go to Insert in the menu bar and select Pivot Table



3. Once Create Pivot Table window pops up, select New Worksheet.
Then click OK



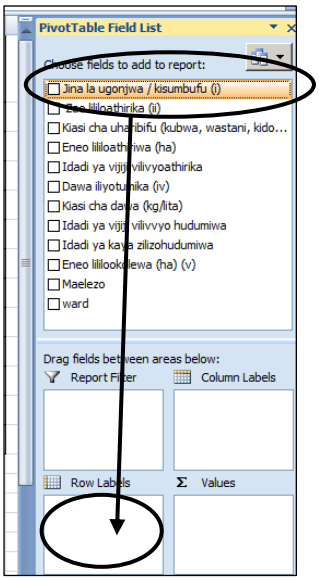
Then, the pivot table appears in a new sheet like this.

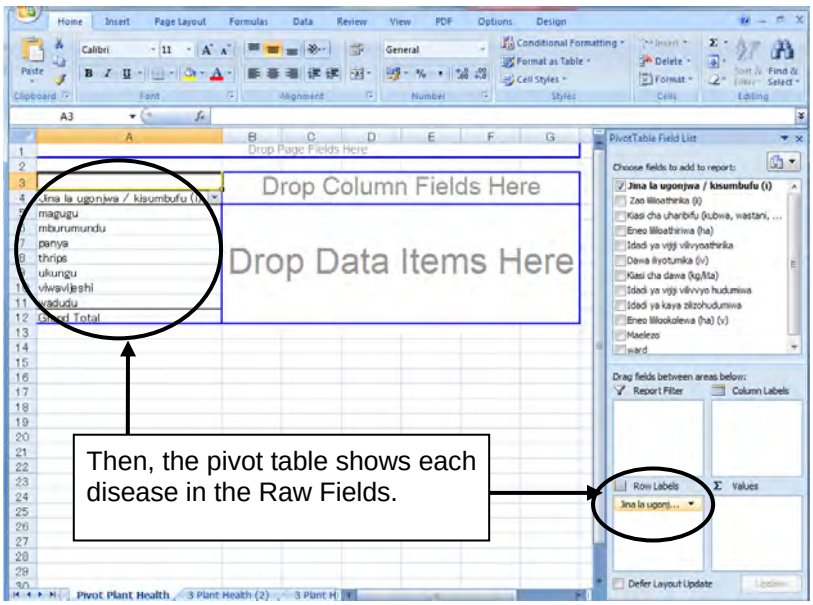
You will find Pivot Table Field List. Each column of the table is listed in Field List.

To conduct pivot table analysis, Tick the box and then, drag and drop it in applicable box below.

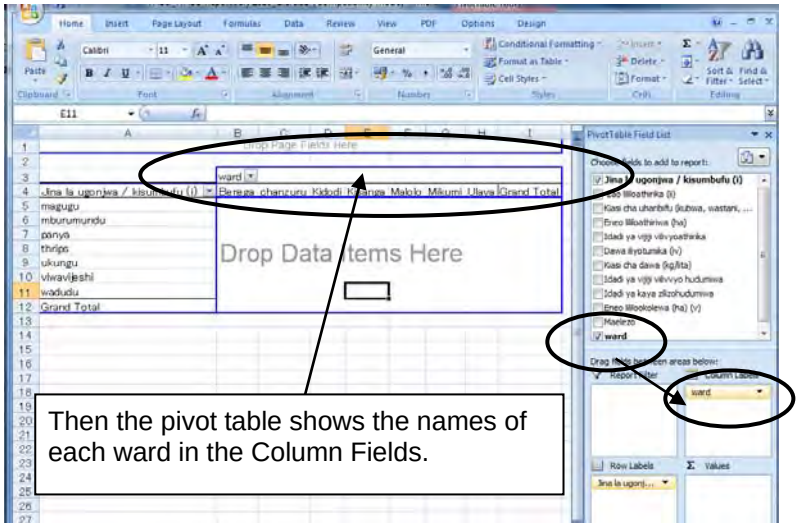
4. Let's rename the new sheet as "Pivot Plant Health".

5. Select, drag and drop "Jina la ugonjwa" to Row Labels.



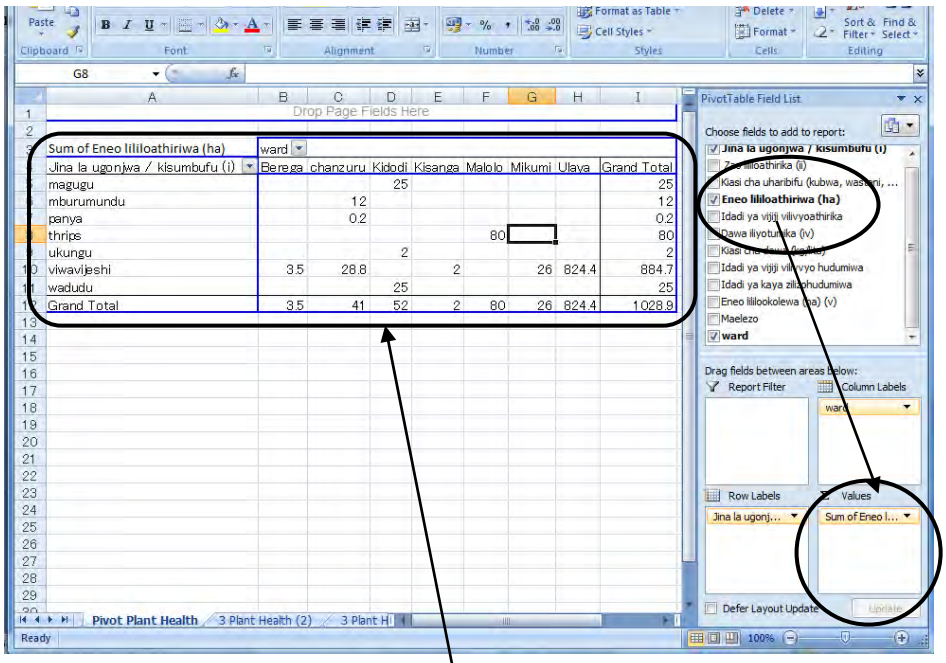


Then, the pivot table shows each disease in the Raw Fields.



Then the pivot table shows the names of each ward in the Column Fields.

6. Next drag and drop “ward” to Column labels.”



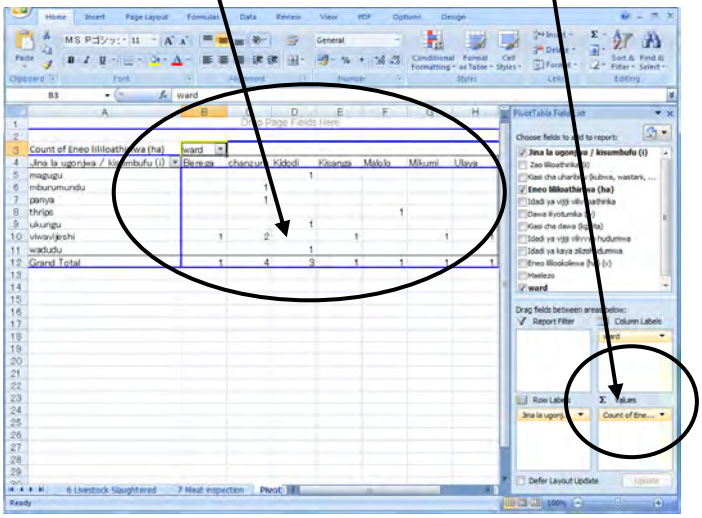
7. Next, drag and drop “Eneo lililoathiriwa” to Values.

Then, the amount is automatically calculated from the original list and presented in the pivot table!

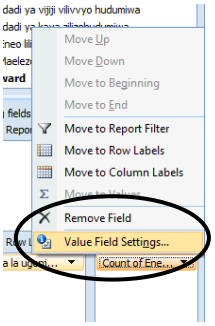
Now you know the area attacked by each disease in each ward!

Tips: In general,
Columns for text entry (such as “Jina la ugonjwa”) should go to Row Labels or Column Labels.
Columns for numeric entry (such as “Eneo lililoathiriwa”) should go to Values.

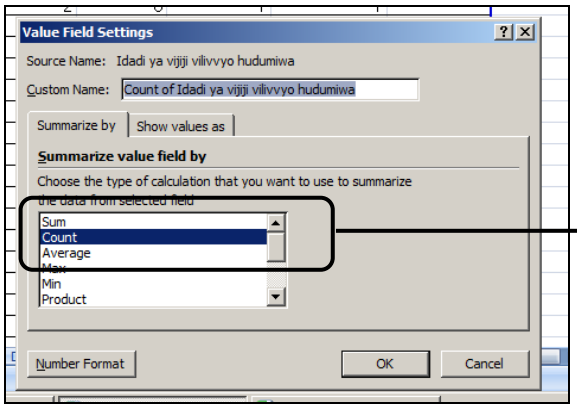
8. If the consolidated data shows “Count” (how many data exist), rather than “Sum” (total value of all data), do one of the following:
1) right click in the data field , or 2) left click on the count,

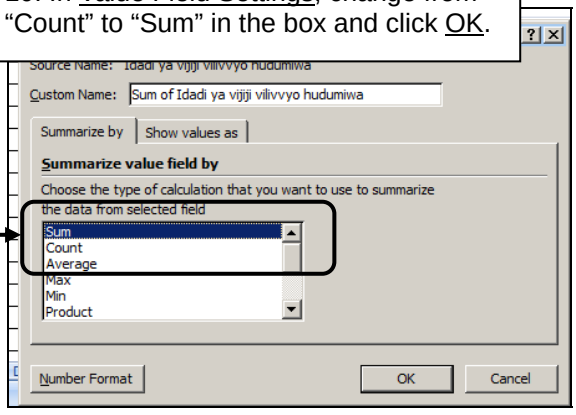


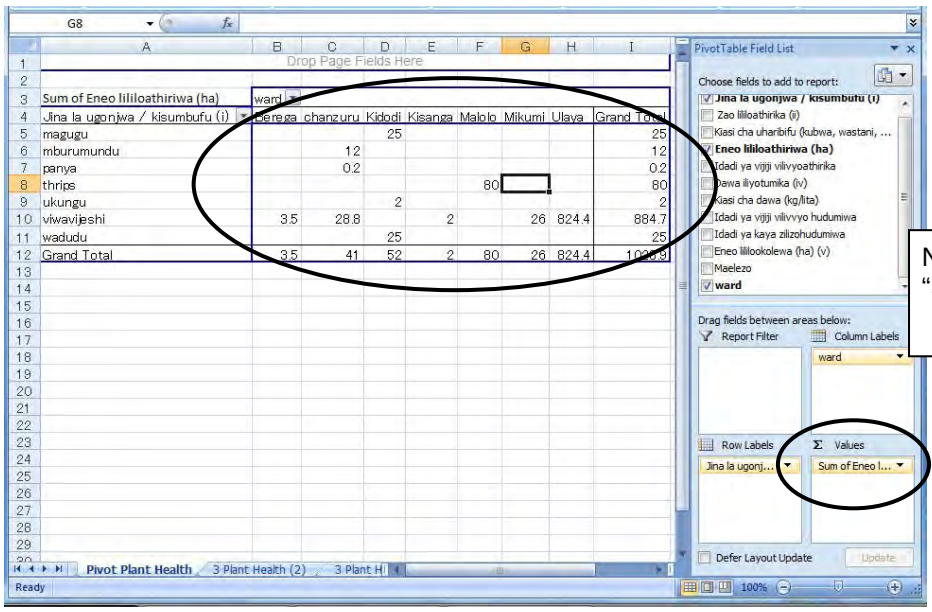
9. Then, select Value Field Settings



10. In Value Field Settings, change from “Count” to “Sum” in the box and click OK.

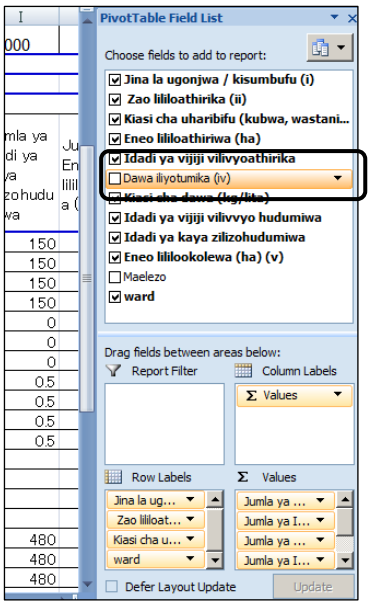




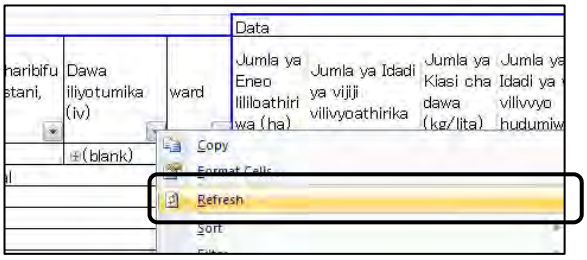


Now, it also shows “Sum”!

To delete an item from the pivot table, click off the check in Field List.

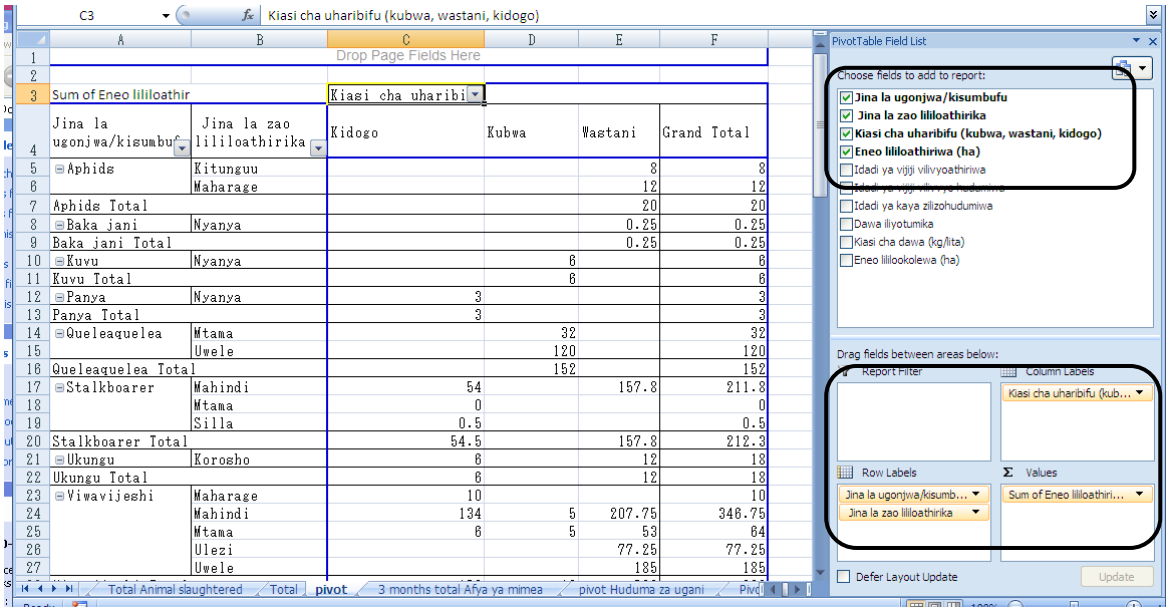


If you make change in the original list after making pivot table, you can right click the pivot table and select refresh.



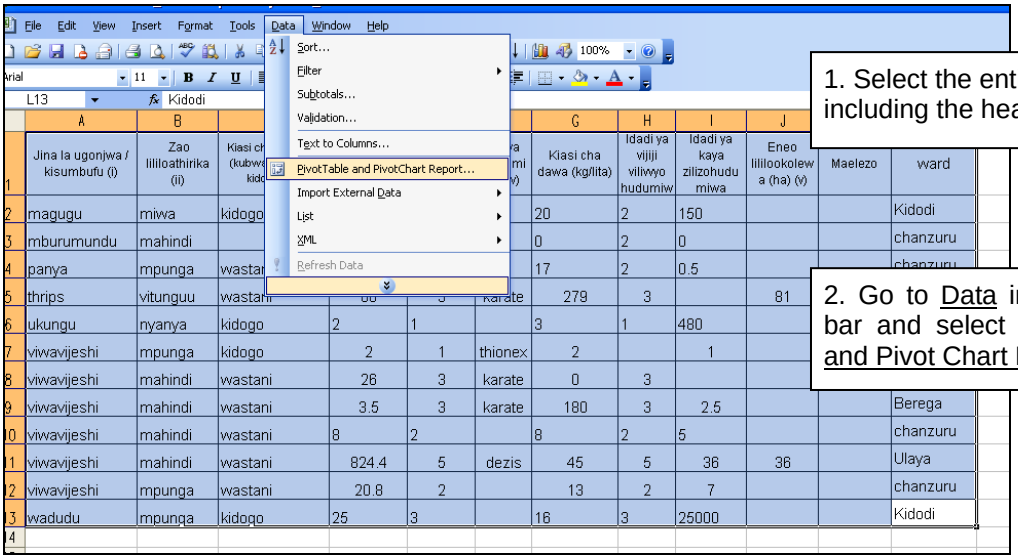
Then, the pivot table is automatically updated.

In Pivot Table, you can make a more complicated table like the one below by dragging and dropping more than one field in columns and/or rows.



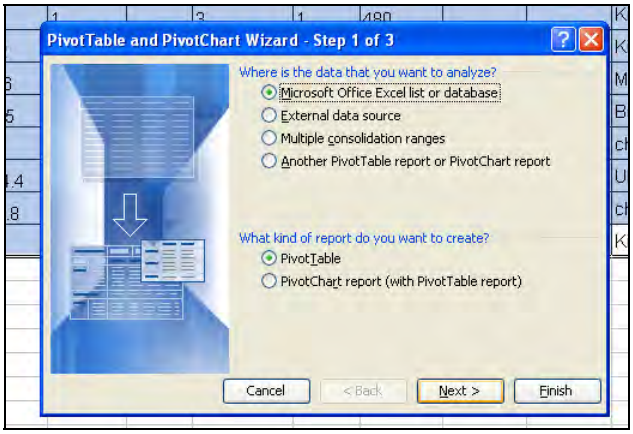
In this figure, the area affected is shown by severity (kidogo, wastani, kubwa) for each type of disease and crop.

<Excel 2003>



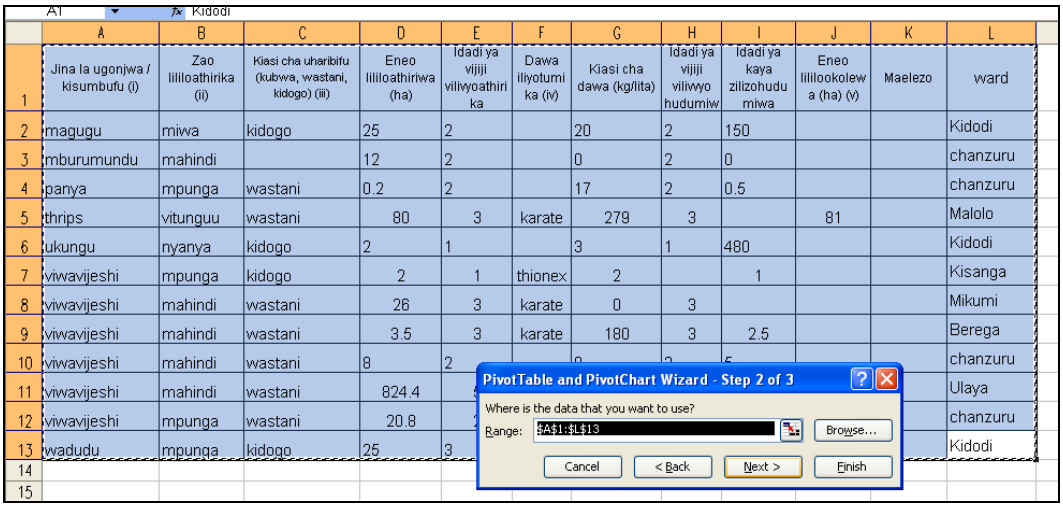
1. Select the entire list including the heading.

2. Go to Data in the menu bar and select Pivot Table and Pivot Chart Report.

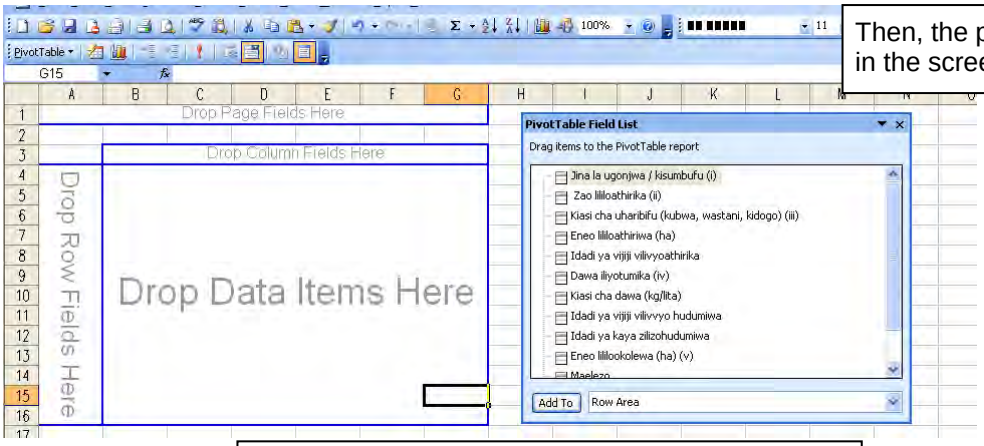


3. Click Next.

4. Check if the area selected is correct, and click Next.

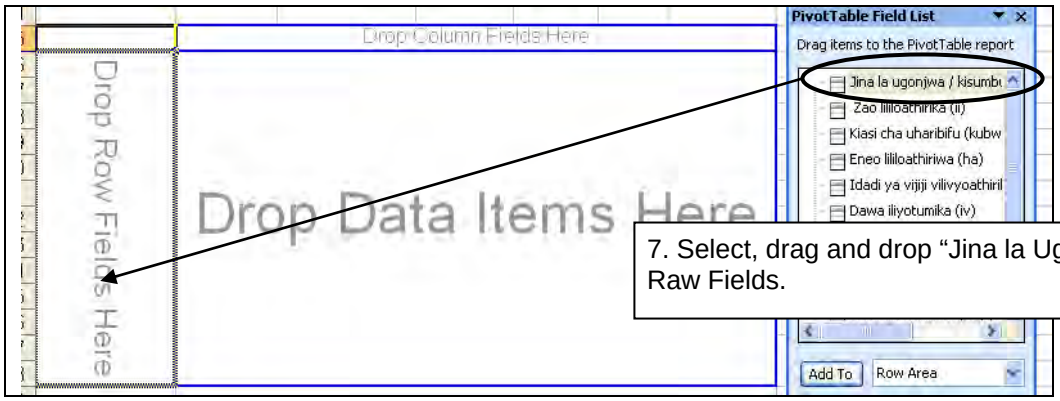


5. Select New worksheet and click Finish.

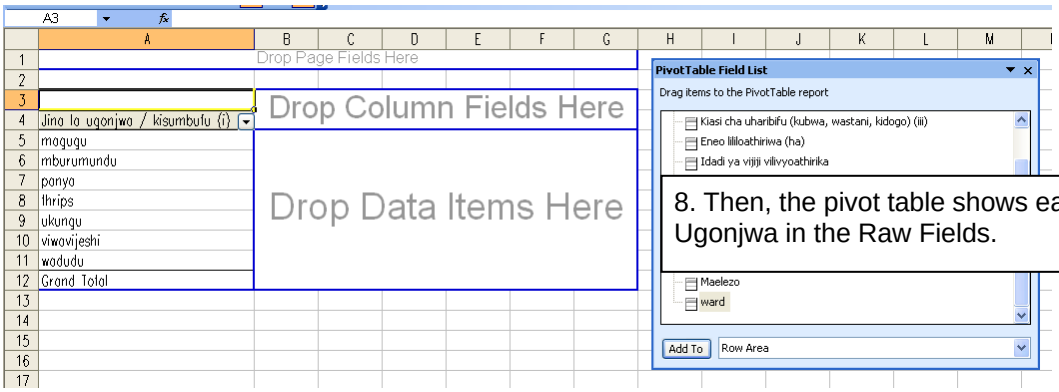


Then, the pivot table appears in the screen like this.

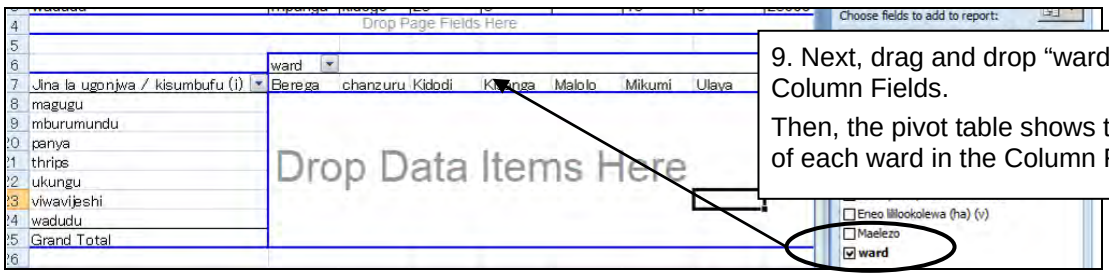
6. Each column is listed in Field List. Drag and drop it in applicable field in the blue frame table.



7. Select, drag and drop “Jina la Ugonjwa” in the Raw Fields.



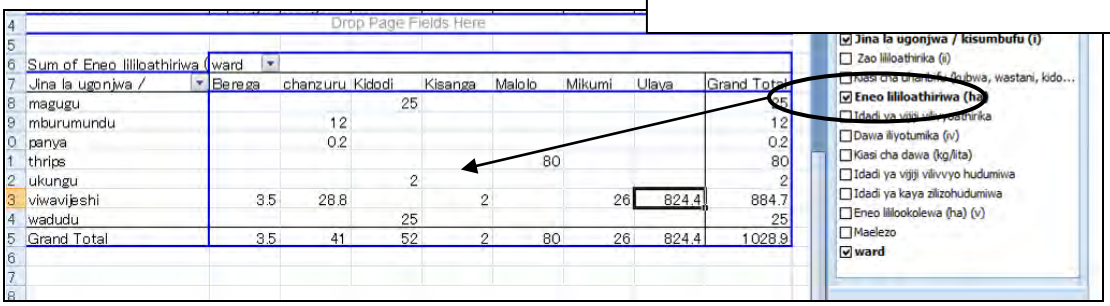
8. Then, the pivot table shows each Jina la Ugonjwa in the Raw Fields.



9. Next, drag and drop “ward” to Column Fields.

Then, the pivot table shows the names of each ward in the Column Fields.

10. Next drag and drop “eneo lililoathiriwa” in the Data Items.



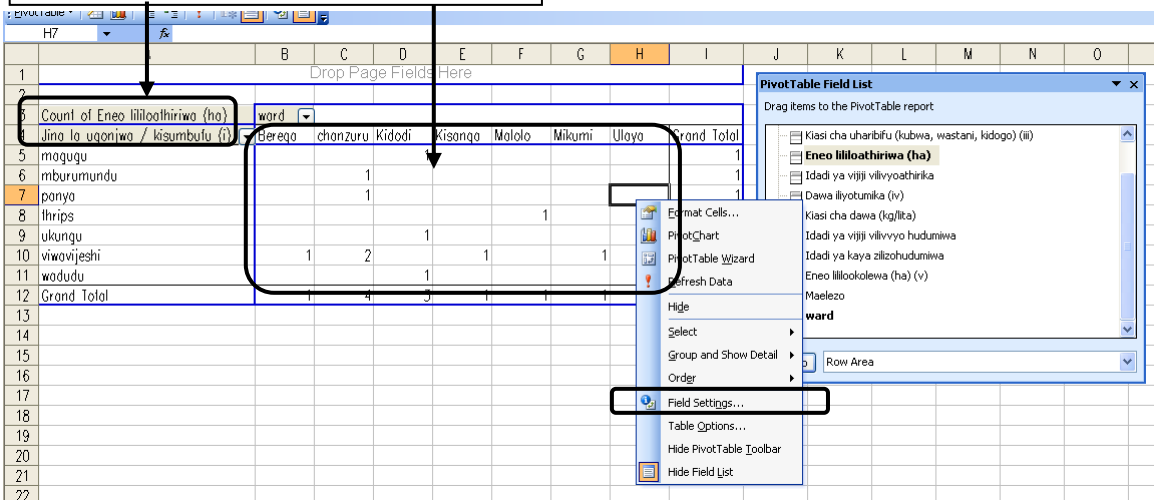
Now the amount is automatically calculated from the original list and presented in the pivot table!

Now you know the area attacked by each disease in each ward

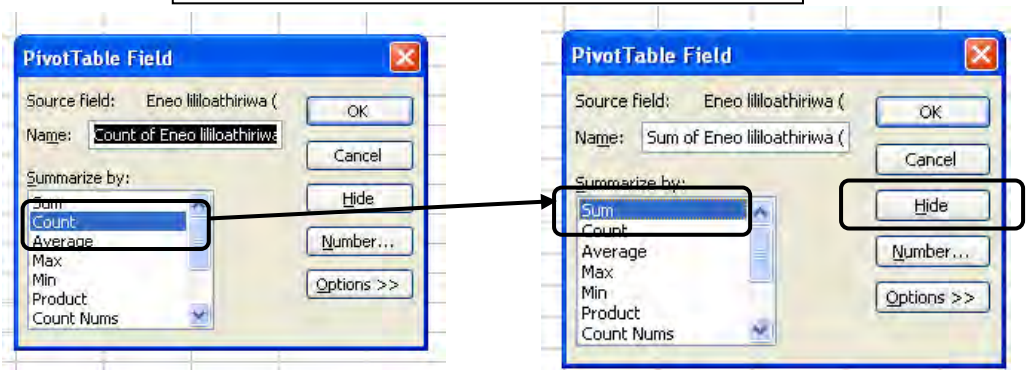
Tips: In general,
Columns for text entry (such as “Jina la ugonjwa”) should go to Row Labels or Column Labels.
Columns for numeric entry (such as “Eneo lililoathiriwa”) should go to Values.

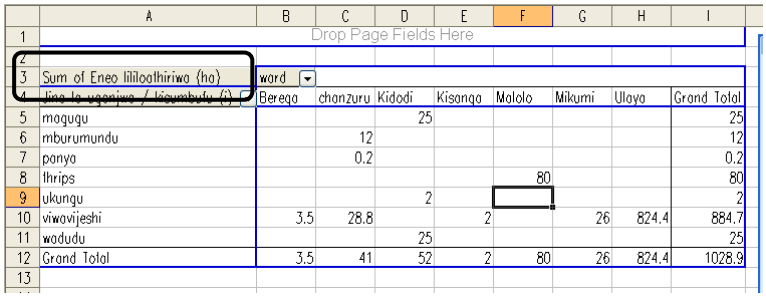
If the consolidated data shows “Count” (how many data exist), rather than “Sum” (total value of all data) as shown right,

11. Put your cursor in the data area, right click and select Field Settings.



12. Pivot Table Field appears. In the field change from “Count” to “Sum” in the box and click OK.

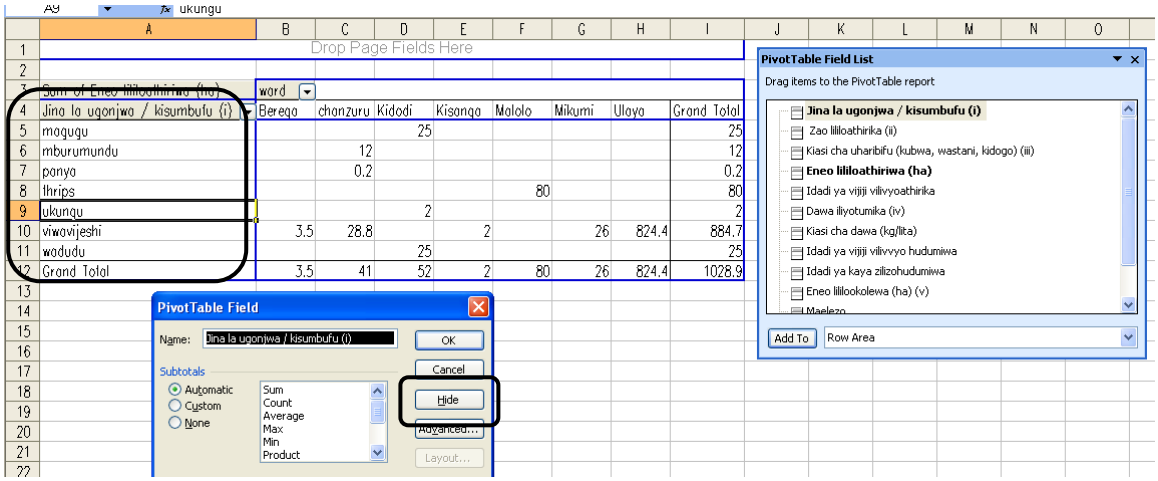


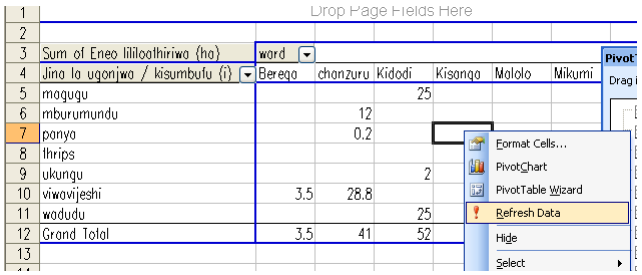


	A	B	C	D	E	F	G	H	I
1	Drop Page Fields Here								
2									
3	Sum of Eneo lililoathiriwa (ha)	ward							
4	Jina la ugonjwa / kisumbufu (i)	Berega	chanzuru	Kidodi	Kisanga	Mololo	Mikumi	Ulaya	Grand Total
5	magugu			25					25
6	mburumundu		12						12
7	panya		0.2						0.2
8	thrips					80			80
9	ukungu			2					2
10	viwavijeshi	3.5	28.8		2		26	824.4	884.7
11	wadudu			25					25
12	Grand Total	3.5	41	52	2	80	26	824.4	1028.9
13									

Now, it also shows “Sum”!

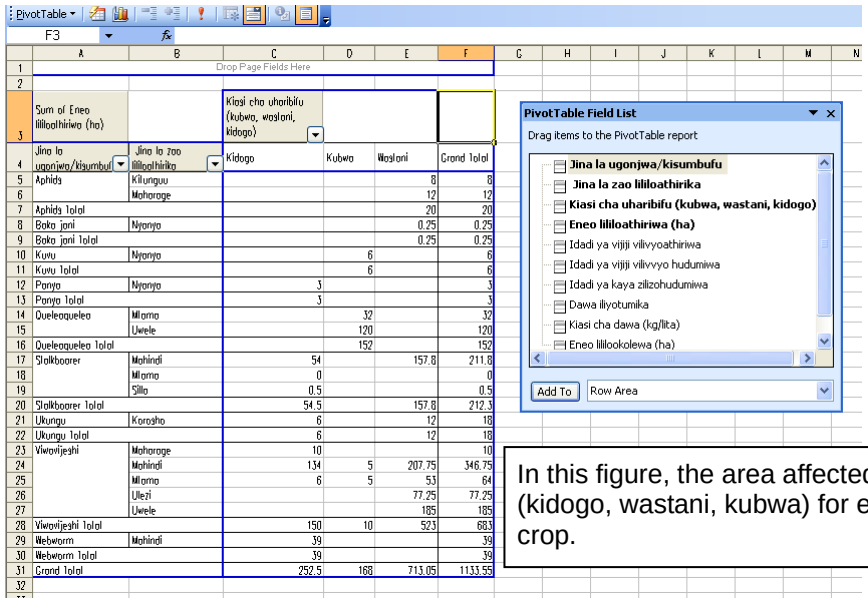
13. To delete an item from the pivot table, go to respective field (column, row or data), right click and choose Field Setting. In the Pivot Table Field, choose Hide. Then the item will disappear.





If you make change in the original list after making pivot table, you can right click the pivot table and select Refresh Data.

Then, the pivot table is automatically updated.



Using the Pivot Table, you can make a more complicated table like this one by dragging more than one field in columns and/or rows.

In this figure, the area affected is shown by severity (kidogo, wastani, kubwa) for each type of disease and crop.

4.1 Integrated Data Collection Format (LGMD2)

Districts are requested to submit the Integrated Data Collection Format (quarterly and annual) in LGMD2 to the national server. In order to fill out tables in these formats, there are two types of data sources: consolidated VAEO/WAEO format (created in Chapter 3) and district's own sources. In the following sections, data sources and how the data are processed are explained for quarterly and annual formats, respectively.

4.1 Quarterly Format

4.1.1 Two types of data sources

Table 3 below shows how to obtain data for each table in the quarterly format in LGMD2, whether from VAEO/WAEO format or district.

Table 3: Data Sources of Quarterly Integrated Data Collection Format (LGMD2)

Table	Source
1. Types of Crops Grown, Planted Area and Total Production	VAEO/WAEO
2. Plant Health Services	VAEO/WAEO
3. Livestock/ Products Movement	District
4. Livestock Slaughtered	VAEO/WAEO
5. Meat Inspection/ Hygiene	VAEO/WAEO
6 (a). Marketing of Livestock Products	District
6 (b), (c). Marketing of Livestock Products	VAEO/WAEO
7 (a). Animal Feeds, Acaricides, Vaccines and Treatment	District
7 (b). Inputs for reproduction of improved livestock	District

4.1.2 Tables with VAEO/WAEO data sources

Relationship between the tables in LGMD2 and tables in VAEO/WAEO format is shown in Table 4. The data source of tables in quarterly format is monthly, rather than quarterly, VAEO/WAEO format. Therefore, you should pay attention which report (all or only the latest) to consolidate. In addition, "remarks" should be hand typed by referring to each ward.

Table 4: Data Source of Quarterly Report Format (VAEO/WAEO Format)

Tables in LGMD2	WAEO format Table No.	Report to be consolidated	Note
1. Types of Crops Grown, Planted Area and Total Production	Monthly Table 2 Malengo, Utekelezaji and Bei ya Mazao	Annual Target: July Achieved to date: Final month of the quarter (Sep, Dec, Mar, June)	Productivity and price are not required in LGMD2. For calculation, see 4.3.1.
2. Plant Health Services	Monthly Table 3 Kuzuia magonjwa/visumbufu kwa kutumia kemikali	All three months of the quarter	For calculation, see 4.3.2.
4.Livestock Slaughtered	Monthly Table 4 Mifugo iliyochinjwa	Total number slaughtered: All three months of the	"Cumulative to date" is automatically calculated in

		quarter. Total carcass weight: Calculated by districts based on the number slaughtered.	LGMD2. Price is not included in LGMD2. For calculation of the total number slaughtered, See 4.3.4.
5. Meat Inspection/ Hygiene	Monthly Table 5 Ukaguzi wa nyama	All three months of the quarter	For calculation, See 4.3.3.
6. Marketing of Livestock Products (b) ~ (c)	Monthly Table 6.1 Maziwa, Table 6.2 Ngozi	This quarter: All three months of the quarter	"Cumulative to date" is automatically calculated in LGMD2. For calculation, See 4.3.4.

4.2 Annual Format

4.2.1 Two types of data sources

Table 5 below shows how to obtain data for each table in the annual format in LGMD2, whether from VAEO/WAEO format or district.

Table 5: Data Sources of Annual Integrated Data Collection Format (LGMD2)

Table	Source
1. Food Situation	District
2. Irrigation	VAEO/WAEO
3. (a) ~ (f) Agricultural Mechanization	VAEO/WAEO
3. (g) Agricultural Mechanization	District
4. Input	VAEO/WAEO
5. (a) ~ (e), (h) Extension Services	District
5. (f) ~ (g) Extension Services	VAEO/WAEO
6. Associations / Groups	VAEO/WAEO
7. Number of Smallholder Households Participating in Contracting Production and Out-growers Schemes	VAEO/WAEO
8. Proportion of Female Members in Finance Management and Planning Committee	District
9. Livestock Population (Large scale farmers)	District
10. Livestock Population (Small Scale Farming)	VAEO/WAEO
11. Livestock Products Processing Plants / Units	District
12. Livestock Infrastructure and Status	VAEO/WAEO District
13. Grazing land	District
14. Pasture	VAEO/WAEO
15. Dissemination of Agricultural Information	VAEO/WAEO
16. Number of Ward Agricultural Resource Centres	District

4.2.2 Tables with VAEO/WAEO data sources

Relationship between the tables in LGMD2 and tables in VAEO/WAEO format is shown in Table 6. It is relatively easy to copy the information from VAEO/WAEO format to annual format in LGMD2 compared to quarterly format, as most tables only require simple copying from annual or the fourth quarter consolidated WAEO report to LGMD2 annual report. “Remarks” should be hand typed by referring to each ward.

Table 6: Data Source of Annual Report Format (VAEO/WAEO Format)

Tables in LGMD2	WAEO format Table No.	Report to be consolidated	Note
2.(a) Irrigation	Annual Table 3.1 Skimu ya umwagiliaji	Annual	Copy and paste from each WAEO format.
2. (b) Irrigation	Quarterly Table 5.1 Mazao yanayolimwa katika eneo la umwagiliaji	The 4th quarter only	For calculation, see 4.3.2.
3. (a) ~ (e) Agricultural Mechanization	Annual Table 4.1 Idadi ya mashine/vifaa vya kilimo, ufugaji na uvuvi Table 4.2 Idadi ya zana za kilimo Table 4.3 Idadi ya vifaa vinavyotumiwa kwa mkono Table 4.4 Mashine za kusindika mazao ya kilimo.	Annual	For calculation, see 4.3.1.
3. (f) Agricultural Mechanization	Quarterly Table 7 Eneo la uzalishaji katika kijiji/kata na njia iliyotumika kulima	The 4th quarter only	For calculation, see 4.3.1.
4. Input	Annual Table 6.1 Mbolea za viwandani, Table 6.2 Viatilifu / Viuadudu, Table 6.3 Mbegu bora	Annual	For calculation in Table 6.1, see 4.3.1. For Tables 6.2 and 6.3, see 4.3.2.
5. (f) Extension Services	Annual Table 5.1 Mafunzo ya wakulima kupitia shamba darasa	Annual	Be careful that the forms in LGMD2 and VAEO/WAEO format are slightly different.
5. (g) Extension Services	Quarterly Table 3.1 Mafunzo kwa wakulima kwa kutumia njia mbalimbali nje ya shamba darasa	All four quarters of the year.	For calculation, see 4.3.5.
6. (a)~(b) Associations / Groups	Quarterly Table 2.1 Vyama vya kuweka na kukopa (SACCOS) Table 2.2 Vikundi vingine vya wakulima	The 4th quarter only	(b) Differentiation of urban and rural depends on the official township status of ward.

			For calculation, see 4.3.1.
7. Number of Smallholder Households Participating in Contracting Production and Out-growers Schemes	Annual Table 2 Kilimo cha mkataba na makubaliano wa soko	Annual	For calculation, see 4.3.1 .
10. Livestock Population – Small Scale Farming	Annual Table 7 Idadi ya mifugo	Annual	For calculation, see 4.3.1.
12. Livestock Infrastructure and Status	Annual Table 8 Miundombinu katika mifugo	Annual	Some items are collected at district level. See 4.3.1.
13. Grazing land	Annual Table 9 Eneo la malisho (Grazing land)	Annual	Some items are collected at district level. See 4.3.1.
14. Pastures	Annual Table 10.1 Malisho ya wanyama yaliyopandwa na kuendelezwa Table 10.2 Masalia ya mazao	Annual	Convert the unit from Hay (=20kg) to ton. Planted area should be filled in at district level. See 4.3.1.
15. Dissemination of Agricultural Information (a) ~ (b)	Annual Table 11.1 TV na Radio Table 11.2 Simu	Annual	See 4.3.1.

4.3 LGMD2 Data Entry

In this section, techniques of consolidating or organizing the data in the VAEO/WAEO format to fill out the tables in LGMD2 are explained. The techniques are built upon the ones that are explained in Chapter 3.

4.3.1 Aggregating WARD level data to district level

District total has already been computed in the “district total” sheet by aggregating the ward level data [see 3.4.1]. Thus, simply copy the data from the sheet and paste it in LGMD2.

However, if there are WAEO who have not submitted the filled-n formats, it is important to take it into account. It is done as shown in the box.

Tips when there are WAEO who have <u>not</u> submitted the filled-in format

<Example>
There are 25 wards. 21 WAEO have already submitted the filled-in format, and 4 WAEO have not. In this case, the district level data should be calculated as follows.

District level estimate= (Sum of the data from 21 WAEO)x (25 / 21)

If the sum of the 21 WAEO is 1800 tons of maize, then,
District level estimate of maize production = 1800 x (25 / 21) = 2143.

Write 2,143 as the district maize production in LGMD2.

4.3.2 Pivot Table 1

This technique can be used for the following tables.

- Quarterly Table 2 Plant Health Services.
- Annual Table 4 (b) Agrochemicals Requirements and Availability
- Annual Table 4 (c) Requirements for and Amount Used of Improved Seed Variety

Let us work with Table 2 Plant Health Services of the LGMD2 Quarterly Report as an example. Explanation is built upon the ones made in 3.5.

First, copy the lists of "Monthly Table 3.1 Kuzuia magonjwa / visumbufu kwa kutumia kemikali" from the three months applicable in one sheet for the quarter.

1. Create a new sheet for consolidation.

Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani, kidogo) (iii)	Eneo lililoathiriwa (ha)	Idadi ya vijiji vilivyoathirika	Dawa iliyotumika (iv)	Kiasi cha dawa (kg/lita)	Idadi ya vijiji vilivyo hudumiwa	Idadi ya kaya zilizohudumiwa	Eneo lililookolewa (ha) (v)	Maelezo	ward	
magugu	miwa	kidogo	25	2		20	2	150			Kidodi	July
mburumundu	mahindi		12	2		0	2	0			chanzuru	July
panya	mpunga	wastani	0.2	2		17	2	0.5			chanzuru	July
thrips	vitunguu	wastani	80	3	karate	279						
ukungu	nyanya	kidogo	2	1		3	1					
viwavijeshi	mpunga	kidogo	2	1	thionex	2						
viwavijeshi	mahindi	wastani	26	3	karate	0						
viwavijeshi	mahindi	wastani	3.5	3	karate	180						
viwavijeshi	mahindi	wastani	8	2		8	2					
viwavijeshi	mahindi	wastani	824.4	5	dezis	45	5	36	36		Ulaya	July
viwavijeshi	mpunga	wastani	20.8	2		13	2	7			chanzuru	July
wadudu	mpunga	kidogo	25	3		16	3	25000			Kidodi	July
magugu	miwa	kidogo	50	2		20	5	130			Kidodi	August
mburumundu	mahindi		10	2		2	2	0			chanzuru	August
panya	mpunga	kidogo	3	2		17	2	1			chanzuru	August
thrips	vitunguu	wastani	50	3	karate	279	3		77		chanzuru	August
ukungu	nyanya	kidogo	3	1		3	1	350			chanzuru	August
viwavijeshi	mpunga	wastani	1	3	thionex	2		1				
viwavijeshi	mahindi	wastani	20	10	karate	0	5					
viwavijeshi	mpunga	wastani	20.8	2		10	2	7				
wadudu	mpunga	kidogo	26	3		10	3	500				
panya	mpunga	wastani	3.5	2		10	2	500				
thrips	vitunguu	wastani	80	3	karate	30	2		81			
ukungu	nyanya	wastani	2	1		17	1	480			Berega	September
viwavijeshi	mpunga	kidogo	2	1	thionex	2		1			Kisanga	September
viwavijeshi	mahindi	kidogo		3	karate	0	3				Mikumi	September

2. Copy and paste the list from each month in respective Excel files. [See 3.4.1]

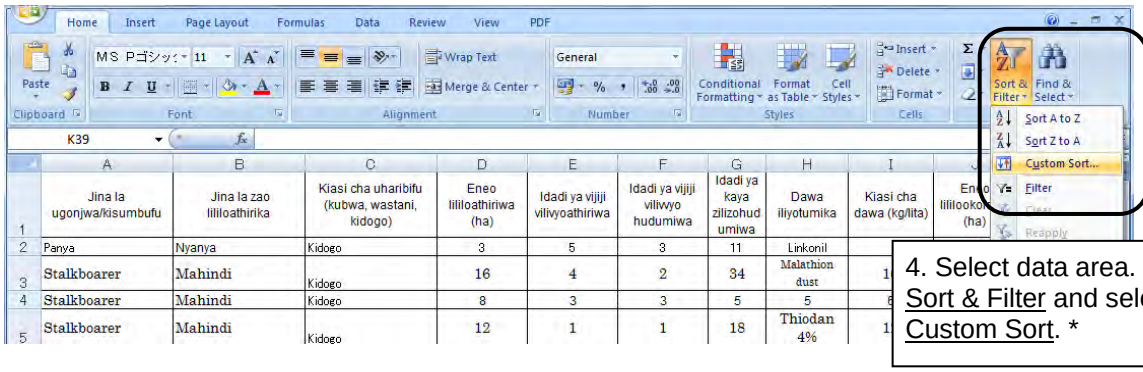
3. For reference and traceability, type the month next to each row.

The table in LGMD2 is like this.

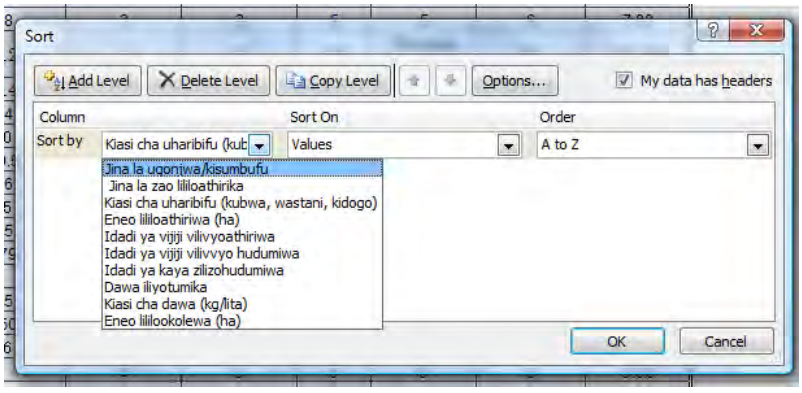
2 Plant Health Services

Name of Pests / Diseases (i)	Name of crop affected (ii)	Severity (large, average, small) (iii)	Area attacked (ha) (iv)	Number of villages attacked (v)	Name of pesticide applied (vi)	Amount of Pesticide applied (kg/litre) (vii)	Number of Villages Served (viii)	Number of Households Received Service (ix)	Area rescued (ha) (x)	Comments (xi)

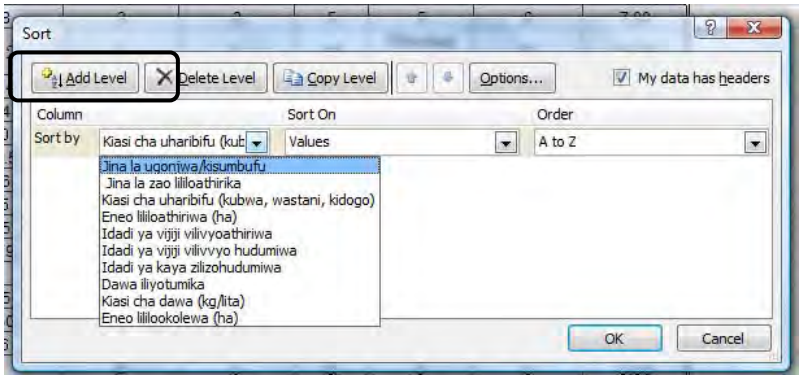
The table asks that you first organize information by i) Name of pests/diseases (Jina la ugonjwa / kisumbufu) [1st column] and then by ii) Name of crop affected (Zao lililoathirika) [2nd column]. The first step is to sort the whole data by these two columns.



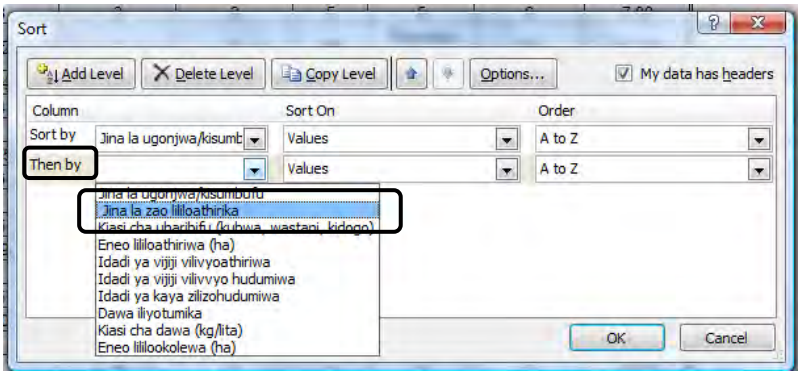
4. Select data area. Go to Sort & Filter and select Custom Sort. *



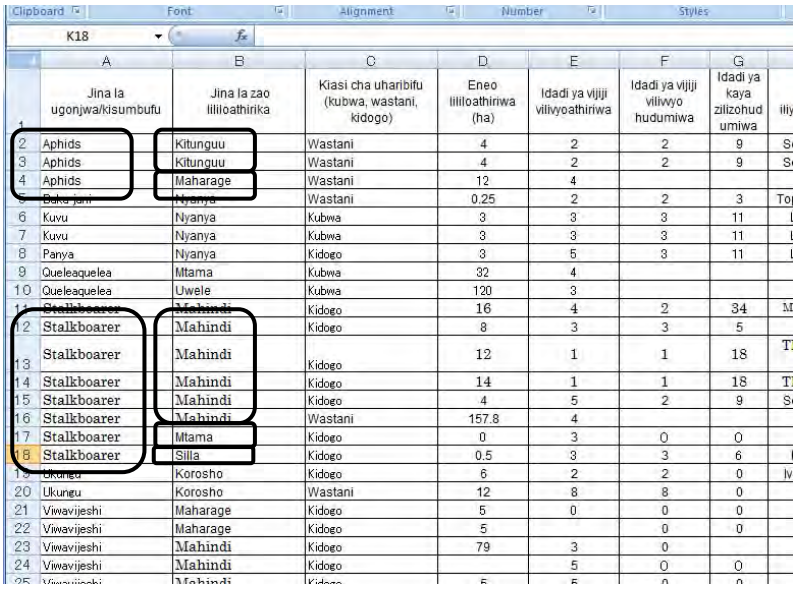
5. Select Jina la ngonjwa, for Sort by, if it is not pre-selected.



6. In Sort, click Add Level.



7. Select “Jina la zao lililoathirika” at Then by. Click OK.



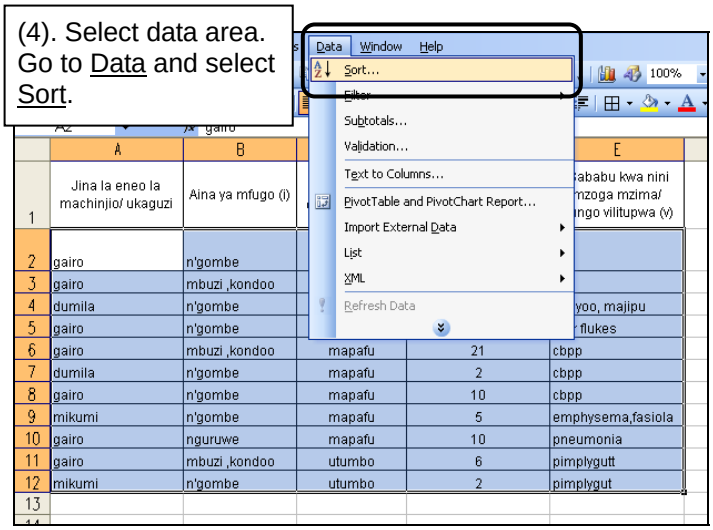
	A	B	C	D	E	F	G
1	Jina la ugonjwa/kisumbufu	Jina la zao lililoathirika	Kiasi cha uharibifu (kubwa, wastani, kidogo)	Eneo lililoathiriwa (ha)	Idadi ya vijiji vilivyoathiriwa	Idadi ya vijiji vilivyyo hudumiwa	Idadi ya kaya zilizohudumiwa
2	Aphids	Kitunguu	Wastani	4	2	2	9
3	Aphids	Kitunguu	Wastani	4	2	2	9
4	Aphids	Maharage	Wastani	12	4		
5	Baku jani	Nyanya	Wastani	0.25	2	2	3
6	Kuvu	Nyanya	Kubwa	3	3	3	11
7	Kuvu	Nyanya	Kubwa	3	3	3	11
8	Panya	Nyanya	Kidogo	3	5	3	11
9	Queleaquelea	Mtama	Kubwa	32	4		
10	Queleaquelea	Uwele	Kubwa	120	3		
11	Stalkboarer	Mahindi	Kidogo	16	4	2	34
12	Stalkboarer	Mahindi	Kidogo	8	3	3	5
13	Stalkboarer	Mahindi	Kidogo	12	1	1	18
14	Stalkboarer	Mahindi	Kidogo	14	1	1	18
15	Stalkboarer	Mahindi	Kidogo	4	5	2	9
16	Stalkboarer	Mahindi	Wastani	157.8	4		
17	Stalkboarer	Mtama	Kidogo	0	3	0	0
18	Stalkboarer	Silla	Kidogo	0.5	3	3	6
19	Ukungu	Korosho	Kidogo	6	2	2	0
20	Ukungu	Korosho	Wastani	12	8	8	0
21	Viwavijeshi	Maharage	Kidogo	5	0	0	0
22	Viwavijeshi	Maharage	Kidogo	5		0	0
23	Viwavijeshi	Mahindi	Kidogo	79	3	0	
24	Viwavijeshi	Mahindi	Kidogo		5	0	0

8. The whole table is organized, first by “Jina la ngonjwa” and then by “Jina la zao lililoathirika”.

Make sure that the data are sorted as you instructed.

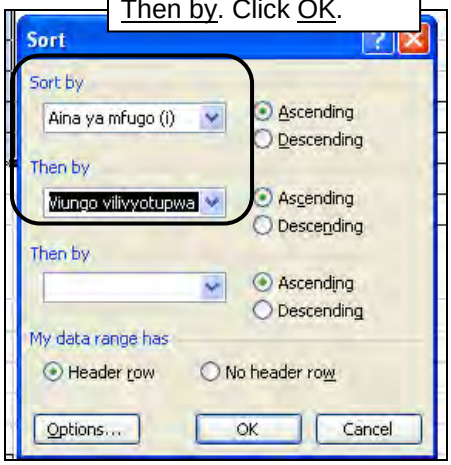
* In Excel 2003,

(4). Select data area. Go to Data and select Sort.



	A	B	C	D	E
1	Jina la eneo la machinjio/ ukaguzi	Aina ya mfugo (i)			ababu kwa nini nzoga mzima/ ngo vilitupwa (v)
2	gairo	n'gombe			
3	gairo	mbuzi ,kondoo			
4	dumila	n'gombe			yoo, majipu
5	gairo	n'gombe			flukes
6	gairo	mbuzi ,kondoo	mapafu	21	cbpp
7	dumila	n'gombe	mapafu	2	cbpp
8	gairo	n'gombe	mapafu	10	cbpp
9	mikumi	n'gombe	mapafu	5	emphysema,fasiola
10	gairo	nguruwe	mapafu	10	pneumonia
11	gairo	mbuzi ,kondoo	utumbo	6	pimplygutt
12	mikumi	n'gombe	utumbo	2	pimplygut
13					

(5). Select “type of animals” at Sort by and “condemnations” at Then by. Click OK.



You may also want to standardize the words in other columns using the method as above [see 3.5.2]. After completing the standardization for all texts, sort the entire table again by first, “Jina la ugonjwa / kisumbufu” and then by “Zao lililoathirika”. This will make the subsequent computation easier.

Next step is to use Pivot Table. The data to be consolidated are either text or numeric as shown in Table 7. In Pivot Table, it is important to pay attention of whether the data is text or numeric.

Table 7: Types of data in Table 3.1 Kuzuia magonjwa / visumbufu kwa kutumia kemikali

Item		Data type
i)	Name of pests / disease (Jina la ugonjwa / kusumbufu)	Text
ii)	Name of the crop affected (Zao lililoathirika)	Text
iii)	Severity (Kiasi cha uharibifu)	Text
iv)	Areas attacked (Eneo lililoathiriwa)	Numeric
v)	Number of villages attacked (Idadi ya vijiji vilivyoathiriwa)	Numeric
vi)	Name of pesticide applied (Dawa iliyotumika)	Text
vii)	Amount of pesticide applied (Kiasi cha dawa)	Numeric
viii)	Number of villages served (Idadi ya vijiji vilivvyo hudumiwa)	Numeric
ix)	Number of households received service (Idadi ya kaya zilizohudumiwa)	Numeric
x)	Area rescued (Eneo lililookolewa)	Numeric

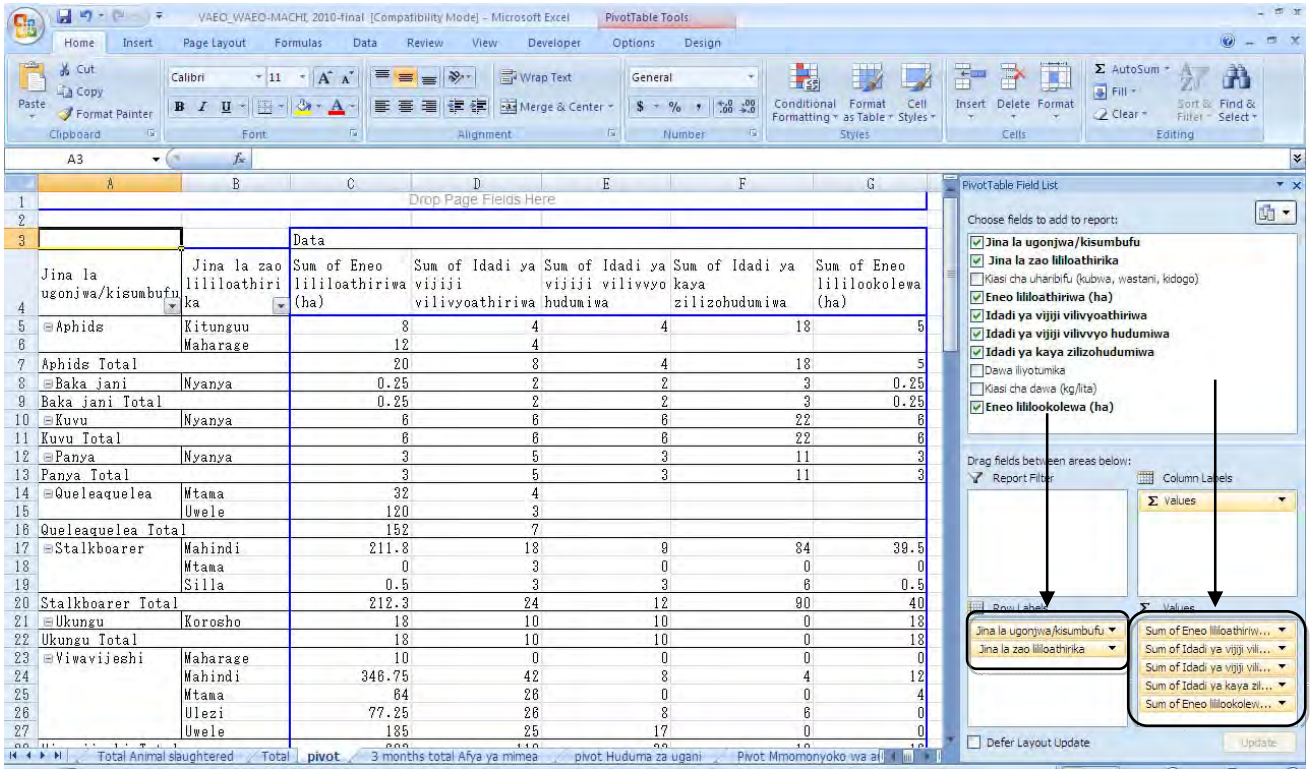
Of the numeric data, vii) Amount of pesticide applied is related to vi) Name of pesticide applied. So it will need to be handled separately.

Create Pivot Table, select, drag and drop the following 2 columns in the Raw Field*

- i) Name of pests/diseases (Jina la ugonjwa / kisumbufu)
- ii) Name of crop affected (Zao lililoathirika)

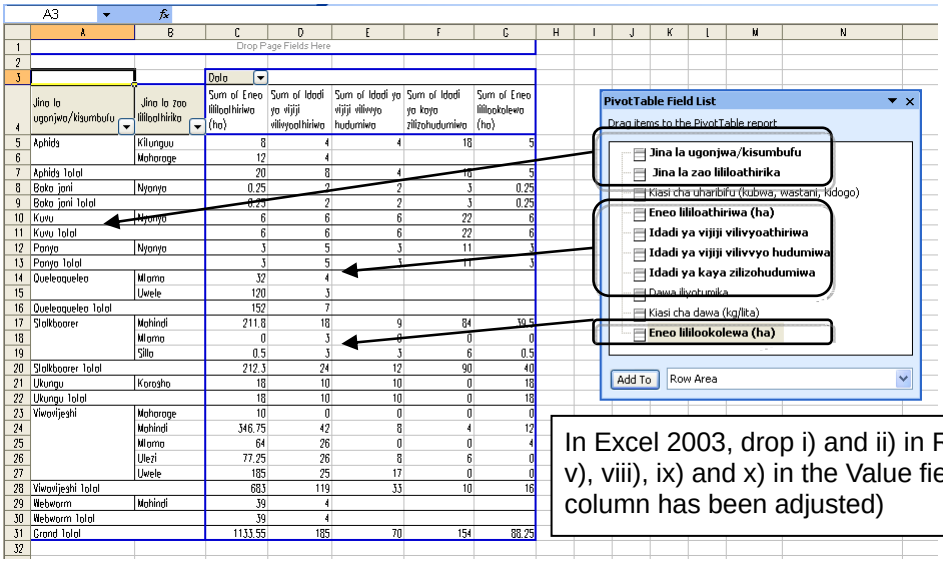
Next, the 5 columns with numerical data are entered in the Values in the same order as in LGMD2.

iv) Areas attacked (Eneo lililoathiriwa)
v) Number of villages attacked (Idadi ya vijiji vilivyoathiriwa)
viii) Number of villages served (Idadi ya vijiji vilivvyo hudumiwa)
ix) Number of households received service (Idadi ya kaya zilizohudumiwa
x) Area rescued (Eneo lililookolewa)



Jina la ugonjwa/kisumbufu	Jina la zao lililoathirika	Sum of Eneo lililoathiriwa (ha)	Sum of Idadi ya vijiji vilivyoathiriwa	Sum of Idadi ya vijiji vilivyyo hudumiwa	Sum of Idadi ya kaya zilizohudumiwa	Sum of Eneo lililookolewa (ha)
Aphids	Kitunguu	8	4	4	18	5
	Maharage	12	4			
Aphids Total		20	8	4	18	5
Baka jani	Nyanya	0.25	2	2	3	0.25
Baka jani Total		0.25	2	2	3	0.25
Kuvu	Nyanya	6	6	6	22	6
Kuvu Total		6	6	6	22	6
Panya	Nyanya	3	5	3	11	3
Panya Total		3	5	3	11	3
Queleaquelea	Mtama	32	4			
	Uwele	120	3			
Queleaquelea Total		152	7			
Stalkboarer	Mahindi	211.8	18	9	84	39.5
	Mtama	0	3	0	0	0
	Silla	0.5	3	3	6	0.5
Stalkboarer Total		212.3	24	12	90	40
Ukungu	Korosho	18	10	10	0	18
Ukungu Total		18	10	10	0	18
Viwavijeshi	Maharage	10	0	0	0	0
	Mahindi	346.75	42	8	4	12
	Mtama	64	26	0	0	4
	Ulezi	77.25	26	8	6	0
	Uwele	185	25	17	0	0

<Excel 2003>

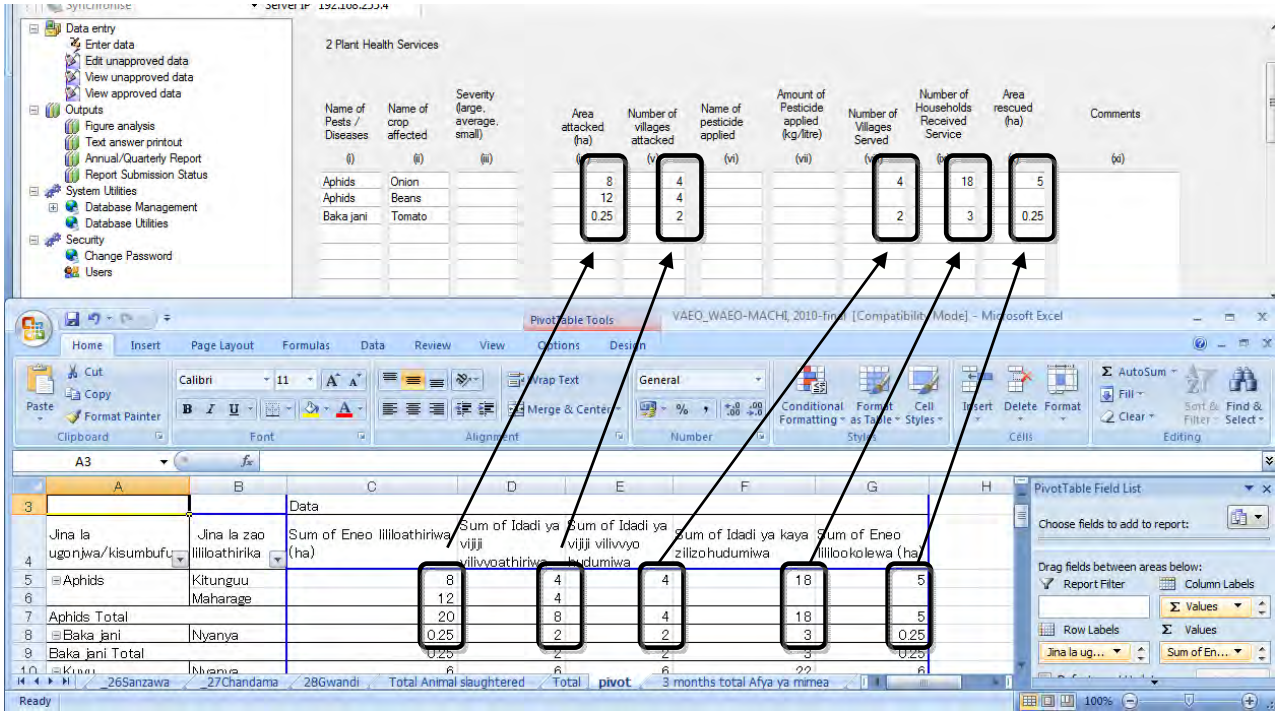


Jina la ugonjwa/kisumbufu	Jina la zao lililoathirika	Sum of Eneo lililoathiriwa (ha)	Sum of Idadi ya vijiji vilivyoathiriwa	Sum of Idadi ya vijiji vilivyyo hudumiwa	Sum of Idadi ya kaya zilizohudumiwa	Sum of Eneo lililookolewa (ha)
Aphids	Kitunguu	8	4	4	18	5
	Maharage	12	4			
Aphids Total		20	8	4	18	5
Baka jani	Nyanya	0.25	2	2	3	0.25
Baka jani Total		0.25	2	2	3	0.25
Kuvu	Nyanya	6	6	6	22	6
Kuvu Total		6	6	6	22	6
Panya	Nyanya	3	5	3	11	3
Panya Total		3	5	3	11	3
Queleaquelea	Mtama	32	4			
	Uwele	120	3			
Queleaquelea Total		152	7			
Stalkboarer	Mahindi	211.8	18	9	84	39.5
	Mtama	0	3	0	0	0
	Silla	0.5	3	3	6	0.5
Stalkboarer Total		212.3	24	12	90	40
Ukungu	Korosho	18	10	10	0	18
Ukungu Total		18	10	10	0	18
Viwavijeshi	Maharage	10	0	0	0	0
	Mahindi	346.75	42	8	4	12
	Mtama	64	26	0	0	4
	Ulezi	77.25	26	8	6	0
	Uwele	185	25	17	0	0
Viwavijeshi Total		603	119	33	10	16
Webworm	Mahindi	39	4			
Webworm Total		39	4			
Grand Total		1133.55	185	70	154	68.25

In Excel 2003, drop i) and ii) in Row Fields and iv), v), viii), ix) and x) in the Value fields. (Width of each column has been adjusted)

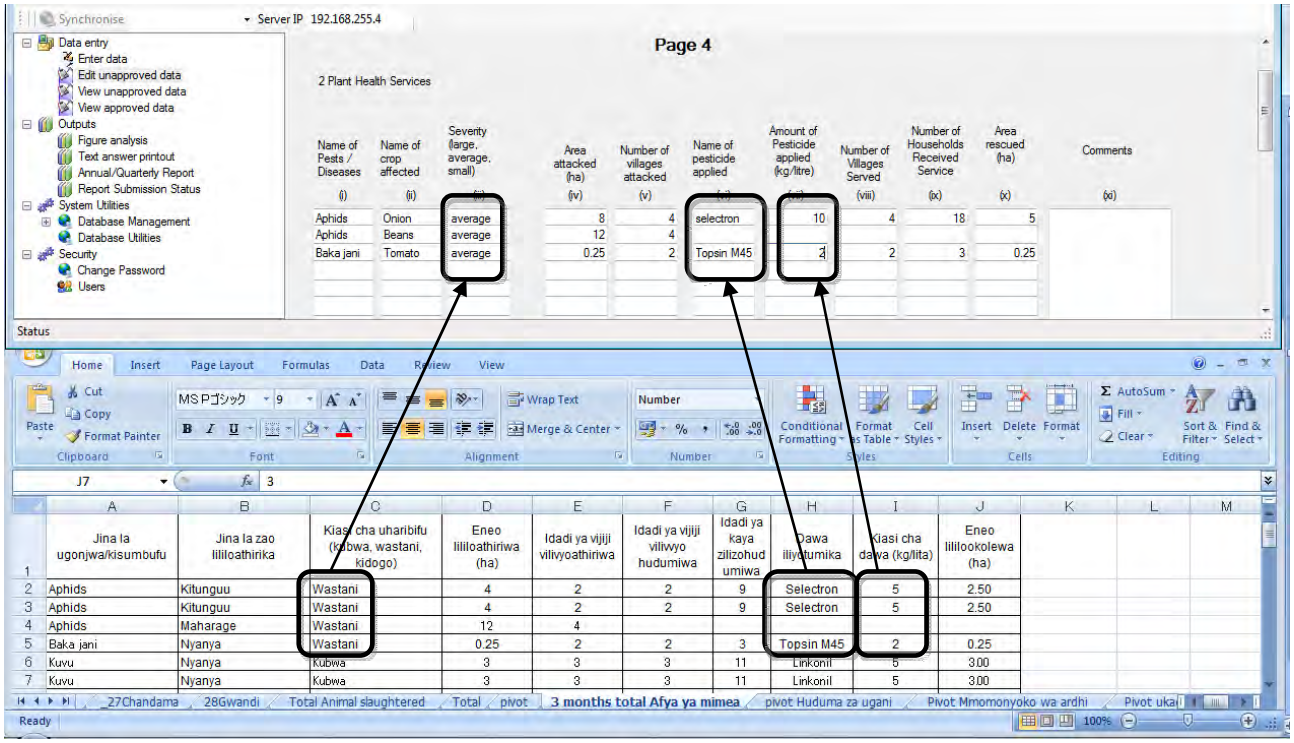
You will see a pivot table like the figure above.
(Width of each column has been adjusted)

Now you are ready to enter the data into LGMD2. Ignore the rows of Totals in the pivot table.



As for “iii) Severity” and “vi) Pesticide”, go back to the Pivot Table in Excel and choose the most common one for each disease and crop.

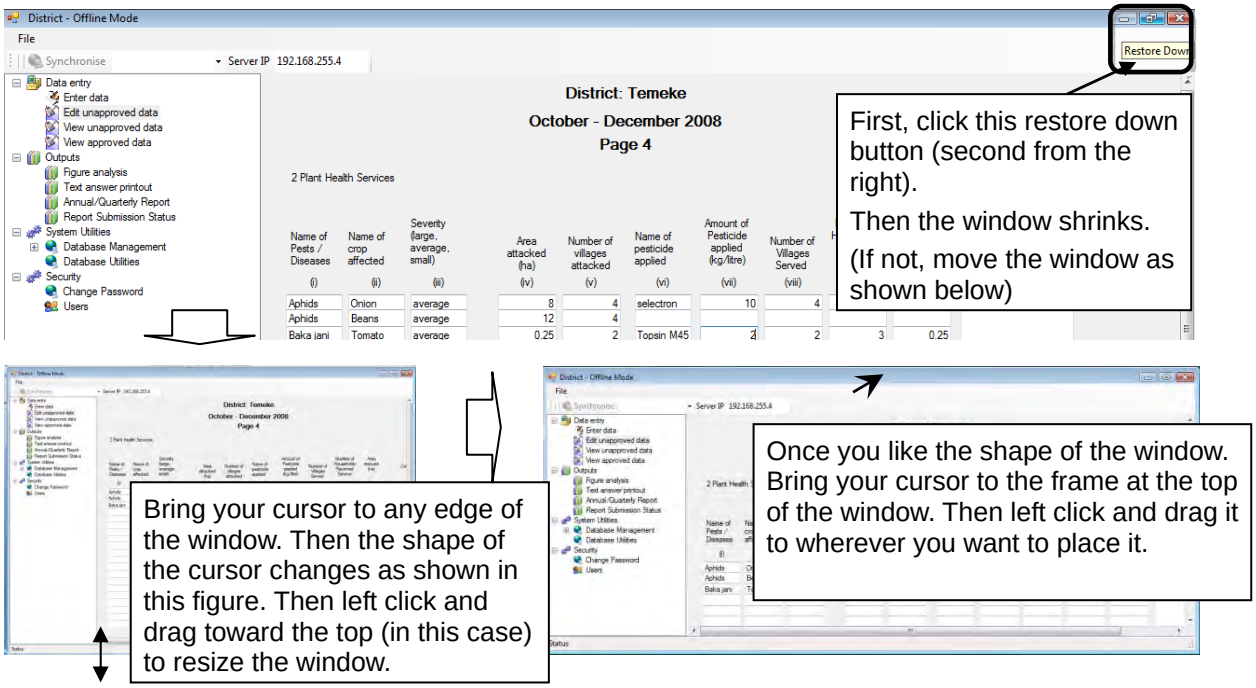
As for “Vii) Amount of pesticide applied”, write the amount for the pesticide you chose for vi).



You can complete Table 2 Plant Health Services if you continue this process.

Tips

When you copy data from Excel to LGMD2, it is convenient if you can see both windows in your screen. Size of each window can be changed and it can be moved in the screen as the following (The explanation is about LGMD2, but you can use exactly the same method for Excel).



4.3.3 Pivot Table 2

This technique can be used to the following tables.

- Quarterly Table 5 Meat Inspection / Hygiene

The data source for this table is VAEO/WAEO Monthly Report Table 5. Ukaguzi wa nyama. The ward level date should look like a figure below.

	A	B	C	D	E	F	G	H	I	J	K	L
1	**5. Ukaguzi wa nyama**											
2	Jina la eneo la machinjio/ ukaguzi	Aina ya mfugo (i)		Idadi ya wanyama walioathirika (ii)		Viungo vilivyotupwa (Mzoga mzima/ Moyo/ Mapafu/ Maini nk.)						
3						Sababu ya kutupa viungo / mzoga mzima (iii)				Idadi ya matukio kwa kila sababu (iv)		
4	MGUNGANI	Ng'ombe		15		Cysts				1		
5						Fascioliasis				2		
6						Liver fluke				9		
7						CBPP				3		
8		Mbuzi		23		Abscesses				6		
9						CCPP				16		
10						Pimply gut				3		
11												
12												
13												
14	i) Andika aina ya mfugo walioathirika (Ng'ombe, Kondoo, Mbuzi, Nguruwe n.k).											

If you copy and paste the same table from each ward, then the district level table will look like the following.

Jina la eneo la machinjio/ ukaguzi	Aina ya mfugo (i)	Idadi ya wanyama walioathirika (ii)	Viungo vilivyotupwa (Mzoga mzima/ Moyo/ Mapafu/ Maini nk.)	
			Sababu ya kutupa viungo / mzoga mzima (iii)	Idadi ya matukio kwa kila sababu (iv)
MGUNGANI	Ng'ombe	15	Cysts	1
			Fascioliasis	2
			Liver fluke	9
			CBPP	3
	Mbuzi	23	Abscesses	6
			CCPP	16
			Pimply gut	3
Chisale	Nguruwe	1	cyst	1
	Mbuzi	2	Pimplygut	1
			Abscesses	2
Mikumi	Ngombe	11	Emphysma	6
			abscesses	2
			CBPP	2
			Fasciolasis	1
			Minyoo	1
	Mbuzi	5	Pimply Guts	5
Kwamtoro	Ng'ombe	6	Liverhosis	6
	Mbuzi	3	CCPP	3
Igunga	Mbuzi	1	CCPP	1
hamai	Mbuzi	4	CCPP	4
Songolo	Mbuzi	2	Pimplyguts	2
Mondo	Ng'ombe	6	E.C.F	6
	Mbuzi	16	Minyoo	16
Dumila	Ngombe	15	Minyoo	11
			T.B	3
			Infacts	2
	Mbuzi	1	Pim plyguts	1

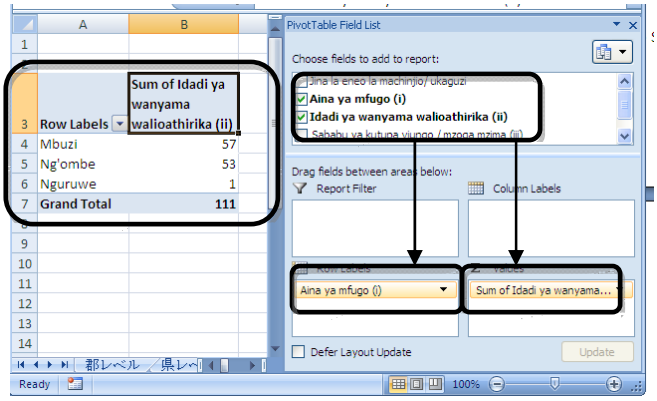
1. Unmerge all the cells and delete the columns without data.

2. Copy the A1-C1 cells to A2-C2, respectively, and delete the entire first row.

3. Copy the name of slaughter slab (in this case “MGUNGANI”) and paste the cells immediately below it until you see the next name. Continue this for all the cells in the first column (Jina la machinjio/ukaguzi) and second column (Aina ya mfugo).

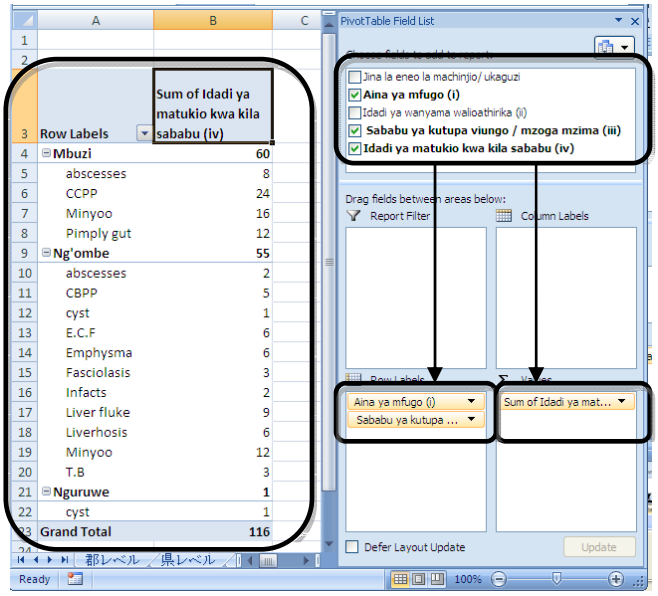
Then the table will look like this. As for the third column leave it as it is (leave blank cells as they are).

Now standardize the words if necessary [see 3.5.2].



4. Run pivot table putting “Aina ya mifugo (i)” in row lables and “Idadi ya wanyama walioathirika (ii)” in Values. Now you know the number of animals affected by animal type.

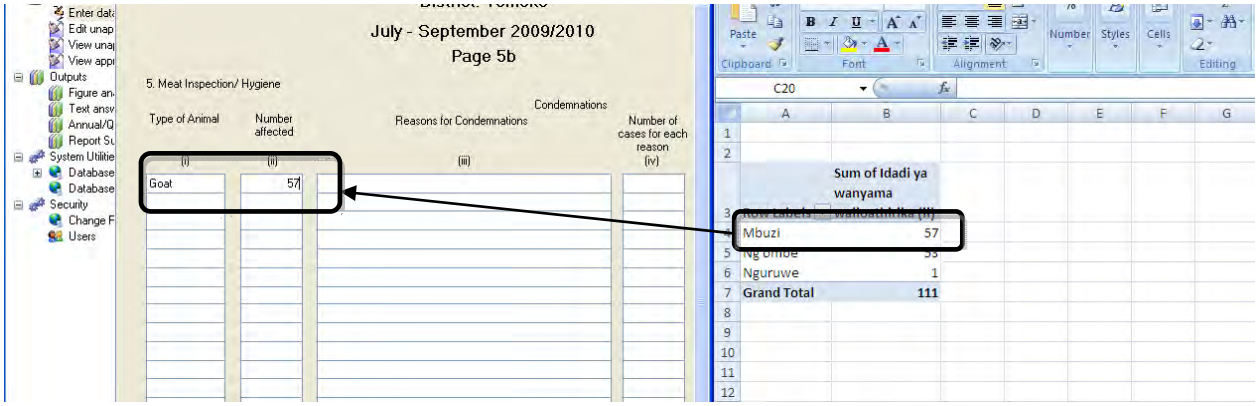
<Excel 2003> Drop i) in Row Field and ii) in Value Fields, respectively.



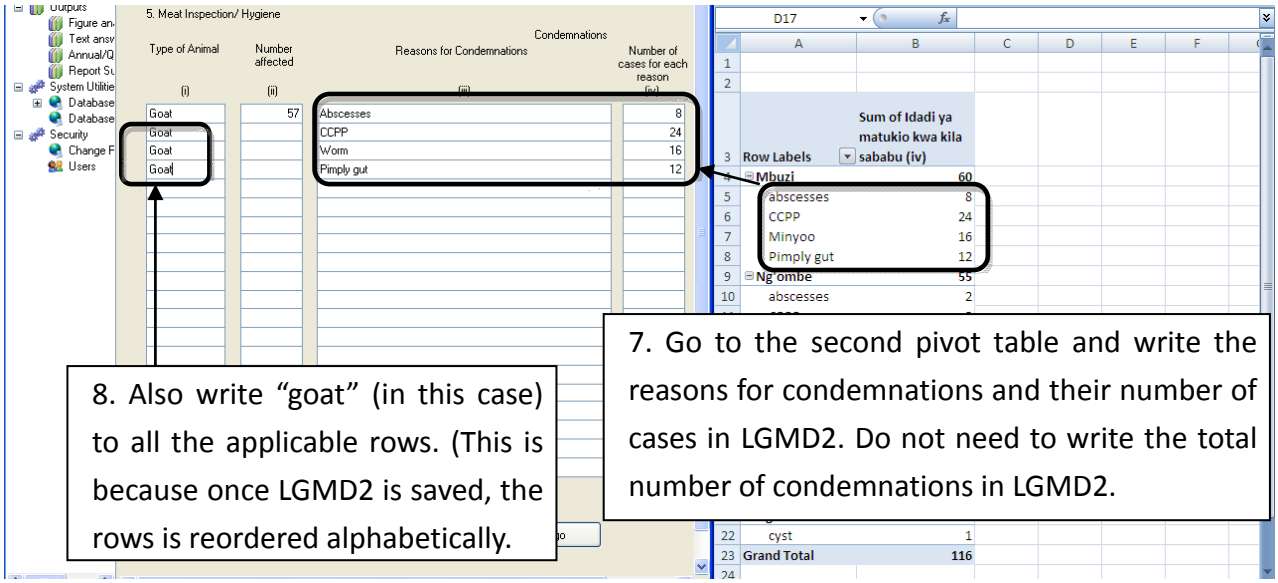
5. Run another pivot table in a <u>new</u> seat. This time, put “Aina ya mifugo (i)” and “Sababu ya kutupa viungo / mzoga mzima (iii)” in row lables and “Idadi ya matukio kwa kila sababu (iv)” in Values. Now you know the number of cases by animal type and by reasons for comdemnations.

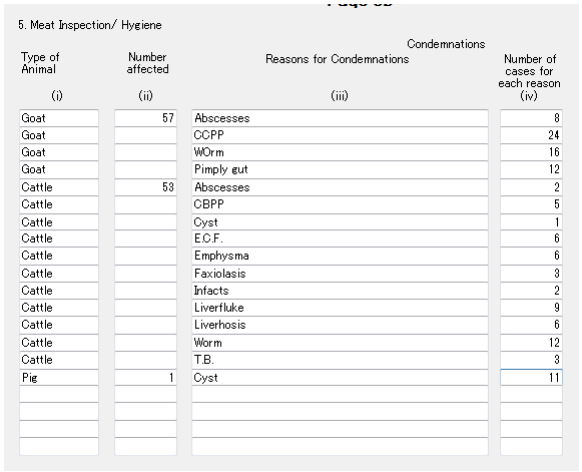
<Excel 2003> Drop i) and (iii) in Row Field and iv) in Value Fields, respectively.

Now you are ready to enter data in LGMD2.



6. Resize and arrange LGMD2 and Excel so that both windows appear in the computer screen.
Write goat (mbuzi) and its number in LGMD2 from the first pivot table.





Continue the same process with cattle, etc.

Now you have completed Quarterly Table 5 Meat Inspection / Hygiene!

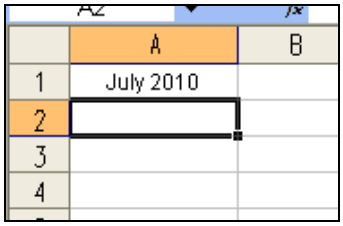
4.3.4 Three Month Data Aggregation

This technique can be applied to

- Quarterly Table 4 Livestock Slaughtered
- Quarterly Table 6 (b)-(c) Livestock Products

Now explanation is given as Table 4 Livestock Slaughtered as an example.

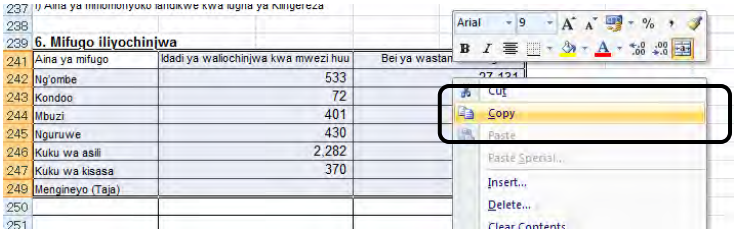
You can consolidate the three months data by copying and pasting tables in one sheet, and calculate. Here we explain with Quarterly Table 4. Livestock slaughtered.



1. Create a new sheet for consolidation.

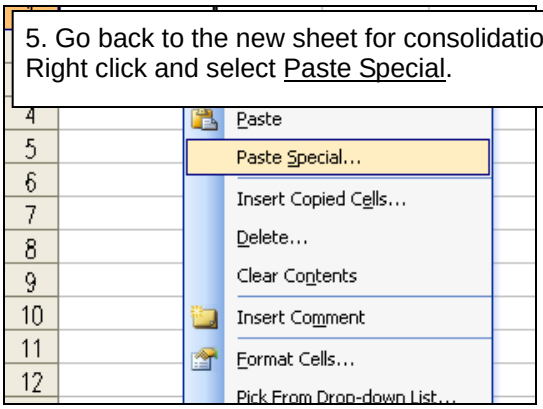
2. Write the month of the data.

3. Open District Total sheet of the excel file of the first month (i.e. July).

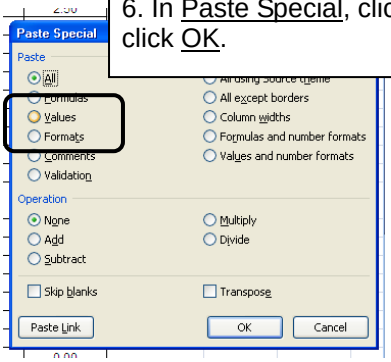


6. Mifugo iliyochinjwa		
Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani
Ng'ombe	533	
Kondoo	72	
Mbuzi	401	
Nguruwe	430	
Kuku wa asili	2,282	
Kuku wa kisasa	370	
Mengineyo (Taja)		

4. Select the entire table and copy (Right click and select Copy or Control +C).



5. Go back to the new sheet for consolidation. Right click and select Paste Special.



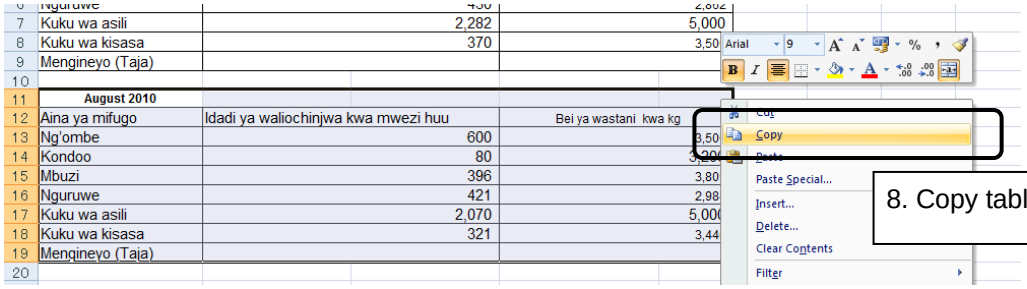
6. In Paste Special, click Values. Then, click OK.

	A	B	C	D	E
1	July 2010				
2	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
3	Ng'ombe		533		3,258
4	Kondoo		72		3,045
5	Mbuzi		401		3,917
6	Nguruwe		430		2,862
7	Kuku wa asili		2,282		5,000
8	Kuku wa kisasa		370		3,500
9	Mengineyo (Taja)				

Then, the table is copied with numbers intact.

	A	B	C	D	E
1	July 2010				
2	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
3	Ng'ombe		533		3,258
4	Kondoo		72		3,045
5	Mbuzi		401		3,917
6	Nguruwe		430		2,862
7	Kuku wa asili		2,282		5,000
8	Kuku wa kisasa		370		3,500
9	Mengineyo (Taja)				
10					
11	August 2010				
12	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
13	Ng'ombe		600		3,500
14	Kondoo		80		3,200
15	Mbuzi		396		3,809
16	Nguruwe		421		2,984
17	Kuku wa asili		2,070		5,000
18	Kuku wa kisasa		321		3,440
19	Mengineyo (Taja)				
20					
21	September 2010				
22	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
23	Ng'ombe		6		3,000
24	Kondoo		98		3,022
25	Mbuzi		437		4,000
26	Nguruwe		398		2,499
27	Kuku wa asili		2,576		5,100
28	Kuku wa kisasa		355		3,400

7. Copy tables from other two months below in the same way.



7	Kuku wa asili	2,282	5,000
8	Kuku wa kisasa	370	3,50
9	Mengineyo (Taja)		
10			
11	**August 2010**		
12	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg
13	Ng'ombe	600	3,50
14	Kondoo	80	3,20
15	Mbuzi	396	3,80
16	Nguruwe	421	2,98
17	Kuku wa asili	2,070	5,00
18	Kuku wa kisasa	321	3,44
19	Mengineyo (Taja)		
20			

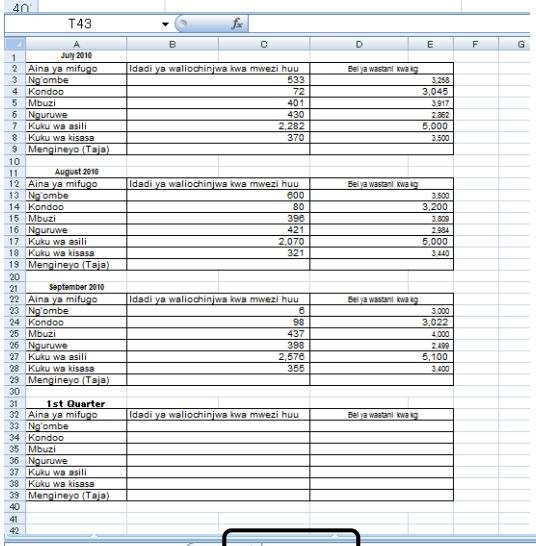
Arial 9 B I

Cut
Copy
Paste
Paste Special...
Insert...
Delete...
Clear Contents
Filter

8. Copy table of any month.

20			
21	**September 2010**		
22	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg
23	Ng'ombe	6	3,000
24	Kondoo	98	3,022
25	Mbuzi	437	4,000
26	Nguruwe	398	2,499
27	Kuku wa asili	2,576	5,100
28	Kuku wa kisasa	355	3,400
29	Mengineyo (Taja)		
30			
31	**1st Quarter**		
32	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg
33	Ng'ombe		
34	Kondoo		
35	Mbuzi		
36	Nguruwe		
37	Kuku wa asili		
38	Kuku wa kisasa		
39	Mengineyo (Taja)		
40			

9. Paste it at the end for quarterly consolidation and delete all data.
Rename it to "1st Quarter".



T43

July 2010

Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg	
Ng'ombe	533	3,258	
Kondoo	72	3,045	
Mbuzi	401	3,917	
Nguruwe	430	2,862	
Kuku wa asili	2,282	5,000	
Kuku wa kisasa	370	3,500	
Mengineyo (Taja)			

August 2010

Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg	
Ng'ombe	600	3,500	
Kondoo	80	3,200	
Mbuzi	396	3,809	
Nguruwe	421	2,984	
Kuku wa asili	2,070	5,000	
Kuku wa kisasa	321	3,440	
Mengineyo (Taja)			

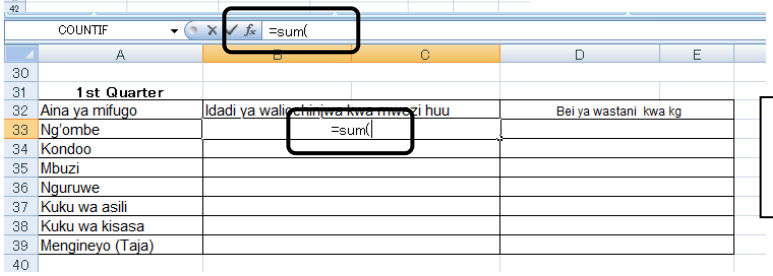
September 2010

Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg	
Ng'ombe	6	3,000	
Kondoo	98	3,022	
Mbuzi	437	4,000	
Nguruwe	398	2,499	
Kuku wa asili	2,576	5,100	
Kuku wa kisasa	355	3,400	
Mengineyo (Taja)			

1st Quarter

Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg	
Ng'ombe			
Kondoo			
Mbuzi			
Nguruwe			
Kuku wa asili			
Kuku wa kisasa			
Mengineyo (Taja)			

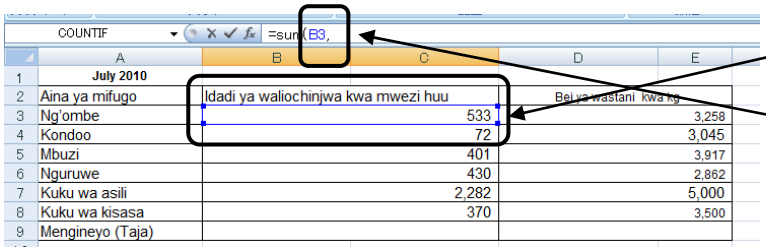
Now, tables of monthly and quarterly totals are all in one sheet!



COUNTIF =sum(

30				
31	**1st Quarter**			
32	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg
33	Ng'ombe	=sum(		
34	Kondoo			
35	Mbuzi			
36	Nguruwe			
37	Kuku wa asili			
38	Kuku wa kisasa			
39	Mengineyo (Taja)			
40				

10. Type " =SUM(" in the first cell, "number of slaughtered" for "cattle" of the quarterly table.

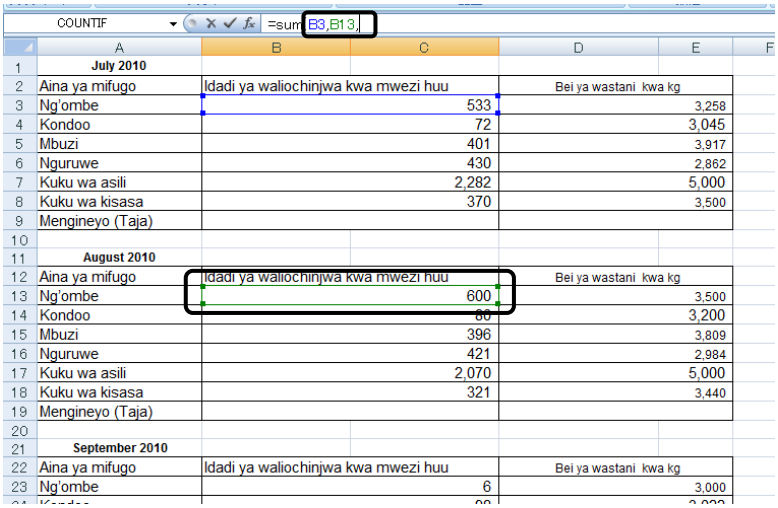


COUNTIF =sum(B3,

1	**July 2010**			
2	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg
3	Ng'ombe	533		3,258
4	Kondoo	72		3,045
5	Mbuzi	401		3,917
6	Nguruwe	430		2,862
7	Kuku wa asili	2,282		5,000
8	Kuku wa kisasa	370		3,500
9	Mengineyo (Taja)			

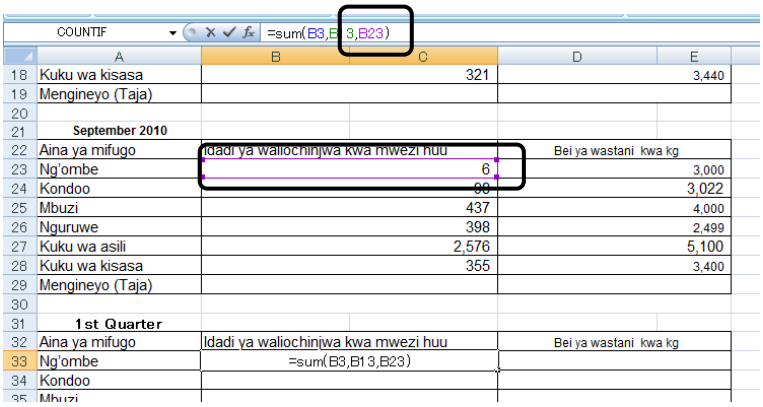
11. Click the cell of the same data in the first month table.

12. Type comma "," in the formula bar.



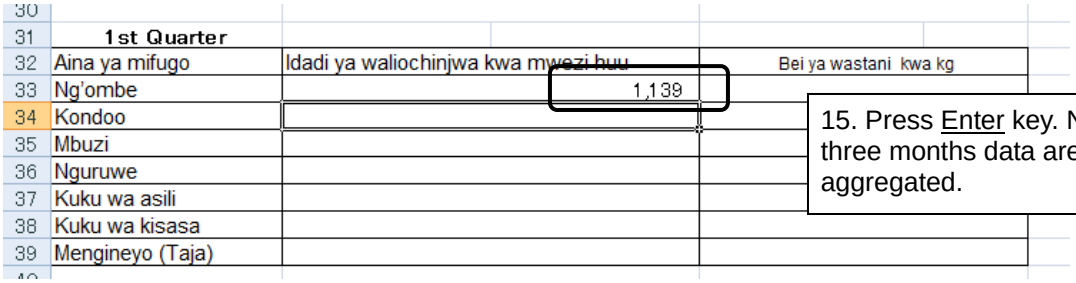
	A	B	C	D	E
1	**July 2010**				
2	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
3	Ng'ombe		533	3,258	
4	Kondoo		72	3,045	
5	Mbuzi		401	3,917	
6	Nguruwe		430	2,862	
7	Kuku wa asili		2,282	5,000	
8	Kuku wa kisasa		370	3,500	
9	Mengineyo (Taja)				
10					
11	**August 2010**				
12	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
13	Ng'ombe		600	3,500	
14	Kondoo		80	3,200	
15	Mbuzi		396	3,809	
16	Nguruwe		421	2,984	
17	Kuku wa asili		2,070	5,000	
18	Kuku wa kisasa		321	3,440	
19	Mengineyo (Taja)				
20					
21	**September 2010**				
22	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
23	Ng'ombe		6	3,000	

13. Click the cell of the same data of the second month and type comma ",".



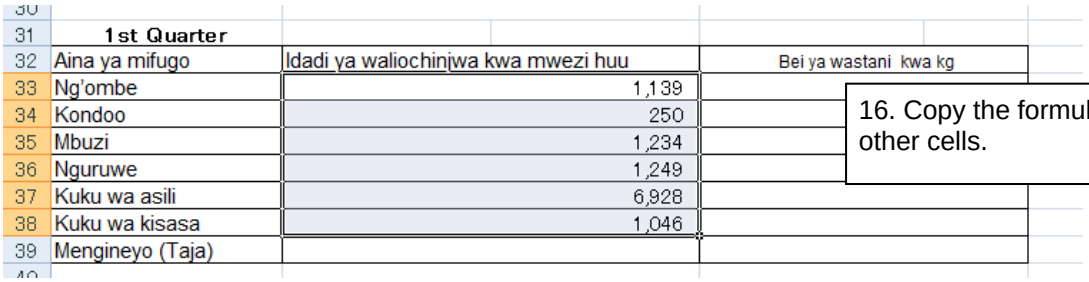
	A	B	C	D	E
18	Kuku wa kisasa		321	3,440	
19	Mengineyo (Taja)				
20					
21	**September 2010**				
22	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
23	Ng'ombe		6	3,000	
24	Kondoo		80	3,022	
25	Mbuzi		437	4,000	
26	Nguruwe		398	2,499	
27	Kuku wa asili		2,576	5,100	
28	Kuku wa kisasa		355	3,400	
29	Mengineyo (Taja)				
30					
31	**1st Quarter**				
32	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
33	Ng'ombe	=sum(B3,B13,B23)			
34	Kondoo				

14. Click the cell of the same data of the third month and type closing bracket ")".



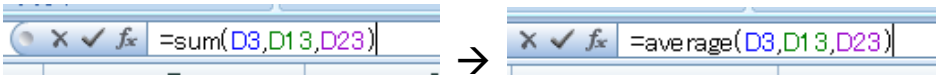
	A	B	C	D	E
30					
31	**1st Quarter**				
32	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
33	Ng'ombe		1,139		
34	Kondoo				
35	Mbuzi				
36	Nguruwe				
37	Kuku wa asili				
38	Kuku wa kisasa				
39	Mengineyo (Taja)				

15. Press Enter key. Now, the three months data are aggregated.



	A	B	C	D	E
30					
31	**1st Quarter**				
32	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu		Bei ya wastani kwa kg	
33	Ng'ombe		1,139		
34	Kondoo		250		
35	Mbuzi		1,234		
36	Nguruwe		1,249		
37	Kuku wa asili		6,928		
38	Kuku wa kisasa		1,046		
39	Mengineyo (Taja)				

16. Copy the formula to other cells.



17. For "average price," change "SUM" to "AVERAGE" in the formula bar.

31	1st Quarter		
32	Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg
33	Ng'ombe	1,139	3,253
34	Kondoo	250	3,089
35	Mbuzi	1,234	3,909
36	Nguruwe	1,249	2,782
37	Kuku wa asili	6,928	5,033
38	Kuku wa kisasa	1,046	3,447
39	Mengineyo (Taja)		
40			

Now, you have created a consolidated table for the quarter and ready to enter the data in LGMD2!

4.3.5 Adding a column to facilitate pivot table analysis

The tables to be handled will require pivot table. However, before conducting the analysis, it will be necessary to prepare by adding a column in the first column. This technique will be used in the following tables, although in a different fashion.

- Annual Table 5 (f) Training of farmers through FFS
- Annual Table 5 (g) Farmers trained through other methods than FFS

For Table 5 (g), in consolidating the data in "Quarterly 3.1 Mafunzo kwa wakulima kwa kutumia njia mbalimbali nje ya shamba darasa," it is convenient to add a first column and write crop, livestock, fishery marketing and processing, or irrigation, respectively, before you conduct pivot table analysis.

	Aina ya mafunzo	Mada ya mafunzo katika (i)	Wanaume	Wanawake	Sawa au pungufu ya wiki moja	Zaidi ya wiki moja	Njia iliyotumika kutoa mafunzo	Mtoa mafunzo/ Mwezeshaji wa mafunzo	Maelezo	Kata	Robo mwaka
3	Masoko na Usindikaji	Ukaushaji matunda	18	14	32	0	Ziara ya mafunzo	UMADEP		Tawa	2
4	Mazao	Hifadhi ya nafaka	36	18	0	54	Washa	Halmashauri		Kiroka	4
5	Mazao	Hifadhi ya nafaka	16	9	25	0	Washa	Halmashauri		Tununguo	4
6	Mazao	Hifadhi ya nafaka	12								4
7	Mazao	Hilimo bora cha maharage	350								3
8	Mazao	Hilimo bora cha mahindi	20								2
9	Mazao	Hilimo bora cha mtama	15								2
10	Mazao	Matumizi salama Dya viuadudu	102								3
11	Mazao	Uboreshaji wa Dnafaka	30								1
12	Mazao	Uzalishaji mbegu ya alizeti	9								2
13	Mazao	Uzalishaji mbegu ya alizeti	21								2
14	Ufugaji	Huogesha mifugo	18								1
15	Ufugaji	Huogesha mifugo	11								3
16	Ufugaji	Hutambua magojwa ya mifugo	73								1
17	Ufugaji	Ithe bora kwa mifugo	5								2
18	Ufugaji	Ufugaji bora wa mbuzi wa maziwa	16								4
19	Ufugaji	Ufugaji bora wa nguruwe	18								2
20	Ufugaji	Ufugaji bora wa kuku wa kienyeji	12	6	18	0	Semina	Halmashauri		Mkuyuni	4
21	Ufugaji	Ufugaji bora wa kuku wa kienyeji	7	9	0	16	Washa	Halmashauri		Mkambarani	3
22	Ufugaji	Maksai wa kulima	15	5	0	20	Kazi	Halmashauri		Mvuha	1
23	Ufugaji	Uzenzi wa mabanda ya ng'ombe	7	6	13	0	Washa	Halmashauri		Mlombozi	1
24	Umwagiliaji	Irrigated rice farming	10	10	20	0		MATI			

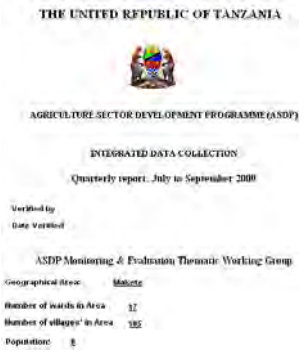
The column of whether crop, livestock fishery, marketing and processing and irrigation may be added in the first column. With this column, now it is possible to use pivot table only once to consolidate data.

Likewise, for Table 5 (f), in consolidating the data in "Annual 5.1 Mafunzo ya wakulima kupitia shamba darasa," write add crop, livestock or fishery before in the first column when you list the information from all wards.

5. Data Analysis and Reporting

After entering all necessary data in LGMD2 and submitting them to the national server, it is now time to analyze the data and produce report for the use in the district as well as for feedback to VAEO/WAEO. The following shows examples of analysis explained in this chapter.

Printed report [5.1.1]
Printed copy of LGMD2 report.


THE UNITED REPUBLIC OF TANZANIA

AGRICULTURE SECTOR DEVELOPMENT PROGRAMME (ASDP)

INTEGRATED DATA COLLECTION

Quarterly report: July to September 2008

Verified by

Date Verified

ASDP Monitoring & Evaluation Thematic Working Group

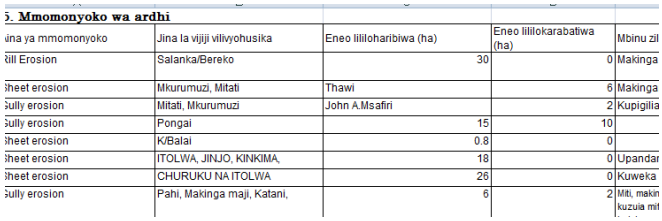
Geographical Area: Makete

Number of wards in Area 12

Number of villages' in Area 185

Population: 0

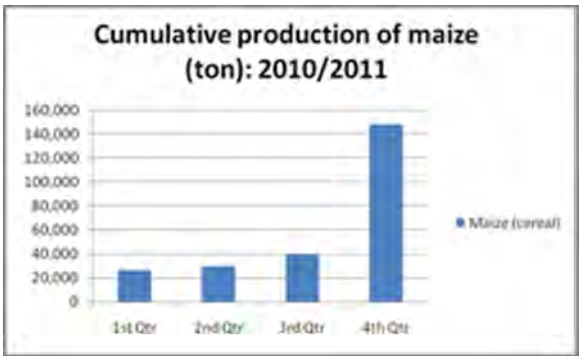
Tables copied from Excel to Word report
[5.1.2] Tables copied from consolidated Excel file or LGMD2 report exported to Excel.



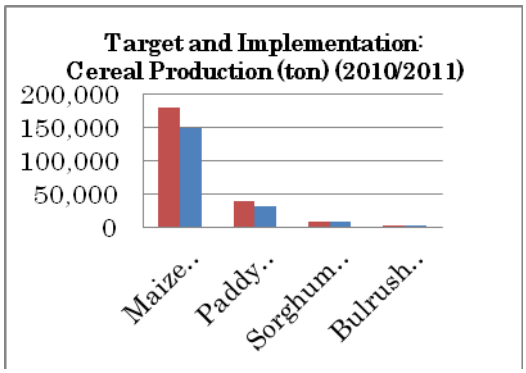
5. Mmomonyoko wa ardhi

ina ya mmomonyoko	Jina la vijiji vilivyohusika	Eneo lililoharibiwa (ha)	Eneo lililokarabatiwa (ha)	Mbinu zil
ill Erosion	Salanka/Bereko	30	0	Makinga
heet erosion	Mkurumuzi, Mitati	Thawi	6	Makinga
ully erosion	Mitati, Mkurumuzi	John A.Msafiri	2	Kupigilia
ully erosion	Pongai	15	10	
heet erosion	K/Balai	0.8	0	
heet erosion	ITOLWA, JINJO, KINKIMA,	18	0	Upandar
heet erosion	CHURUKU NA ITOLWA	26	0	Kuweka
ully erosion	Pahi, Makinga maji, Katani,	6	2	Miti, makin kuzuia mit

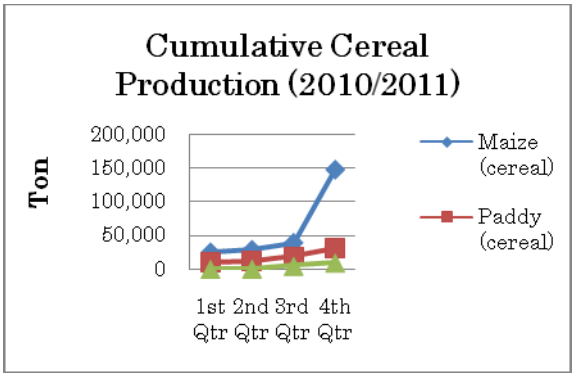
Time series analysis [5.1.3 A]
How the data of a variable change over time.



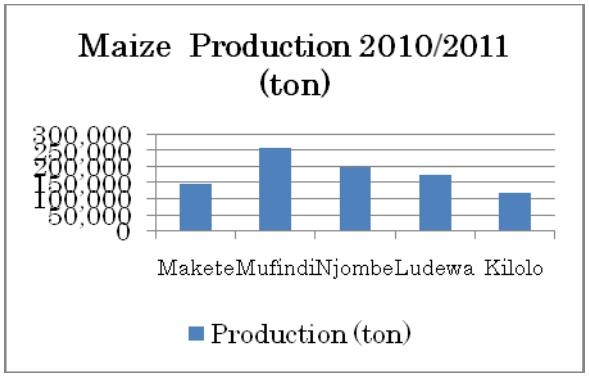
Comparison with target [5.1.3 B]
Whether the implementation meets the target/ annual requirement.



Cross section analysis [5.1.3 C]
Comparison of multiple variables.



Comparison with neighboring districts
[5.1.3 D] Comparison with other districts or regional and national data.



Ward disaggregated tables [5.2.1 and 5.2.4]
One or more variables disaggregated by ward, sorted by the value.

SN	Ward	No slaughtered
1	Mamboya	0
6	Ulelingombe	0
9	Masanze	2
16	Malolo	4
3	Kilangali	5
2	Magubike	6
10	Ulaya	6
15	Kisanga	6
14	Rubeho	8
4	Chanzuru	12
7	Gairo	60
5	Msowelo	61
8	Dumila	64
12	Mikumi	139
17	Kidodi	160
11	Vidunda	
13	Berega	
18	Kimamba.a	
19	Kimanba.b	
20	Zombo	
21	Kibedya	
	Total	533

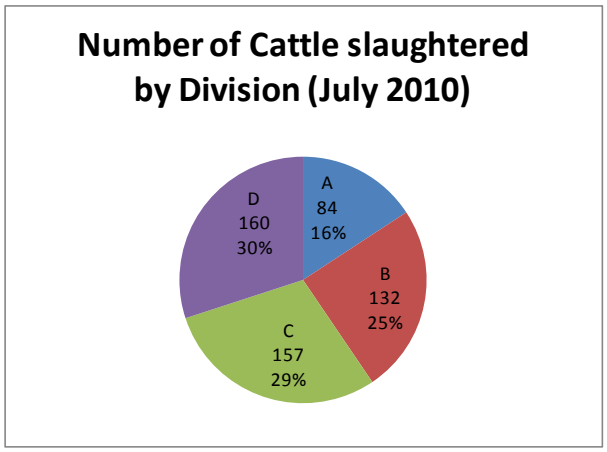
Division disaggregated tables [5.2.2]
One or more variables disaggregated by division.

Division	No slaughtered
A	84
B	132
C	157
D	160
Total	533

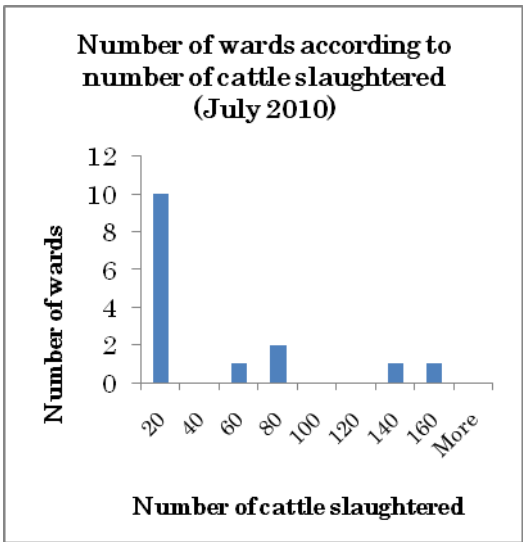
Basic analysis [5.2. 3]
Average (mean), Maximum (largest value in a set of data), Minimum (smallest value in a set of data), Standard deviation (value showing data variation from the average), and Median (the value in the middle of a set of data when counted from the smallest or largest).

Average	35.53
Maximum	160
Minimum	0
Standard deviation	50.17
Median	6

Ratio [5.2.5]
How much each ward/ division is contributing to the district total.



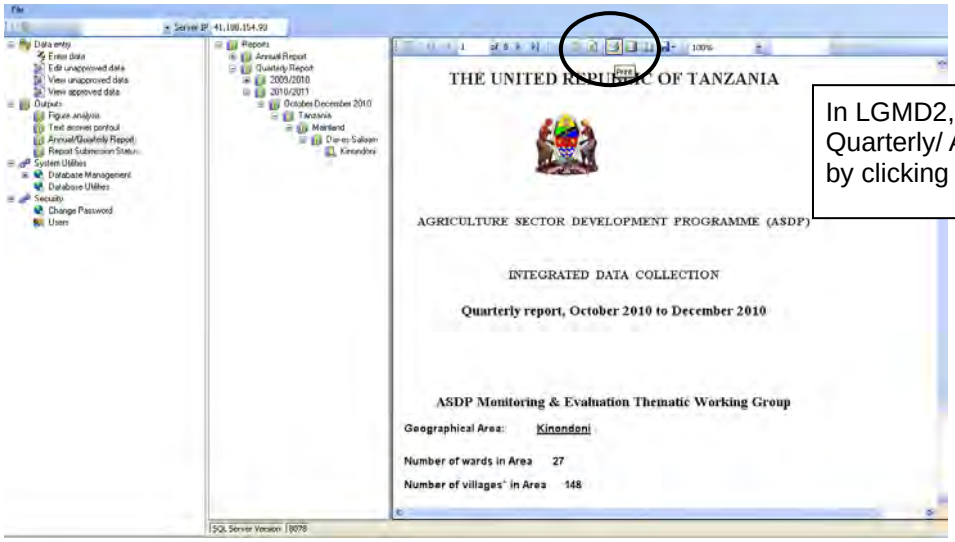
Distribution (histogram) [5.2.7]
How data are distributed among ward/ division.



5.1 District Level Information (LGMD2)

5.1.1 Report Printing

The easiest way to produce a report is to print the report from LGMD2. For this, see the LGMD2 Operating Manual on "Annual/Quarterly Reports." For tables not included in LGMD2, you can simply print the aggregated Excel tables created in Chapter 3.



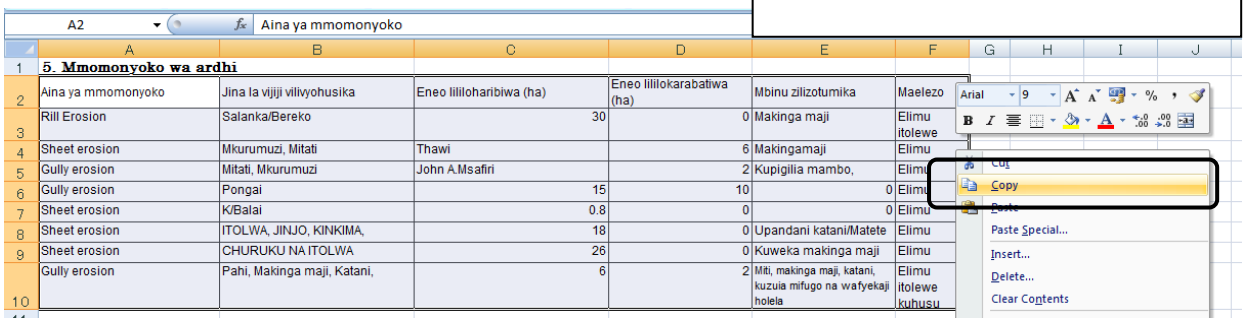
In LGMD2, you can print Quarterly/ Annual Report simply by clicking "Print".

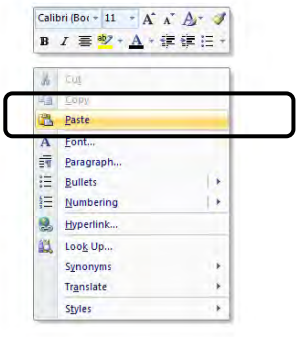
5.1.2 Copying table from Excel to Word

Tables in Excel or those exported from LGMD2 to Excel can be copied and pasted to a Word file in the following ways.

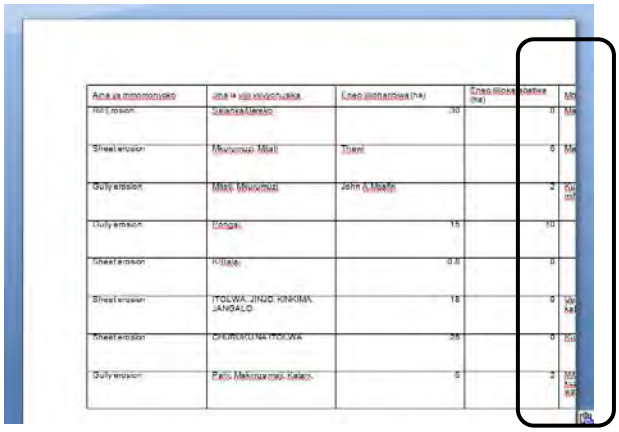
<When you want to modify the table in Word>

1. Select and copy the table (right click and select Copy or control + C).

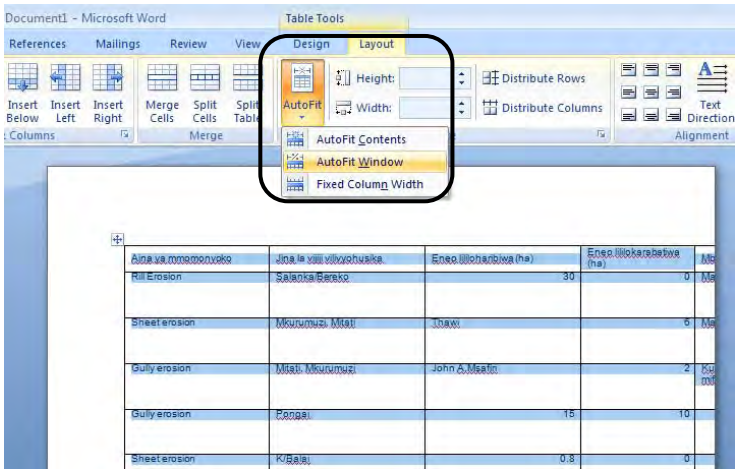




2. Paste in a Word file (right click and select Paste or control + V).

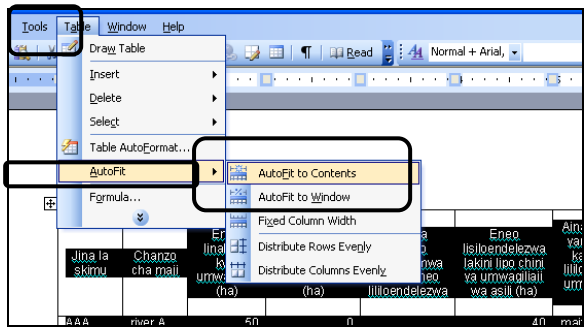


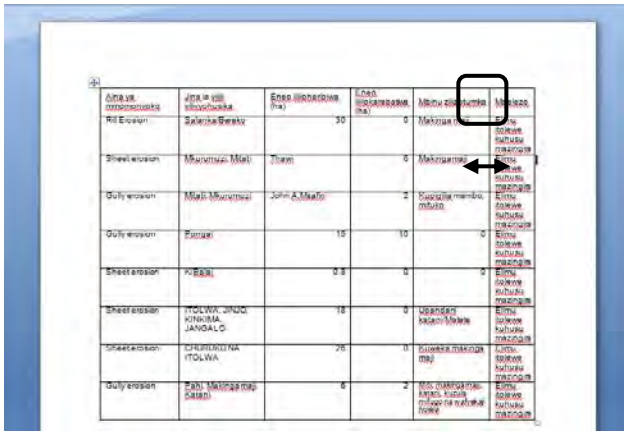
If it does not fit in the screen…



3. Select the table and go to Layout in the menu bar. Then, select AutoFit Window or AutoFit Contents in AutoFit. *

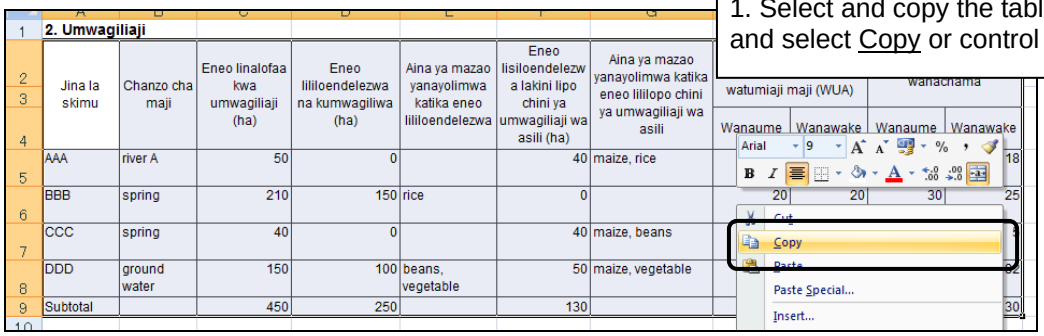
* In Word 2003, you can find AutoFit under Table in the menu bar.





4. Then, all areas will fit in the screen. You can adjust the width of each column by bringing the cursor to the line between columns and clicking and moving the edge mark.

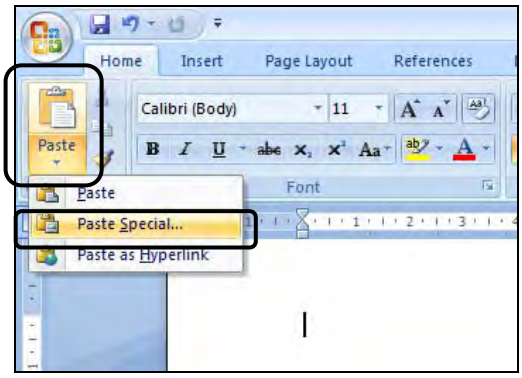
<When you do not need to modify the table in Word>



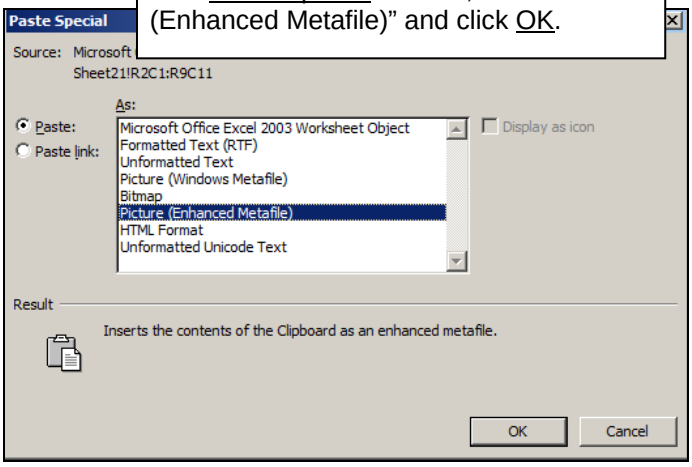
2. Select and copy the table (right click and select Copy or control + C).

2. Umwagiliaji						
Jina la skimu	Chanzo cha maji	Eneo linalofaa kwa umwagiliaji (ha)	Eneo lililoendelezwa na kumwagiliwa (ha)	Aina ya mazao yanayolimwa katika eneo lililoendelezwa	Eneo lisiloendelezwa lakini lipo chini ya umwagiliaji wa asili (ha)	Aina ya mazao yanayolimwa katika eneo lililopo chini ya umwagiliaji wa asili
AAA	river A	50	0		40	maize, rice
BBB	spring	210	150	rice	0	
CCC	spring	40	0		40	maize, beans
DDD	ground water	150	100	beans, vegetable	50	maize, vegetable
Subtotal		450	250		130	

2. In a Word file, click allow under Paste and select Paste Special. *



3. In Paste Special window, select “Picture (Enhanced Metafile)” and click OK.



* In Word 2003, Paste Special is found under Edit in the menu bar.

Jina la skimu	Chanzo cha maji	Eneo linalofaa kwa umwagiliaji (ha)	Eneo lililoendelezwa na kumwagiliwa (ha)	Aina ya mazao yanayolimwa katika eneo lililoendelezwa	Eneo lisiloendelezwa lakini lipo chini ya umwagiliaji wa asili (ha)	Aina ya mazao yanayolimwa katika eneo lililopo chini ya umwagiliaji wa asili	Idadi ya wanachama katika chama cha watumiaji maji (WUA)		Idadi ya watumiaji wasio wanachama	
							Wanaume	Wanawake	Wanaume	Wanawake
AAA	river A	50	0		40	maize, rice	12	7	20	18
BBB	spring	210	150	rice	0		20	20	30	25
CCC	spring	40	0		40	maize, beans	5	5	5	5
DDD	ground water	150	100	beans, vegetable	50	maize, vegetable	60	70	88	82
Subtotal		450	250		130		97	102	143	130

4. Then, the table is pasted as a picture.

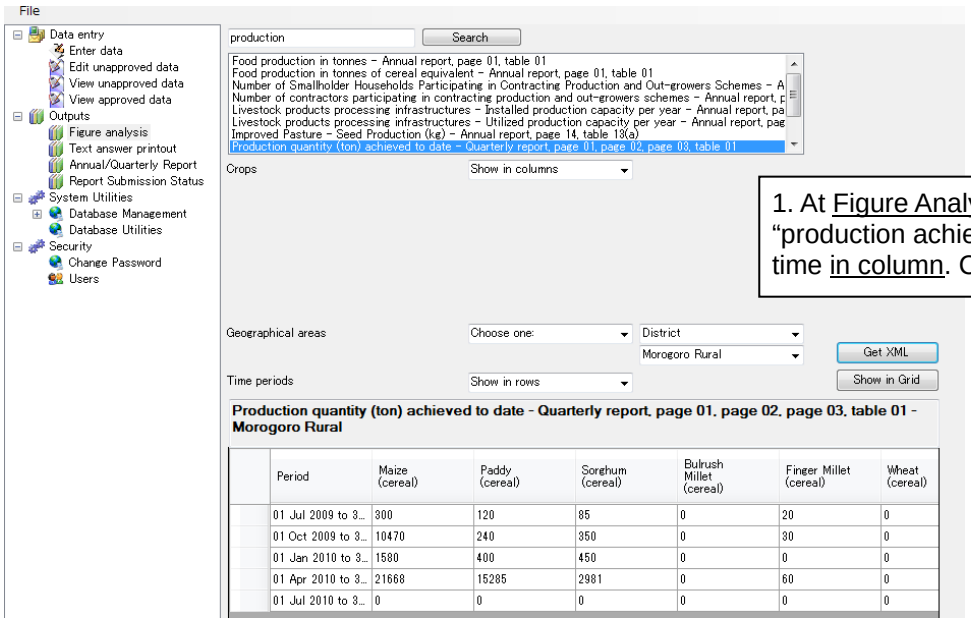
5.1.3 Data Analysis

In order to fully utilize the data and prepare a better report, presenting tables is not enough. Data analysis is important. In data analysis, you should grasp the trend and characteristics of the data (change over time, achievement of target, comparison, distribution, etc.) and think about the reasons behind these changes and characteristics and actions to be taken if necessary.

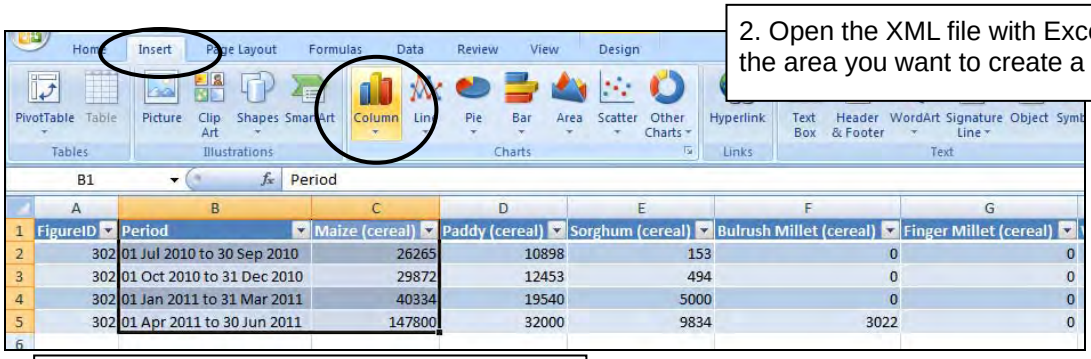
In order to facilitate this analysis, this section explains how to create additional tables and charts. For the district level data, data analysis is easily done by utilizing the Figure Analysis function in LGMD2. See the LGMD2 Operating Manual on "Figure Analysis" to design tables and export it to Excel files. If tables/items are not listed in "Figure Analysis," export the report to Excel and analyze with Excel functions.

A. Time series analysis

This analysis shows how the data of a variable change over time. Let's take an example of maize production.



1. At Figure Analysis of LGMD2, select "production achieved to date" in row and time in column. Click Get XML.

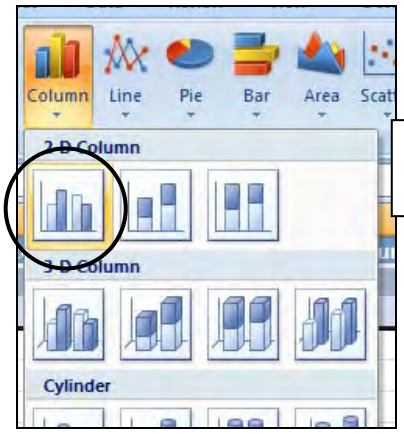


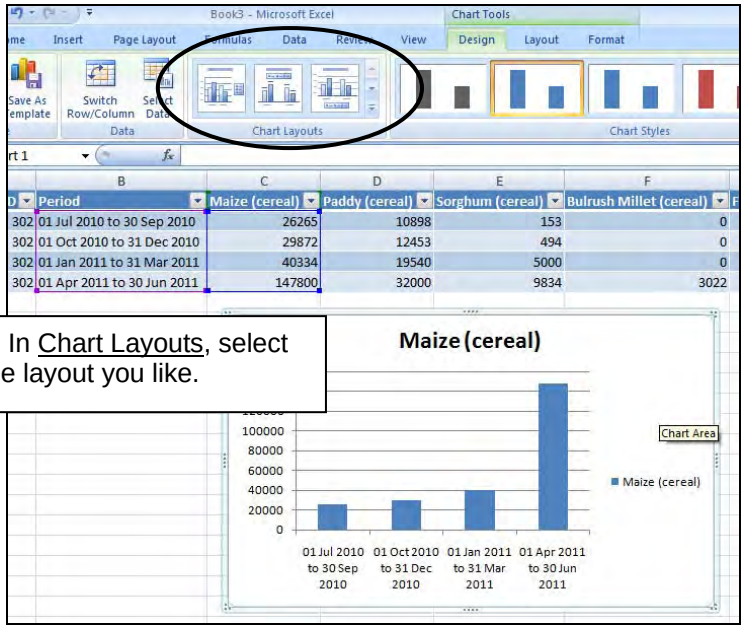
2. Open the XML file with Excel. Select the area you want to create a chart.

3. You can select four quarters of particular year (cumulative production of the year), or the 4th quarters of many years (comparison of annual production).

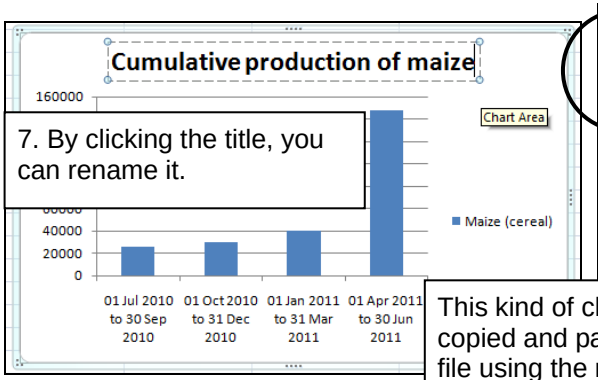
4. Go to Insert in the menu bar, then select Column in Charts.

5. Select 2-D Column.

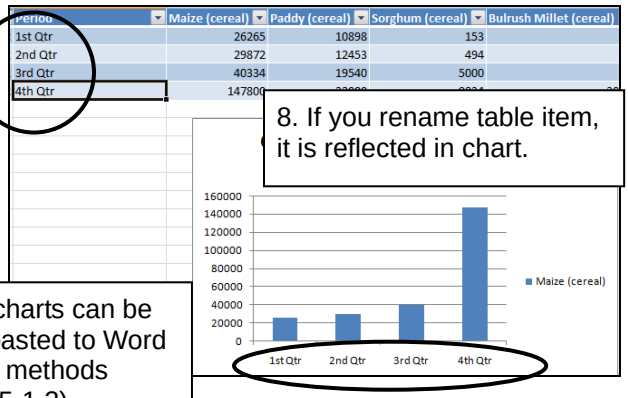




6. In Chart Layouts, select the layout you like.



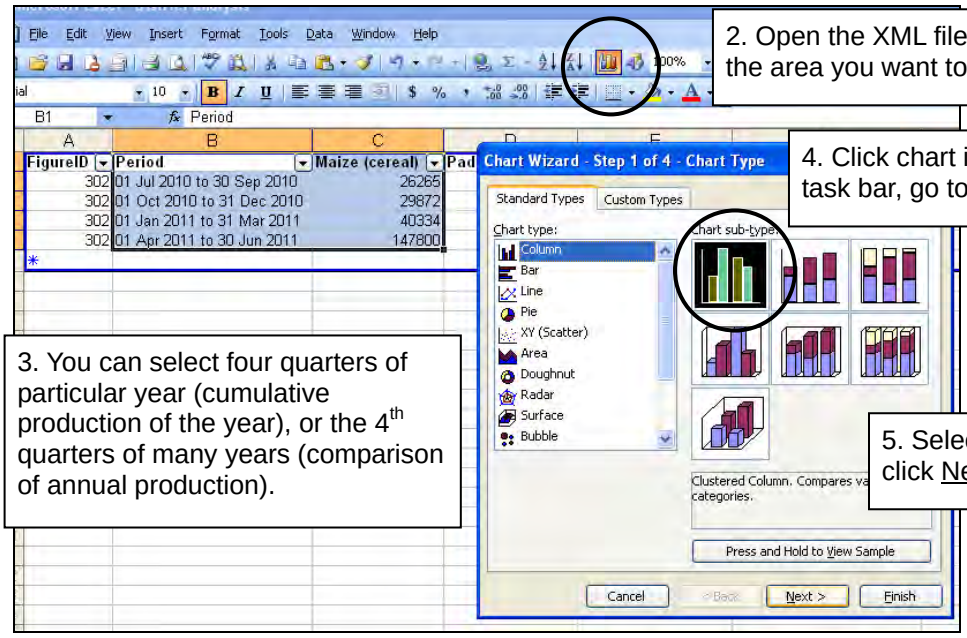
7. By clicking the title, you can rename it.



8. If you rename table item, it is reflected in chart.

This kind of charts can be copied and pasted to Word file using the methods explained in 5-1 2).

<Excel 2003>

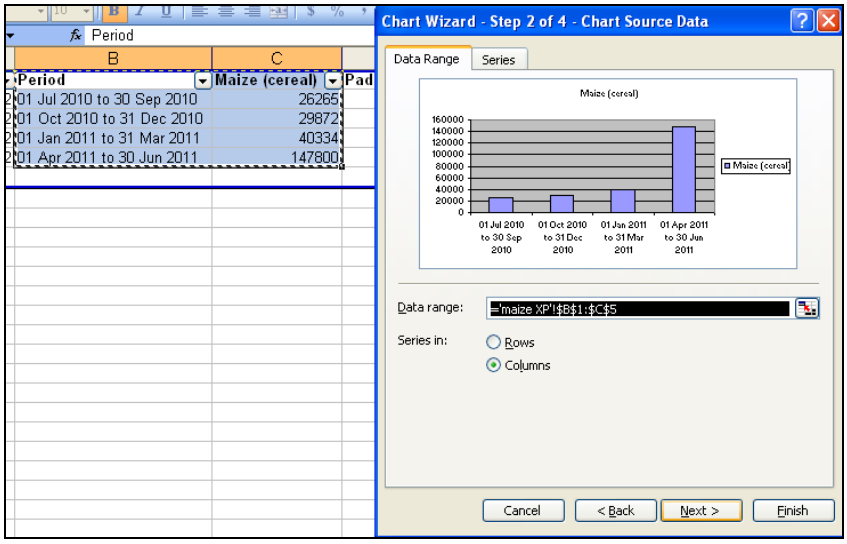


2. Open the XML file with Excel. Select the area you want to create a chart.

4. Click chart icon. (If it's not in the task bar, go to Insert).

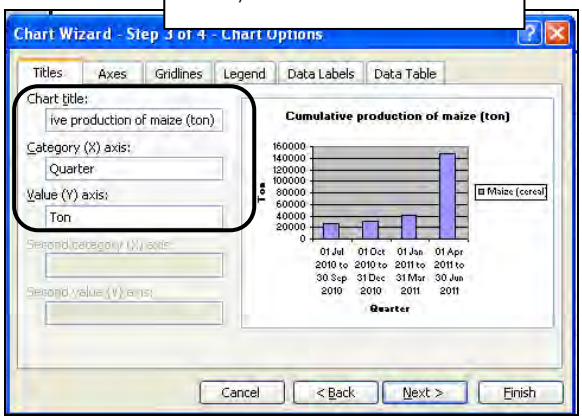
3. You can select four quarters of particular year (cumulative production of the year), or the 4th quarters of many years (comparison of annual production).

5. Select 2-D Column and click Next.

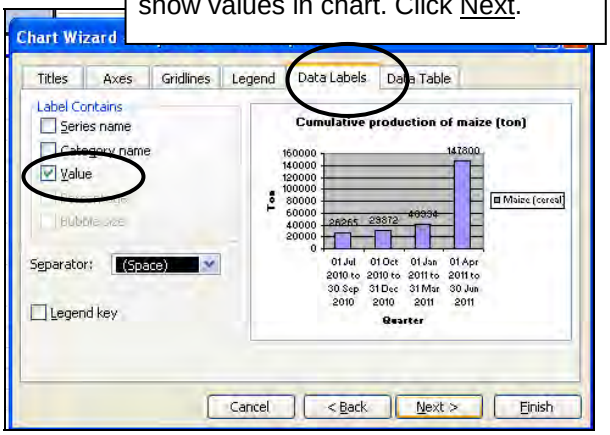


6. In Data Range, check if the area selected is OK. Then, click Next.

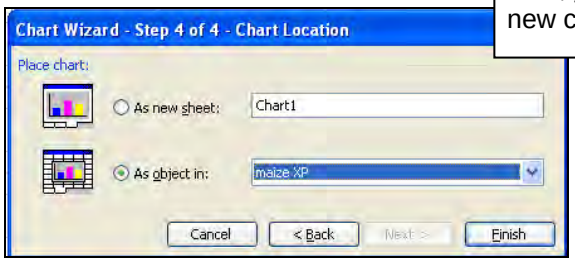
7. In Titles, type titles of chart, X axis and Y axis.



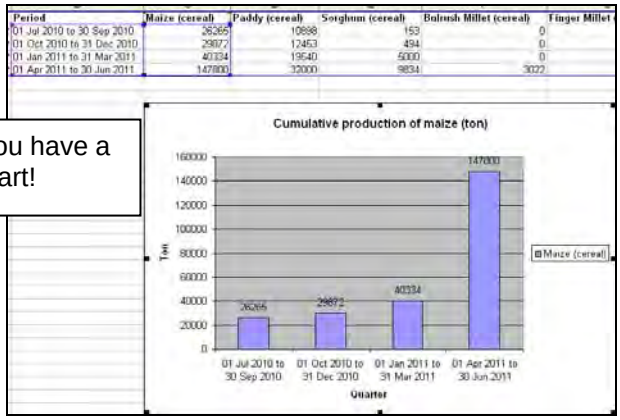
8. Click Data Labels tab. Click Value to show values in chart. Click Next.

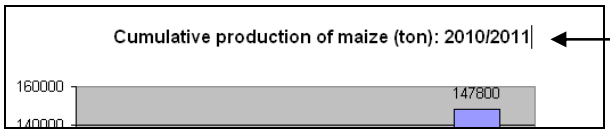


9. Click Finish.

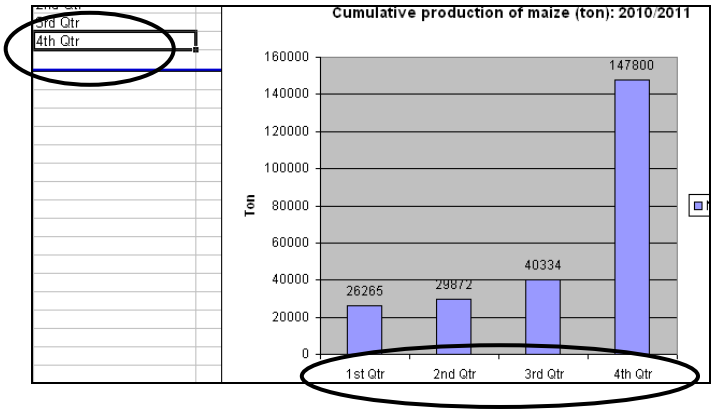


Now, you have a new chart!





10. If necessary, you can change title by clicking it.

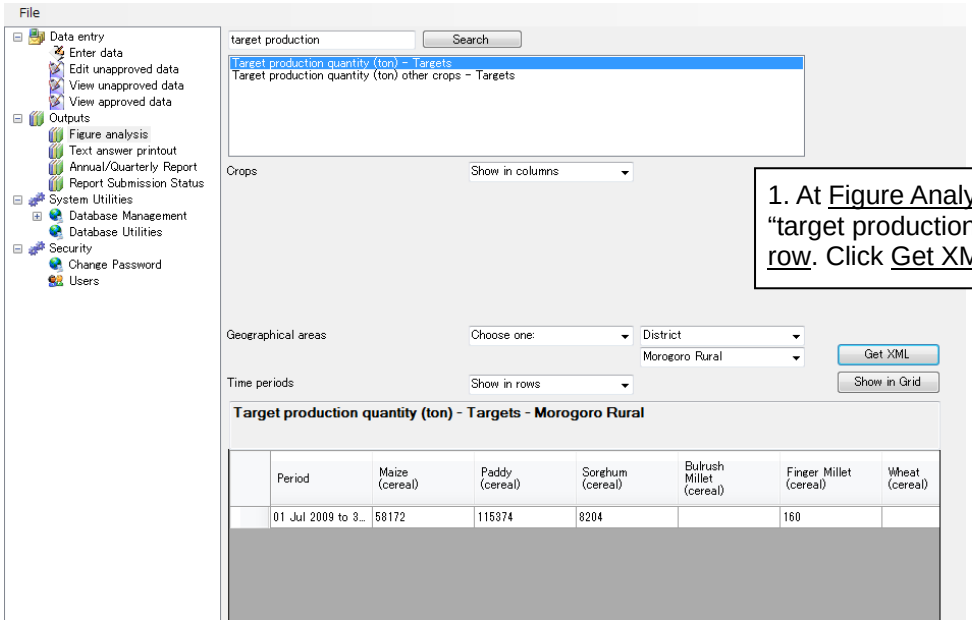


11. If you rename table item, it is reflected in chart.

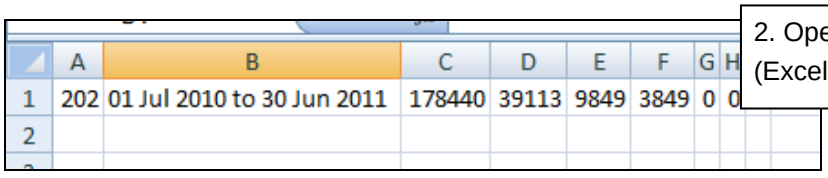
This kind of charts can be copied and pasted to Word file using the methods explained in 5-1 2)..

B. Comparison with target

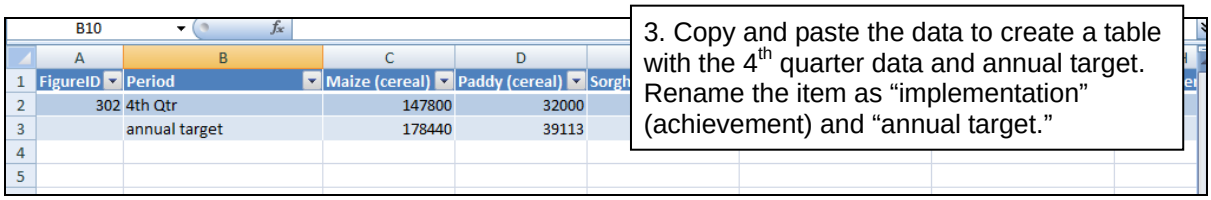
This analysis shows whether the district meets the target/ annual requirement. (For example, comparison between fertilizer requirement and amount used). Tables are already available in LGMD2 or Excel. Let's take an example of annual target and implementation (achievement) of maize production.



1. At Figure Analysis of LGMD2, select "target production" in column and time in row. Click Get XML.

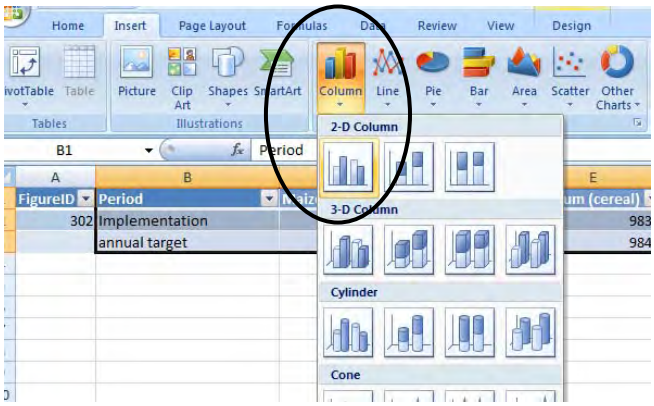


2. Open the XML file with Excel. (Excel 2003, see page 64)

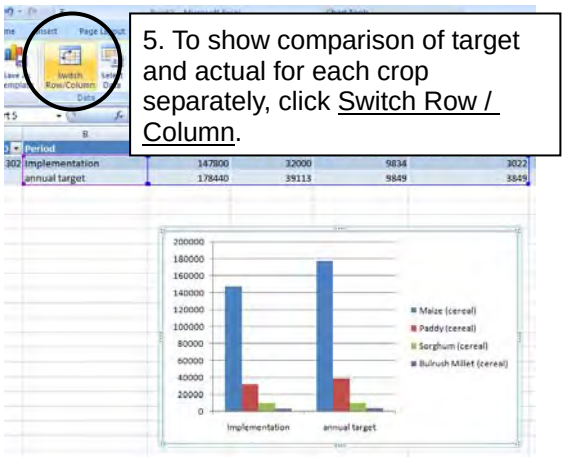


3. Copy and paste the data to create a table with the 4th quarter data and annual target. Rename the item as "implementation" (achievement) and "annual target."

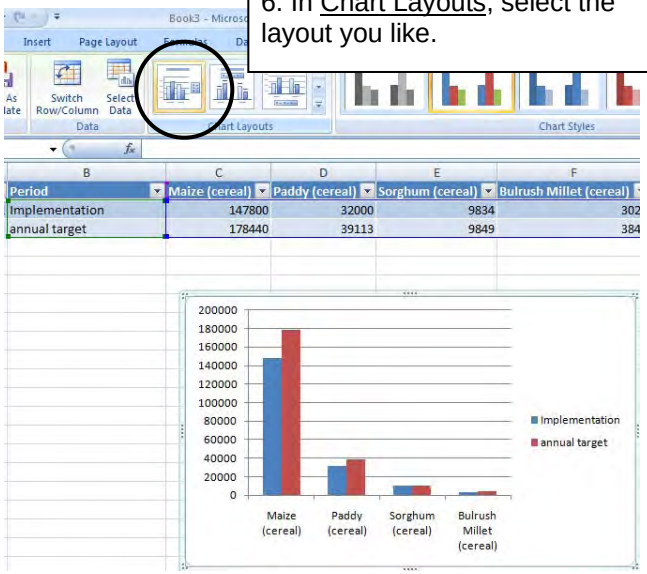
4. Select the area, got to Insert and Select Column (2-D Column).



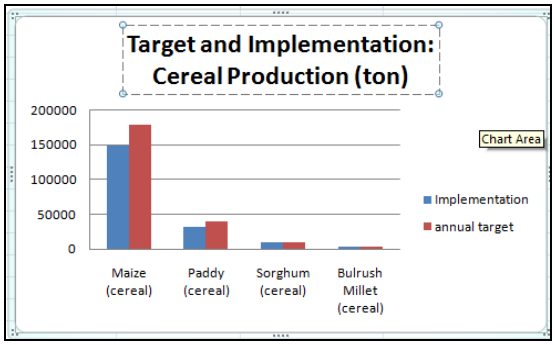
5. To show comparison of target and actual for each crop separately, click Switch Row / Column.



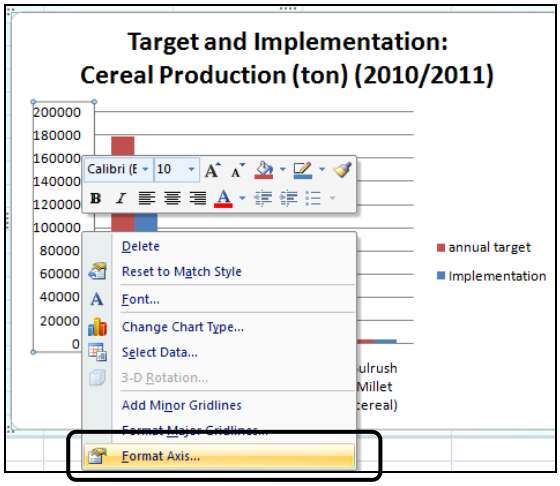
6. In Chart Layouts, select the layout you like.

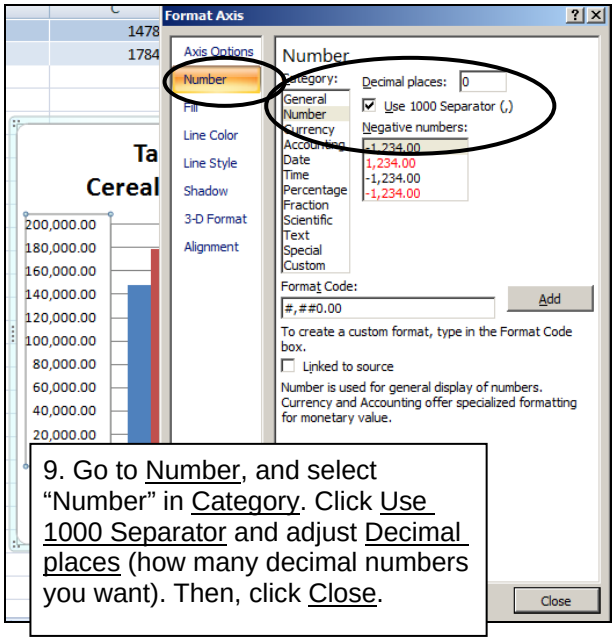


7. By clicking the title, you can rename it.

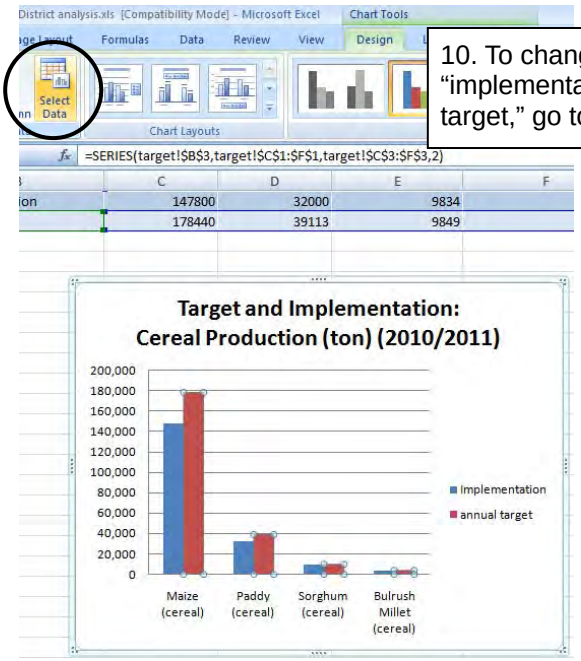


8. To improve the presentation of numbers, right click and select Format Axis.



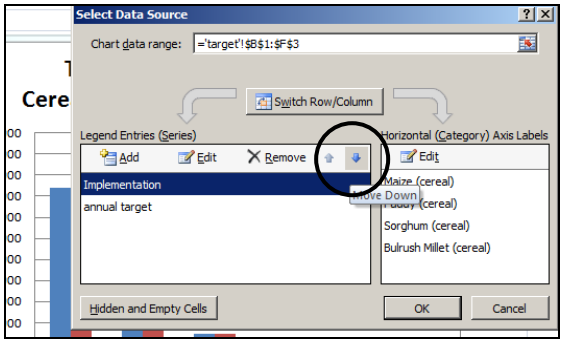


9. Go to Number, and select "Number" in Category. Click Use 1000 Separator and adjust Decimal places (how many decimal numbers you want). Then, click Close.

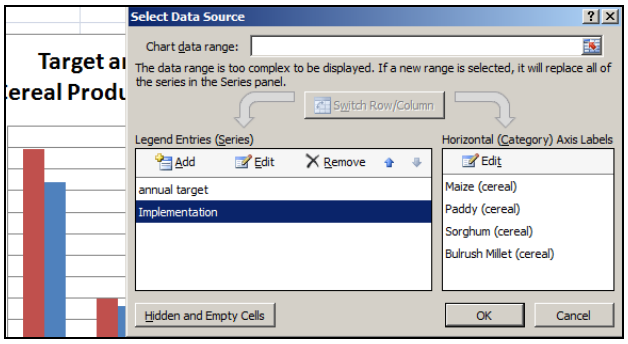


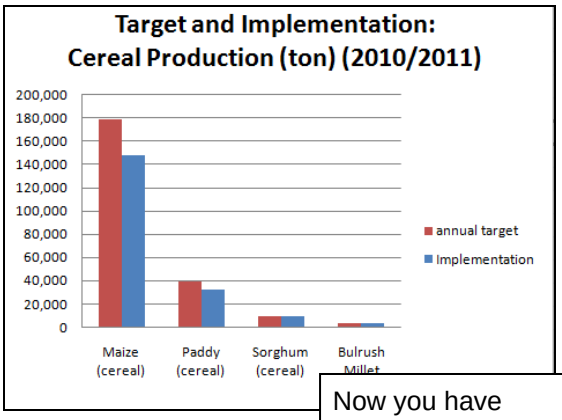
10. To change the order between "implementation" and "annual target," go to Select Data.

11. In Select Data Source window, select "implementation" and click "move down" allow.



12. Confirm that the order is changed, and click OK.





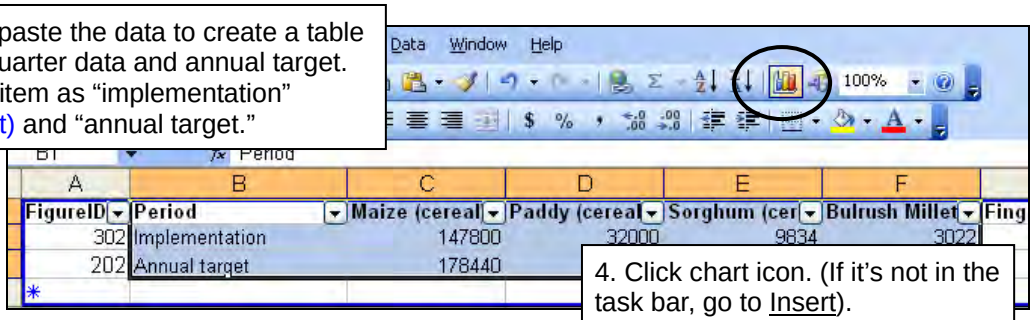
Now you have created a new chart!

<Excel 2003>

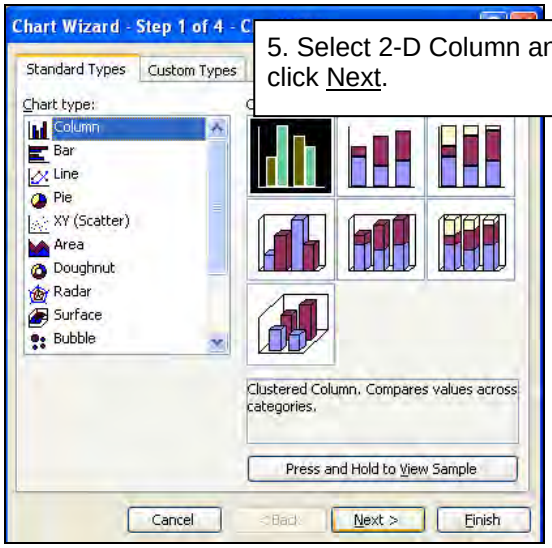
2. Open the XML file with Excel.

FigureID	Period	Maize (cereal)	Paddy (cereal)	Sorghum (cerea	Bulrush Millet (c	Fi
302	4th Qtr	147800	32000	9834	3022	
202	Annual target	178440	39113	9849	3849	

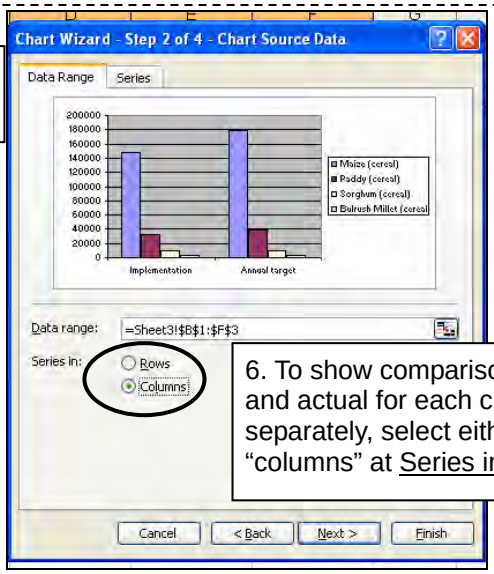
3. Copy and paste the data to create a table with the 4th quarter data and annual target. Rename the item as "implementation" (achievement) and "annual target."



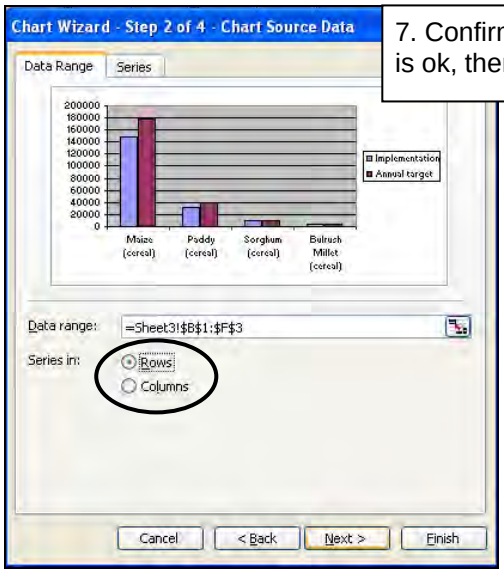
4. Click chart icon. (If it's not in the task bar, go to Insert).



5. Select 2-D Column and click Next.

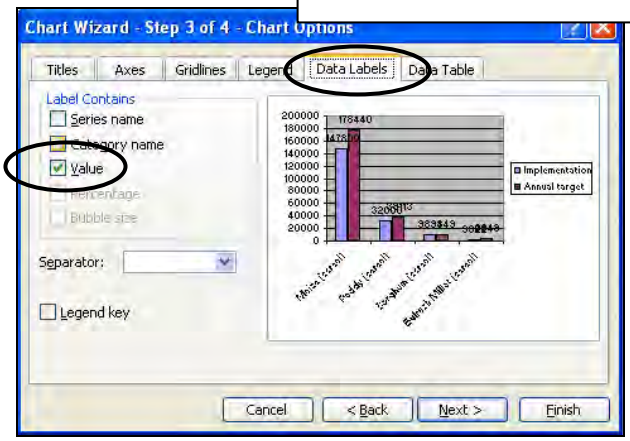


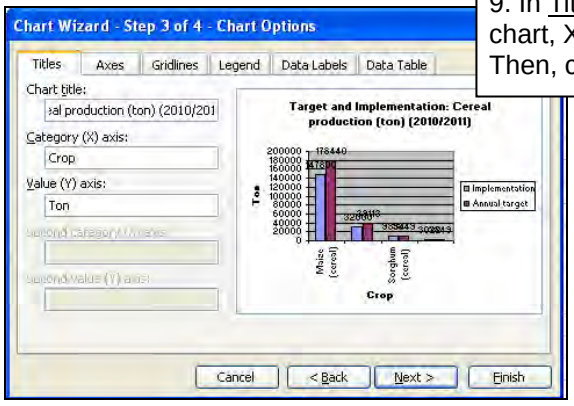
6. To show comparison of target and actual for each crop separately, select either “rows” or “columns” at Series in.



7. Confirm the row and column is ok, then click Next.

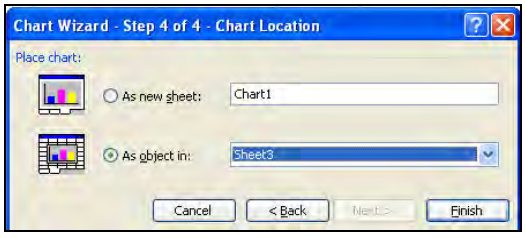
8. In Data Labels tab, click Value to show values in chart.

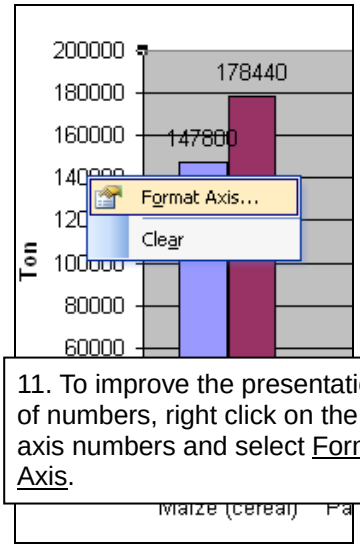




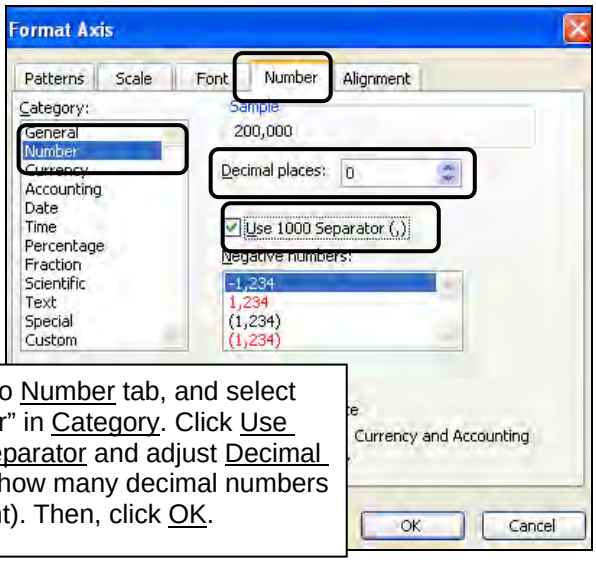
9. In Titles tab, type titles of chart, X axis and Y axis. Then, click Next.

10. Click Finish.

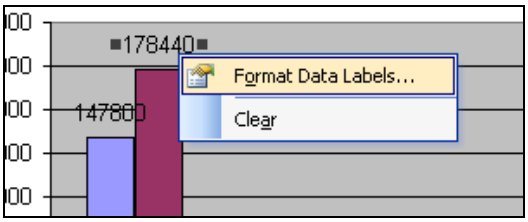




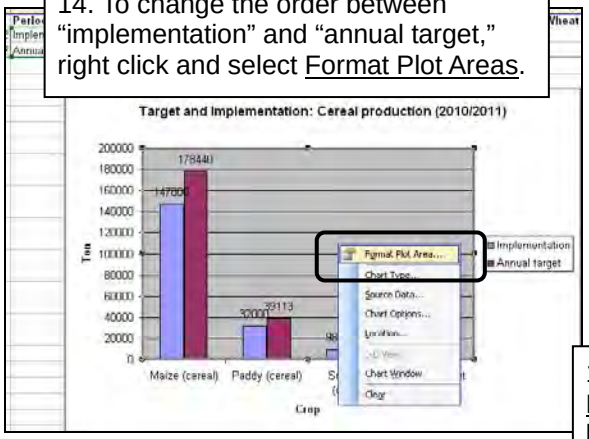
11. To improve the presentation of numbers, right click on the y axis numbers and select Format Axis.



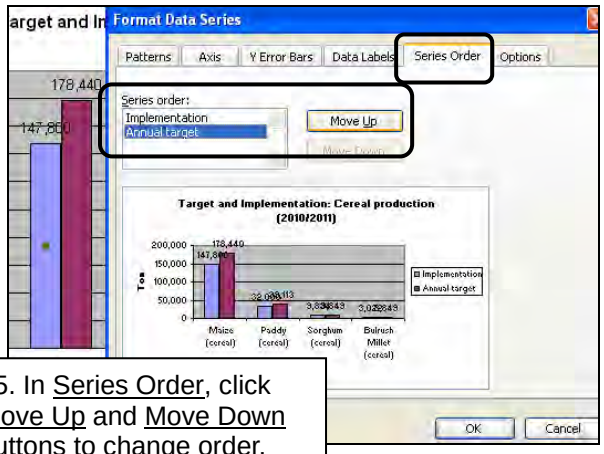
12. Go to Number tab, and select "Number" in Category. Click Use 1000 Separator and adjust Decimal places (how many decimal numbers you want). Then, click OK.



13. To do the same for values in chart, right click and select Format Data Labels.

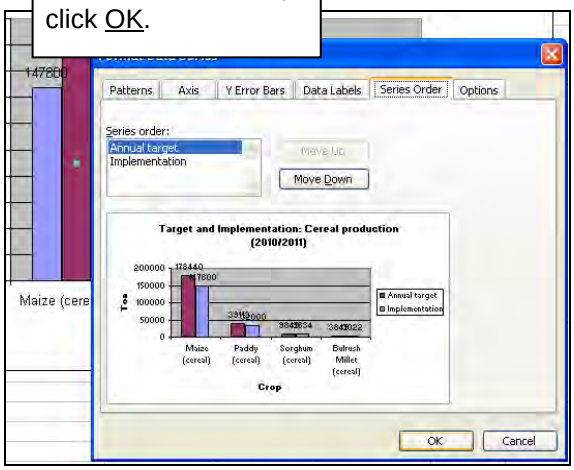


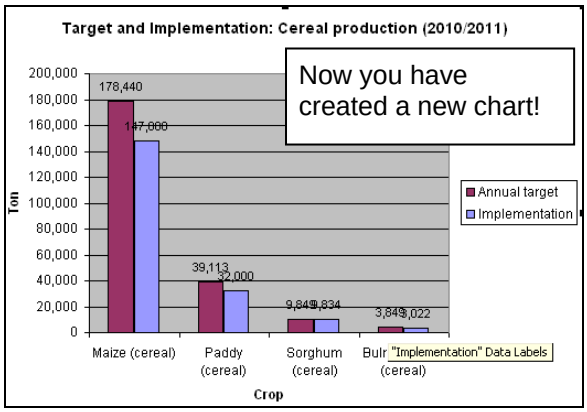
14. To change the order between "implementation" and "annual target," right click and select Format Plot Areas.



15. In Series Order, click Move Up and Move Down buttons to change order.

16. If the order is ok, click OK.

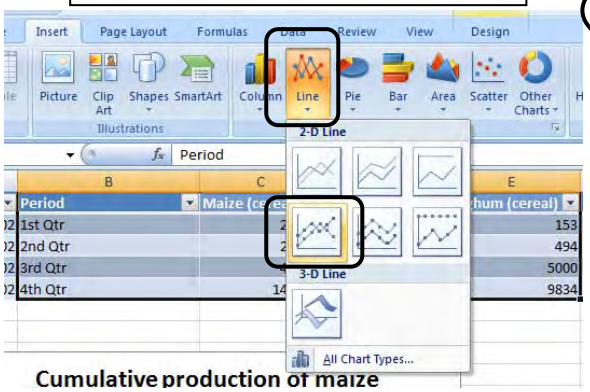




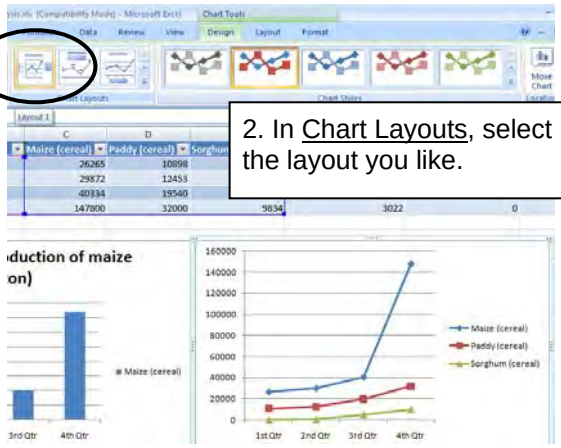
C. Cross section analysis

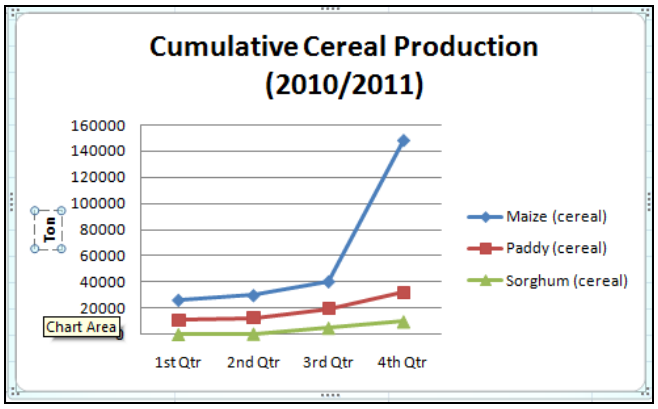
This analysis compares the data of multiple variables including items and time. Tables are already available in LGMD2 or Excel. Let's take an example of quarterly cumulative production of various cereals. For cross section analysis, column or bar charts can also be used.

1. Select the area, go to Insert and Select Line (Line with Marker).



2. In Chart Layouts, select the layout you like.

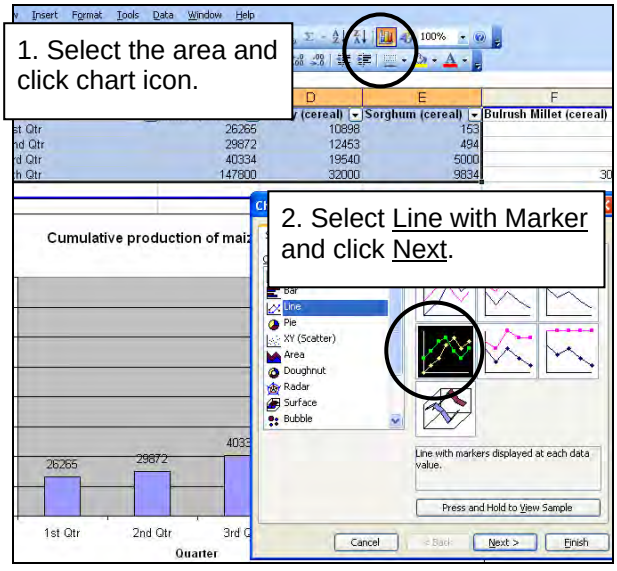




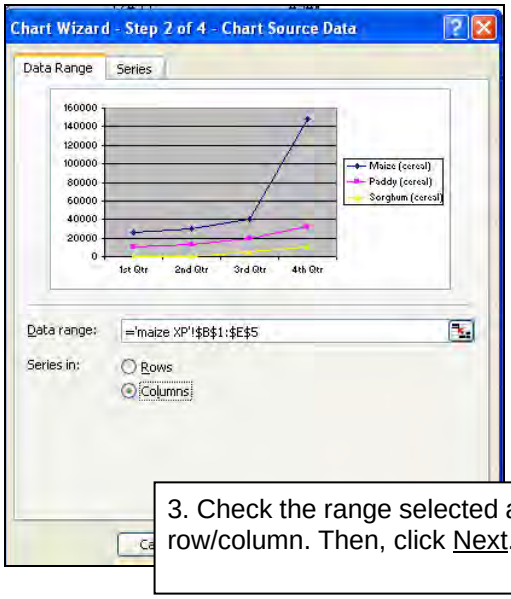
3. Change titles of chart and axis.

<Excel 2003>

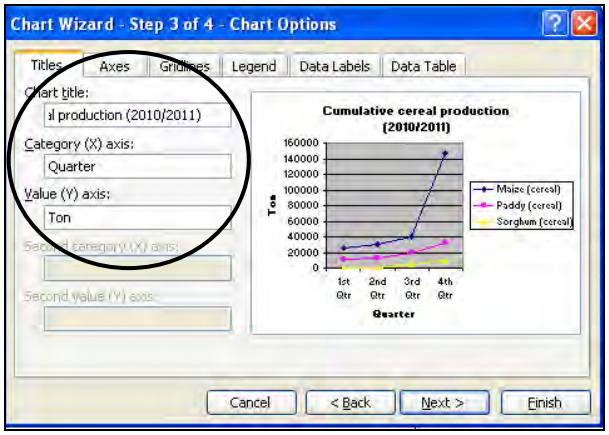
1. Select the area and click chart icon.



2. Select Line with Marker and click Next.

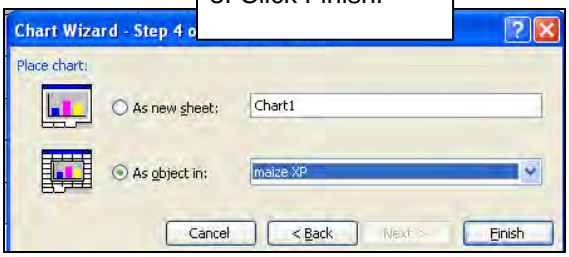


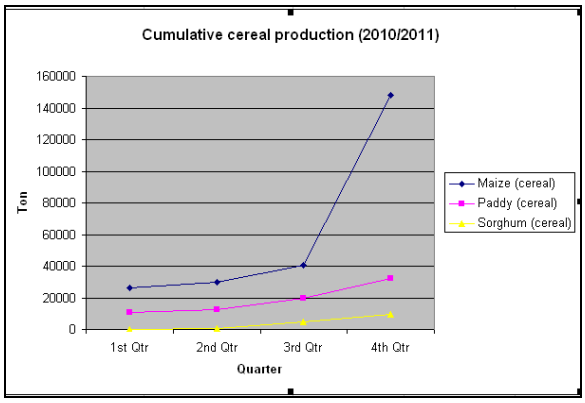
3. Check the range selected and row/column. Then, click Next.



4. In Titles tab, type titles of chart, X axis and Y axis. Then, click Next.

5. Click Finish.





Now you have created a new chart!

Other examples of cross section analysis are shown below.

Annual Livestock population	2007/08	2008/09	2009/10
Cattle			
Goat			
Sheep			
....			

Annual cereal production	Maize		Rice	
	Area (Ha)	Production (ton)	Area (Ha)	Production (ton)
2008/09				
2009/10				
....				

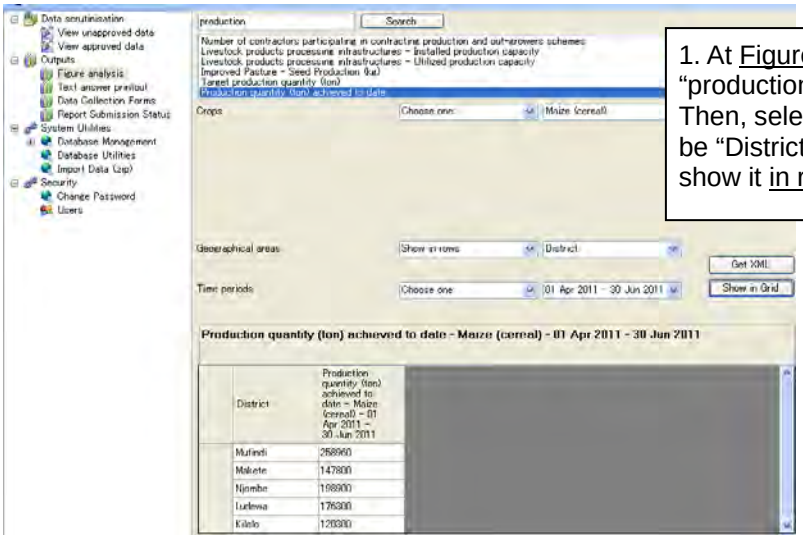
Monthly livestock production	Beef (kg)	Goat meat (kg)	Milk (litre)	Egg (piece)
July 2009				
August 2009				
....				

Monthly meat production	Production (kg)	Average price (Tsh)
July 2009		
August 2009		
….		

Monthly rain fall	2009		2010	
	No. of Days	MM	No. of Days	MM
January				
February				
…				

D. Comparison with neighboring Districts

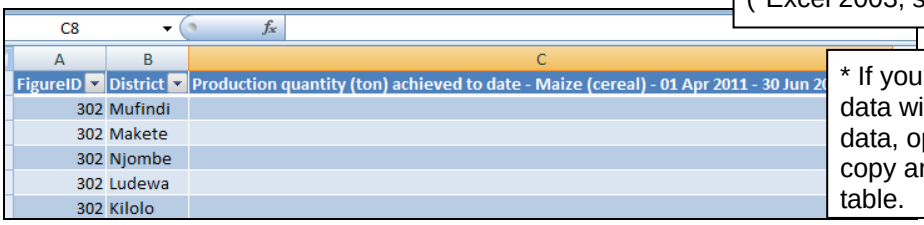
This analysis allows you to compare the data of your district with other districts or regional and national data. To do this comparison, you need to log into LGMD2 and synchronize through the national level database.



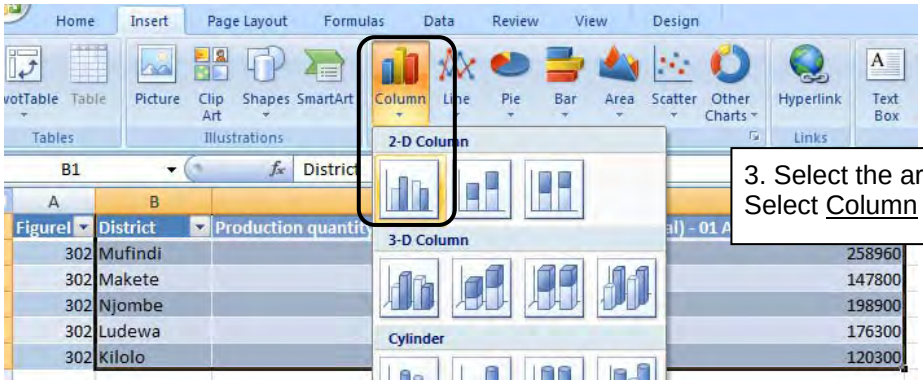
1. At Figure Analysis of LGMD2, select "production achieved to date" as Choose one. Then, select "Maize." Geographical areas should be "District" and shown in rows. Select time and show it in row. Click Get XML.

* If you want to compare LGA data with regional or national data, repeat this by selecting "region" or "national" for Geographical areas.

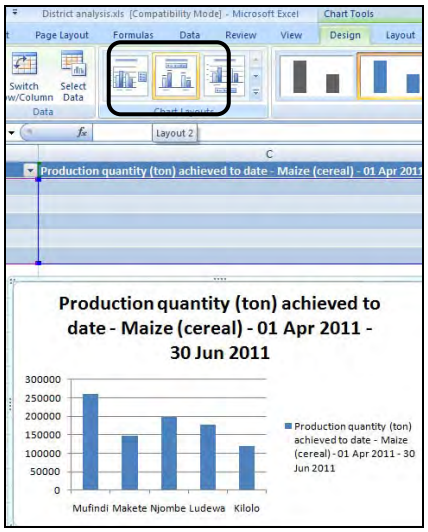
2. Open the XML file with Excel. (*Excel 2003, see page 72)



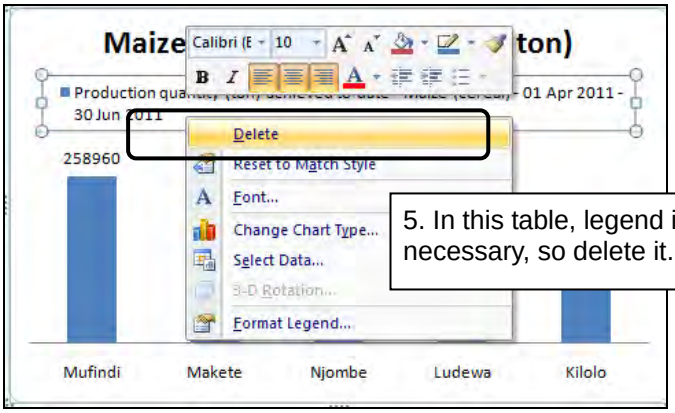
* If you want to compare LGA data with regional or national data, open all XML files and copy and paste data into one table.



3. Select the area, got to Insert and Select Column (2-D Column).

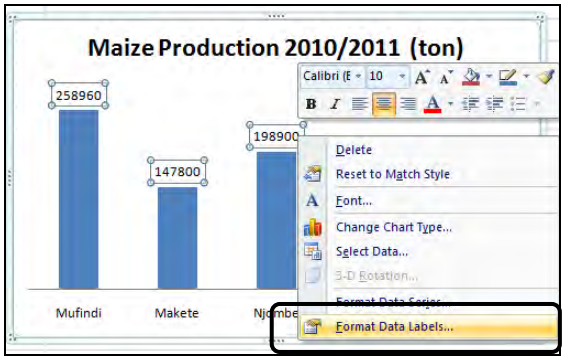


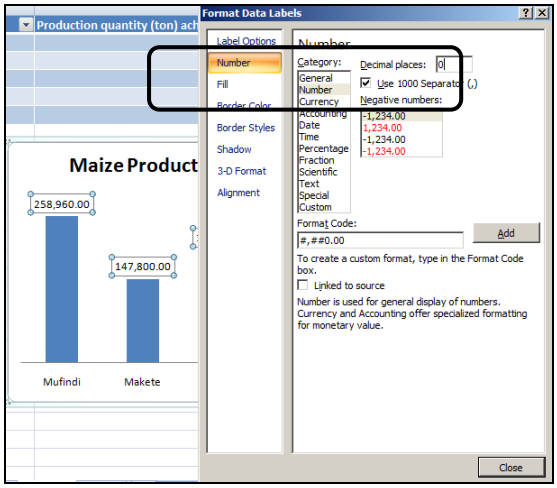
4. In Chart Layouts, select the layout you like.

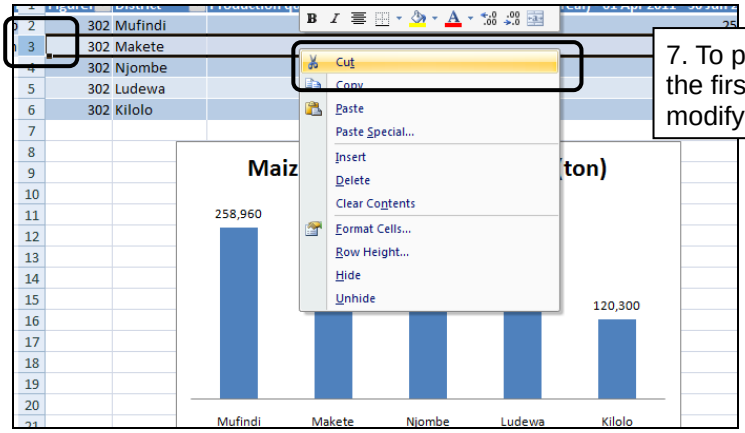


5. In this table, legend is not necessary, so delete it.

6. Rename the title (click and type) and adjust the presentation of numbers (Right click + Format Data Labels)

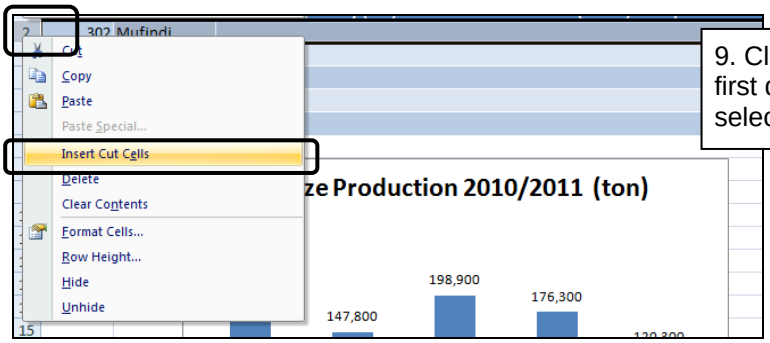




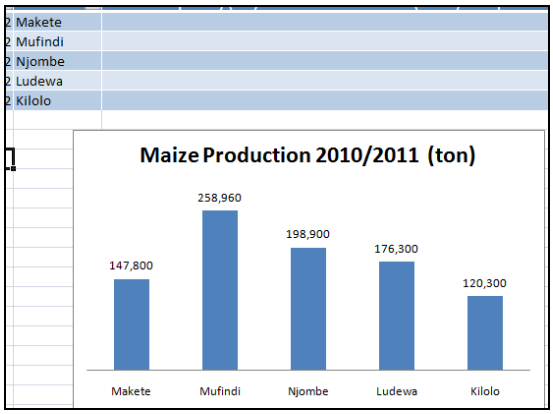


7. To place your district (e.g. Makete) at the first of the districts, you need to modify the order of the original table.

8. Select the row of your district (click row number) and cut it (Right click and select Cut or Control + X).



9. Click the row number of the first district. Right click and select Insert Cut Cells.

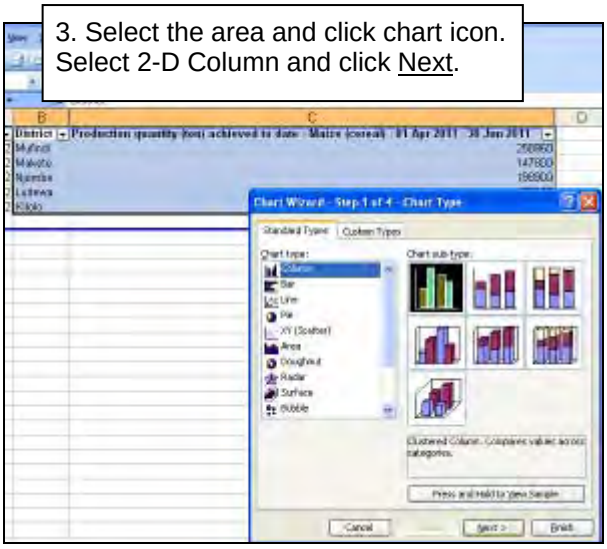


Now your district is at the top of the table and chart.

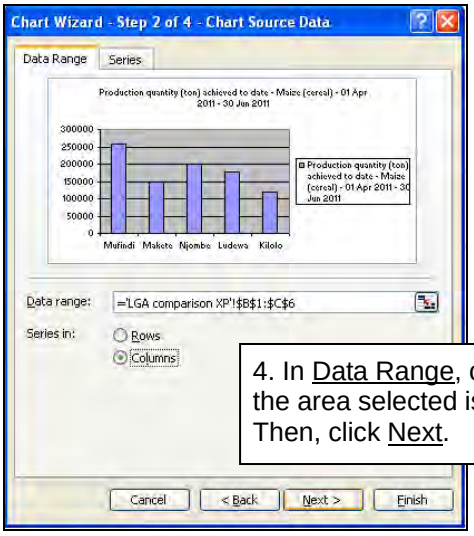
<Excel 2003>

ID	District	Production quantity (ton) achieved to date - Maize (cereal) -
302	Mufindi	
302	Makete	
302	Njombe	198900
302	Ludewa	176300
302	Kilolo	120300

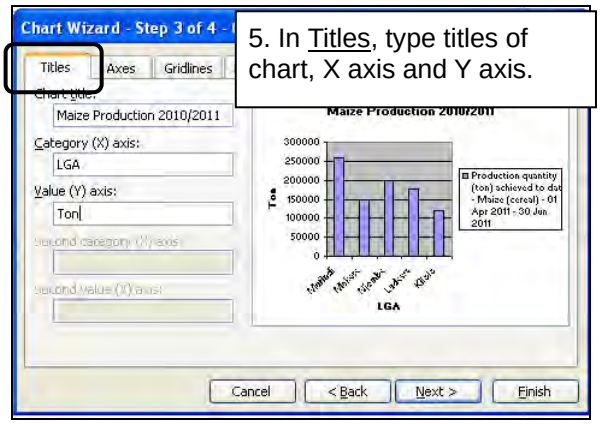
2. Open the XML file with Excel.



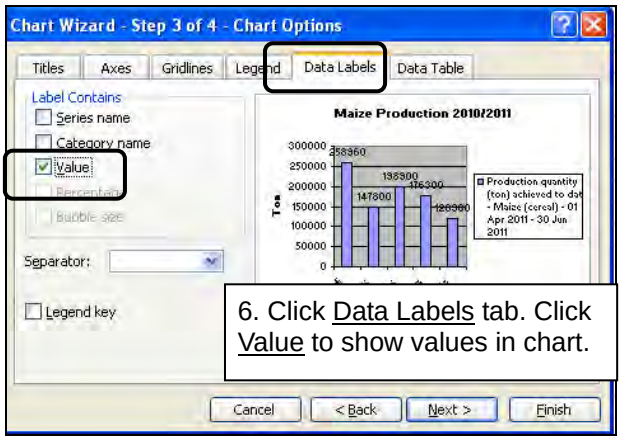
3. Select the area and click chart icon. Select 2-D Column and click Next.



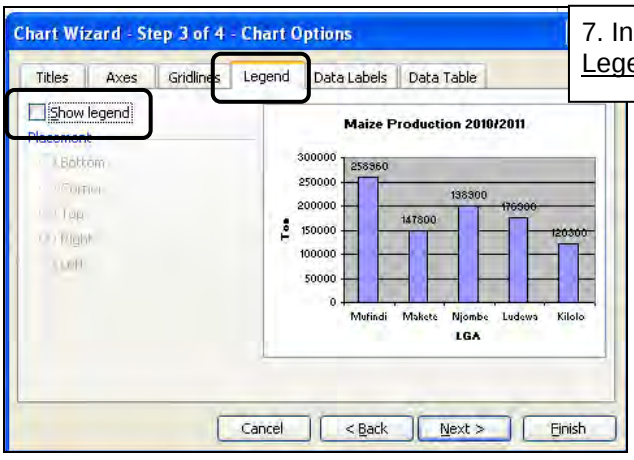
4. In Data Range, check if the area selected is OK. Then, click Next.



5. In Titles, type titles of chart, X axis and Y axis.

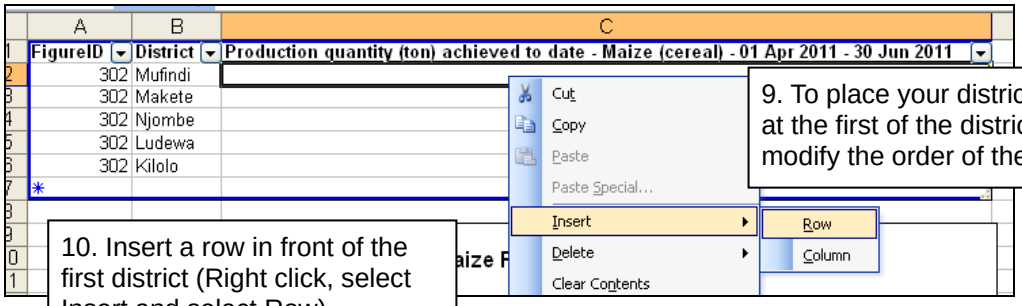


6. Click Data Labels tab. Click Value to show values in chart.



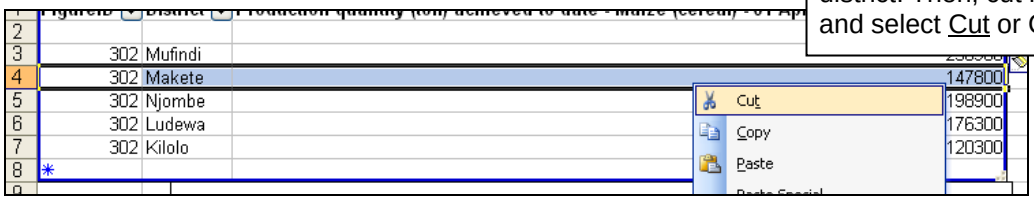
7. In this table, legend is not necessary. Click Legend tab and click off Show legend. Click Next.

8 Click Finish.

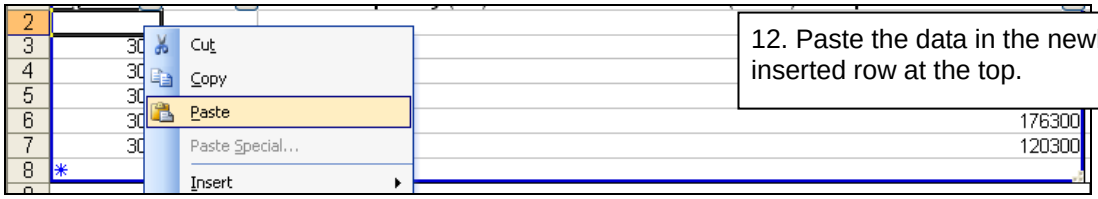


9. To place your district (e.g. Makete) at the first of the districts, you need to modify the order of the original table.

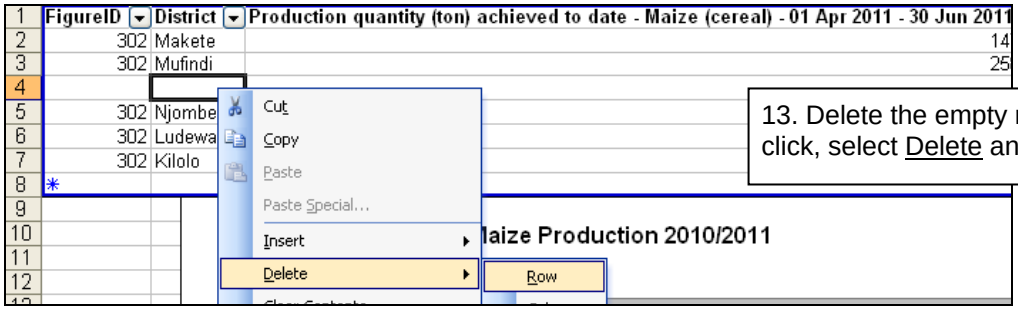
10. Insert a row in front of the first district (Right click, select Insert and select Row).



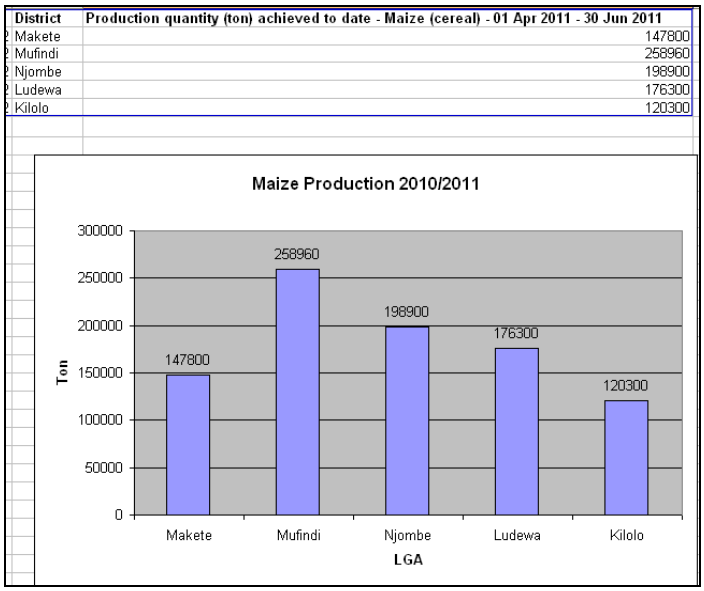
11. Select the data of your district. Then, cut it (Right click and select Cut or Control + X).



12. Paste the data in the newly inserted row at the top.



13. Delete the empty row (Right click, select Delete and select Row).



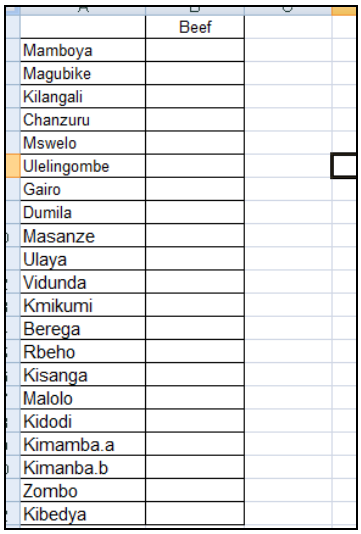
Now your district is at the top of the table and chart.

5.2 Ward/Division Level Information

Using the ward level data entered in the Excel file, you can create tables and chart for the ward/division disaggregated information.

5.2.1 Creating ward disaggregated tables

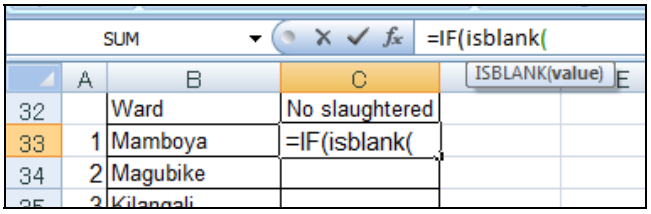
Let's take an example of Table 4 "Livestock Slaughtered" in VAEO/WAEO monthly report.

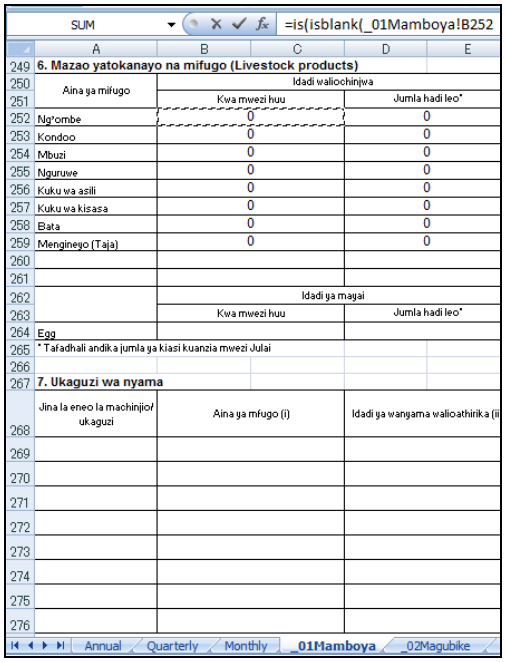


1. In Excel file for a month, quarter or year, create a new blank sheet. (Chapter 3-5. 1))

2. Create a blank table with each ward name.

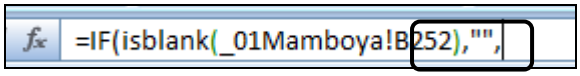
3. At the first ward, type " =IF(isblank(".

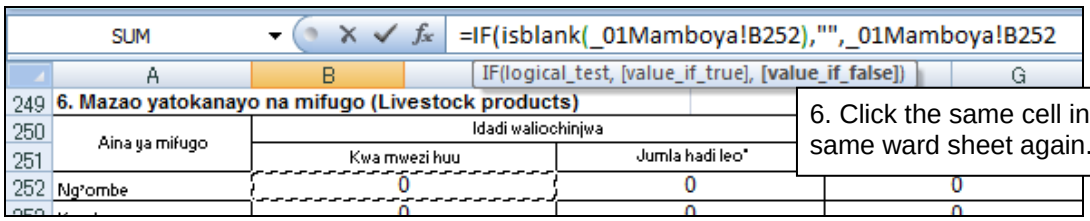




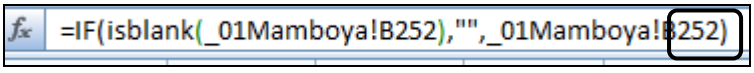
4. Go to the original sheet of that ward, and click the cell you want to create table.

5. Type "),"", ". (closing bracket, comma, double apostrophe, double apostrophe, comma) in the formula bar.

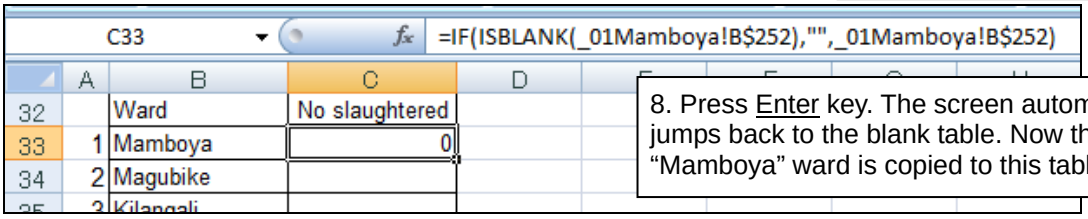




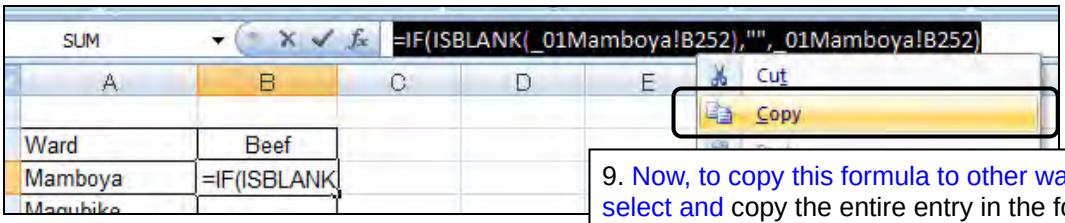
6. Click the same cell in the same ward sheet again.



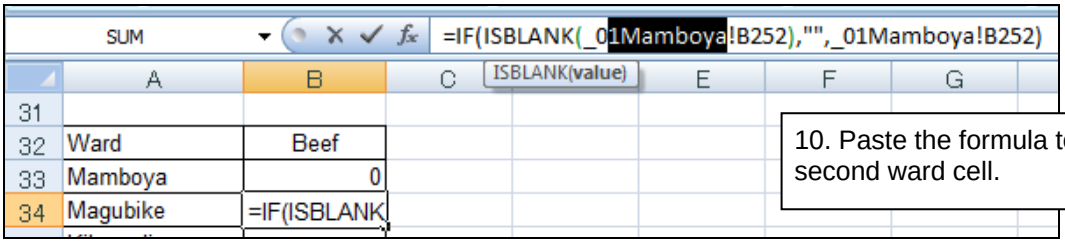
7. Type closing bracket ")" in the formula bar.



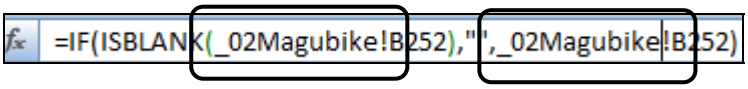
8. Press Enter key. The screen automatically jumps back to the blank table. Now the data of "Mamboya" ward is copied to this table.



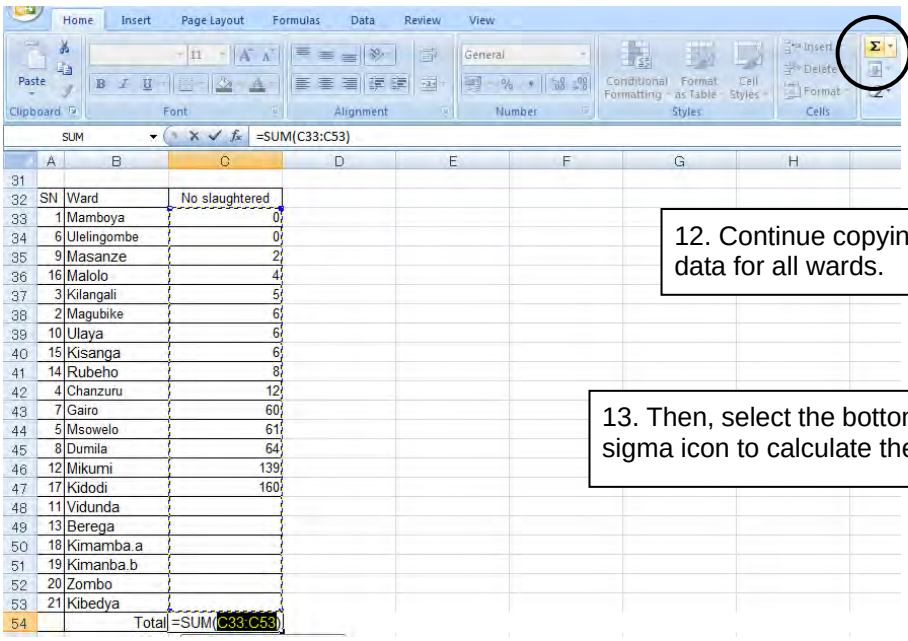
9. Now, to copy this formula to other wards, select and copy the entire entry in the formula bar of the first cell and press Enter key.



10. Paste the formula to the second ward cell.

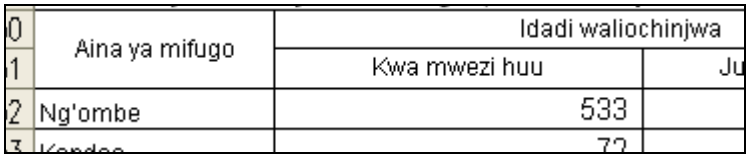


11. Change the sheet name in the formula, and press Enter key.



12. Continue copying the data for all wards.

13. Then, select the bottom cell and click sigma icon to calculate the total.



14. Cross check the total figure with the total shown in "District Total" sheet.

5.2.2 Creating division disaggregated tables

Division	No slaughtered
A	
B	
C	
D	
Total	

1. In Excel file for a month, quarter or year, create a new blank sheet.

2. Create a blank table with each division name.

C2 =SUM(_01Mamboya:_05Msowelo!B252)

	A	B	C	D	E	F
1		Division	No slaughtered			
2		A	84			
3		B	132			
4		C	157			
5		D	160			
6		Total				

3. By using the summation method shown in Chapter 3-4. 1), create a formula to summarize data from the first ward to the last ward of each division.

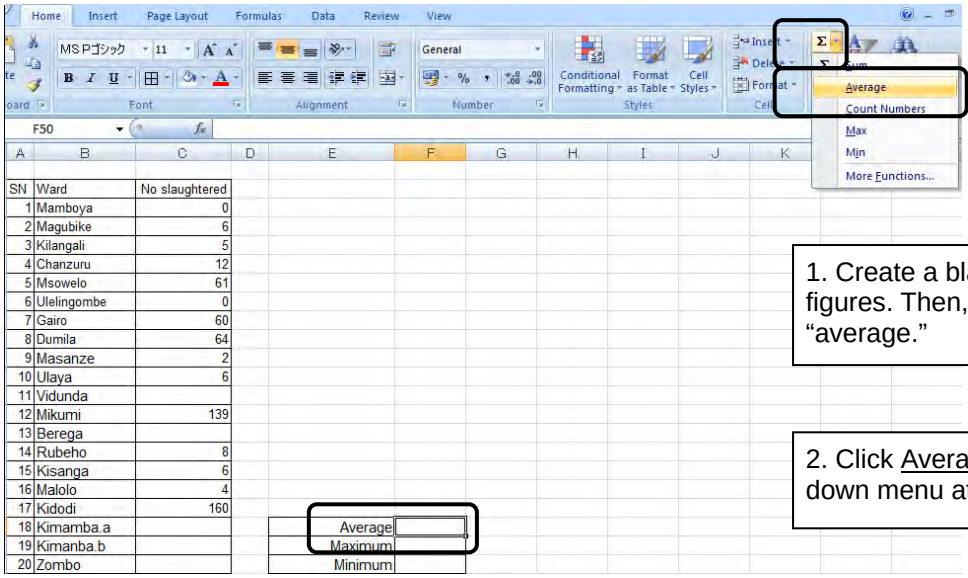
C6 =SUM(C2:C5)

	A	B	C	D
1		Division	No slaughtered	
2		A	84	
3		B	132	
4		C	157	
5		D	160	
6		Total	533	

4. Calculate the total and cross check with other tables.

5.2.3 Average, maximum, minimum, standard deviation, and median

To grasp the situation in your district, let's calculate average (mean), maximum (largest value in a set of data), minimum (smallest value in a set of data), standard deviation (value showing data variation from the average), and median (the value in the middle of a set of data when counted from the smallest or largest).

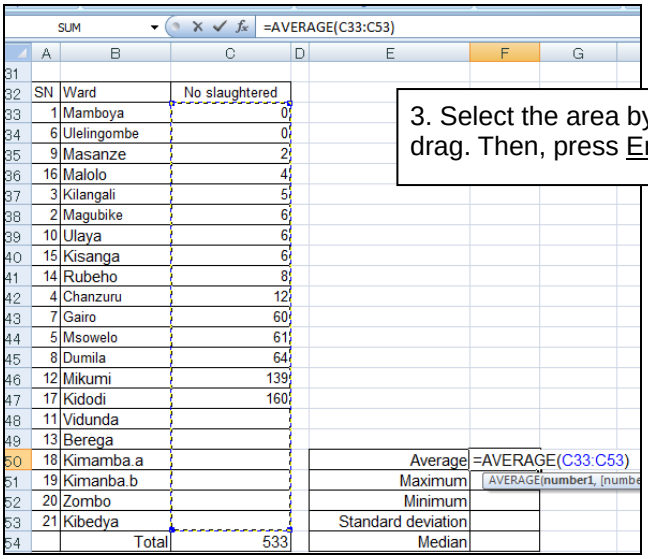


SN	Ward	No slaughtered
1	Mamboya	0
2	Magubike	6
3	Kilangali	5
4	Chanzuru	12
5	Msowelo	61
6	Ulelingombe	0
7	Gairo	60
8	Dumila	64
9	Masanze	2
10	Ulaya	6
11	Vidunda	
12	Mikumi	139
13	Berega	
14	Rubeho	8
15	Kisanga	6
16	Malolo	4
17	Kidodi	160
18	Kimamba.a	
19	Kimamba.b	
20	Zombo	

Average	
Maximum	
Minimum	

1. Create a blank table for these figures. Then, select the cell for "average."

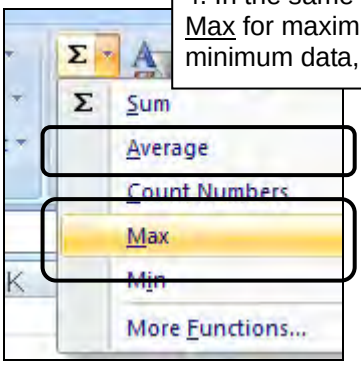
2. Click Average at the drop down menu at sigma mark.

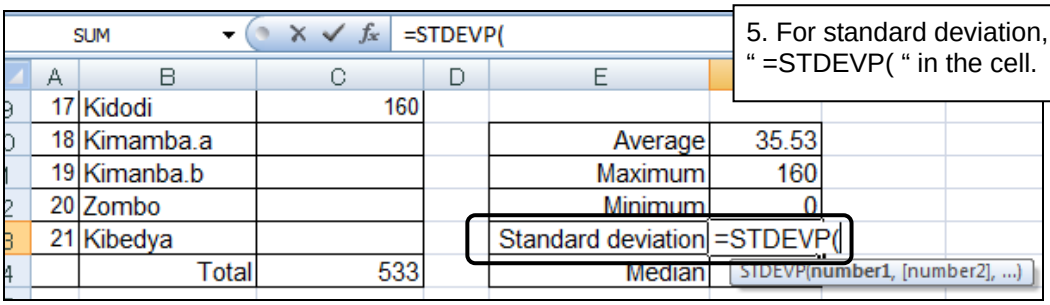


3. Select the area by click and drag. Then, press Enter key.

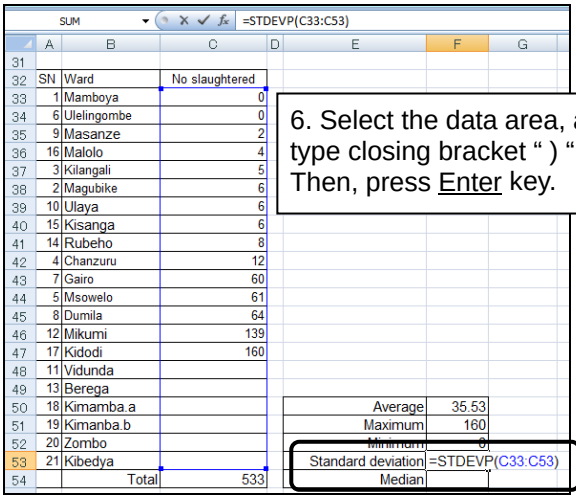
Include the wards with blank data. But be careful not to include “Total”.

4. In the same way, select Max for maximum data. For minimum data, select Min.

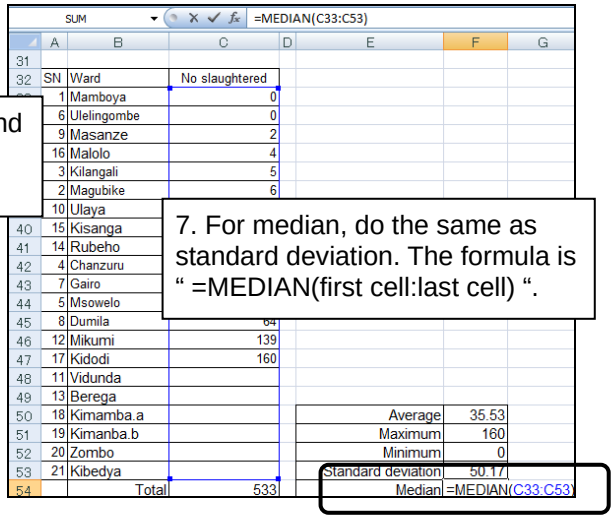




5. For standard deviation, type “ =STDEVP(“ in the cell.



6. Select the data area, and type closing bracket “) “. Then, press Enter key.



7. For median, do the same as standard deviation. The formula is “ =MEDIAN(first cell:last cell) “.

5.2.4 Ranking

With Excel, you can also sort the order of ward/division in ascending order to present the ranking. For this, see Chapter 3.5.2. Select all data area and select the column such as “No of slaughtered” to sort by in an ascending order.

SN	Ward	No slaughtered
1	Mamboya	0
6	Ulelingombe	0
9	Masanze	2
16	Malolo	4
3	Kilangali	5
2	Magubike	6
10	Ulaya	6
15	Kisanga	6
14	Rubeho	8
4	Chanzuru	12
7	Gairo	60
5	Msowelo	61
8	Dumila	64
12	Mikumi	139
17	Kidodi	160
11	Vidunda	
13	Berega	
18	Kimamba.a	
19	Kimanba.b	
20	Zombo	
21	Kibedya	
	Total	533

5.2.5 Ratio

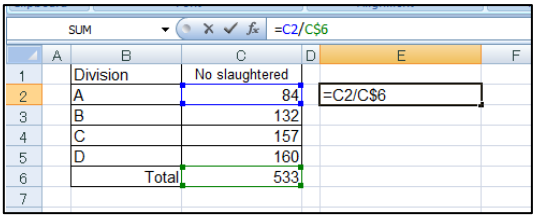
In order to understand how much each ward/ division is contributing to the district total, there are two ways to do this:

A. calculate the ratio in the spread sheet, and

B. create a pie chart.

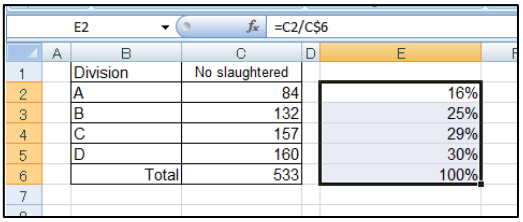
Let’s look at each method one by one.

A. Calculate the ratio in the spread sheet



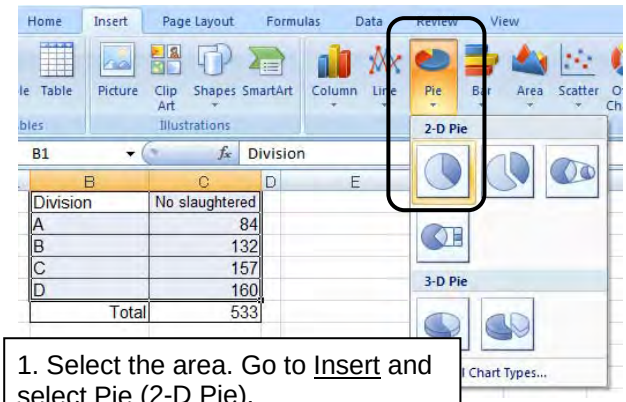
1. To get a ratio of Division A, first click E2 and write “=c2/c$6” in formula bar. Or after clicking E2, wirte “=” in formula bar, click cell C2, write “/”, click cell C6, and then insert “$” between C and 6.

The $ mark is important as the figure right after this mark will not change when the formula is copied to another cell.

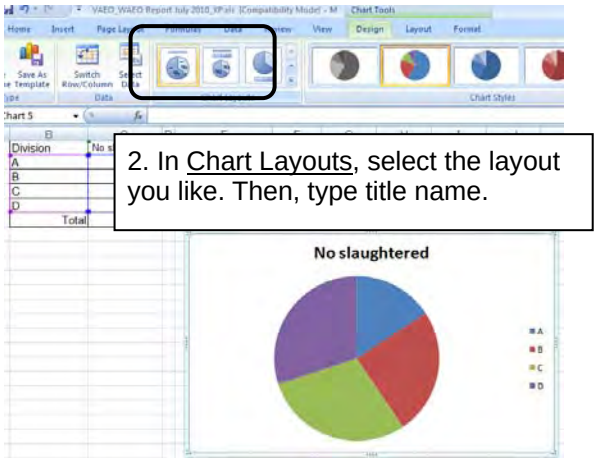


2. Copy the E2 cell by dragging down its corner to cell E6 and click a % button. Then you can automatically compute the ratio of each division to the total.

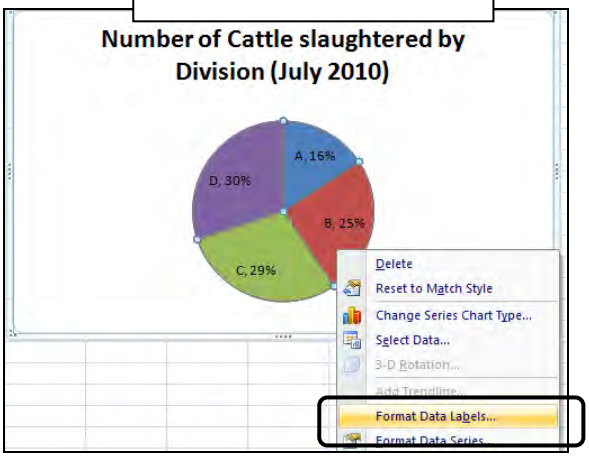
B. Create a pie chart



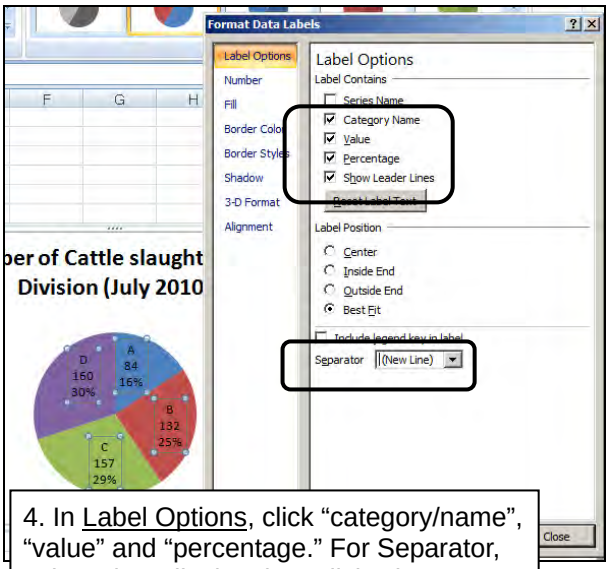
1. Select the area. Go to Insert and select Pie (2-D Pie).



2. In Chart Layouts, select the layout you like. Then, type title name.

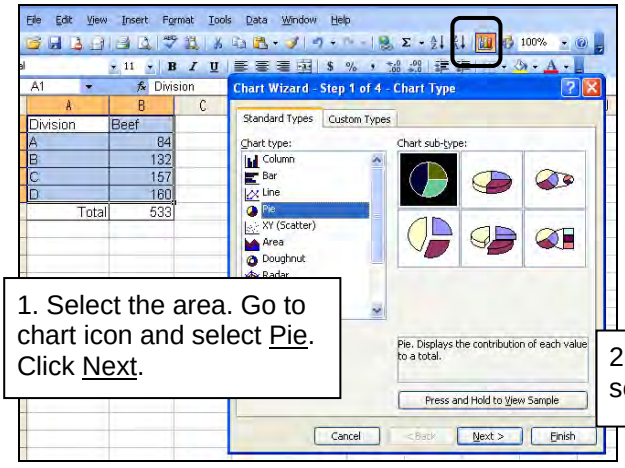


3. Right click the chart and select Format Data Labels.

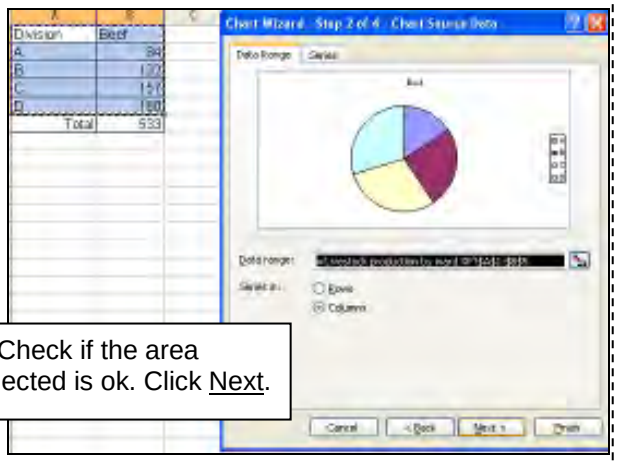


4. In Label Options, click “category/name”, “value” and “percentage.” For Separator, select “(new line)”. Then click Close.

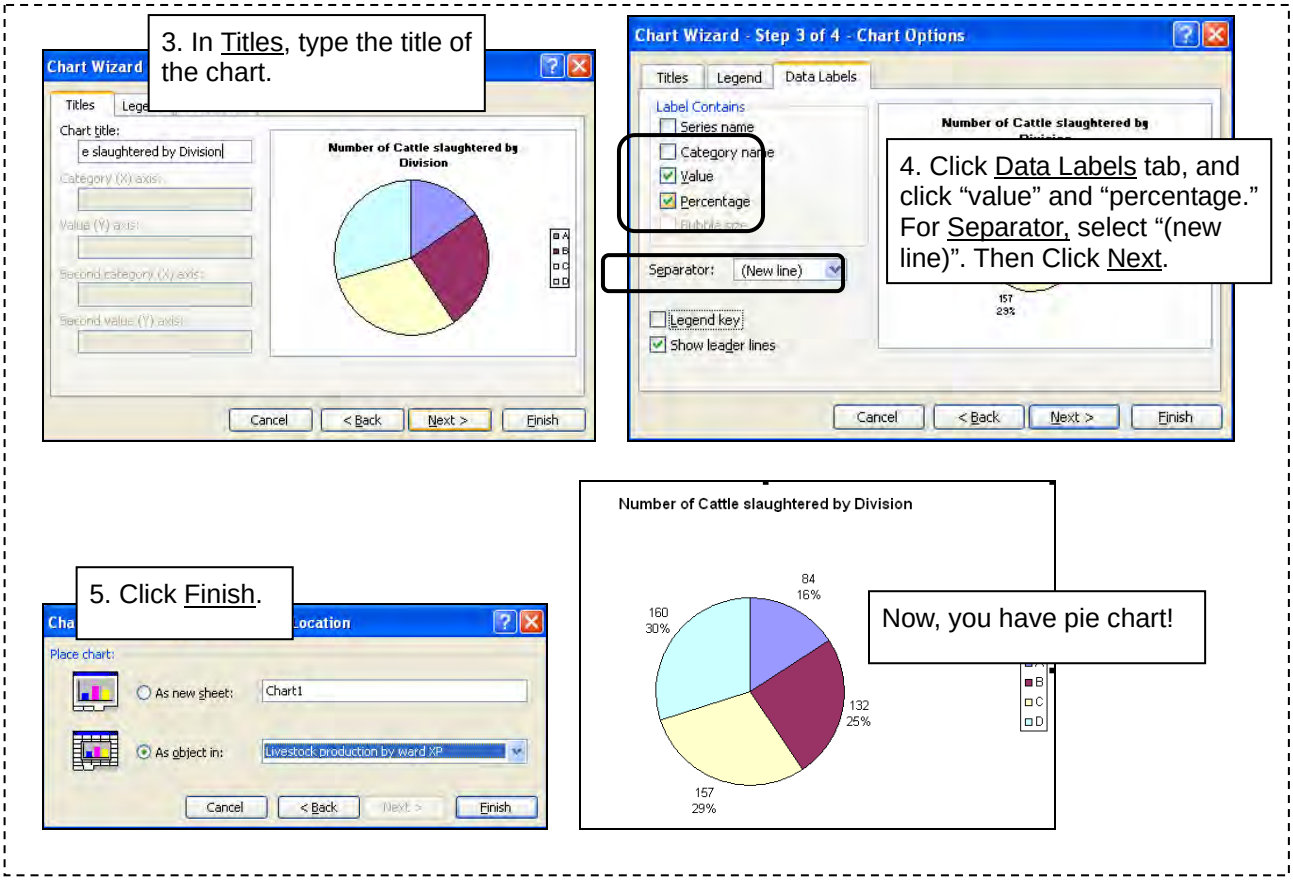
<Excel 2003>



1. Select the area. Go to chart icon and select Pie. Click Next.

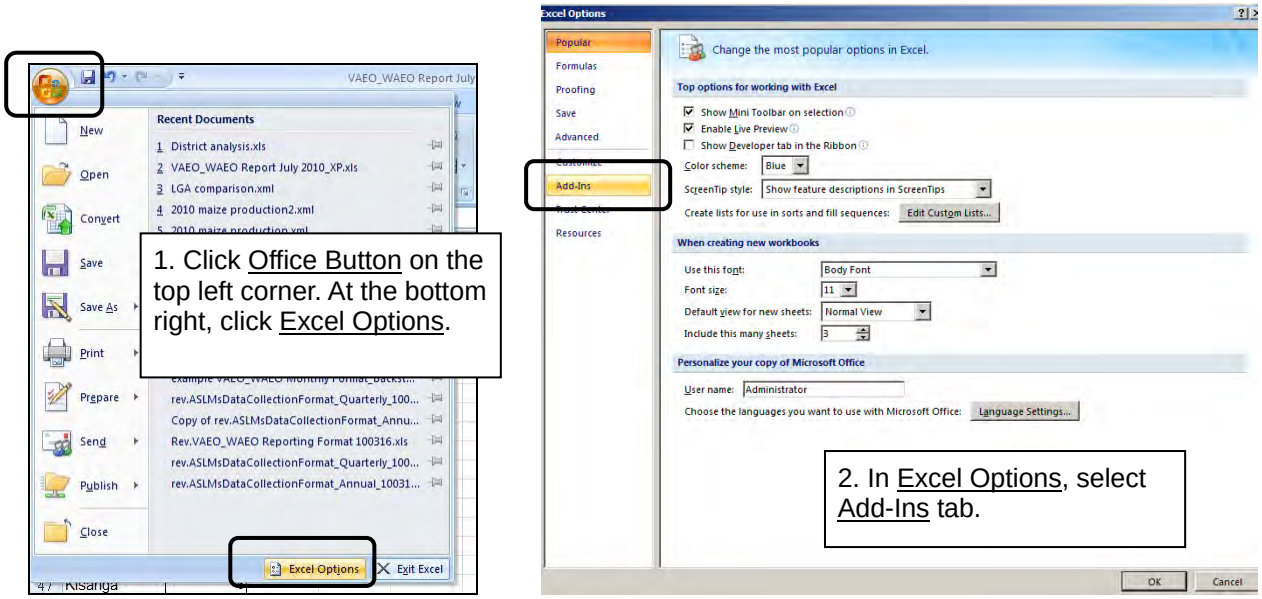


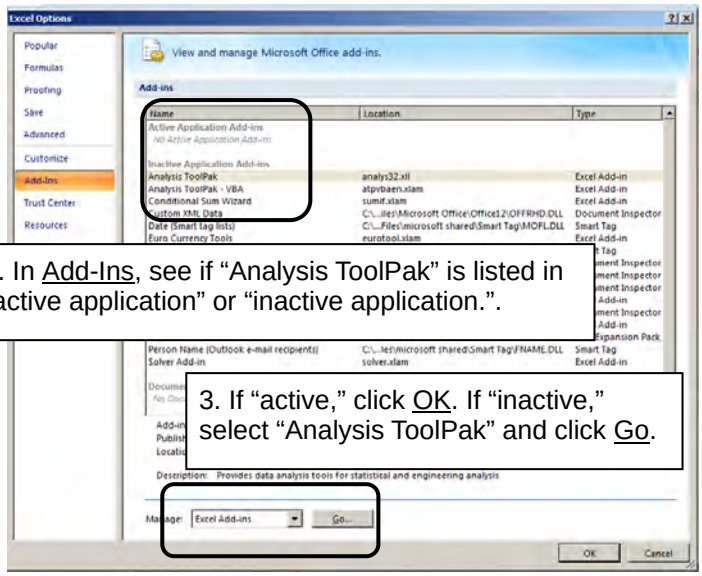
2. Check if the area selected is ok. Click Next.



5.2.6 Activation of "Analysis Tool Pack"

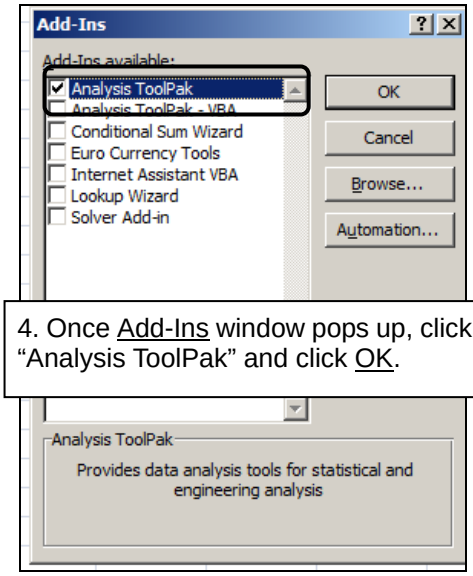
In order to create histogram which helps you to analyze distribution of data, your Excel needs to have "Analysis Tool Pack" activated. If you do not have it, take the following steps.





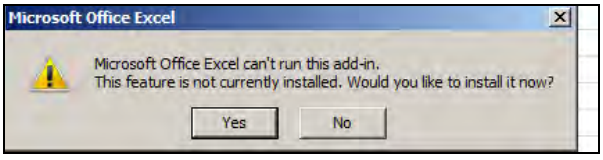
2. In Add-Ins, see if “Analysis ToolPak” is listed in “active application” or “inactive application.”.

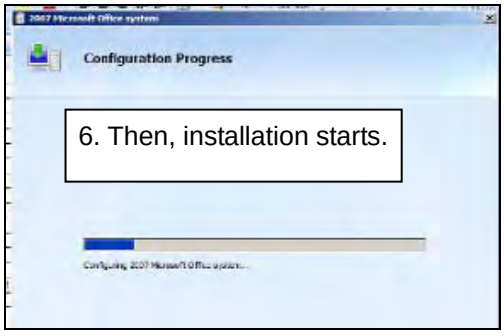
3. If “active,” click OK. If “inactive,” select “Analysis ToolPak” and click Go.



4. Once Add-Ins window pops up, click “Analysis ToolPak” and click OK.

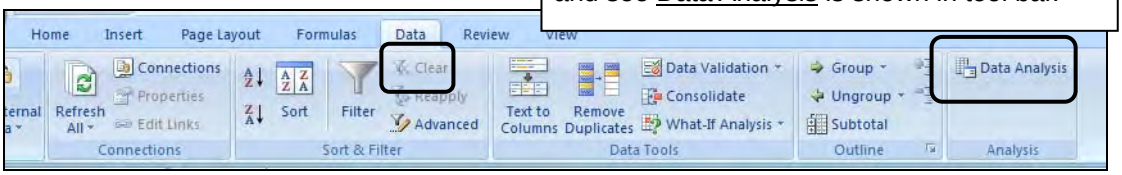
5. You will be asked whether to install this feature. Click Yes.



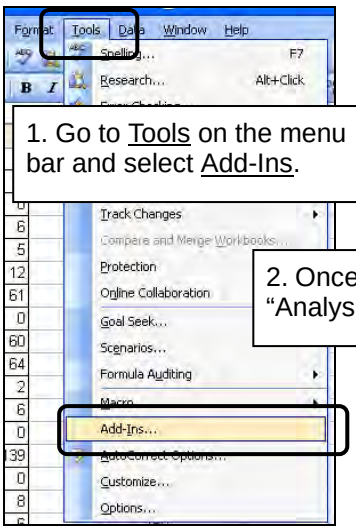


6. Then, installation starts.

7. Once installation is completed, go to Data and see Data Analysis is shown in tool bar.

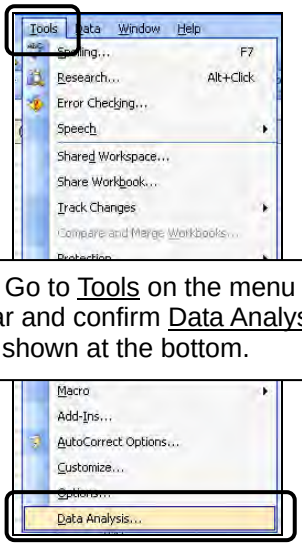


<Excel 2003>



1. Go to Tools on the menu bar and select Add-Ins.

2. Once Add-Ins window pops up, click “Analysis ToolPak” and click OK.

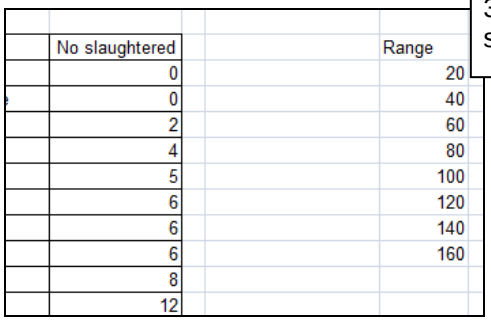


3. Go to Tools on the menu bar and confirm Data Analysis is shown at the bottom.

5.2.7 Distribution (histogram)

Now, let's create histogram which helps you analyze distribution of data.

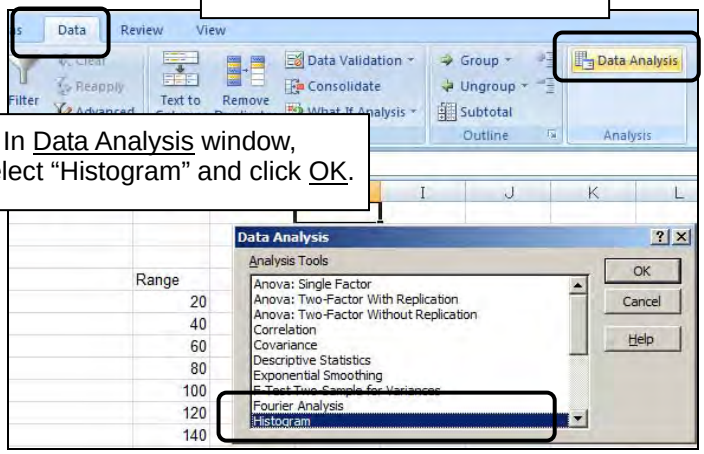
1. Near the table, type in the range you want to divide the data.



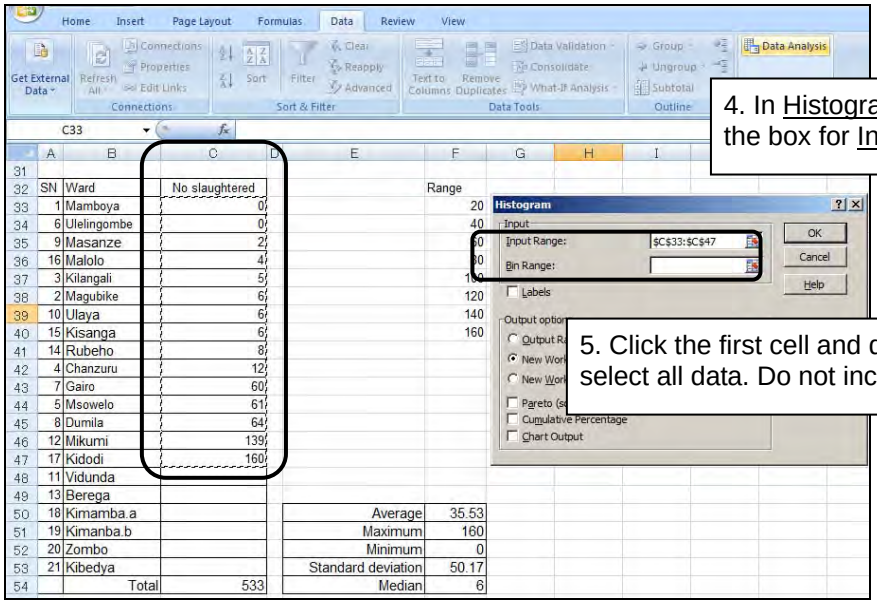
	No slaughtered		Range
	0		20
	0		40
	2		60
	4		80
	5		100
	6		120
	6		140
	6		160
	8		
	12		

2. Go to Data on the menu bar and select Data Analysis. *

3. In Data Analysis window, select "Histogram" and click OK.



* In Excel 2003, go to Tools on the menu bar and select Data Analysis.

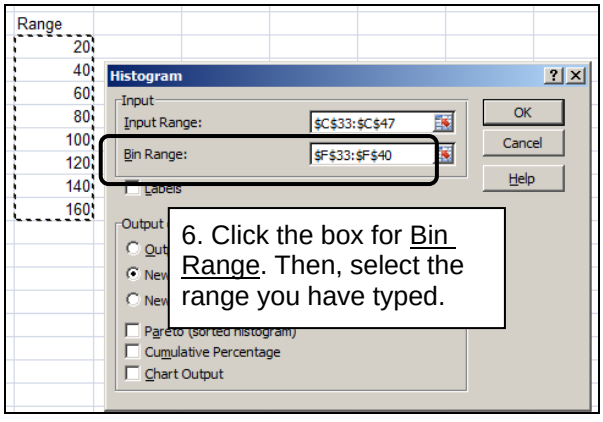


SN	Ward	No slaughtered
1	Mamboya	0
6	Ulelingombe	0
9	Masanze	2
16	Malolo	4
3	Kilangali	5
2	Magubike	6
10	Ulaya	6
15	Kisanga	6
14	Rubeho	8
4	Chanzuru	12
7	Gairo	60
5	Msowelo	61
8	Dumila	64
12	Mikumi	139
17	Kidodi	160
11	Vidunda	
13	Berega	
18	Kimamba.a	
19	Kimanba.b	
20	Zombo	
21	Kibedya	
	Total	533

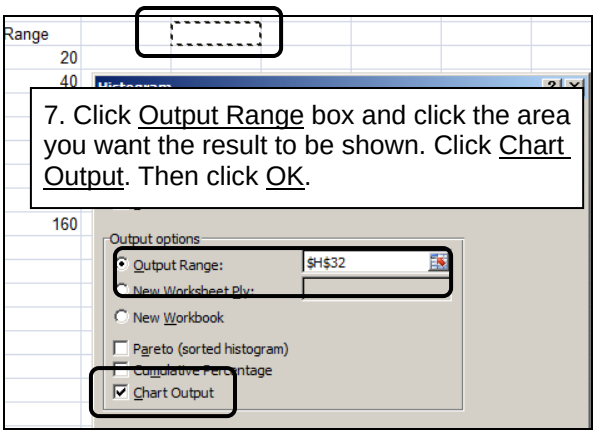
Average	35.53
Maximum	160
Minimum	0
Standard deviation	50.17
Median	6

4. In Histogram window, click the box for Input Range.

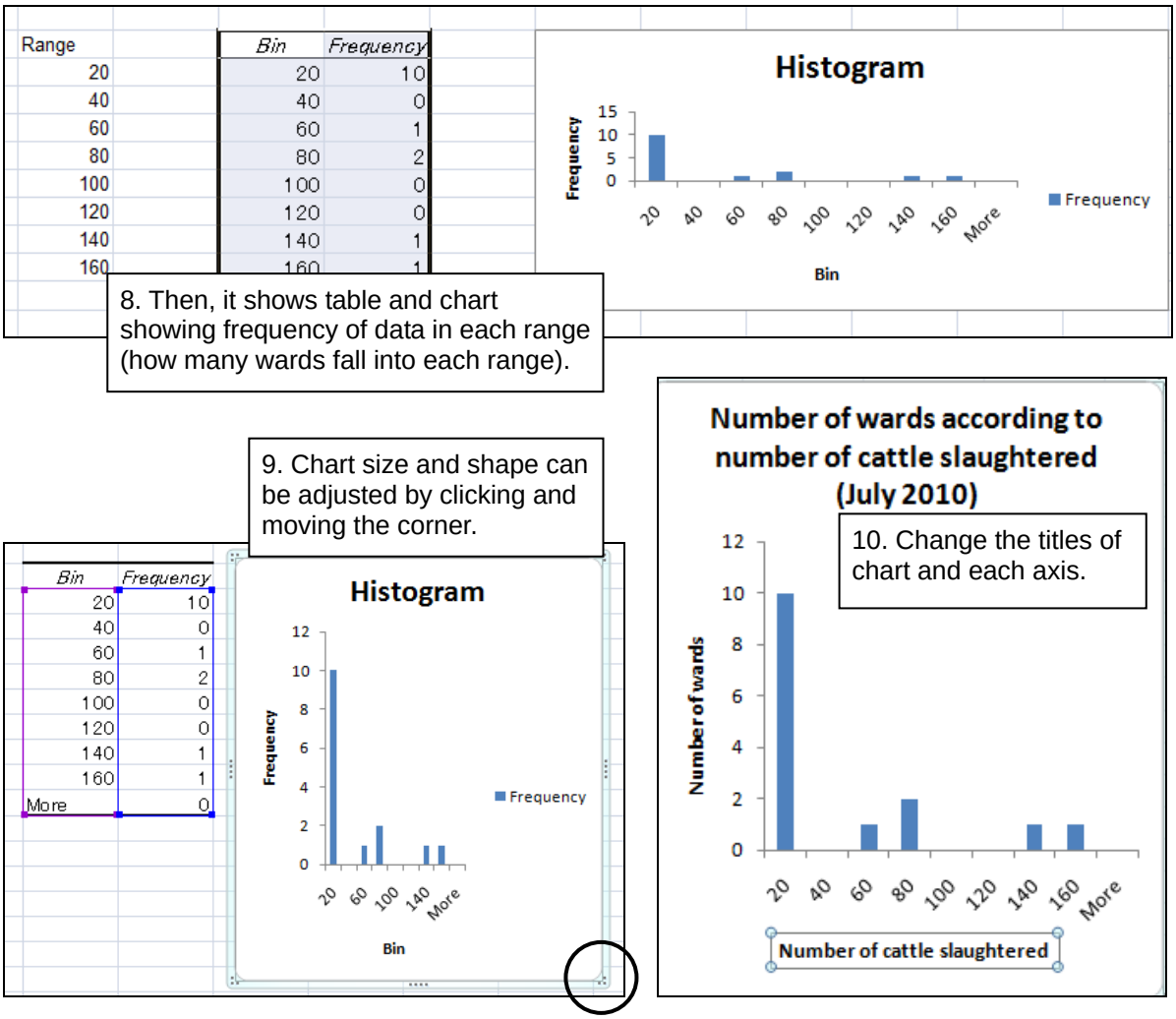
5. Click the first cell and drag down to select all data. Do not include blank cells.



6. Click the box for Bin Range. Then, select the range you have typed.



7. Click Output Range box and click the area you want the result to be shown. Click Chart Output. Then click OK.



5.2.8 Cross section analysis

This analysis compares the data of multiple variables. (For example, number of animals, livestock products, crop production, or number of machines in each ward/division in the district). Some example tables are shown below. After creating these tables by the steps shown in 1) and 2), you can analyze the data by using steps shown from 3) to 7).

Number of machine	Division A	Division B	…
Tractor			
Power tiller			
…			

Livestock population	Cattle	Goat	…
Ward A			
Ward B			
…			

Cereal production	Maize		Rice	
	Area planted (Ha)	Production (ton)	Area planted (Ha)	Production (ton)
Ward A				
Ward B				
…				

6. Feedback

As mentioned in Chapter 2, proper feedback is a key to motivate VAEO/WAEOs to fill out the format with reliable information and submit it on time. Through feedback, VAEO/WAEOs need to see that their reports are read and the information they have provided is well used by the district. The following is some examples of how to give feedback to them.

- Once the report is prepared, the district should not only submit it to the District Executive Officer and the Council, but also to all wards to place it on the notice board at ward offices so that everyone can read it.
- District officer can discuss the result of analysis with VAEO/WAEO individually during his/her field visit or collectively at VAEO/WAEO meetings.
- Based on the data analysis, district and VAEO/WAEO can provide comment to village agriculture development plan.
- Another idea to motivate VAEO/WAEO is to provide an award to those performed well, such as “best WAEO of the quarter.”

Annex 1. Suggested Format of Format Distribution / Submission List

(For Distribution)

Report for : ________________

SN	Name of Ward	Number of village	Number distributed	Received by			Remark
				Name	signature	date	

(For Collection)

Report for : ______________________

SN	Name of Ward	Submitted by		Data review (check)	Data entry (check)	Remark
		Name	date			

Annex 2. Table for WAEO Format Submission Record

District: _____
Year: _____

Month, Type of report		Village	Ward									
		Distribution (i)	Distribution (ii)	Submission			Submission rate			Quality		
				on time (iii)	late (iv)	total (v)=(iii)+(iv)	on time (vi)=(iii)/(ii)	late (vii)=(iv)/(ii)	total (viii)=(v)/(ii)	good	acceptable	bad
July												
August												
September	Monthly											
	Quarterly											
October												
November												
December	Monthly											
	Quarterly											
January												
February												
March	Monthly											
	Quarterly											
April												
May												
June	Monthly											
	Quarterly											
	Annual											

MWONGOZO WA NAMNA YA KUTAYARISHA TAARIFA YA MPANGO WA MAENDELEO YA KILIMO NGAZI YA KIJIJI NA KATA

January 2011

PROGRAMU YA MAENDELEO YA SEKTA YA KILIMO

KIKUNDI KAZI CHA UFUATILIAJI NA TATHMINI

YALIYOMO

1. Lengo La Mwongozo

- Kuwa na uelewa mmoja wa jinsi ya kujaza fomu ili kupata taarifa husika.
- Kubadilishana mbinu mbalimbali ambazo zitasaidia kuwa na takwimu sahihi katika sekta ya kilimo.
- Kurahisisha ujazaji wa taarifa na hivyo kutumia muda mfupi.
- Kuwa na taarifa bora na za kuaminika ili ziweze kusaidia katika kupanga mipango sahihi ya sekta ya kilimo katika ngazi ya Kijiji, Kata, Wilaya na Taifa.
- Kubadilishana mawazo kuhusu umuhimu wa taarifa zilizokusanywa na zinamsaidiaje mkusanyaji.

2. Umuhimu wa Afisa Ugani wa Kijiji na Kata kukusanya Takwimu

- Taarifa hizi zitatumika katika kupanga mipango ya maendeleo ya sekta ya kilimo katika ngazi ya Kijiji/Kata, Wilaya na hatimaye kitaifa.
- Takwimu zilizo katika ngazi ya Kata/Kijiji zinamwezesha Afisa Ugani mwenyeji/mgeni aweze kujua mahitaji halisi ya wakulima anaowahudumia.
- Kuwa na mfumo kamili wa uhifadhi kumbukumbu ambazo zitasaidia uandaaji wa taarifa mbalimbali za Kijiji, Kata, Wilaya na Taifa kwa ujumla.
- Zitaweza kusaidia kufanya maamuzi sahihi katika ngazi mbalimbali za utendaji kuanzia Vijiji hadi ngazi ya Taifa.
- Zitapunguza upotevu wa rasilimali fedha, watu na muda katika sekta ya kilimo.

3. Hatua za utekelezaji wa kutayarisha taarifa

1) Usambazaji wa fomu

- Fomu hizi za taarifa ya mwezi, robo mwaka na mwaka zitasambazwa na Halmashauri ya Wilaya husika.
- Kama fomu zinachelewa kugawiwa, ni vizuri Afisa Ugani wa kijiji na kata afuatilie fomu hizo Wilayani.

2) Ujazaji

- Katika ngazi ya Kijiji, fomu zijazwe mpaka mwisho wa mwezi. Wakati wa kujaza fomu, afisa wa ugani watumie kumbukumbu za taarifa zilizokusanywa wakati wanatembelea wakulima.
- Katika ngazi ya kata, taarifa zitajumuishwa kabla ya tarehe 5 ya mwezi unaofuata. Ili kuwa na uhakika wa usahihi wa taarifa zilizowasilishwa kutoka ngazi ya Kijiji, wakati wa majumuisho Maafisa Ugani wa Kata wanaweza kukaa pamoja na Maafisa Ugani wa Kijiji na kufanya kazi hiyo.

3) Uwasilishaji

- Katika ngazi ya Kijiji, taarifa ziwe zimewasilishwa kwa Afisa Ugani wa Kata ifikapo mwisho wa mwezi.
- Katika ngazi ya Kata, taarifa ziwe zimewasilishwa ofisi ya wilaya ifikapo mwisho wa wiki ya kwanza ya mwezi unaofuata. Ni vizuri Afisa Ugani wa Kata kuwa na nakala ya taarifa iliyowasilishwa Wilayani kwa ajili ya kumbukumbu ya Serikali ya Kata.
- Ni vizuri Afisa Ugani wa Kata aende ofisi ya Wilaya kwa ajili ya kuwasilisha taarifa yake. Kama hawezi kwenda ofisi ya Wilaya mwenyewe, basi amkabidhi Afisa Ugani mwenzake apeleke taarifa zake ili kuwa na uhakika wa kufikisha. Haishauriwi kuikabidhi taarifa kwa mtu asiye na uaminifu.

4) Mrejesho (Feed back)

- Afisa Ugani wa Kata atatoa mrejesho kwa Maafisa Ugani wa Vijiji baada ya kupata taarifa kwa njia ya simu au mawasiliano mengine. Kama kuna marekebisho au matatizo, mhusika atalazimika kutolea ufafanuzi ama kurekebisha.

- Ni vizuri wakati wa majumuisho ya taarifa, Maafisa Ugani wa Vijiji na Kata kukaa pamoja ili kupitia taarifa za Vijiji na kufanya marekebisho kama kuna ulazima, hasa katika Kata ambazo Maafisa Ugani wa Vijiji ni wachache.

4. Taarifa za Mwezi

Usisahau kuandika jina la Kijiji/Kata na jina lako.

Futa isiyohusika (Kijiji/Mtaa/Kata).

OFISI YA WAZIRI MKUU - TAWALA ZA MIKOA NA SERIKALI ZA MITAA (OWM-TAMISEMI)
FOMU YA TAARIFA YA MWEZI YA MPANGO WA MAENDELEO YA KILIMO WA KIJIJI/KATA

Revised November 2010

Jina la Kijiji/ Mtaa/ Kata _____

Jina la Afisa Ugani _____

Mwezi _____ Mwaka wa fedha _____ Tarehe ya kuwasilisha _____

(Iwasilishwe kwenye kata kabla ya mwisho wa mwezi kutoka kwenye kijiji, na wilayani mwisho wa wiki ya kwanza ya mwezi unaofuata kutoka kwenye kata)

Unashauriwa kusoma angalizo kwanza.

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) 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.

Sehemu hii ijazwe kwa maeneo ambayo kuna vifaa vya kupimia mvua tu (kwa milimita). Mahusiano mazuri kati ya vituo vya mvua na Maafisa Ugani yanatakiwa ili kupata takwimu sahihi.

Katika ngazi ya Kijiji, kama kuna vituo viwili au zaidi vyenye vipimia mvua, ajumulishe na kuweka wastani.

Katika ngazi ya Kata, kama kuna vijiji viwili au zaidi vyenye vipimia mvua, ajumlishe na kuweka wastani.

1. Utangulizi

1.1 Hali ya hewa

a) Mvua: Jaza idadi ya siku ambazo mvua imenyesha na kiasi cha milimita zilizokusanywa

Idadi ya siku	Kiasi cha mvua (milimita) (mm)	Maelezo (Kyingi/ Wastani/ Kidogo/ Hakuna) (iii)

(i) Kama kijiji chako kin[illegible] (m[illegible])

(ii) Kama kijiji chako hakina kipima mvua, chagua na ujaze maelezo katika safu wima ya tatu tu.

b) Matuki[illegible]: Tafadhali eleza matukio muhimu (ukame, mafuriko, njaa, magonjwa ya mimea na mifugo n.k.) yaliyojitokeza kwa kipindi cha mwezi huu.

Katika ngazi ya Kata, utaje matukio kutoka kila Kijiji na vema yakaambatana na takwimu.

Pamoja na utofauti wa wingi wa mvua kulingana na eneo, taarifa ijazwe kwa mujibu wa uzoefu wa miaka ya nyuma katika eneo husika.

Katika ngazi ya Kata, unapojumuisha taarifa, kama Vijiji vingi vimeonyesha mvua ya wastani, utajaza wastani.

1.2 Kazi zilizofanyika

Tafadhali eleza shuguli za sekta ya kilimo zilizofanyika katika kipindi cha mwezi huu.

Kazi hizi ni pamoja na chanjo, upandaji, palizi, uvunaji nk.Kama kuna kazi ya kuua/ kuangamiza visumbufu ilifanyika pia haina budi kuelezwa.

2. Malengo, Utekelezaji na Bei ya Mazao

Kabla ya kujaza sehemu hii, soma maelezo yaliyopo chini ya jedwali hili.

Malengo ya mwaka yaandikwe kwenye mwezi wa Julai tu na kuacha wazi miezi inayofuata.

Utekelezaji wa malengo msimu

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko		Maelezo
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kipimo (vii)	Tsh	
Nafaka									
Mahindi									
Mpunga									
Mtama									
Uwele									
Ulezi									
Ngano									
Shayiri									
Jumla ndogo									
Mazao yatokanayo na mizizi									
Mihogo									
Viazi vitamu									
Viazi mviringo									
Viazi vikuu									
Gimbi									
Jumla ndogo									
Mazao ya viwandani									
Pamba									
Tumbaku									
Kahawa									
Chai									
Pareto									
Kakao									
Mpira									
Miwati (Wattle)									
Miwa									
Jute									
Katani									
Korosho									
Jumla ndogo									

Malengo ya mwaka yaandikwe mwezi wa Julai tu na kuacha wazi miezi inayofuata. Afisa Ugani awe na nakala ya fomu ya mwezi wa saba iliyojazwa kwa ajili ya kutumika katika kupima utekelezaji wa malengo.

Wakati wa kuandaa malengo, ni vizuri kushirikiana* na watendaji wa vijiji na kutumia miongozo** iliyopo wilayani na kuangalia hali halisi ya eneo linalofaa kutumika kwa ajili ya shughuli za kilimo.

Wilaya iandae ufafanuzi wa miongozo iliyopo ya uzalishaji kwa mazao mbalimbali.

* Mfano 1; Katika Wilaya ya Morogoro Vijijini, Afisa Ughani wa Kijiji/ Kata anashirikiana na Afisa Mtendaji wa Kijiji kukusanya orodha ya kaya za wakulima wote wa kijiji kupitia Wenyeviti wa Vitongozi. Orodha hiyo ina majina ya wakulima,maeneo ya mashamba yanayomilikiwa, aina ya mazao, idadi ya mifugo nk. na pia inasaidia kuandaa malengo ya mwaka.

** Mfano 2; Katika Mkoa wa Dodoma, miongozo ipo na Afisa Ughani wa Kijiji/ Kata anafuatilia hiyo wakati wa kuandaa malengo. Kuna mwongozo unaoagiza kila kaya kulima jumla ya ekari nne kwa mgawanyo ufuatao: mazao ya chakula (hususan mtama) yalimwe ekari mbili, mazao ya biashara ekari moja na mazao ya kukinga njaa ekari moja.

Maelezo ya namna ya kujaza utekelezaji wa malengo ya kilimo yapo katika ukurasa unaofuata.

Maelezo yaandikwe mfano hatua ya mimea iliyofikia (kuchanua, kutoa maua nk.), kazi zinazofanywa na wakulima (palizi, nk.) na sababu za wingi au uchache wa mavuno ukilinganisha na malengo nk.

Aina ya mazao	Malengo kwa mwaka				Utekelezaji		Bei ya soko		Maelezo
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kipimo (vii)	Tsh	
Mazao ya mafuta									
Alizeti									
Ufuta									
Karanga									
Mawese									
Nazi									
Maharage ya Soya									
Mbegu za Nyonyo									
Mibono									
Jumla ndogo									
Mazao ya jamii ya kund									
Kunde									
Mbaazi									
Choroko									
Njegere									
Dengu									
Njugu mawe									
Maharage									
Jumla ndogo									
Viungo									
Tangawizi									
Pilipili manga									
Giligiliani									
Mdalasini									
Binzari									
Vanilla									
Pilipili kali									
Karafuu									
Vitunguu swaumu									
Iiki									
Paprika									
Jumla ndogo									

Kwa ajili ya kupata takwimu sahihi za **utekelezaji wa malengo ya uzalishaji wa mazao***,

1) Tumia orodha ya kaya za wakulima wote katika kijiji. Usihesabu anayefuga mifugo tu. Kama wewe ni afisa ughani wa kata na hakuna maafisa ughani wa kijiji, tumia orodha ya kaya za wakulima wote katika kata.

2) Chagua kaya 10 kati ya orodha ya wakulima wote kijijini/ katani**. Namna ya kuchagua ni 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 hapo juu (mfano ukianza na namba 3, utachagua 33, 63, 93, 123…na kuendelea).

3) Mwisho wa mwaka (mwezi Juni), tembelea wakulima waliochaguliwa kwa kutumia utaratibu ulioelezwa hapo juu na uliza **uzalishaji/ tija wa mazao (gunia au kilo ngapi kwa ekari moja/ production per unit area)**. Usiulize mavuno (total production). Kama kaya iliyochaguliwa ni ya mitala na wanajitegemea, uliza mke mkubwa tu kwa kaya moja.

4) Tumia wastani wa majibu uliyopata kutoka wakulima hao 10 na jaza column (v).

Maelezo:

* Kipaumbele kikubwa ni zao la mahindi kwa kutumia njia hii. Kwa mazao mengine tumia makadirio.

** Kama hakuna afisa ughani wa kijiji katika kata yako, basi afisa ughani wa kata wachague kaya 10 kutoka kata nzima.

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko		Maelezo
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kipimo (vii)	Tsh	
Mbogamboga									
Matango									
Uyoga									
Cauliflower									
Kabichi									
Mchicha									
Spinachi									
Kabichi china (Chinese ca									
Nyanya									
Biringanya									
Vitunguu									
Pilipili hoho									
Karoti									
Nyanya chungu									
Mnafu									
Figiri									
Leek									
Saladi									
Bamia									
Jumla ndogo									
Matunda									
Ndizi mbivu									
Ndizi mbichi									
Embe									
Papai									
Chungwa									
Chenza									
Pera									
Apple									
Nanasi									
Parachichi									
Tikiti maji									
Limau									
Ndimu									
Tunda damu									
Mapeasi (Pear)									
Mapesheni (Passion fruit)									
Jumla ndogo									

Kwa ajili ya kupata takwimu sahihi kwa **eneo lililopandwa (hekta)**,

5) Tumia njia moja kati ya njia zifuatazo;

   i) Tumia takwimu za serikali ya kijiji * na jaza column (iv) kama zipo,

   ii) Kama hakuna takwimu,jaza eneo la zao husika kwa kukadiria ni asilimia ngapi ya eneo lote lililolimwa mazao kijijini.

   iii) Uliza eneo lililolimwa na zao husika kutoka kwa wakulima 10 waliochaguliwa na tumia wastani wa majibu uliyopata. Zidisha wastani huo kwa idadi ya wakulima wote wa kijijini/ kata na utapata eneo lililolimwa kijijini/ katani. Jaza column (iv). Linganisha kati ya majibu uliyopata na makadirio hapo juu.

   Vipimo vilivyokubalika na kutambulika kimataifa vitumike. Maafisa ughani wanashauriwa kutumia jedwali la kubadilisha vipimo (conversion table) ambavyo vinapatikana wilayani. Baadhi ya vipimo hivyo vimeambatanishwa kwenye mwongozo huu.

6) Utapata **mavuno (tani)** ukizidisha eneo lililolimwa (hekta) kwa uzalishaji/ tija (tani/hekta). Jaza column (vi).

7) Ni vizuri kuwasilisha na kupata ushauri kutoka kwa afisa mtendaji wa kijiji/ kata kabla ya kuwasilisha wilayani kwa ajili ya kuhakiki na kumiliki takwimu zilizojazwa.

Maelezo:

* Serikali ya kijiji inatarajia kutengeneza orodha ya kaya za wakulima wote wa kijijini pamoja na takwimu za eneo lililolimwa, zao lililopandwa na idadi ya mifugo nk.

Aina ya mazao	Malengo kwa mwaka			Utekelezaji			Bei ya soko		Maelezo
	Eneo litakalopandwa (ha) (i)	Uzalishaji /tija (tani/ha) (ii)	Matarajio ya mavuno (tani) (iii) = (i) x (ii)	Eneo lililopandwa (ha) (iv)	Uzalishaji/ tija (tani/ha) (v)	Mavuno (tani) (vi) = (iv) x (v)	Kipimo (vii)	Tsh	
Maua									
Waridi (Rose)									
Chrysanthemum									
Carnation									
Aster									
Gypsophylla									
Ginger rose									
Helianthus									
Jumla ndogo									
Mengineyo									
Choya (Rozella)									

Andika bei ya mazao yaliyozalishwa katika kijiji/ kata na yanauzwa sokoni.

Vipimo vilivyokubalika na kutambulika kimataifa vitumike (mfano kilo na tani). Maafisa ugani wanashauriwa kutumia jedwali la kubadilisha vipimo (conversion table) ambalo linapatikana wilayani. Baadhi ya vipimo hivyo vimeambatanishwa.

Kama hakuna uwezekano wa kupata vipimo vya kitaifa vya mazao mfano mchicha nk., kadiria kwa kutumia vipimo vya kitaifa.

i) Lengo la eneo litakalopandwa kwa hekta katika kipindi cha mwaka mzima liandaliwe mwanzoni mwa mwaka (Julai).
iii) Lengo la matarajio ya mavuno kwa tani katika kipindi cha mwaka mzima liandaliwe mwanzoni mwa mwaka (Julai)
iv) Utekelezaji wa eneo lililopandwa linamaanisha ni jumla ya eneo lililopandwa kutoka mwezi Julai mpaka mwishoni mwa mwezi husika wa taarifa.
vi) Utekelezaji wa mavuno linamaanisha ni jumla ya uzalishaji toka mwezi Julai mpaka mwishoni mwa mwezi husika wa taarifa.

3. Afya ya mimea
3.1 Kuzuia magonjwa/visumbufu kwa kutumia kemikali

Jina la ugonjwa / kisumbufu (i)	Zao lililoathirika (ii)	Kiasi cha uharibifu (kubwa, wastani, kidogo) (iii)	Eneo lililoathiriwa (ha)	Idadi ya vijiji vilivyoathirika	Dawa iliyotumika (iv)	Kiasi cha dawa (kg/lita)	Idadi ya vijiji vilivyyo hudumiwa	Idadi ya kaya zilizohudumiwa	Eneo lililookolewa (ha) (v)	Maelezo
American boll worm	Mbaazi	Wastani	50	4	Thionex	15	4	16	42	
American boll worm	Nyanya	Kidogo	0.1	2	Actellic 50 EC	0.1	2	4	0.1	Afya ya mimea ni nzuri
Cut worms	Vitunguu	Kidogo	0.1	2	Actellic 50 EC	0.1	2	2	0.1	
Late blight	Nyanya	Kidogo	0.05	2	Dithane M-45	0.15	2	4	0 05	
Jumla			50.25	10			10	26	42.25	

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.

Takwimu zinapatikana kutokana na huduma iliyotolewa. Kama wapo wakulima wanaojihudumia wenyewe lakini umetoa ushauri, unaweza kuandika kiasi cha dawa iliyotumika.

4. Mifugo iliyochinjwa

Aina ya mifugo	Idadi ya waliochinjwa kwa mwezi huu	Bei ya wastani kwa kg
Ng'ombe		
Kondoo		
Mbuzi		
Nguruwe		
Kuku wa asili		
Kuku wa kisasa		
Mengineyo (Taja)		

Takwimu hizi zinategemewa kutoka katika sehemu rasmi za kuchinjia (formal slaugthering points) na baadhi kutoka kwa afisa ughani ambaye amekagua nyama iliyochinjwa sehemu nyingine za mauzo mfano hoteli, sehemu za kuuzia nyama choma na masoko ya mifugo magulio nk

Takwimu za **kuku wa asili** waliochinjwa zinategemewa kutoka sehemu za kuuzia nyama ya kuku mfano hoteli, migahawa na wauza chipsi nk. Kupata takwimu za matumizi ya nyumbani ni vigumu hivyo huhitaji kuhesabu.

Takwimu za **kuku wa kisasa** waliochinjwa zinategemewa kutoka machinjioni.

5. Ukaguzi wa nyama

Jina la eneo la machinjio/ ukaguzi	Aina ya mfugo (i)	Idadi ya wanyama walioathirika (ii)	Viungo vilivyotupwa (Mzoga mzima/ Moyo/ Mapafu/ Maini nk.)	
			Sababu ya kutupa viungo / mzoga mzima (iii)	Idadi ya matukio kwa kila sababu (iv)
	Ng'ombe	15	Cysts	1
			Fascioliasis	2
			Liver fluke	9
			CBPP	3
	Mbuzi	23	Abscesses	4
			CCPP	16
			Pimply gut	3

Takwimu hizi pia zinategemewa kutoka katika sehemu rasmi za kuchinjia (formal slaugthering points) na baadhi kutoka kwa afisa ughani ambaye anakagua nyama iliyochinjwa sehemu mbalimbali.

i) Andika aina ya mfugo walioathirika (Ng'ombe, Kondoo, Mbuzi, Nguruwe n k).
ii) Hesabu kila mnyama mara moja. Acha kisanduku kilichobaki wazi kwa mnyama wa aina moja.
iii) Andika kila sababu moja iliyojitokeza kwa kila mstari (row).
iv) Andika idadi ya matukio kwa kila sababu.

Soma maelezo kwa makini wakati wa kujaza jedwali hili.

6. Mazao yatokanayo na mifugo

6.1 Maziwa

Aina ya mazao	Kiasi cha maziwa yaliyozalishwa (Whole milk) kwa mwezi huu
Maziwa ya ng'ombe wa asili (lita)	
Maziwa ya ng'ombe wa kisasa (lita)	
Jibini (Cheese) (kg)	
Siagi (Butter) (kg)	
Samli (Ghee) (kg)	

Takwimu za mazao ya maziwa zinapatikana kwenye vituo vya kukusanyia/ kuuzia maziwa (milk collection centre) na baadhi kutoka kwa wafugaji au migahawa.

Hesabu kiasi cha maziwa yaliyozalishwa **kwa ajili ya kuuza tu**. Matumizi ya nyumbani hayahusiani na takwimu hizi.

Takwimu zinapatikana machinjioni.

6.2 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/ kondoo				

7. Afya ya Mifugo

7.1 Tiba

Aina ya mifugo	Aina ya ugonjwa	Idadi ya walioathirika	Idadi ya waliotibiwa	Idadi ya waliopona	Idadi ya waliokufa	Matibabu/ Dawa iliyotumika
Ng'ombe	CBPP	1	1	1	0	Tylosin
Ng'ombe	Babebious	20	20	20	0	Berenil
Ng'ombe	Minyoo	127	127	127	0	Levamizole
Mbuzi	Minyoo	119	113	105	14	Albendezole
Nguruwe	Majipu	1	1	1	0	
Mbwa	Minyoo	16	16	16	0	Ivomectin

Orodhesha madawa yote yaliyotumika kwa matibabu katika kisanduku kimoja.

Idadi ya walioathirika ni sawa na jumla ya idadi ya waliopona na waliokufa.

7.2 Uogeshaji, kunyunyizia na chanjo

Aina ya mifugo	Idadi ya walioogeshwa	Dawa iliyotumika	Idadi ya walionyunyiziwa	Dawa iliyotumika	Idadi ya waliochanjwa	Chanjo iliyotumika
Kuku					325	NCD Vaccine
Ng'ombe	128	Dominex	92	Supper Dip		
Mbuzi	10	Cybadip				

Tumia mstari mmoja kwa aina ya mfugo mmoja.

7.3 Huduma za mifugo

Aina ya mifugo	Kukata kwato	Kuhasi	Kuhamilisha (AI)	Kukata pembe	Kuweka alama	Kukata mikia	Kukata meno	Kukata midomo
Ng'ombe	10	47	0	12	16			
Mbuzi	7	44	0	12	10			
Kondoo	5	0	0	5	25	0		
Nguruwe	0	4	0		0		0	
Kuku								0
Bata								0

Maelezo: Utekelezaji kufikia mwezi huu

Jaza takwimu kutokana na huduma zote zilizotolewa katika mwezi husika. Kama wapo wafugaji wanaojihudumia wenyewe lakini umetoa ushauri, unaweza kuandika idadi ya mifugo iliyopata huduma.

8. Maoni ya Afisa Ugani wa kijiji/ kata kuhusu sekta ya kilimo katika eneo lake

Mafanikio:

Inashauriwa kuwa mafanikio yanapoandikwa ni vema yakaambatana na takwimu.

Changamoto/ Matatizo:

9. Wageni waliotembelea kijiji/kata kwa shughuli za Kilimo au ufugaji

Tarehe	Jina la mgeni	Anuani	Shughuli iliyomleta	Maagizo/ ushauri wa mgeni

5. Taarifa za Robo Mwaka

Usisahau kuandika jina la kijiji/kata na jina lako.

Futa isiyohusika (Kijiji/Mtaa/Kata).

Chagua hali ya chakula kijijini na weka alama “v”.

Eleza kwa nini umechagua hali ya chakula kijijini kuwa ni “nzuri/ wastani/ mbaya” kwa kutumia viashiria kwa mfano bei ya chakula, kiasi kilicholiwa cha vyakula vya kinga ya njaa nk.

OFISI YA WAZIRI MKUU - TAWALA ZA MIKOA NA SERIKALI
FOMU YA TAARIFA YA ROBO MWAKA YA MPANGO WA MAEND

Jina la Kijiji/ Mtaa/ Kata:

Jina la Afisa Ugani:

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) 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.

Uliza SACCOs kwa kupata takwimu hizi.

Kiasi cha mkopo wa biashara ni mkopo unatumika kuanzisha/endesha biashara katika sekta ya kilimo mfano kutafuta masoko, usindikaji nk.

1. Hali ya chakula kijijini

	Weka alama	Maelezo
Nzuri		
Wastani		
Mbaya		

Takwimu hizi zinapatikana kutoka kwa Serikali ya Kijiji kupitia viongozi wa vitongoji.

Kaya zenye chakula pungufu ni zile ambazo kwa siku zinakula mlo mmoja.

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 cha ziada

2. Vikundi/Ushirika wa wakulima

2.1 Vyama vya kuweka na kukopa (SACCOs)

Idadi ya SACCOs	Idadi ya wanachama				Kiasi cha mkopo (Tsh)				
	Mwanachama mmojammoja		Vikundi *	Jumla	Mazao	Ufugaji	Uvuvi	Biashara	Jumla
	Wanaume	Wanawake							

Maelezo: * Kikundi kimoja kihesabike kama mwanachama mmoja.

2.2 Vikundi vingine vya wakulima

Aina ya Vikundi		Idadi ya Vikundi	Idadi ya wanachama			Idadi ya vikundi vilivyosajiliwa	Idadi ya vikundi vyenye akaunti za
			Wanaume	Wanawake	Jumla		
Mazao	Uzalishaji						
	Usindikaji						
	Biashara						
Ufugaji	Uzalishaji						
	Usindikaji						
	Biashara						
Uvuvi	Uzalishaji						
	Usindikaji						
	Biashara						

Andika idadi ya vikundi vilivyosajiliwa na Wizara ya mambo ya ndani, Halmashauri ya Wilaya na vikundi vinavyotambuliwa na Wilaya.

Takwimu zinapatikana kutoka kwenye vikundi vilivyopo kijijini.

Mafunzo kwa wakulima kwa kutumia njia mbalimbali **nje ya shamba darasa** ni kwa mfano mafunzo yametolewa na MATI, LITI, chuo kingine, NGOs, CBOs, VICOBA, nk. au mafunzo mengine yametolewa na Wilava lakini sivo shamba darasa.

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/ Mwezeshaji wa mafunzo	Maelezo
	Wanaume	Wanawake	Sawa au pungufu ya wiki moja	Zaidi ya wiki moja			
Mazao							
Ufugaji							
Uvuvi							
Masoko na Usindikaji							
Umwagiliaji							

Orodhesha mada za mafunzo ziwe pana kwa mfano ukulima bora wa mahindi nk.

Njia iliyotumika kutoa mafunzo ni kama vile seminar, workshop, course, or study tour etc.

Mtoa mafunzo/ mwezeshaji wa mafunzo ni kama vile MATI, LITI nk.

Maelezo: i) Orodhesha mada zilizofundishwa kwa wakulima.

4. Afya ya mimea

4.1 Kuzuia magonjwa/visumbufu kwa njia za kibaiolojia

Aina ya ugonjwa/ kisumbufu	Aina ya zao	Njia zilizotumika	Eneo lililodhibi iwa (ha)	Kaya zilizohusika	Maelezo

Ni vizuri kuandika njia za kiasili hapa pia (mfano kutumia majivu, mwarobaini nk.).

5. Umwagiliaji

5.1 Mazao yanayolimwa katika eneo la umwagiliaji

Aina ya mazao (i)	Eneo lililopandwa (ha) (ii)		Uzalishaji/ Tija (tani/ha) (iii)		Mavuno (tani) (iv) = (ii) x (iii)	
	Masika/ Vuli (v)	Kiangazi (vi)	Masika/ Vuli (vii)	Kiangazi (viii)	Masika/ Vuli (ix)	Kiangazi (x)

Takwimu hizi zinahusiana na mazao yaliyozalishwa katika **skimu ya umwagiliaji** tu. **Skimu** ni eneo lenye miundombinu ya umwagiliaji (kisasa na asili) na linalotumika kwa shughuli za umwagiliaji ili kuzalisha mazao.

Takwimu za **eneo lililopandwa** pamoja na tija zinapatikana kutoka kwa meneja wa skimu na Chama cha Wamwagiliaji (IO).

Maelezo:

(iv) (vi) (viii) Masika/ Vuli - Jaza takwimu za eneo lililopandwa (ha), uzalishaji (tani/ha) na mavuno (tani) katika eneo la skimu zinazotegemea umwagiliaji kipindi cha Masika/ Vuli.

(v) (vii) (ix) Kiangazi - Jaza takwimu za eneo lililopandwa (ha), uzalishaji (tani/ha) na mavuno (tani) katika eneo la skimu zinazotegemea umwagiliaji kipindi cha Kiangazi.

Majina ya aina ya mmomonyoko yanaweza kuandikwa kwa kiingereza. Mara nyingi majina hutokana na kisababishi/ chanzo. Mfano, gully erosion inasababishwa na maji ambayo yanatengeneza korongo.

6. Mmomonyoko wa ardhi

Aina ya mmomonyoko (i)	Jina la kijiji/ vijiji vilivyohusika	Eneo lililoharibiwa (ha)	Mbinu zilizotumika	Eneo lililokarabatiwa (ha)	Maelezo

Andika mbinu zilizotumika kwa kukarabati.

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/ trekta la mkono (ha) (i)	Kwa kutumia wanyamakazi (ha) (ii)	Kwa jembe la 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/ trekta la mkono (ha) (i)	Kwa kutumia wanyamakazi (ha) (ii)	Kwa jembe la 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

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/ trekta la mkono na vifaa vingine.

6. Taarifa za Mwaka

OFISI YA WAZIRI MKUU - TAWALA ZA MIKOA NA SERIKALI ZA MITAA (OWM-TAMISEMI)
FOMU YA TAARIFA YA MWAKA YA MPANGO WA MAENDELEO YA KILIMO WA KIJIJI/KATA

Revised November 2010

Usisahau kuandika jina la kijiji/kata na jina lako. Futa isiyohusika (Kijiji/Mtaa/ Kata).

Jina la K jiji/ Mtaa/ Kata: _____

Jina la Afisa Ugani: _____

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) 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.

Iwapo takwimu mpya (actual number) imekusanywa na Serikali ya kijiji, tumia takwimu hiyo.

Kama hakuna takwimu mpya, tumia takwimu za Wilaya. Afisa ughani asikadirie mwenyewe idadi ya watu ila atumie takwimu kutoka Wilayani.

Vinginevyo, tumia takwimu za sensa.

1. Utangulizi, Taarifa za msingi za Kijiji/ Kata

	Wanaume	Wanawake	Jumla	Wenye uwezo wa kufanya kazi za kilimo
Idadi ya watu				
	Zinazoongozwa na wanaume	Zinazoongozwa na wanawake	Jumla	Zenye uwezo wa kufanya kazi za kilimo
Idadi ya kaya				

2. Kilimo cha mkataba na makubaliano wa soko

Tumia takwimu za Serikali ya Kijiji.

Aina ya shughuli	Mkataba wa soko (Contract farming) (i)			Makubaliano ya soko (Out-growers scheme) (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 ka i 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 ka ika 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 kuhifadhia mavuno.

v), viii) Andika jina la zao kuu/bidhaa ka ika maelezo.

Skimu ni eneo lenye miundombinu ya umwagiliaji (kisasa na asili) na linatumika kwa shughuli za umwagiliaji ili kuzalisha mazao. Takwimu zinapatikana kutoka kwa meneja wa skimu na Chama cha Wamwagiliaji.

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 marekebisho, 4=haijulikani)	Idadi ya wanachama katika chama cha wamwagiliaji (IO)		Idadi ya wamwagiliaji (wanachama na wasiowanachama)	
						Wanaume	Wanawake	Wanaume	Wanawake
Skimu iliyoendelezwa									
Skimu ya asili									

Skimu ya umwagiliaji **iliyoendelezwa** inahusisha miundombinu ya kisasa kama vile mifereji nk. 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.

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	Nzima		Mbovu		Sababu ya ubovu wa mashine
	Binafsi	Kikundi	Binafsi	Kikundi	
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 meet catter)					
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)					

Takwimu za mashine hizi zinapatikana kwenye Serikali ya Kijiji kwa sababu mashine zote zinazomilikiwa zinatambuliwa/zinaorodheshwa na Serikali ya Kijiji.

Hesabu mashine zinazomilikiwa na wanakijiji tu, na usihesabu mashine zinazokuja kufanya kazi kutoka nje ya Kijiji.

Maelezo: i) Andika jina la mashine ambayo haijatajwa kwenye orodha iliyo kwenye jedwali juu.
ii) Andika jina la 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

Takwimu za zana zinapatikana kwa wamiliki.

a) Zana zinazokokotwa 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 ku ifua (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 zinazokokotwa na wanyamakazi

Aina ya zana	Nzima	
	Binafsi	Kikundi
Jembe la kusawazisha (Harrow)		
Mashine ya kupanda (Planter)		
Jembe la kulima (Disk plough)		
Jembe la ku ifua (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.

Namna ya kukadhiria idadi ya majembe ya mkono ni kwa mfano kutumia idadi ya kaya zinazoshiriki kilimo (Jedwali Na.1) na kila kaya ina majembe mawili/ matatu, au kutumia idadi ya watu wanaoshiriki kilimo na kila mmoja ana jembe moja nk.

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

Aina ya mashine	Nzima		Mbovu		Sababu ya ubovu wa mashine
	Binafsi	Kikundi	Binafsi	Kikundi	
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)					

Takwimu za mashine hizi zinapatikana kwenye Serikali ya Kijiji kwa sababu mashine zote zinazomilikiwa zinatambuliwa/zinaorodheshwa na Serikali ya Kijiji na baadhi kutoka kwa wamiliki.

Maelezo: i) Hesabu idadi ya mashine zilizopo kijijini/ kwenye kata.

ii) Andika idadi ya mashine kama haijatajwa kwenye orodha iliyopo juu kwenye jedwali.

iii) 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.

Huduma za ughani ni zile zinazotolewa na serikali au sekta binafsi **kupitia shamba darasa tu**.

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	Maelezo
		Wanaume	Wanawake		Wanaume	Wanawake			
Mazao									
Hifadhi bora ya nafaka	2	16	9	14	16	9	2	25	
Uzalishaji bora wa zao la alizeti	3	41	33	36	41	33	3	74	
Ufugaji									
Ufugaji bora wa kuku wa kienyeji	2	5	6	12	5	6	2	11	
Ufugaji bora wa mbuzi wa maziwa	2	12	28	24	12	28	2	40	
Matayarisho bora wa ngozi	1	6	2	7	6	2	1	8	
Uvuvi									
Masoko na U									
Mengineyo									

Lengo la shamba darasa liwe pana kwa mfano kilimo bora cha mahindi, ufugaji wa kuku wa kienyeji nk.

Waliohitimu ni wale waliohudhuria mafunzo ya shamba darasa angalau kwa asilimia 75.

Idadi ya wakulima wanaotumia elimu ya mafunzo ni wale wanaotumia elimu katika shughuli zao za kilimo.

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.

Mahitaji/malengo yaandaliwe kwa kutumia vigezo husika na kuwashirikisha wakulima/wafugaji.

Matumizi ya mwaka yanapatikana kutoka duka la pembejeo lililopo kijijini/katani au kutokana na huduma/ ushauri uliotolewa.

Mahitaji ya pembejeo (6.1-6.3) yaandaliwe mwanzoni mwa mwaka (mwezi wa saba) na taarifa ya utekelezaji ya mwaka iandaliwe mwisho wa mwaka (mwezi wa sita).

6.2 Viatilifu/ Viuadudu

Aina ya kiatilifu/ kiuadudu	Jina la kiatilifu/ kiuadudu *	Kipimo (kg/ lita)	Matumizi kwa mwaka	Maelezo
A: Dawa za kuua wadudu	Actellic 50EC	lita	40	
A: Dawa za kuua wadudu	DURSBAN	lita	60	
A: Dawa za kuua wadudu	Karate	lita	20	
A: Dawa za kuua wadudu	Thionex	lita	50	
A: Dawa za kuua wadudu				
B: Dawa za fangasi	Blue copper EC	lita	0.5	
B: Dawa za fangasi	Dithane M. 45	kg	20	
B: Dawa za fangasi	Ridomil	kg	1	
B: Dawa za fangasi	Zinc	kg	0.25	
B: Dawa za fangasi				
C: Dawa za magugu	Gramoxone	lita	100	
C: Dawa za magugu	Roundup	lita	350	
C: Dawa za magugu				
C: Dawa za magugu				
C: Dawa za magugu				
D: Sumu ya panya	RAT CIDE	lita	0.1	
D: Sumu ya panya				
D: Sumu ya panya				
D: Sumu ya panya				
D: Sumu ya panya				
E: Dawa za kudhibiti ndege uharibifu				
E: Dawa za kudhibiti ndege uharibifu				
E: Dawa za kudhibiti ndege uharibifu				
E: Dawa za kudhibiti ndege uharibifu				
E: Dawa za kudhibiti ndege uharibifu				
F: Mengineyo (taja)				
F: Mengineyo (taja)				
F: Mengineyo (taja)				
F: Mengineyo (taja)				
F: Mengineyo (taja)				

Andika kilo au lita hapa.

Matumizi ya mwaka yanapatikana kutoka duka la pembejeo lililopo kijijini/katani au kutokana na huduma/ ushauri uliotolewa.

Maelezo: * Andika jina la bidhaa.

6.3 Mbegu bora

Mahitaji/malengo yaandaliwe kwa kutumia vigezo husika na kuwashirikisha wakulima/wafugaji.

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		Kilima	400	50	
Mahindi		Staha	300	30	
Mahindi	1,200	Stuka	200		
Mahindi		TMV I	250	100	
Mahindi					
Mpunga					
Mpunga					
Mpunga					
Mpunga					
Mpunga					
Maharage		C. Wonder		30	
Maharage					
Maharage	150				
Maharage					
Maharage					
Mtama		Macia	180	30	
Mtama	450	Wahi	150		
Mtama					
Ngano					
Ngano					
Ngano					
Alizeti		Record		50	
Alizeti	50				
Alizeti					
Mengineyo (taja)					
Mengineyo (taja)					
Mengineyo (taja)					

Mbegu zenye ubora unaotambulika (QDS) zinazalishwa na wakulima waliopata mafunzo na kuruhusiwa kuzalisha na kuuza ndani ya kata.

Mbegu zenye ubora uliothibitishwa ni zile zinazozalishwa na taasisi za utafiti wa kilimo (kwa mfano ASA).

Matumizi ya mwaka yanapatikana kutoka duka la pembejeo lililopo kijijini/katani au kutoka huduma/ushauri uliotolewa.

Takwimu zinapatikana kutoka kwa Serikali ya Kijiji na baadhi kutoka kwa wafugaji.

7. Idadi ya mifugo

Aina ya mnyama	Idadi wa asili	Idadi wa kisasa		Jumla	Jumla ya waliosajiliwa
		Nyama	Maziwa		
1. Ng'ombe					
Ng'ombe dume*	725	7	28	760	
Ng'ombe jike**	1,500	10	127	1,637	
Maksai***	103		12	115	
Mtamba****	1,227		58	1,285	
Ndama dume	302	5	53	360	
Ndama jike	321		60	381	
Maksai wa kulima	200			200	
Jumla ndogo ng'ombe	4 378	22	338	4,738	
2. Kondoo					
Kondoo dume	633	2		635	
Kondoo Jike	1,079	4		1,083	
Jumla ndogo kondoo	1,712	6		1,718	
3. Mbuzi					
Mbuzi dume	1,900	6	85	1,991	
Mbuzi jike	2,008	2	203	2,213	
Jumla ndogo mbuzi	3,908	8	288	4,204	
4. Mifugo Mingine					
Nguruwe	127	50		177	
Nyati maji	0			0	
Punda	3			3	
Farasi	213			213	
Ngamia	0			0	
Mbwa					
Paka	112			112	
Sungura					
5. Ndege	Idadi ya wa asili	Wa nyama	Wa Mayai	Jumla	
Kuku	5,223	112	145	5,480	
Bata	16			16	
Bata mzinga	0			0	
Kanga	27			27	

Kama hakuna takwimu ya idadi ya ng'ombe wa kila aina, unaruhusiwa kujumlisha idadi iliyopo na kujaza kwenye "jumla ndogo ya ng'ombe".

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.

* Ng'ombe dume ni ambaye hajahasiwa anatumiwa kwa kuzalisha mbegu.

** Ng'ombe jike ni ambaye amewahi kuzaa 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.

8. Miundombinu katika mifugo

Aina ya miundombinu	Nzima	Mbovu	Mahitaji halisi	Idadi ya zilizosajiliwa	Sababu ya ubovu wa miundombinu
Jengo la machinjio *	1		2		
Karo **	2		5		
Bucha	3		5		
Banda la ngozi	1		2		
Banio la kudumu (Permanent crush)					
Lambo	5	1	10		
Birika la kunywea maji (Water Trough)	2		5		
Josho la wanyama wakubwa (Ng'ombe, Punda)	2	2	5		
Josho la wanyama wadogo (Mbuzi, Kondoo, Mbwa)			5		
Sehemu ya kunyunyuzia dawa mifugo (Spray Race)					
Kituo cha kutotolea vifaranga					
Kituo cha kukusanyia maziwa					
Mnada	1	1	2		
Ghala	1				
Mengineyo (Taja)					

Uwe makini katika kuandika mahitaji halisi ya miundombinu kwa sababu takwimu hizi zinatumika kwa ajili ya mipango ya VADP/DADP nk.

Maelezo: i) Andika jina la miundo mbinu kama ipo zaidi ya hiyo iliyotajwa hapo juu

* Jengo la Machinjio ni mahali ambapo wanyama wanachinjwa na kuwa nyama (hakuna usindikaji)

** Karo ni mahali pa kuchinjia wanyama, kwenye sakafu ka ika eneo la wazi

*** Kituo cha kutotolea vifaranga kinahitaji vitendea kazi ambavyo vitatumika kuzalisha vifaranga kwa siku moja katika ukubwa wowote.

Takwimu hizi zinapatikana serikali ya kijiji kwa sababu eneo lote linasajiliwa na ofisi. Ukubwa wa eneo linalomilikiwa kisheria linahesabiwa pamoja na eneo lote ambalo linamilikiwa na mtu binafsi, kikundi ama taasisi.

9. Eneo la malisho (Grazing land)

Aina ya mfugo (i)	Idadi ya wanyama (ii)	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	4,378				
Mbuzi	3,908	3,557	3,531	3,531	0
Kondoo	1,712				
Punda	3				

Maelezo:

(ii) Idadi ya wanyama waliopo kwenye eneo la malisho.

(iii) Eneo linalofaa na linajumlisha linalotumika na lisilotumika.

(iv) Eneo halisi ambalo linatumika kulishia wanyama.

(vi) Eneo lililopewa hati.

Kama eneo lililopo halijapimwa, weka makisio ukishindwa acha wazi, pia takwimu zinaweza kupatikana kutoka Serikali ya Kijiji.

Takwimu hizi zinaweza kupatikana kutoka taasisi za kilimo/mifugo mfano LITI nk.

10. Malisho ya wanyama

10.1 Malisho ya wanyama yaliyopandwa na kuendelezwa

Idadi ya mashamba	Eneo (ha)	Uzalishaji wa mbegu (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	dadi ya marobota/ bandali (bundle) yaliyozalishwa (Hei*)	Eneo la mashamba yaliyotumika kwa malisho (grazed in situ) (ha)	Maelezo

* Robota moja la hei lina uzito wa kilo 20.

Takwimu hizi zinaweza kupatikana kutoka kwa wafugaji.

Taja jina la kituo cha TV/ Radio cha kijamii kinachopatikana katika Kijiji/Kata yako.

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	

Andika vipindi vya kilimo, ufugaji, na uvuvi ambavyo vinarushwa kutoka kituo cha TV/ Radio cha kijamii na unaweza kutazama/kusikiliza ukiwa Kijijini/Katani mwako.

7. Uzoefu Uliojitokeza Pamoja Na Mambo Tuliyojifunza

<u>Ukusanyaji wa takwimu</u>:

- Fomu hizi zinaeleza nini kinatakiwa kujazwa katika taarifa kwa ufasaha, inategemewa kuwa Maafisa Ugani watajaza kwa urahisi fomu hizi. Awali ilionekana kuwa kabla ya kutumia fomu hii baadhi ya takwimu/taarifa zilikuwa hazitolewi, hivyo fomu imesaidia sana.
- Fomu hii inakusanya taarifa nyingi za sekta ya Kilimo yaani mazao, mifugo, ushirika nk.
- Fomu hizi zitajazwa kwa urahisi sana iwapo Maafisa Ugani watatumia kumbukumbu za taarifa za kila siku kutokana na kuwatembela wakulima.
- Ni muhimu sana kushirikiana kati ya Maafisa Ugani wa Vijiji na Kata ili kugawana majukumu vizuri na hivyo kurahisisha ukusanyaji wa taarifa/takwimu.
- Ni muhimu pia kushirikiana na viongozi wa vitongoji pamoja na maafisa watendaji wa vijiji ili kutoa taarifa/takwimu sahihi .
- Wakati Afisa Ugani wa Kijiji anapokuwa likizo, inashauriwa akabidhi kazi zake kwa Afisa Ugani mwenzake kutoka Kijiji jirani baada ya kushauriana na Afisa Ugani wa Kata ili aweze kumsaidia kuandaa taarifa. Kwa Maafisa Ugani wa Kata, wanaweza kumkabidhi Afisa Ugani wa Kijiji chini ya Kata yake ili aweze kuandaa taarifa ya Kata.

<u>Utayarishaji wa taarifa</u>:

- Kabla ya kuanza kutumia fomu hii, Maafisa Ugani wa Vijiji walikuwa wanachelewa kuwasilisha taarifa zao katika Kata. Lakini baada ya kuanza kutumia fomu hii, taarifa zao zinawasilishwa kwa muda muafaka kulingana na tarehe walizokubaliana (mfano tarehe 30 ya mwisho wa mwezi).
- Maafisa Ugani sasa wanapata karatasi za kuandikia taarifa kila mwezi kutoka Wilayani.

- Fomu hii imepunguza kazi ya uandaaji wa taarifa maana Maafisa Ugani wanahamishia tu kumbukumbu zao za kazi kwenye fomu hii iliyoandaliwa.
- Kwa kutumia fomu hii imewawezesha Maafisa Ugani kuwa na takwimu nzuri na za mpangilio mmoja (uniform).

Faida ya utumiaji wa fomu hii:

- Fomu hii inawakumbusha Maafisa Ugani kazi zao za kila siku, na hivyo kulazimika kuweka kumbukumbu zao za kila siku kama vile taarifa za mvua nk.
- Kwa kutumia fomu hii, Maafisa Ugani wanalazimika kuwatembelea wakulima mara nyingi zaidi kuliko ilivyokuwa hapo awali.
- Kwa kutumia fomu hii Maafisa Ugani wanalazimika kufanya kazi zaidi na katika eneo kubwa kuliko ilivyokuwa hapo awali na hivyo imewasaidia kupata takwimu zote kwa wakati mmoja.
- Takwimu hizi zimewafanya Maafisa Ugani kuwa karibu sana na wafugaji na wakulima.

Matumizi ya takwimu:

- Fomu hii imerahisisha utunzaji wa kumbukumbu katika ngazi ya Kijiji na Kata.
- Kwa kupitia fomu hii, imepunguza idadi ya taarifa za mara kwa mara zinazohitajika na maafisa mbalimbali kutoka wilayani, kwa sababu imekidhi mahitaji ya takwimu zote muhimu Wilayani.
- Takwimu/taarifa hizi zinasaidia sana katika kuandaa mipango mingi, kama vile kugawa chakula cha msaada wakati wa njaa.
- Takwimu/taarifa husaidia katika kuandaa Mipango Kazi ya Maafisa Ugani.

Mrejesho:

- Maafisa kutoka wilayani wameshauriwa kutembelea afisa wa ugani wa Kata na Vijiji ili kutoa mrejesho na kuboresha ubora wa taarifa zinazoandaliwa. Baada ya matembezi hayo, afisa wa ugani anakuwa na ujasiri wa namna ya kujaza fomu.
- Kutokana na kutumia fomu hizi, Maafisa Ugani wa Vijiji na Kata wamekuwa wakiwatembelea watendaji wa Kijiji/Kata mara kwa mara ili kukusanya taarifa na kubadilishana uzoefu juu ya namna ya kutunza kumbukumbu.

Jedwali la kubadilisha vipimo (Conversion table)

Vipimo			**Conversions**	
1 hekta	= 10,000 sq mita	(100 x 100 mita)	1 hekta	= 2.47 ekari
1 ekari	= 4050 sq mita		1 ekari	= hatua 70 kwa 70
1 kilomita	= 1,000 mita			
1 futi	= 30.48 sentimita			
1 hatua	= 3 futi			
1 tani	= 1,000 kgs			

Mlinganisho kwa kilo (Kg Equivalents)

	Aina ya mazao	Standard (kgs)		Non-standard	
		Kiroba	Debe	Jina	kgs
Nafaka	Mahindi	100	18	Rumbesa	140
	Mpunga	75	15		
	Mtama	100	18		
	Uwele	100	18		
	Ulezi	120	20		
	Ngano	75	15		
	Shayiri	75	15		
Mazao yatokanayo na mizizi	Mihogo	60	12		
	Viazi vitamu	80	16		
	Viazi mviringo	80	16		
	Viazi vikuu	80	16		
	Gimbi	80	16		
Mazao ya viwandani	Pamba	50	10		
	Tumbaku	70	14		
	Kahawa	55			
	Chai	60			
	Pareto	60	12		
	Kakao	60			
	Mpira				
	Miwati (Wattle)	90			
	Miwa	120			
	Katani	130			
	Korosho	80			

	Aina ya mazao	Standard (kgs)		Non-standard	
		Kiroba	Debe	Jina	kgs
Mazao ya mafuta	Alzeti	60	12		
	Ufuta	100	20		
	Karanga	50	10		
	Mawese	100			
	Nazi	75			
	Maharage ya Soya	100	20		
	Mbegu za Nyonyo	100	20		
Mazao ya jamii ya kunde	Kunde	100	20		
	Mbaazi	100	20		
	Choroko	100	20		
	Dengu	100	20		
	Njugu mawe	100	20		
	Maharage	100	20		
Viungo	Tangawizi	75	15		
	Pilipili kali	85			
	Iliki	100			

	Aina ya mazao	Standard (kgs)		Non-standard	
		Kiroba	Debe	Jina	kgs
Mbogamboga	Matango	80			
	Cauliflower	50			
	Kabichi	50			
	Mchicha	50			
	Spinachi	45			
	Nyanya	90			
	Biringanya	70			
	Vitunguu	80	16		
	Karoti	110			
Matunda	Ndizi	120			
	Embe	130			
	Papai	100			
	Chungwa	130			
	Chenza	110			
	Pera	110			
	Apple	110			
	Nanasi	90	18		
	Parachichi	140			
	Tikiti maji	80			
	Tunda damu	110			
	Mapesi (Pear)	110			

Sensa ya sampuli ya kilimo mwaka 2002/03

Annex 3.6 LGMD2 Operation Manual (District)

United Republic of Tanzania

LGMD2

Operating Manual

District Level

Draft Version 1.053

LGMD2 is an initiative of the ASDP Monitoring & Evaluation Thematic Working Group under the AGRICULTURE SECTOR DEVELOPMENT PROGRAMME (ASDP). The latest version of LGMD2, together with related resources, such as this operational manual, can be downloaded from the MIS section of the
PMO-RALG website www.pmoralg.go.tz
and also at the Homepage for ASDP M&E: www.kilimo.go.tz/M&E.html

The LGMD2 software has been engineered by the
University Computing Centre Ltd, Dar es Salaam
www.ucc.co.tz financed by Japan International Cooperation Agency (JICA)

ASDP Monitoring & Evaluation Thematic Working Group
P.O.Box 9192, Dar es Salaam
Tel & Fax: +255 22 286 4460
E-Mail: *Lgmd2@kilimo.go.tz*

The content of this manual is contained on the installation CD and describes

LGMD2 version 1.053 – District Level

Abbreviations

ASLMs	Agricultural Sector Lead Ministries
DED	District Executive Director
ICT	Information and Communication Technology
IP	Internet protocol
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
MIS	Management Information System
MITM	Ministry of Industry, Trade and Marketing
MLDF	Ministry of Livestock Development and Fisheries
MWI	Ministry of Water and Irrigation
PDF	Portable Document Format – a common type of format which cannot be easily edited
PMO-RALG	Prime Minister's Office, Regional Administration and Local Government
XML	Extensible Markup Language - a set of rules for encoding documents electronically

Glossary of Terms

Alpha-numeric	Combination of letters and numbers, especially the characters A to Z (lowercase and uppercase) and 0 to 9. Also includes punctuation and other special characters
Check box	A small box on the computer screen which can contain a tick or be left blank
Drop-down list	A list that appears on a computer screen item when the small arrow at the right hand side of the box is clicked
Hard copy	A printout on paper
Internet	A global system of interconnected computer networks that use the standardized Internet Protocol Suite (TCP/IP) to serve billions of users worldwide.
IP address	'Internet protocol' address which uniquely defines a computer on the internet
Offline	Not connected to the internet
Online	Connected to the internet
Pick List	A list that appears on a computer screen item when the small arrow is clicked
Server	A large, high performance computer used for receiving and storing data
Soft copy	Information that can only be read using a computer, not printed
Synchronising data	Transferring of data from one software application to another in order to make the databases identical. Note that this operation can work both ways – sending data to the main server (as for LGAs) or receiving data from it (as for Regions or ASLMs).
Tree view	The way the software displays selectable options. It is the same method as used by Windows Explorer
Web browser	Software such as Windows Internet Explorer or Firefox, which enable users connected to the internet to view web sites

Contents

Chapter

1

1 Introduction

1.1 Overview

The Local Government Monitoring Database 2 (LGMD2) is a database designed to assist local authorities in monitoring agricultural sector data on a quarterly and annual basis using the integrated data collection forms. It is different from its predecessor LGMD, in three major ways - it is an online system; it is currently limited to the agricultural sector and also contains a much more comprehensive amount of data than LGMD which was limited to minimal data collection in all pro-poor sectors.

The software is designed in Microsoft Visual Basic .net ('dot net') and can be used either 'online' or 'offline', i.e. either connected to the internet or not. The main LGMD2 database is stored in a server at the Ministry of Agriculture, Food Security and Co-operatives (MAFC) headquarters and data can be transferred to the server automatically from the district software whenever there is a connection to the internet. Being automatic, the system does not require the use of a web browser. In addition, data can be transferred to the region for approval.

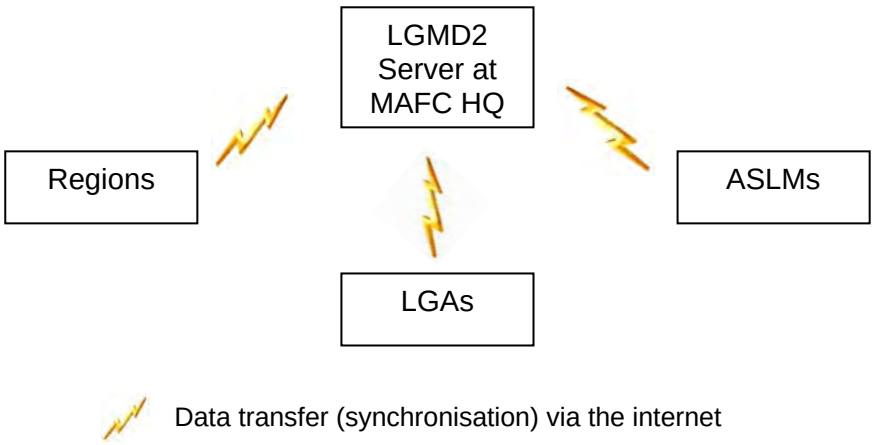
The database can be operated at any of three levels:

- District Level
- Regional Level
- National Level

This manual describes the operation of LGMD2 at District Level only. The latest version of regional and national level manuals, along with this manual can be downloaded from MAFC website, ASDP M&E page at www.kilimo.go.tz/M&E.html .

Software support is given through the Regional ICT specialists. The website contains the latest updates of the software, answers to FAQs, and manuals.

A simplified data flow diagram of LGMD2 is given in the following figure.



Schematic diagram of LGMD2 online data flow

1.2 Functions

LGMD2 enables the user at District level to carry out the following functions:

- Enter quarterly and annual agricultural sector information from completed data collection forms
- Print a hard copy of the data entered
- Export the entered data locally in Microsoft Excel format
- Create customised tables with numeric data
- Export the entered data, through the internet, to the region via the main LGMD2 server
- Receive any comments from the region about any unapproved data sent to the main LGMD2 server
- Edit data for final approval by the region and send to the LGMD2 server
- Export the entered data as a local file for sending to the regional and national headquarters, via a flash disk or by email where no internet connection is available on the computer on which LGMD2 is running
- View the status of each report in the system

Chapter

2

2 Setting up LGMD2

LGMD2 will operate on Windows 7, Windows Vista, Windows XP and Windows 2000 platforms. It does not operate on Linux platforms, e.g. Ubuntu. LGMD2 does not require any other software to be installed. An internet connection is not essential in installation.

It is recommended that only one computer in a LGA is assigned for LGMD2 data entry. If a LGA wishes to install LGMD2 on other computers, they should install and log-in as the national level (see the operating manual for national level) which only allows users to view and analyze data (no editing).

2.1 Before Installing LGMD2

The following steps have to be taken to start before you install the program.

(1) Confirm the “Current format”, and date and time.

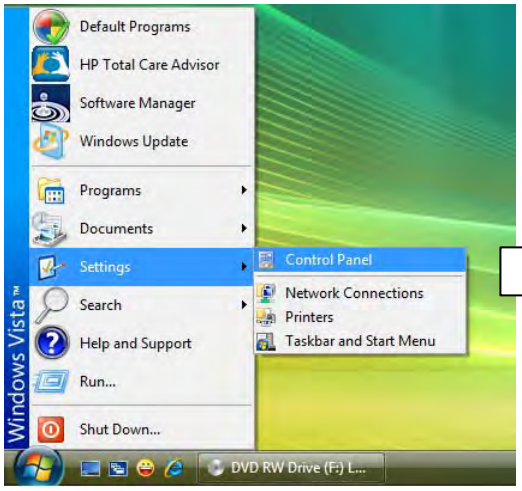
(2) Scan your computer to remove all viruses.

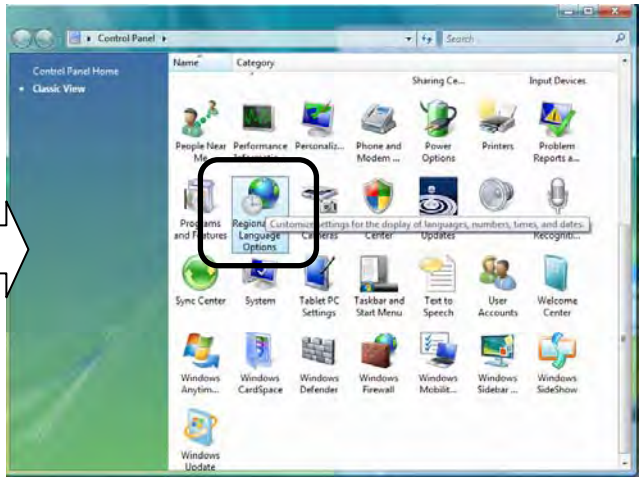
(1) Confirm the “Current format”, and date and time

First, ensure that the Regional settings are set to English (United Kingdom). To do so, go to the Control Panel/Regional & Language Options, and select English (United Kingdom) and Customise. Ensure that the date settings are dd/mm/yyyy. Then, check on the clock at the bottom right of the desktop and then click ‘change date and time settings’ (7/Vista) or change the time and date directly (XP).

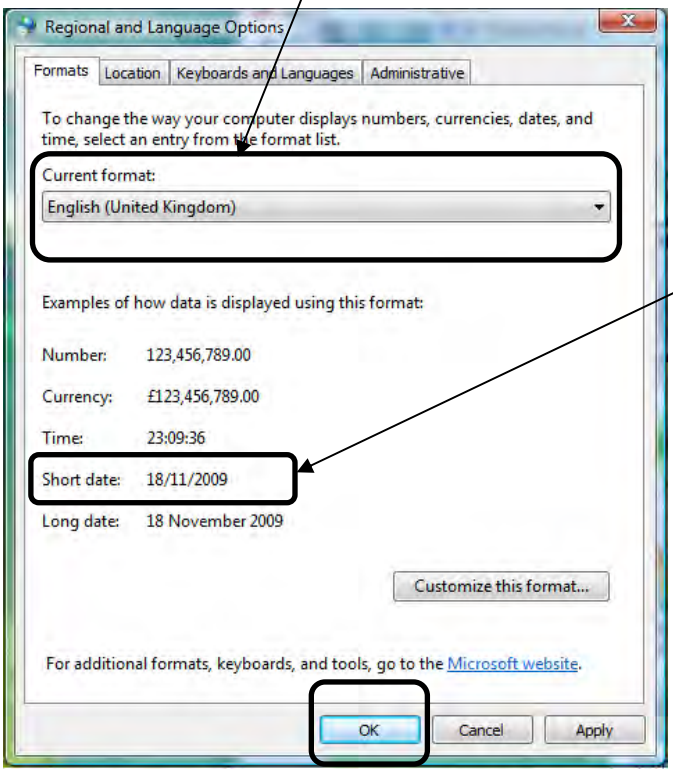
(Example: Windows Vista)

- **Go <u>Settings</u> > <u>Control Panel</u> > <u>Clock, Language and Region</u> > <u>Regions and Language Options</u>**

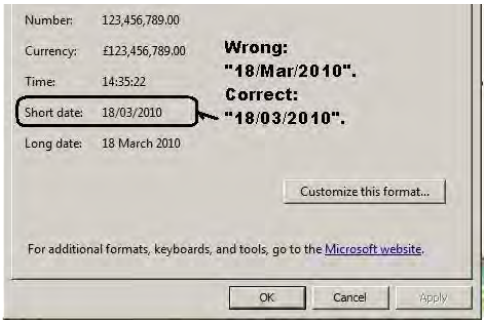




- **Select "English (United Kingdom)" at <u>Current format</u>.**

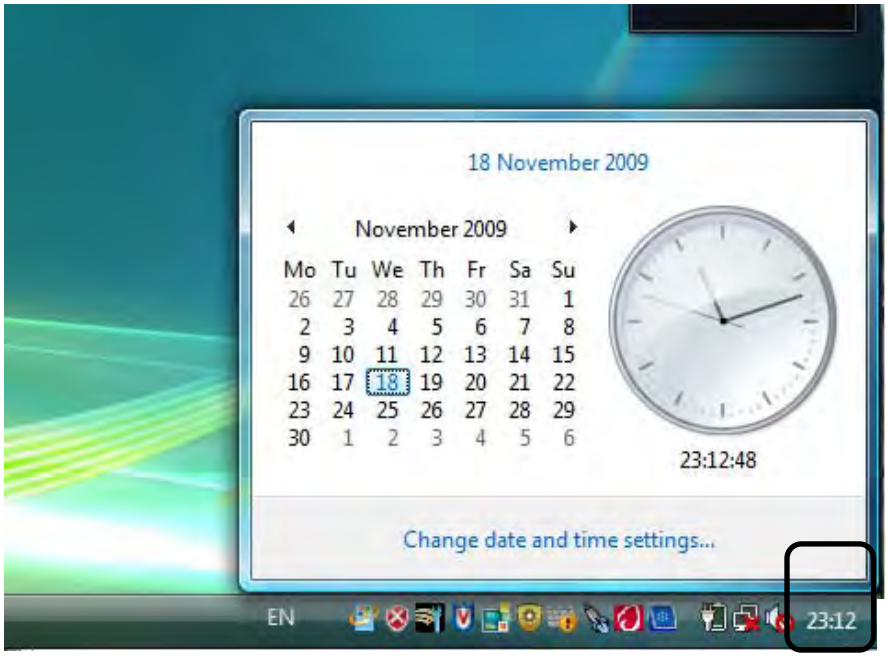


Also, please confirm the date format.



If you want to change date format, please click <u>Customize the format…</u>.

➢ **Click the time, and confirm the date and time is correctly set.**



<=Click the time.

(2) Scan your computer to remove all viruses.

If your computer does not have an anti-virus software or the software is out of date, it is recommended that you download and install the strong but free Anti-Virus software.

After you install the Anti-Virus software, it is strongly recommended to scan your hard disk and remove all viruses from your computer before you install LGMD2.

2.2 Installation of LGMD2

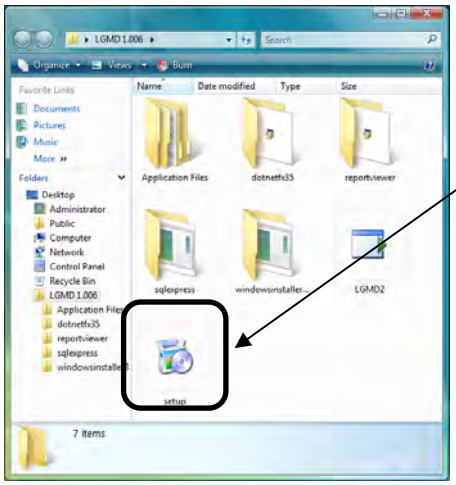
2.2.1 Installation

The following steps have to be taken to install LGMD2 first time by using the CD. It is recommended to use Windows VISTA or 7 even though LGMD2 can run on XP.

1) Close all programs on the computer
2) Insert the CD in the drive, and use Windows Explorer to open it, by right- clicking on the Start button, then left clicking Explore. The CD will normally be drive D or E
3) There are several files on the CD. Locate the folder called LGMD2.
4) ***If running Vista***, right click the file **`setup.exe`** and left click **Run as Administrator**, then double-click the **`setup.exe`** file. For Windows XP, simply double-click the **`setup.exe`** file.

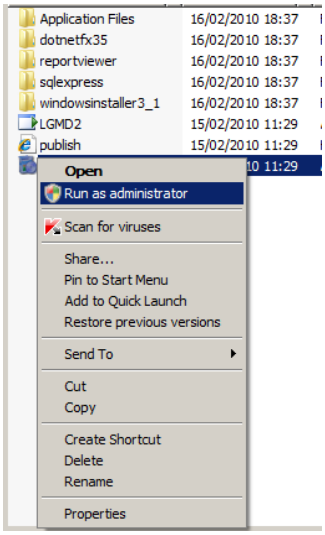
(Example: Windows Vista)

➢ **Double-click <u>setup</u>.**

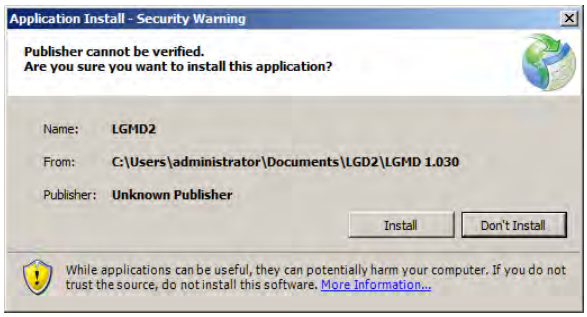


If you are running **Vista**, right-click the file **<u>setup.exe</u>** and left-click **<u>Run as Administrator</u>**, then double-click the **<u>setup.exe</u>** file.

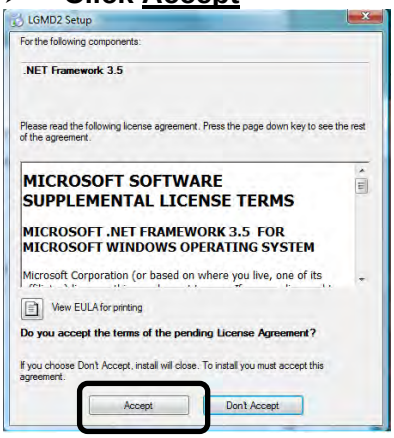
For Windows XP, simply double-click the **<u>setup.exe</u>** file.



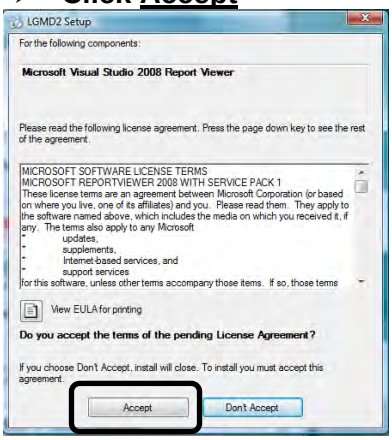
➢ **Click <u>Install</u>**



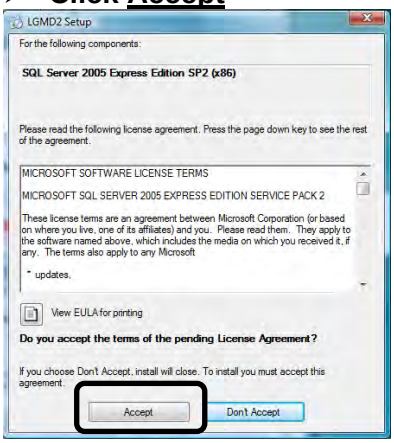
➢ **Click <u>Accept</u>**



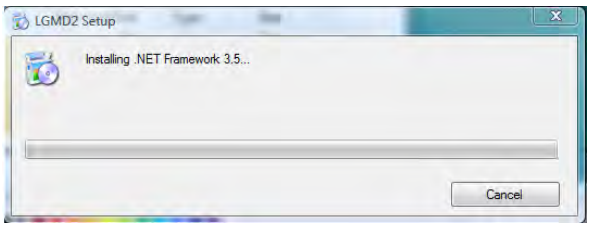
➢ **Click <u>Accept</u>**

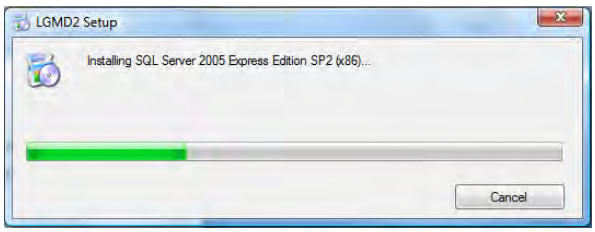


➢ **Click <u>Accept</u>**

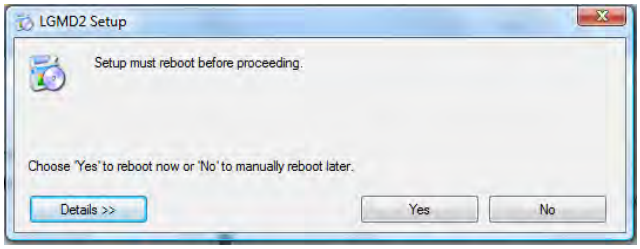


➢ **Waite for a while (1-10 minutes for completing installation).**

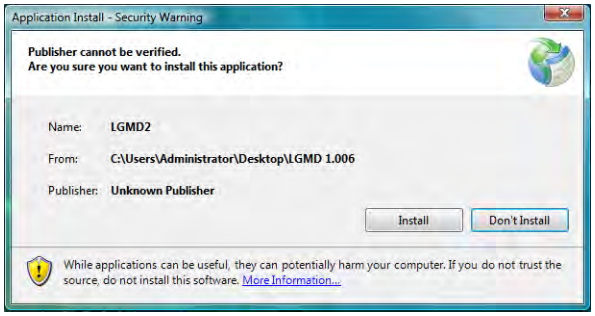




➢ **Click <u>Yes</u>. (for rebooting the computer)**

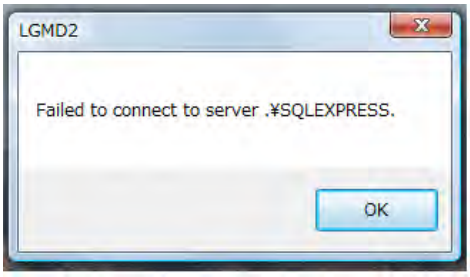


➢ **After rebooting, you see the following box. Click <u>Install</u>.**



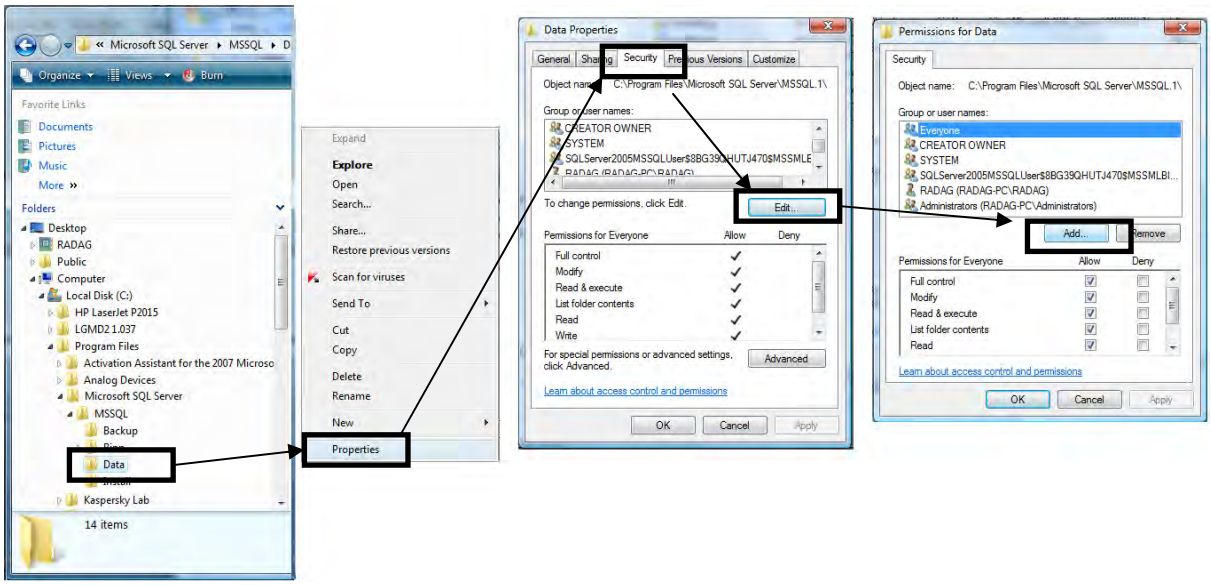
Tips 1

Sometimes LGMD2 does not start and show the following message or similar message.



For some errors during operation, the following procedure should be carried out:

(i) Go to C:\Program Files\Microsoft SQL Server\MSSQL\Data\
(ii) Right click on the folder name
(iii) Select Properties
(iv) Go to Security
(v) Create a user Everyone (If doesn't exist)
(vi) Give the user full control
(vii) Click OK

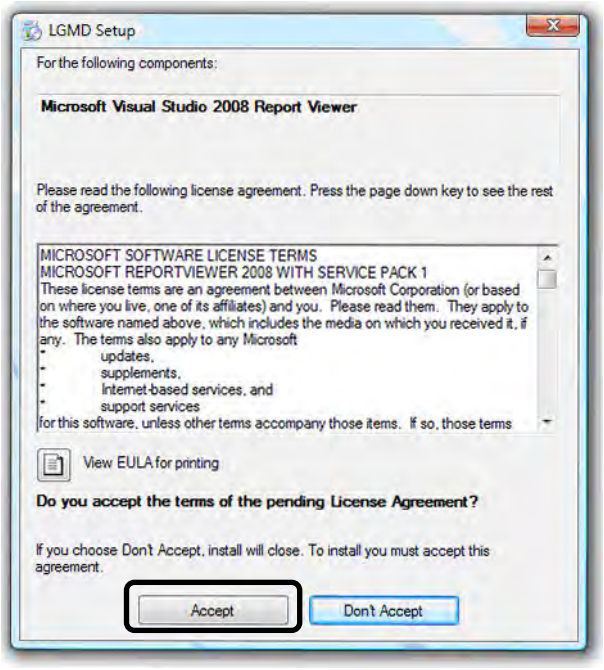


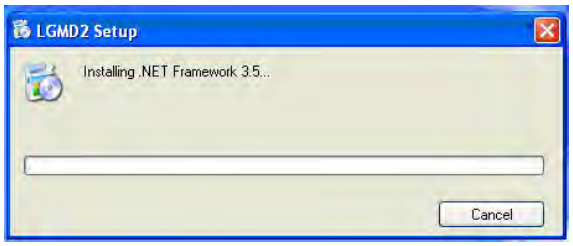
Tips 2

Before LGMD2 is installed, up to three different messages may appear, indicating that the following components of LGMD2 are being installed:

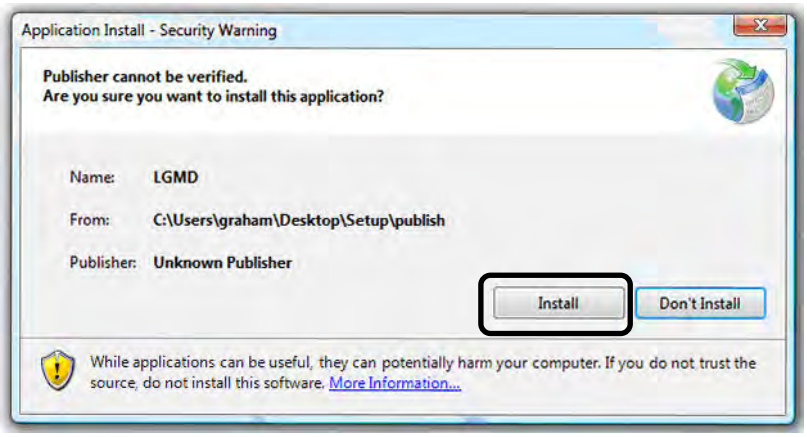
- .NET Framework 3.5
- SQL Server Express
- Visual Studio Report Viewer

A window such as that shown below left may appear on the screen for each item installed. Click **Accept** or **OK** in each case and a smaller window (below right) will indicate the progress of the respective installations.





Eventually, the following window will appear:



Then,

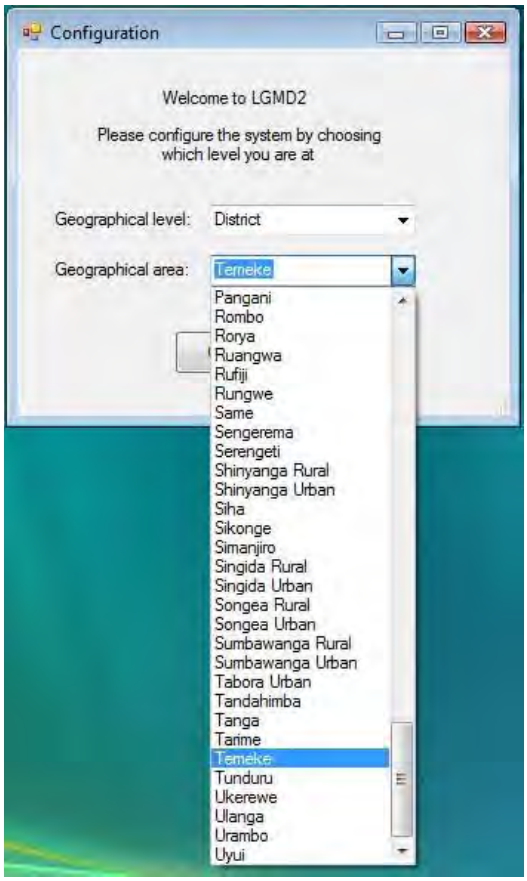
- Disregard the warning that the 'Publisher cannot be verified' and click the **Install** button
- Follow the onscreen instructions

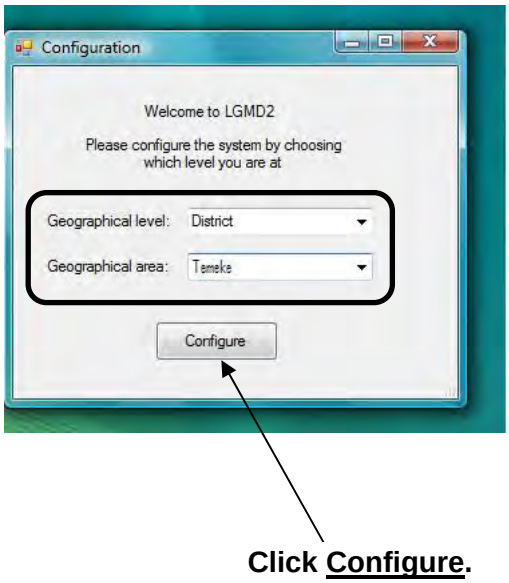
If installation fails with some error messages, see 8.1 in this manual.

2.2.2 Start and Login

If the installation is successful, the following window appears.

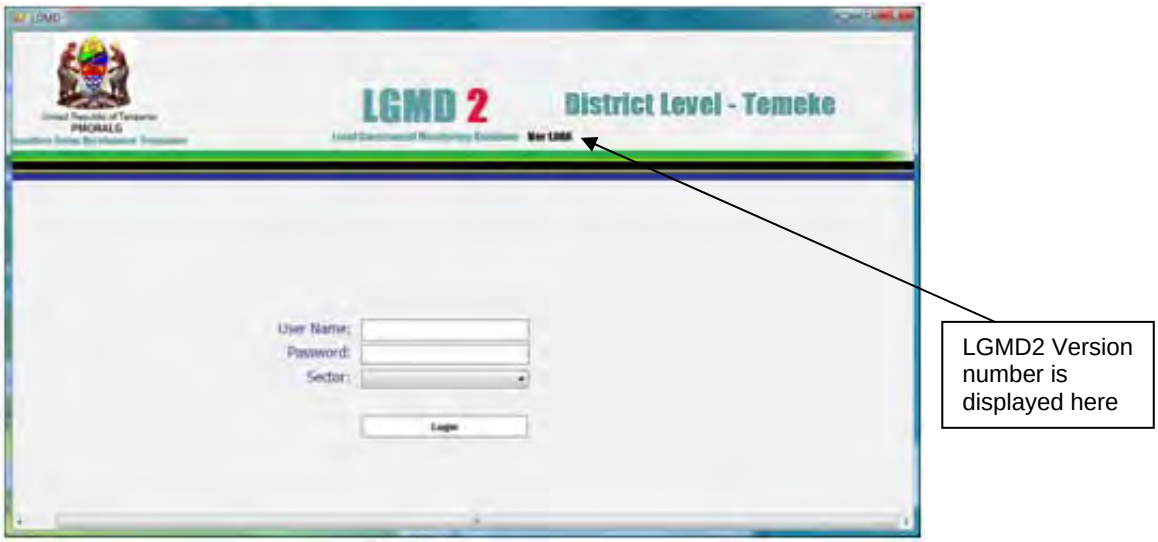
Select Geographical level, and select **District** from the drop-down list. Next, select Geographical area, and then your district name (e.g., “Temeke”) from the drop-down list. Then, click the **Configure** button.





Click Configure.

The LGMD2 software is then set up for a single district and cannot be changed unless another database is created as described later in this manual. After configuration, you see the following screen. Note that the version number is displayed as shown.



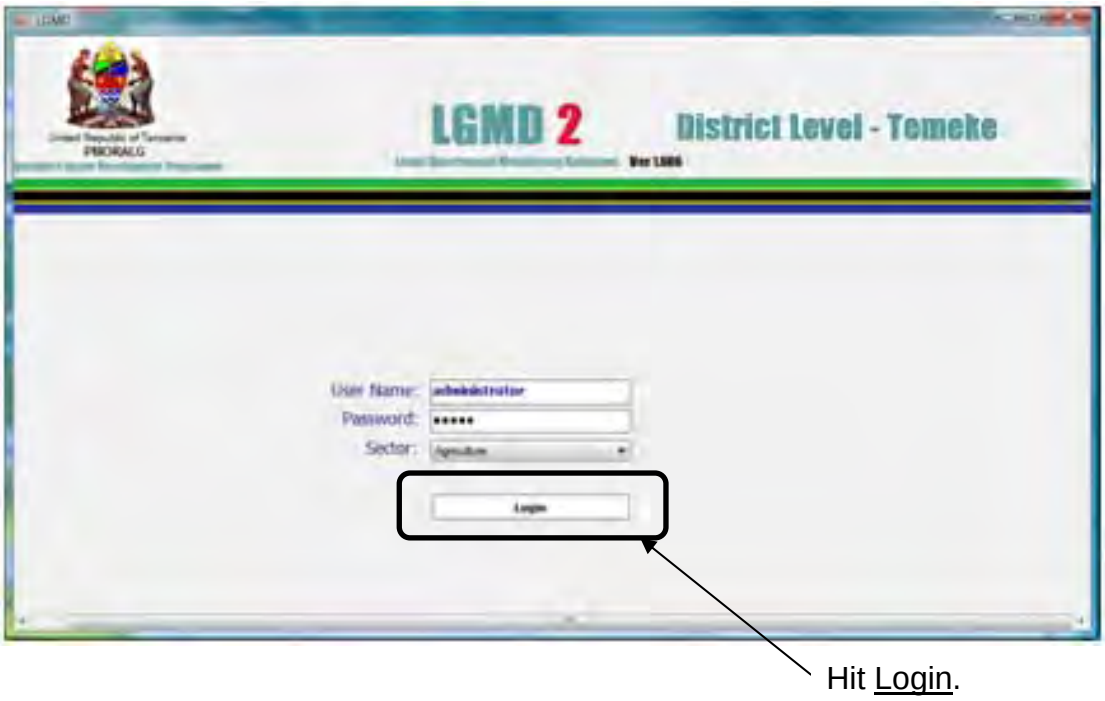
- **Type as follows.**

  <u>User name</u>: administrator

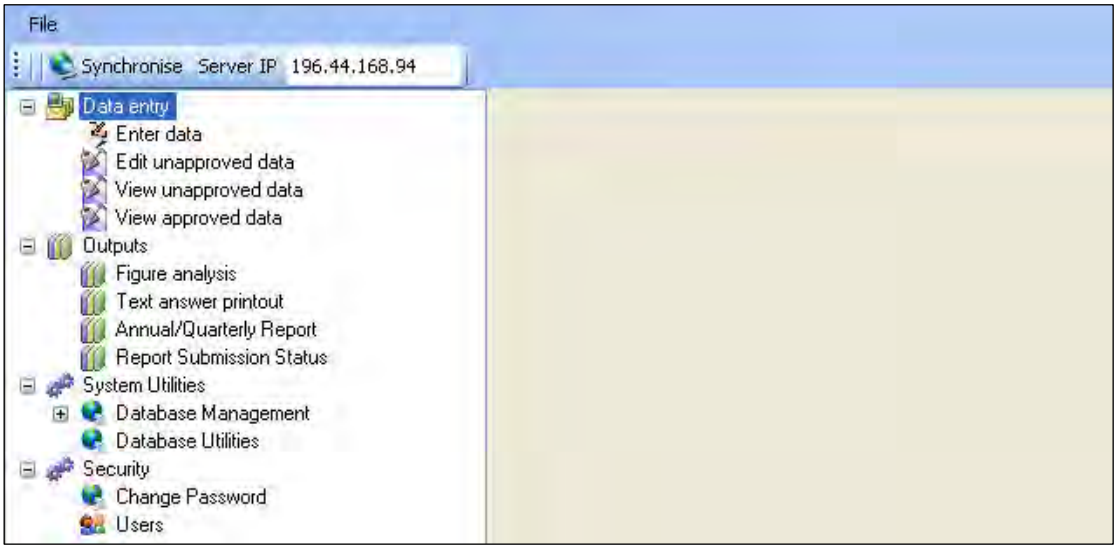
  <u>Password</u>: admin

- **Select "Agriculture" for <u>Sector</u>**

- **Then, hit <u>Login</u>.**

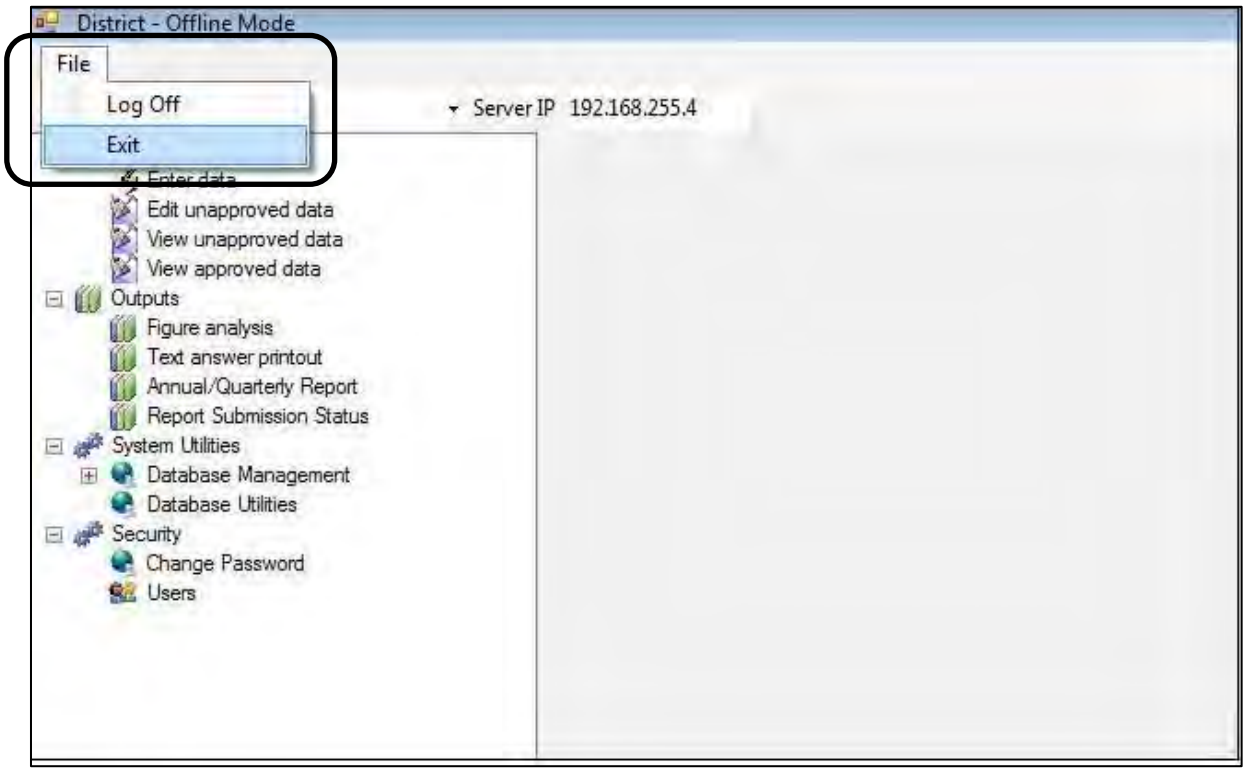


The following screen will then appear.



When you logout from LGMD2,

- **Select File > Exit**



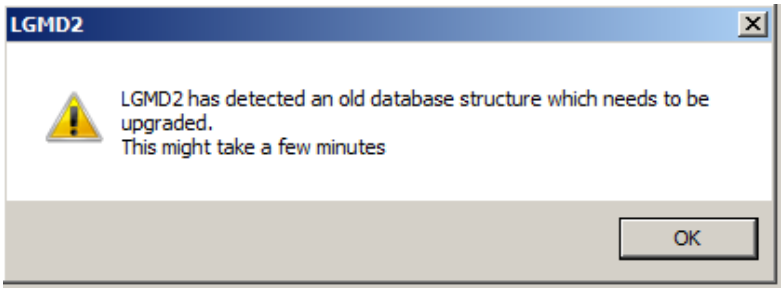
Tips 3

Upgrading LGMD2 to a newer version

If the LGMD2 has already been installed, and it is required to upgrade it, use the following procedure:

1) Back up your data using the method described in 6.1.4 (The existing data will not be deleted when you upgrade, but this is simply good practice)
2) Remove the old version by selecting Start/Control Panel/Add or remove Programs (XP) or Programs and Features (Vista). Select LGMD2 and click Remove (XP) or Uninstall/Change (Vista).
3) Navigate to the new upgrade file and for:
   - Windows XP users: double-click the setup.exe file and follow the instructions
   - Vista users: right click on the setup.exe file and left click 'Run as Administrator'. Then double-click the setup.exe file and follow the instructions

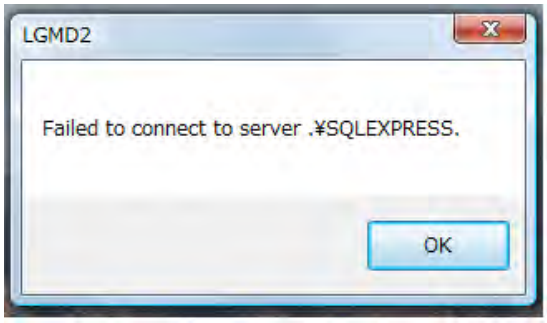
After upgrading, when the user logs in, a warning appears as follows.



Simply click **OK** and proceed. The system will automatically update the database so that data already saved is also updated. In case this message does not appear, follow the procedure described in 6.2 and select the same database you are using. Then, the message will appear.

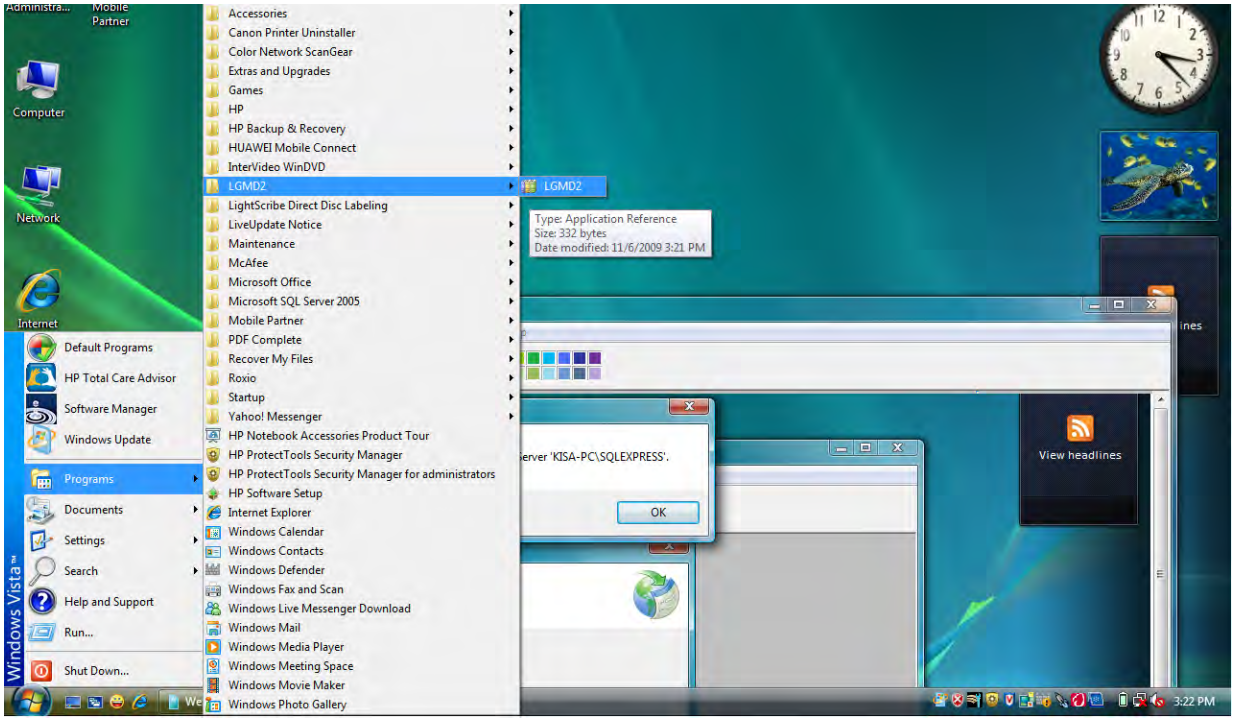
Error in upgrading

After you upgrade for LGMD2, the error on the right may appear. If so, see 8.1.2 for further information.



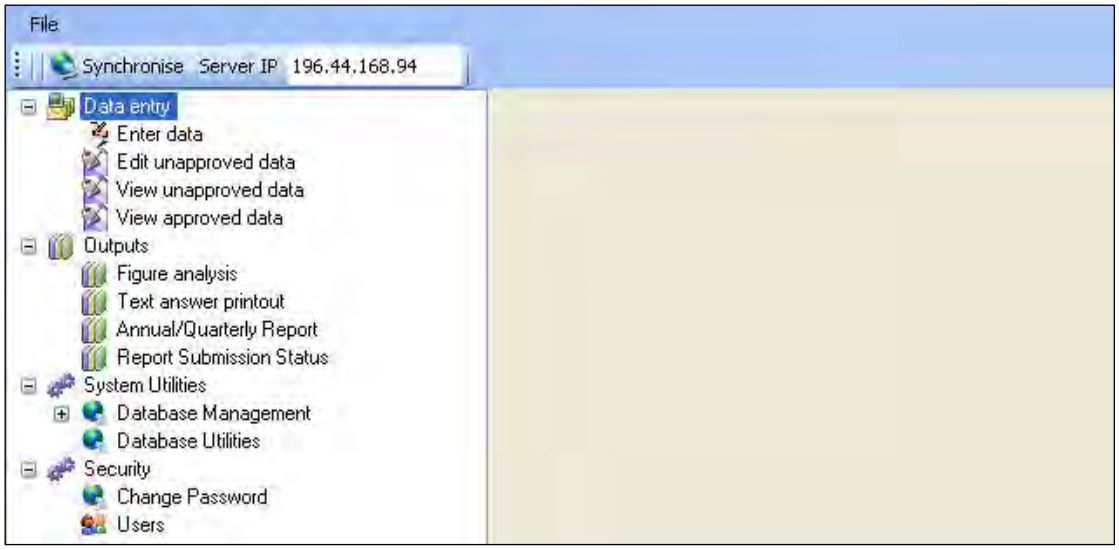
2.3 Starting LGMD2

➢ **Select Start Menu > Program > LGMD2**



Then, you see the same screen when you installed LGMD2 as follows. Enter the user name "administrator" and password "admin", select sector ("Agriculture"), and click Login.

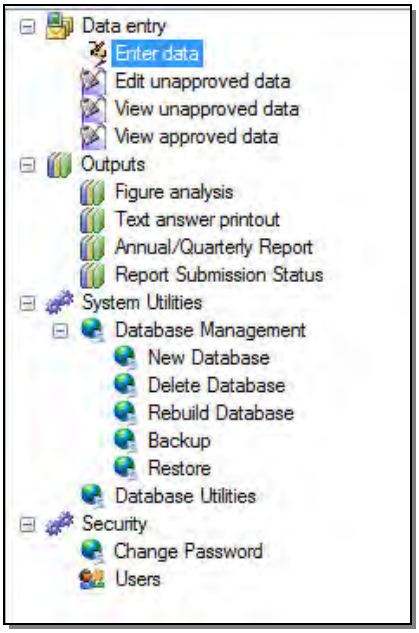
Then, the main screen appears.



2.4 Main Screen Components

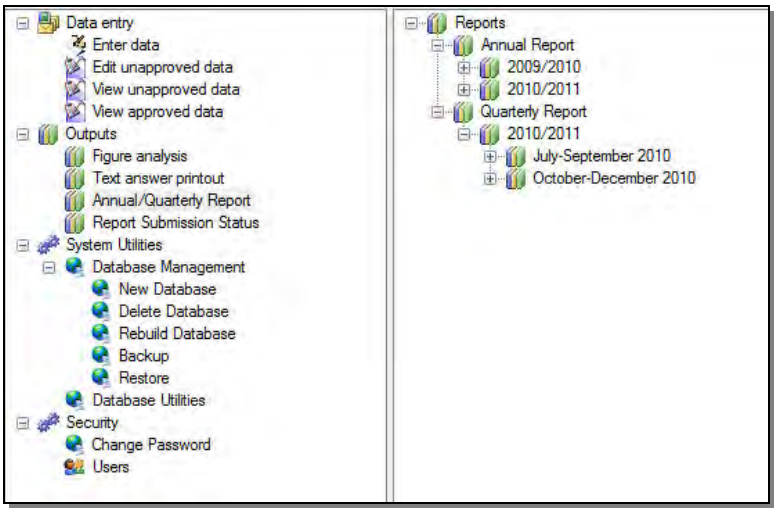
2.4.1 Treeview column

On the left of the main screen is the 'tree-view' of the different functions of LGMD2. By clicking on any option, the details are displayed in the right hand pane. A '+' sign to the left of an option indicates that further options are available. An enlarged view is shown below.



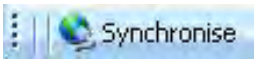
The tree view contains all the options available in LGMD2 and replaces the 'switchboard' used, for example in the original LGMD. Select any option at any time by simply clicking on it, and the relevant screen will be displayed in the right.

Note that for some options, e.g. Annual/Quarterly Reports a second tree is opened as follows.



2.4.2 Online and Offline Modes

At the very top left is the 'synchronise' button that indicates to the user whether or not there is an internet connection. When there is no internet connection, the button appears as shown on the left and it is inoperable. When there is an internet connection, the button appears as shown on the right and it can be operated to synchronise the data entered locally with that on the LGMD2 main server.



In addition to the above changes, at the bottom right of the screen the following are displayed whenever the internet status changes, in order further to inform the user:

2.4.3 The Server IP box

This box contains the 'IP address' of the main LGMD2 server. This will be automatically entered, and should only be changed when instructed by the systems administrator who controls the main LGMD2 server.

The latest IP address is:

41.216.218.60

(Note)

- You will see the previous IP address in some screen shots in this manual. In actual operation, use the latest IP address.

2.4.4 Main screen

On the right is the main screen which displays what is selected by the user from the tree view column. The following chapters describe in detail how the system can be used for data entry, data export, and data analysis, etc.

2.5 Creating Users

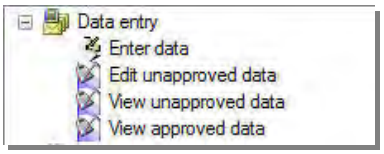
The system administrator/supervisor for LGMD2 must create users of the software as soon as possible so that the system can be used correctly. The **Administrator** login and the associated password must not normally be used. See the chapter 7 on 'Security' for details of how to create users and user groups.

Chapter

3

3 Data Entry

There are four options for data entry – Enter data, Edit unapproved data, View unapproved data and View approved data. These are displayed in the part of the tree view shown on the right.

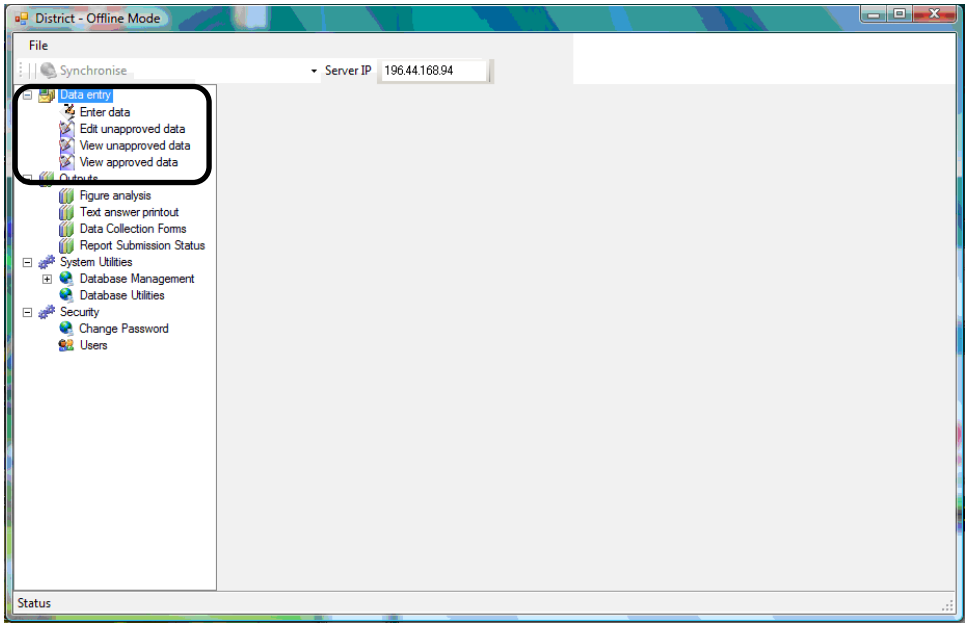


There are three kinds of data entry form: Annual Report, Annual Target Report, and Quarterly Report. Data forms are treated by the system as one form, regardless of the number of pages. When no report form has been created for the period required, a new form for that period, starting from the Annual Target Report, must first be created. 'Enter data' option is used to create a new form. Once a form is created, for a particular year or quarter, no other form for that period can be created to avoid duplication of data entry. An error message appears if you attempt to do this. Data for any particular period can be added or amended as required using the 'Edit data' option. Data can be viewed at any time by selecting the 'View data' option.

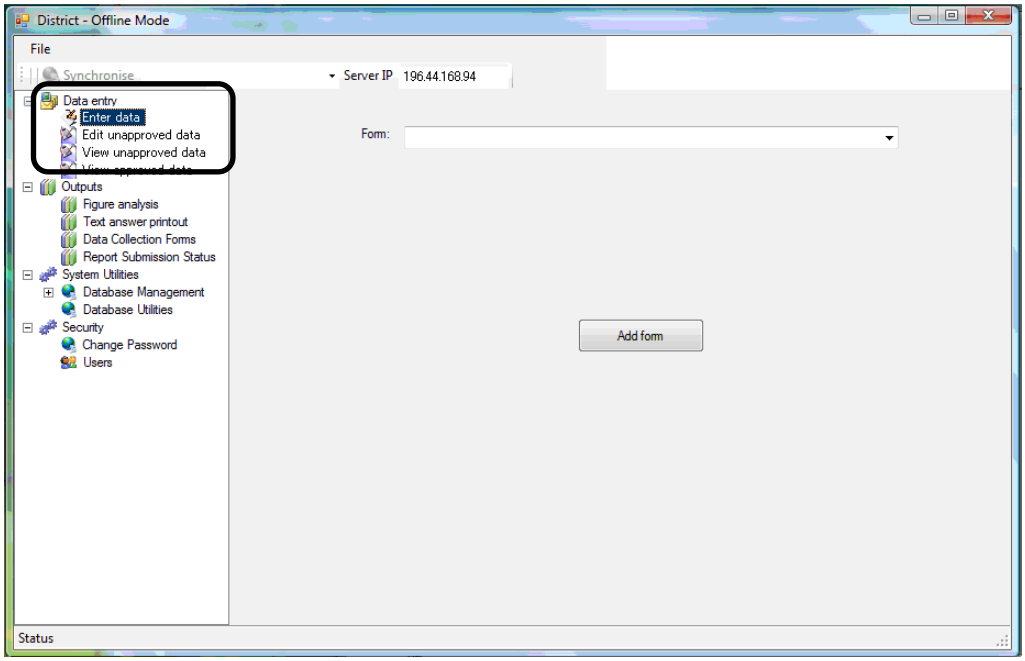
3.1 Entry Form and Data Entry

3.1.1 Annual Target Report

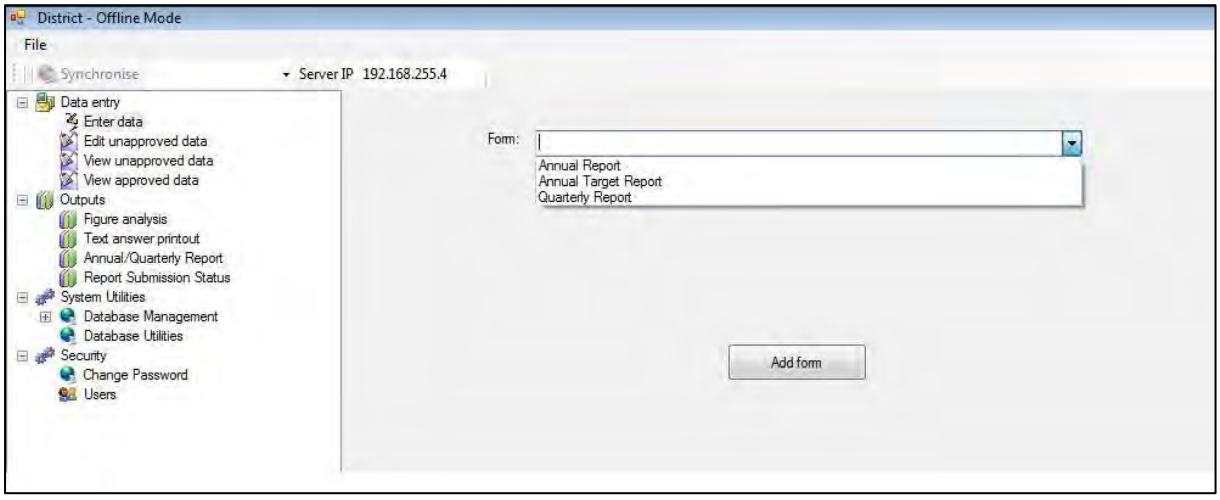
➢ **Select <u>Data entry</u>.**



- **Select <u>Enter data</u>.**

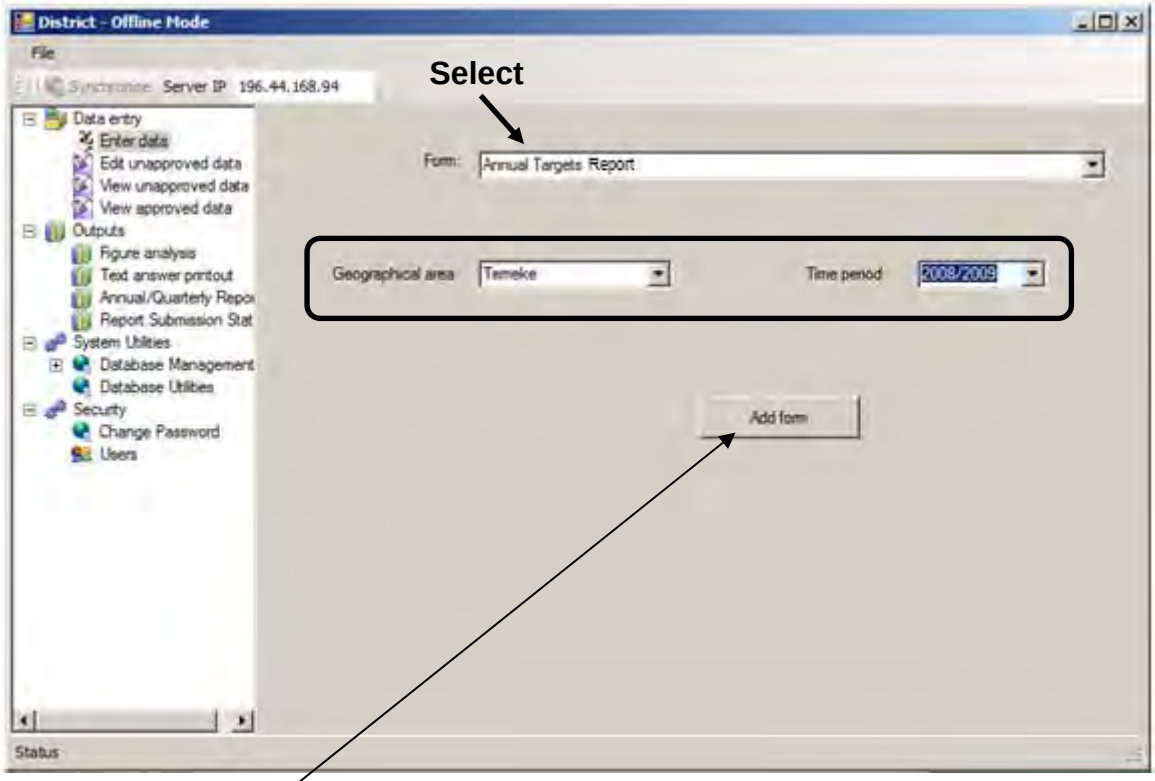


There are three options in the drop-down list: Annual Report, Annual Target Report, and Quarterly Report.



- **Select <u>Annual Targets Report</u>, <u>Geographical area</u> (e.g., Temeke) and <u>Time period</u> (e.g., 2008/2009).**

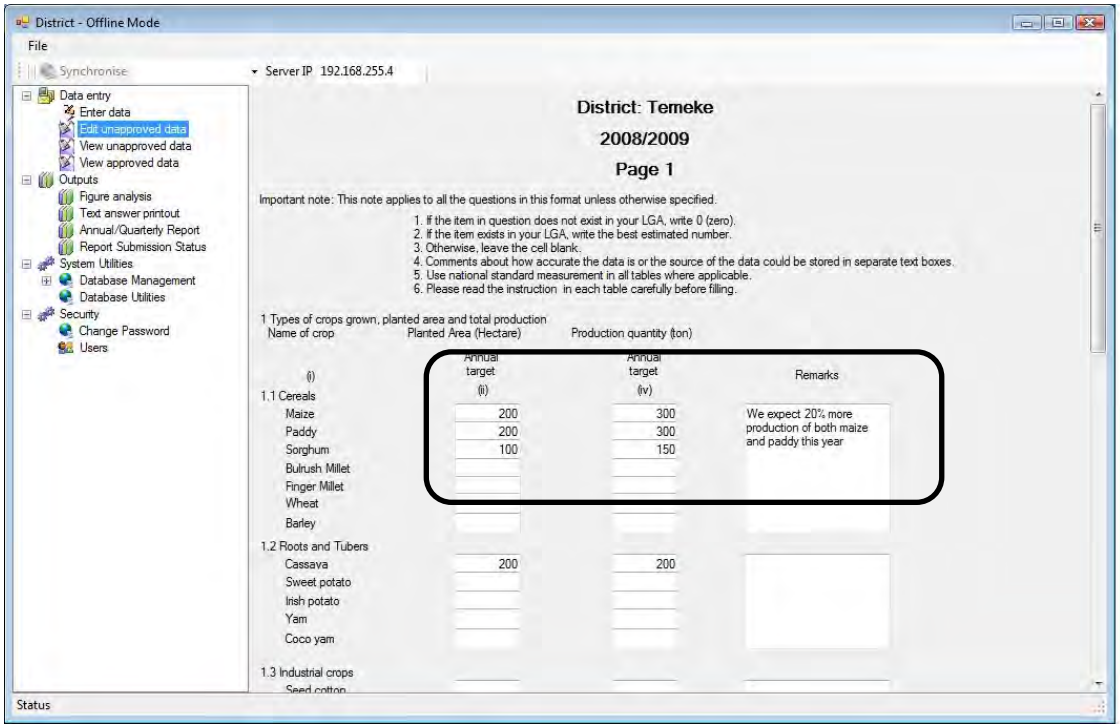
The **'Geographical area'** box automatically displays confirmation of the district for which the software has been set up. The **'Time period'** must now be selected from the drop-down list.



- **Then, click <u>Add Form</u>.**

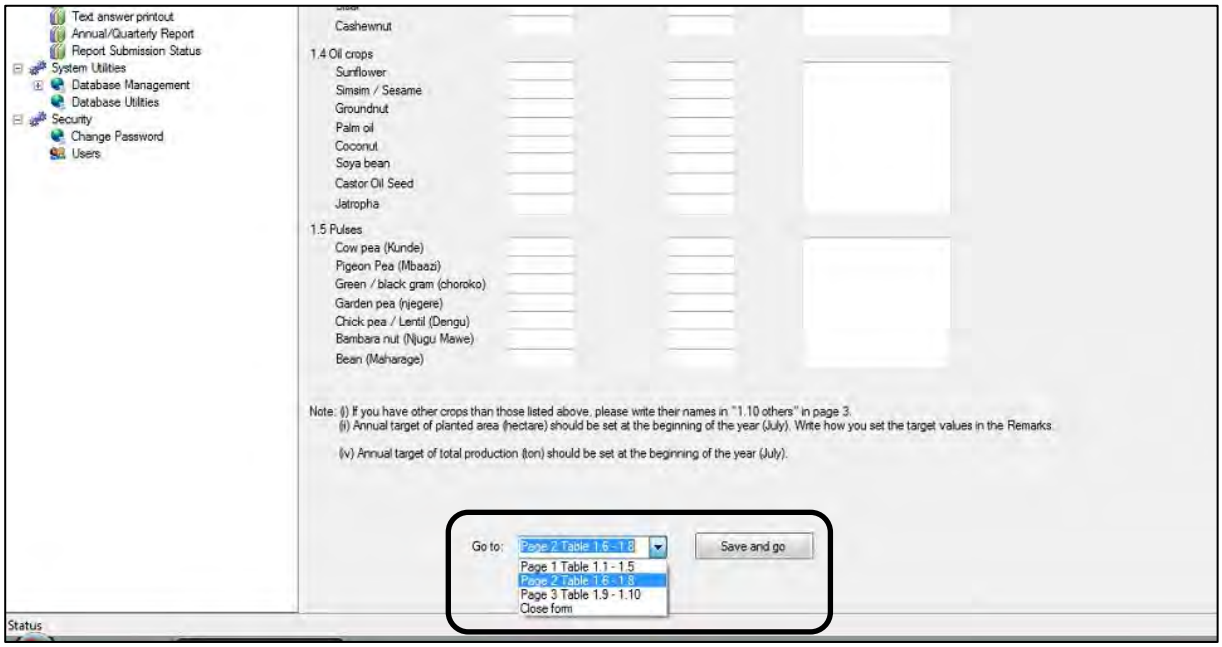
The screen appears displaying the first page of the Annual Target Report.

- **Enter data for each item accordingly.**



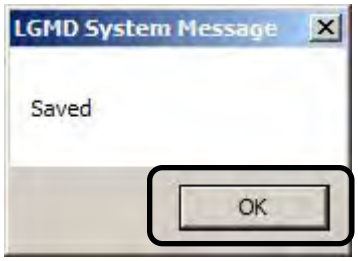
When you go to another page, or close the form,

- **Select any page or <u>Close form</u> from the drop-down list, and Click <u>Save and go</u> at the bottom of the form**



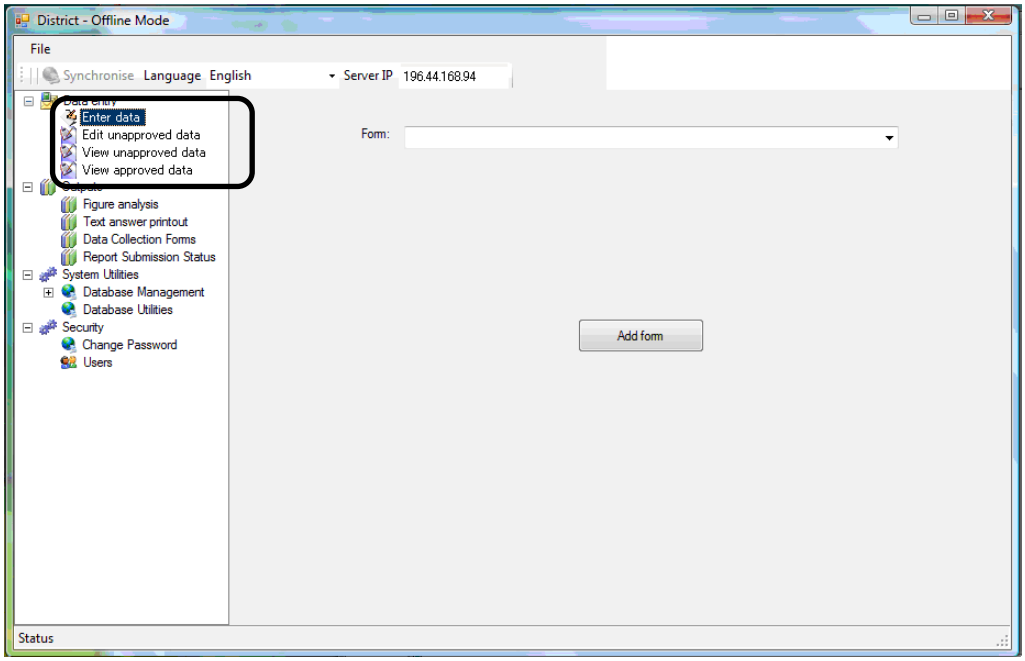
You can see the following box.

- **Hit <u>OK</u>.**

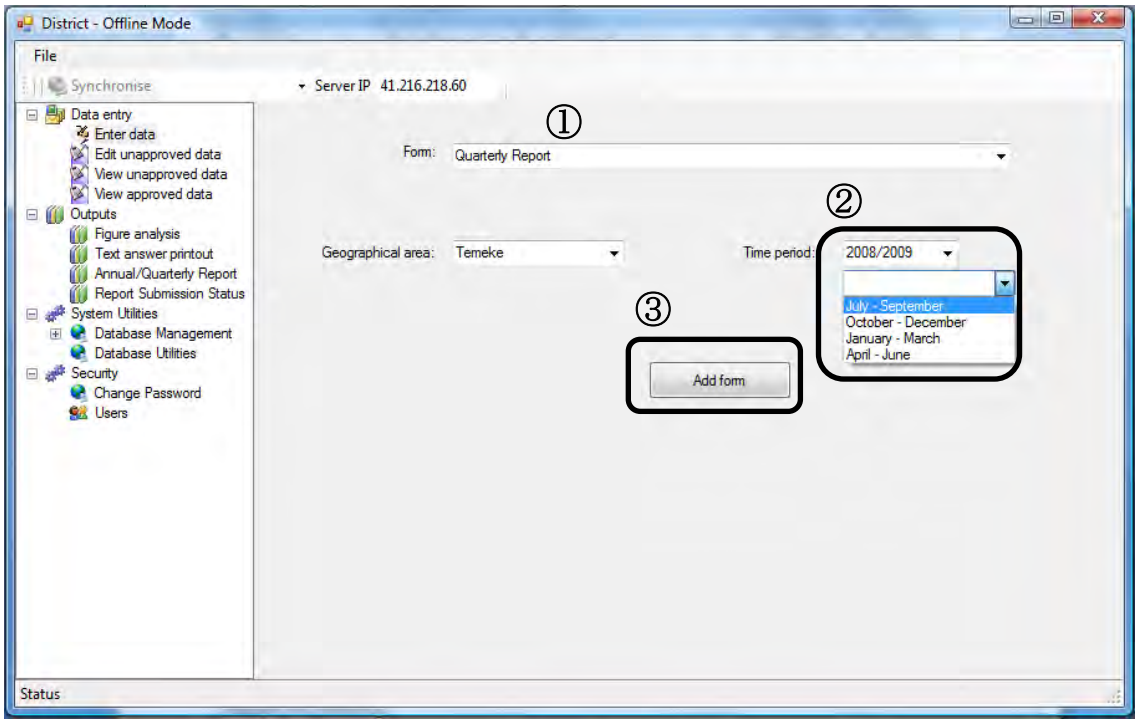


3.1.2 Quarterly Report

- **Select Enter data.**

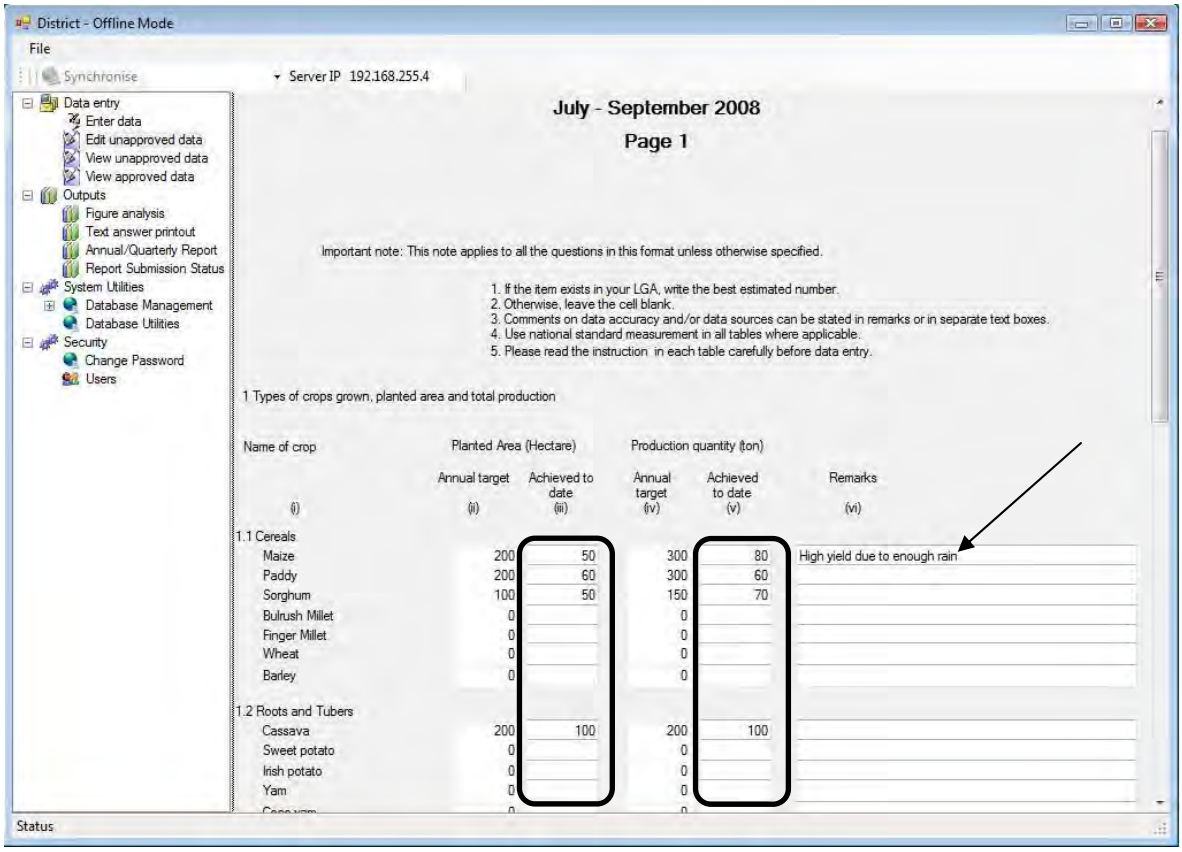


- **Select <u>Quarterly Report</u>, and <u>Time period</u> (e.g., 2008/2009, July-September) from the drop-down list. Then, Click <u>Add form</u>.**



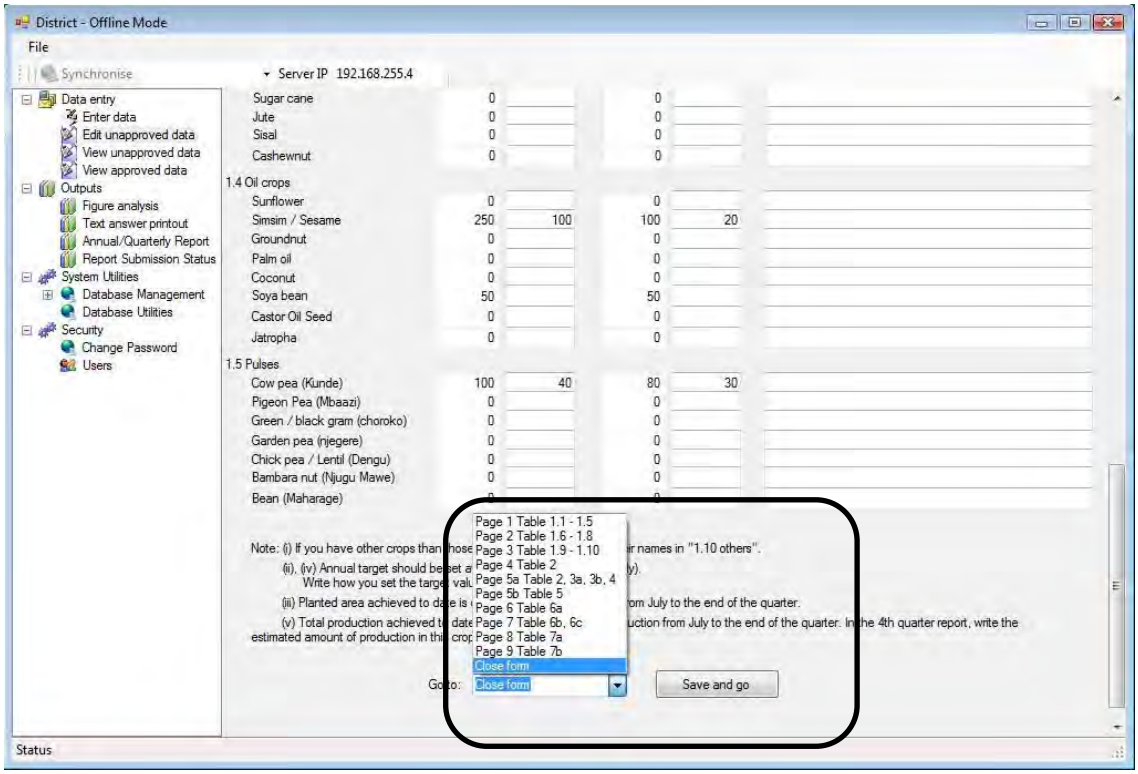
The screen appears displaying the first page of the Quarterly Report.

- **Enter data for each item accordingly.**

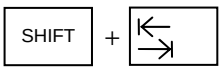


When you go to another page, or close the form,

- **Select <u>any page</u> or <u>Close the form</u> from the drop-down list, and click <u>Save and go</u> at the bottom of the form**



(Note)

- In Table 1 ('Types of crops grown, planted area and total production'), the figures that you previously input in the Annual Target Report appears under the "Annual target" heading, but cannot be changed in the Quarterly Report. If any figures of the annual target are incorrect, you must go back to the Annual Target Report to change them (To do so, see 3.2.1 for details.).
- In 1.10 (Other crops) of Table 1, you cannot enter the name of crops unless the targets for the year in question have been entered already in the Annual Target Report. If it is required to enter figures for 1.10, go to the Annual Target Report form and enter the names of the other crops as required, together with the target.
- After the Annual Target Report has been approved at regional level, the targets cannot be changed in principle. In that case, contact regional agricultural officers to get permission for data correction. The regional agricultural officers remove the approval status of the submitted report if they regard data correction as reasonable. In order to check approval status, you have to go to Report Submission Status on LGMD2 screen (See 5.4 for details.).
- When you attempt to enter alpha-numeric data in a box requiring a figure, that system will show an error message.
- For tables with boxes for text (non-numeric) data, the data rows entered are automatically sorted in alphabetical order after saving. Therefore, it is recommended that you finish entering data for such a table before saving it (if you stop data entry in the middle and save, it will be difficult to find where you should resume data entry when you go back to that table).
- Moving from one cell to the next, you can simply hit tab button  of your computer keyboard.
- Moving back to the previous cell, hit tab button with sift: 

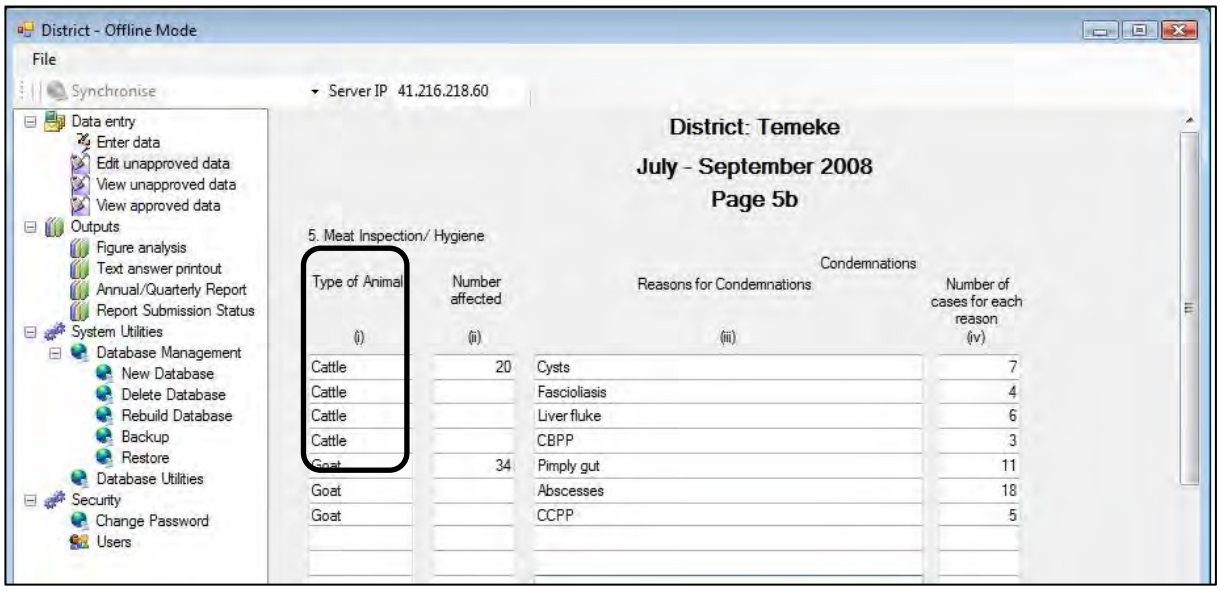
Tips 4

In any entry forms, LGMD2 automatically sorts the rows with text data cell in alphabetical order after saving the page. Therefore, when entering data in the table whose first cell to the left is open for text data, you should be careful.

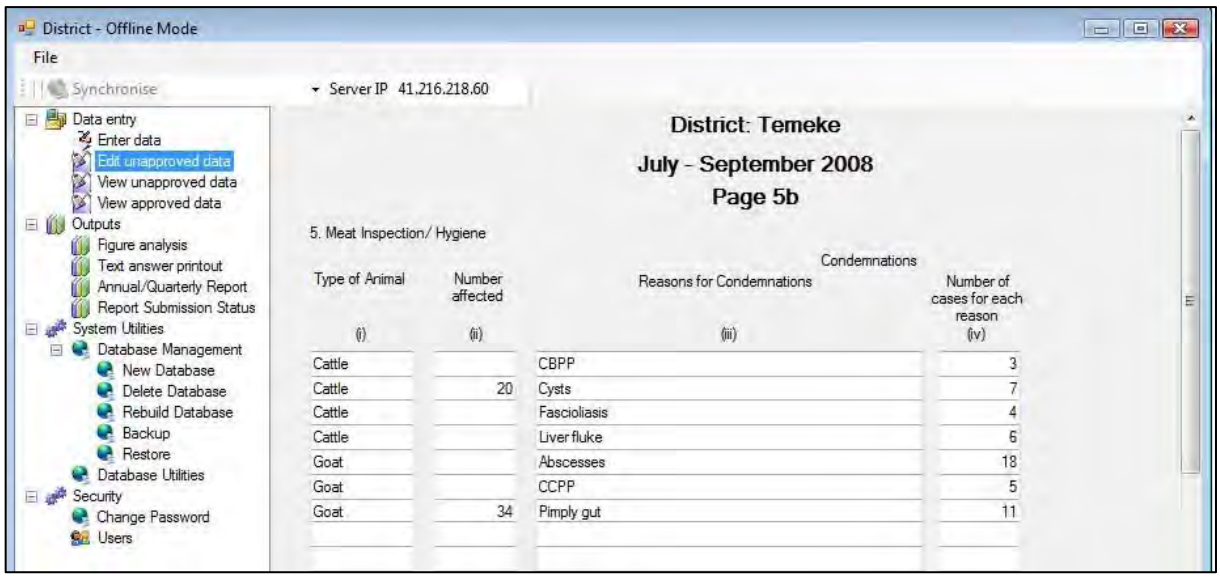
(Example: Table 5 'Meat Inspection / Hygiene' in the Quarterly Report)

- Twenty heads of cattle are affected in total. They are further divided by 4 different reasons (Cysts: 7, Fascioliasis: 4, Liver fluke: 6, CBPP: 3).
- Thirty-four goats are affected in total, further divided by 3 different reasons (Pimply gut: 11, Abscesses: 18, CCPP: 5).

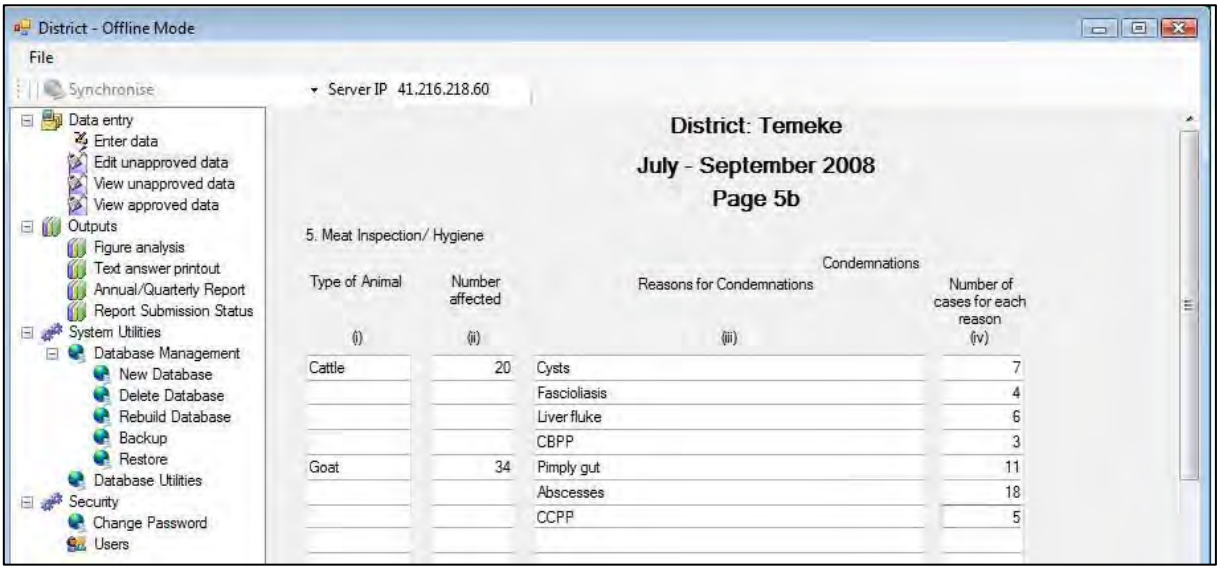
You should enter "Cattle" or "Goat" in every cell for each reason.



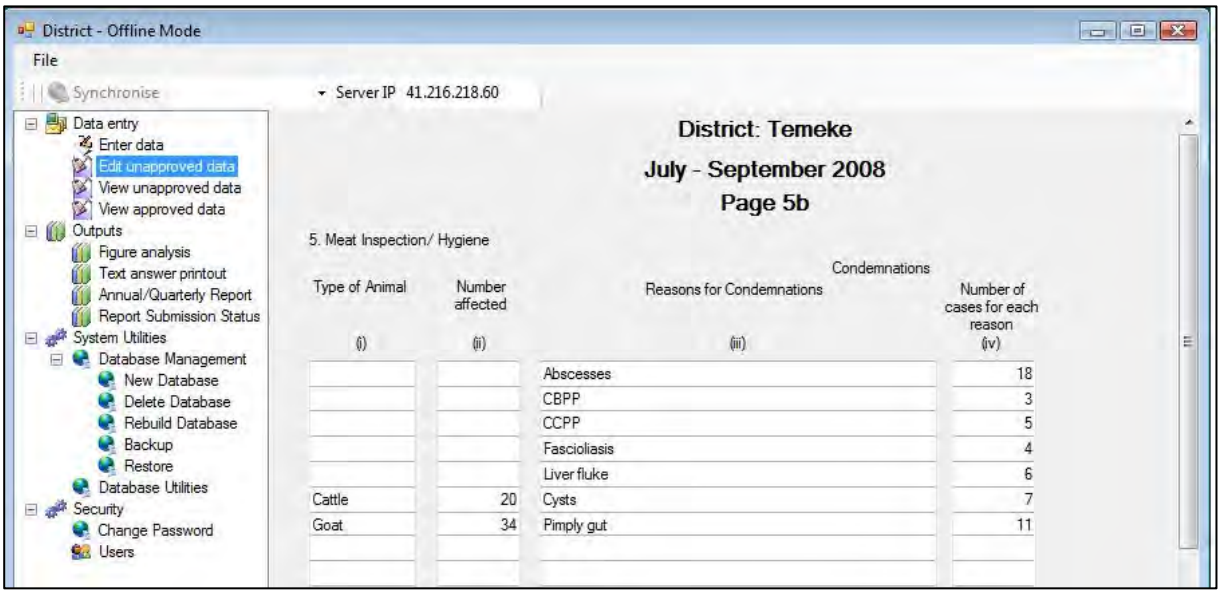
After saving the page, you go back to the page and see the table sorted as follows (Rows are sorted by first "Type of Animal", then "Reasons for Condemnations" in alphabetical order.



If you do not follow this rule when entering data as shown below,

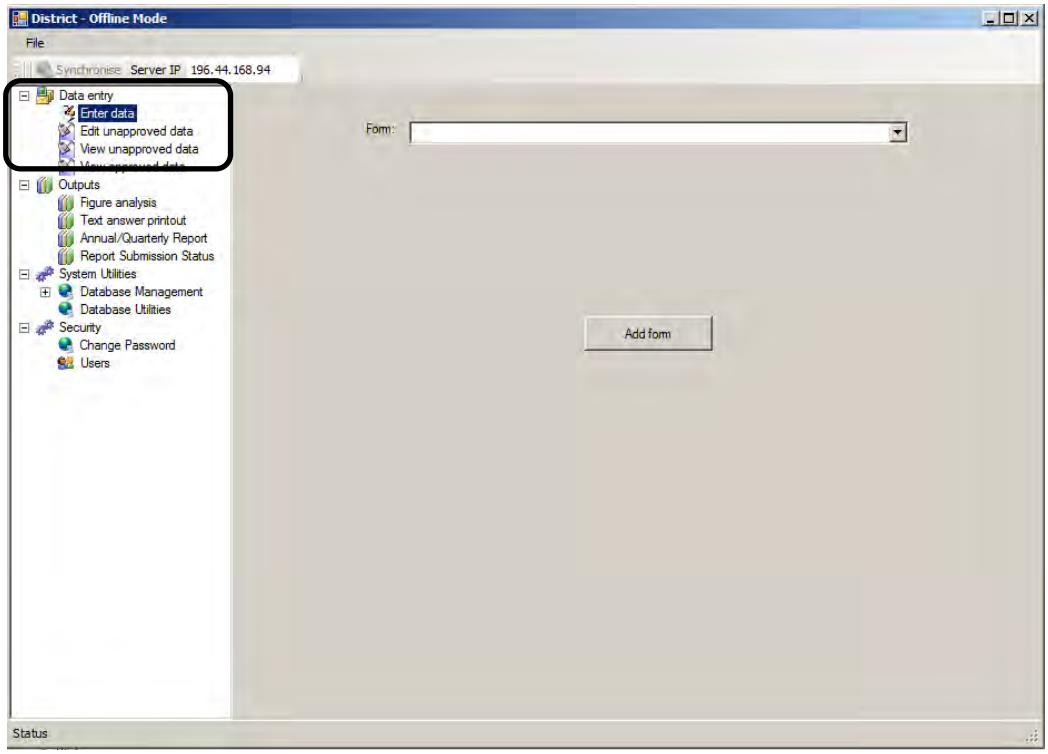


The page appears as follows after saving, and you find that the data are messed up.

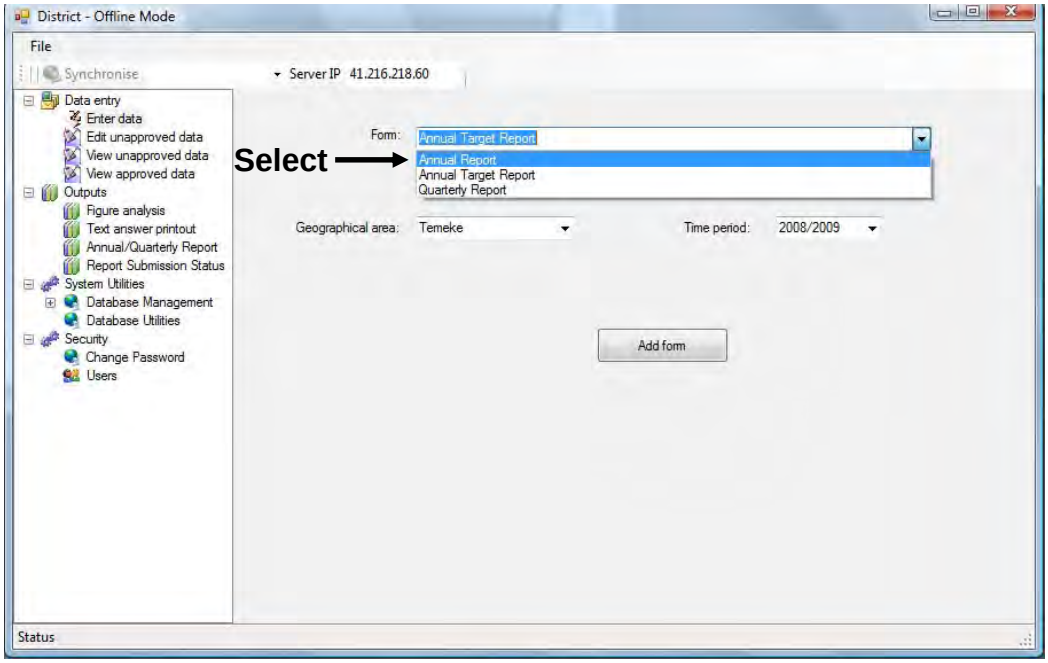


3.1.3 Annual Report

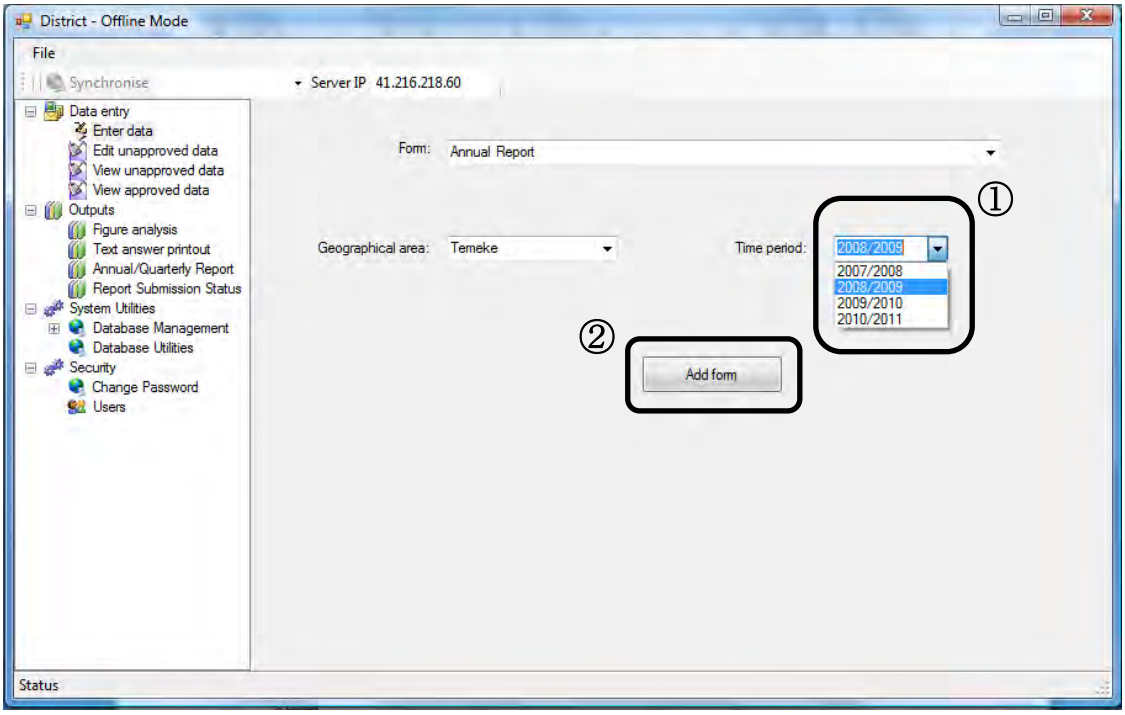
- **Select <u>Data entry</u> > <u>Enter data</u>.**



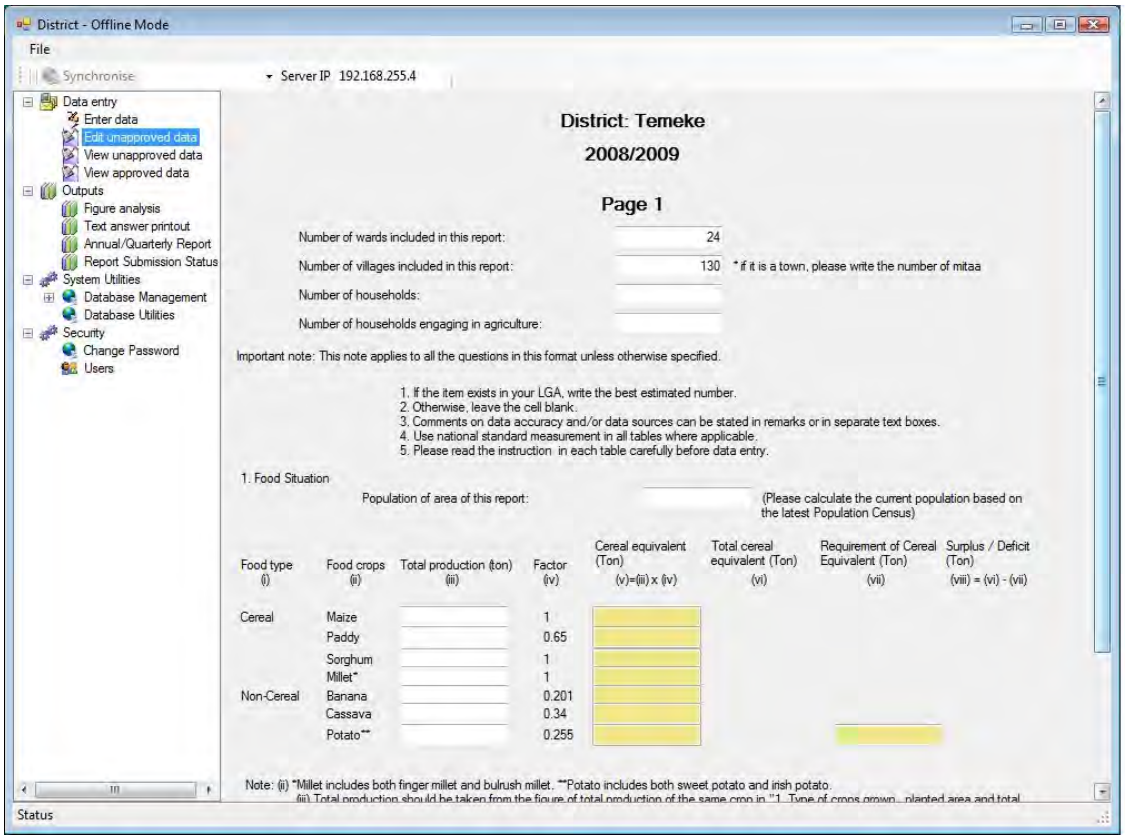
- **Select <u>Annual Report</u>.**



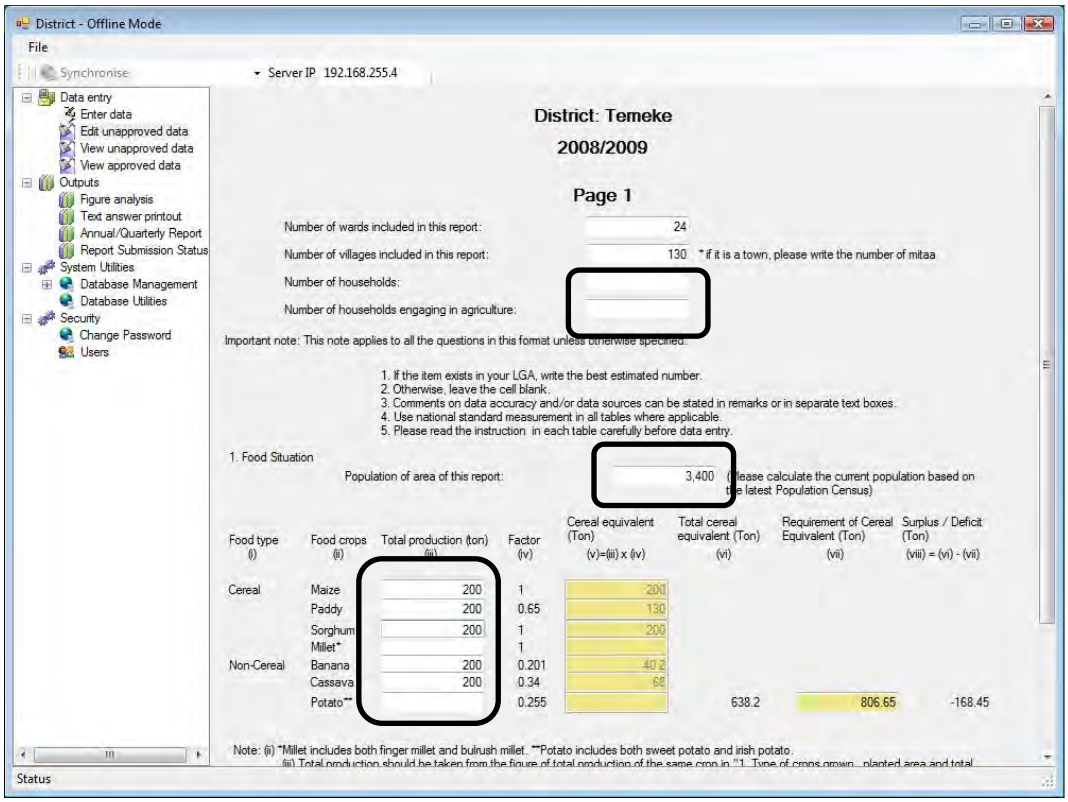
➢ **Select <u>Time period</u> (e.g., 2008/2009) from the drop-down list. Then, Click <u>Add form</u>.**



You see the first page of the Annual Report.



➢ **Enter data as appropriate.**

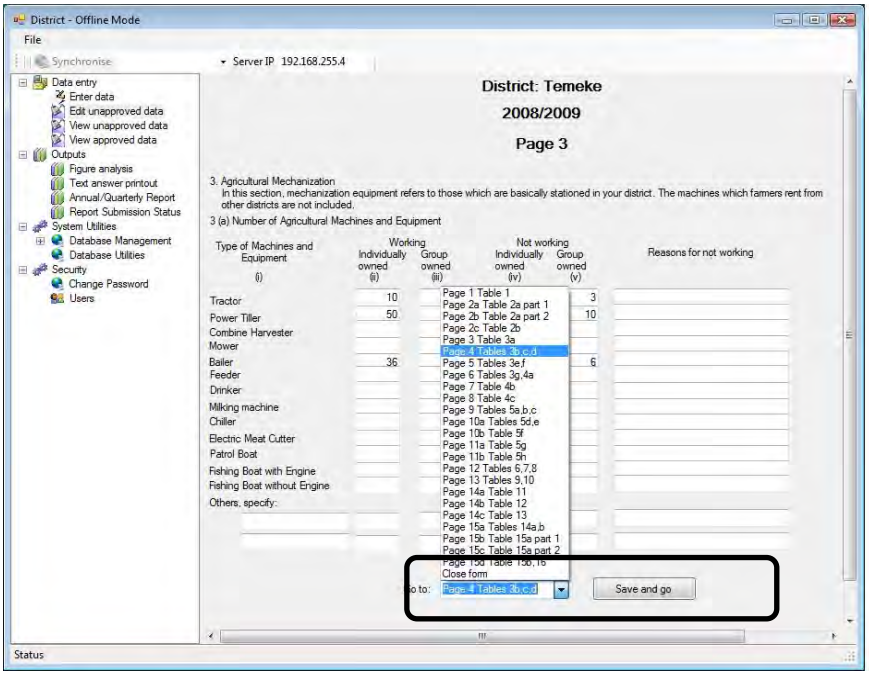


(Note)

- In page 1, when entering the total production of any cereal or non-cereal, the cereal equivalent figure is automatically calculated and entered. Likewise, the surplus deficit figure is automatically calculated once the Cereal Requirement figure is entered.

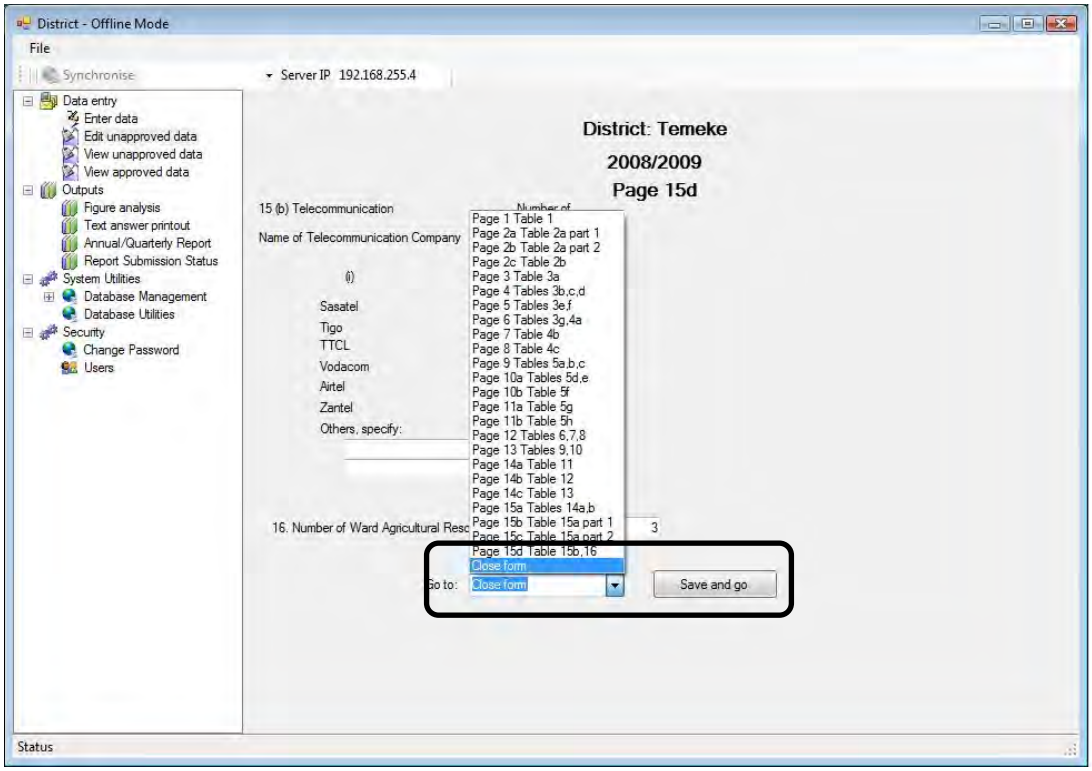
When you go to another page,

➢ **Select any page from the drop-down list, and click <u>Save and go</u> (e.g., moving from Page 3 to Page 4)**



When you finish entering data,

- **Select <u>Close form</u> from the drop-down list, and click <u>Save and go</u>**

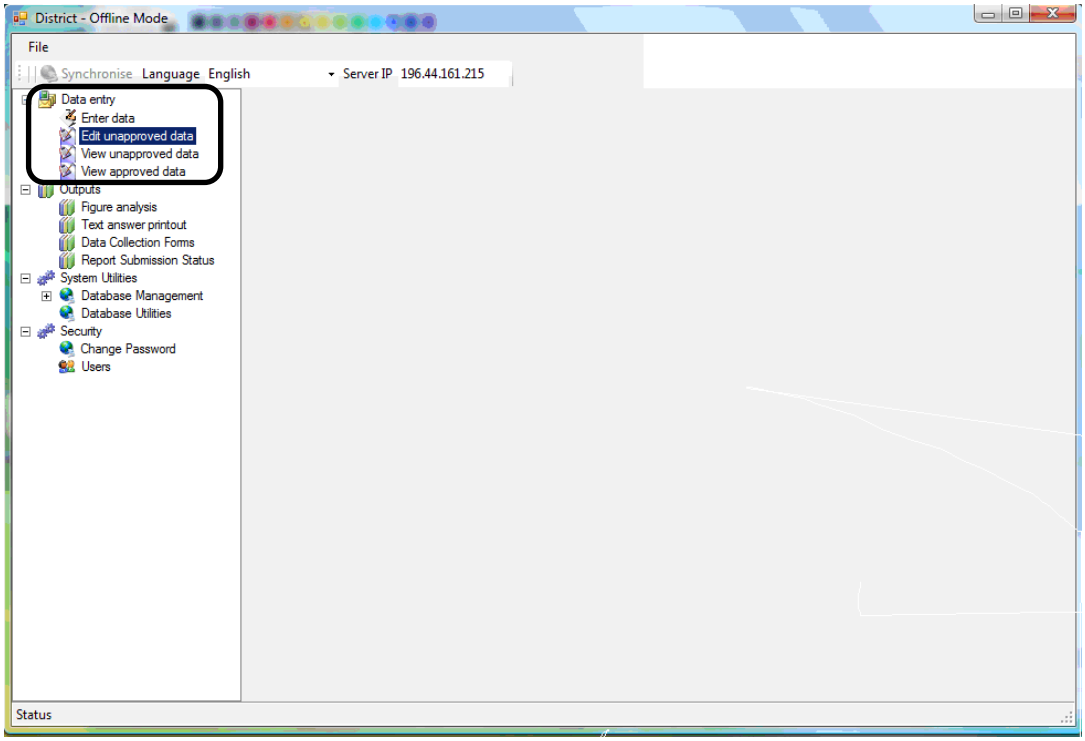


3.2 Editing and Viewing Data

3.2.1 Editing Data

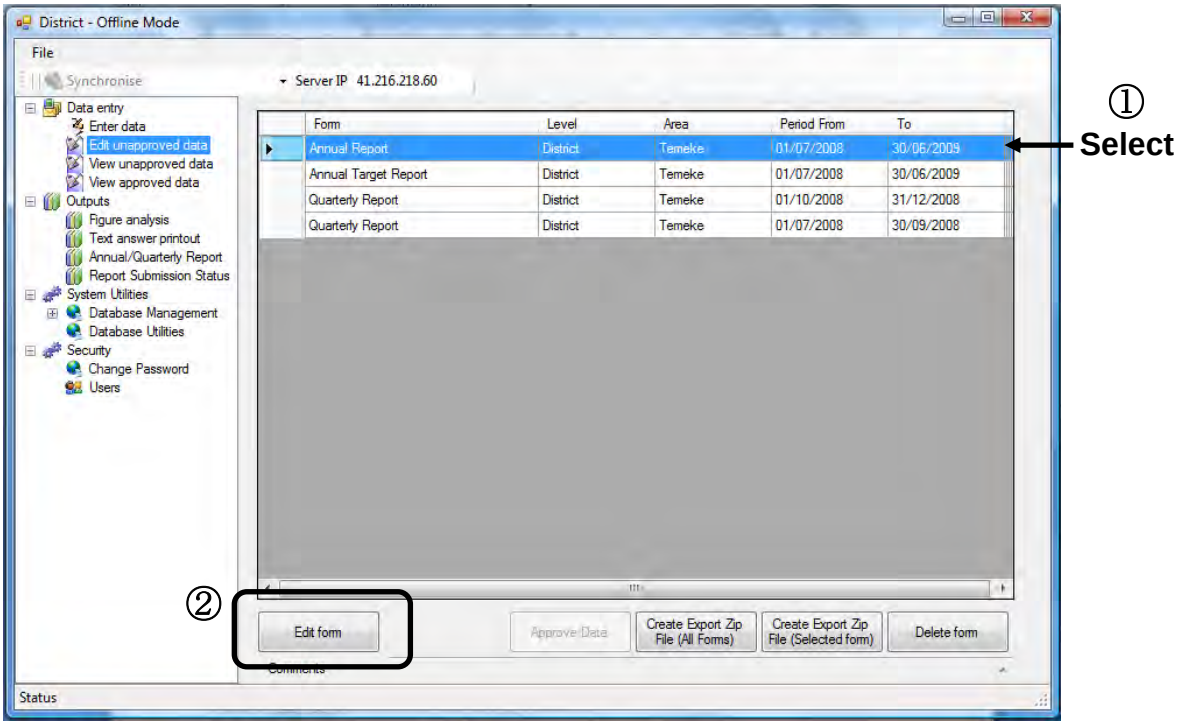
To edit any item on any page of the entry forms of Annual Target, Quarterly, and Annual Report after the form has been saved and closed, follow the steps below.

- **Select <u>Data entry</u> > <u>Edit unapproved data</u>.**

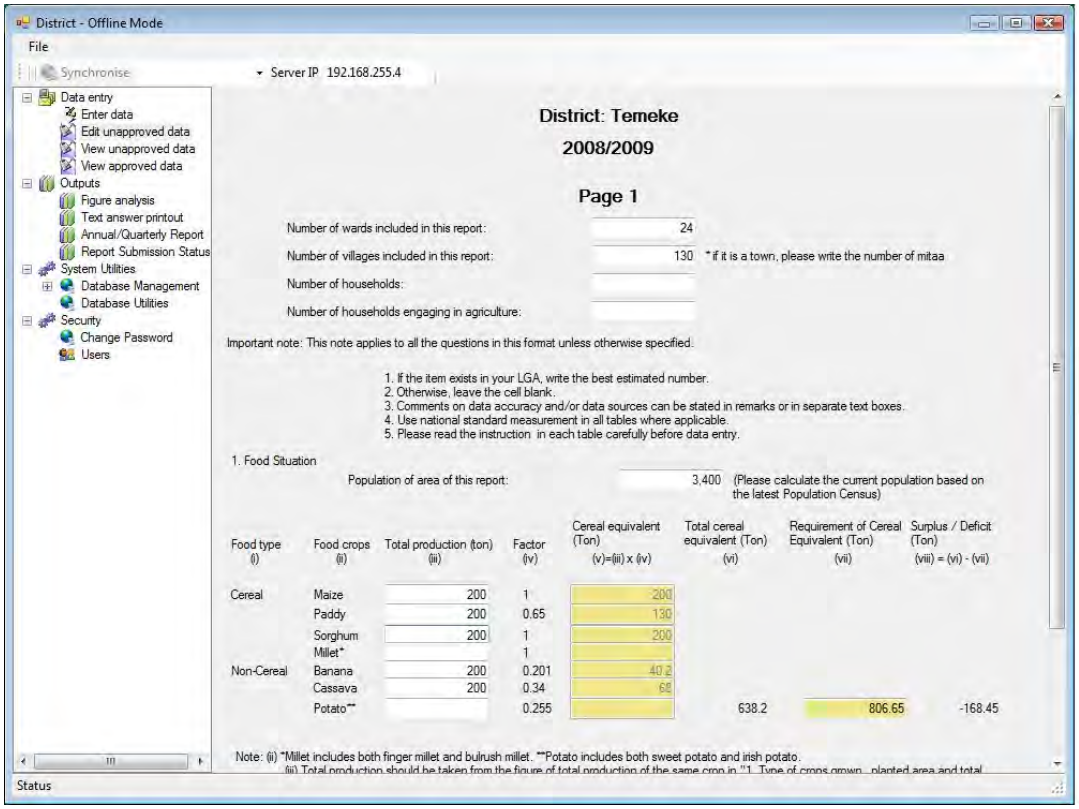


You see a list of reports that you have made.

- **Select the report which you would like to edit (e.g., Annual Report), then click <u>Edit form</u>**



You see the entry form with the data you have entered previously.

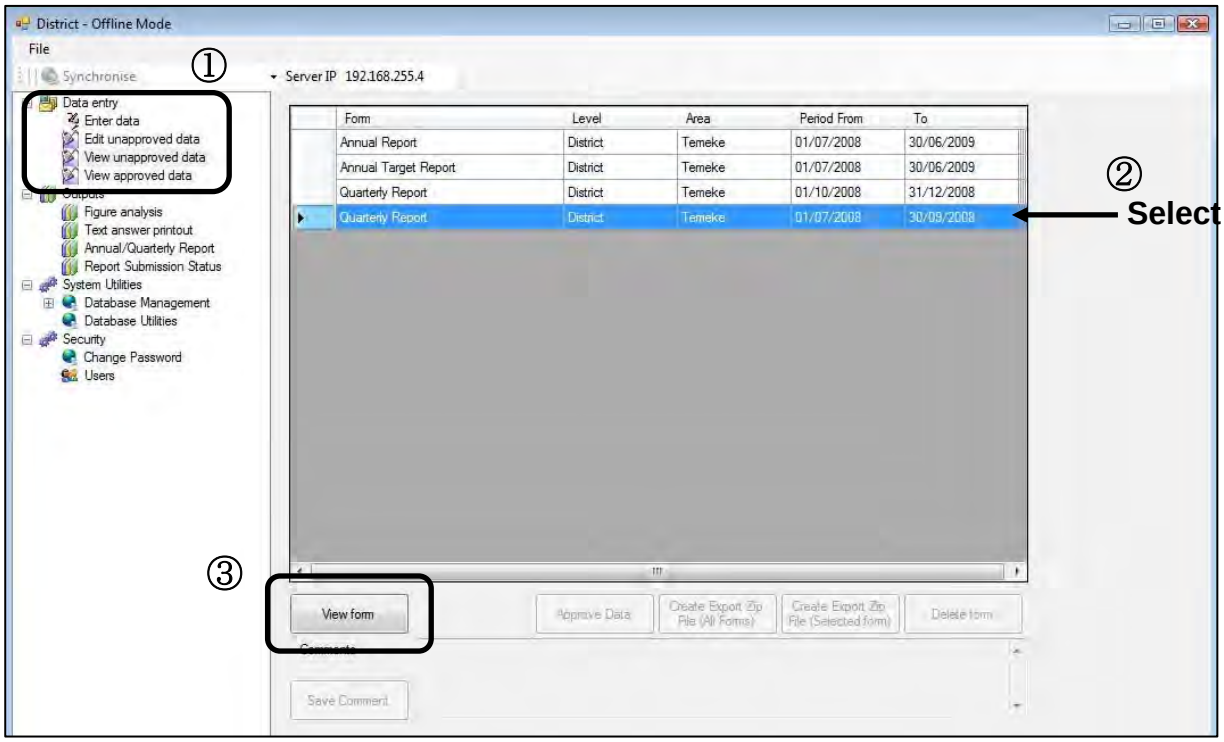


Edit the data as required, clicking **<u>Save and Go</u>** as usual. Note that forms, which have been approved, cannot be edited, but can only be reviewed.

3.2.2 Viewing Data

When you would like to review the data which has been entered for any particular year or quarter, but not yet approved by the region, follow the steps below.

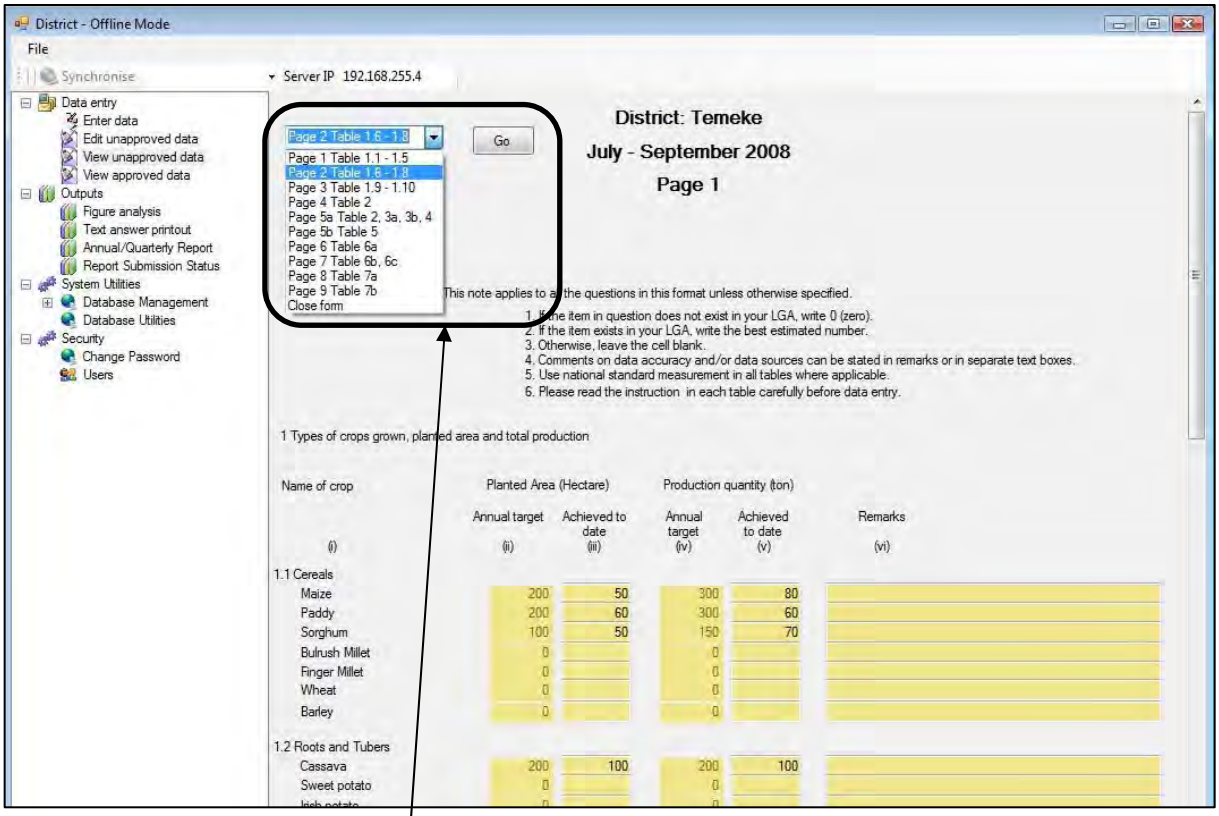
- **Select <u>Data entry</u> > <u>View unapproved data</u>.**
- **Select the report which you would like to view (e.g., Quarterly Report), then click <u>View form</u>**



(Note)

- If there are many reports in the box and difficult to find the one you want to edit, you can sort the reports by alphabetical order according to the name of the form ("Form") and period ("Period from") by clicking the title bar of the box.
- You can review approved data in exactly the same way. (**Select <u>Data entry</u> > <u>View unapproved data</u>.**)
- Note that you cannot edit data on the view screen unless the editing procedure above is followed.

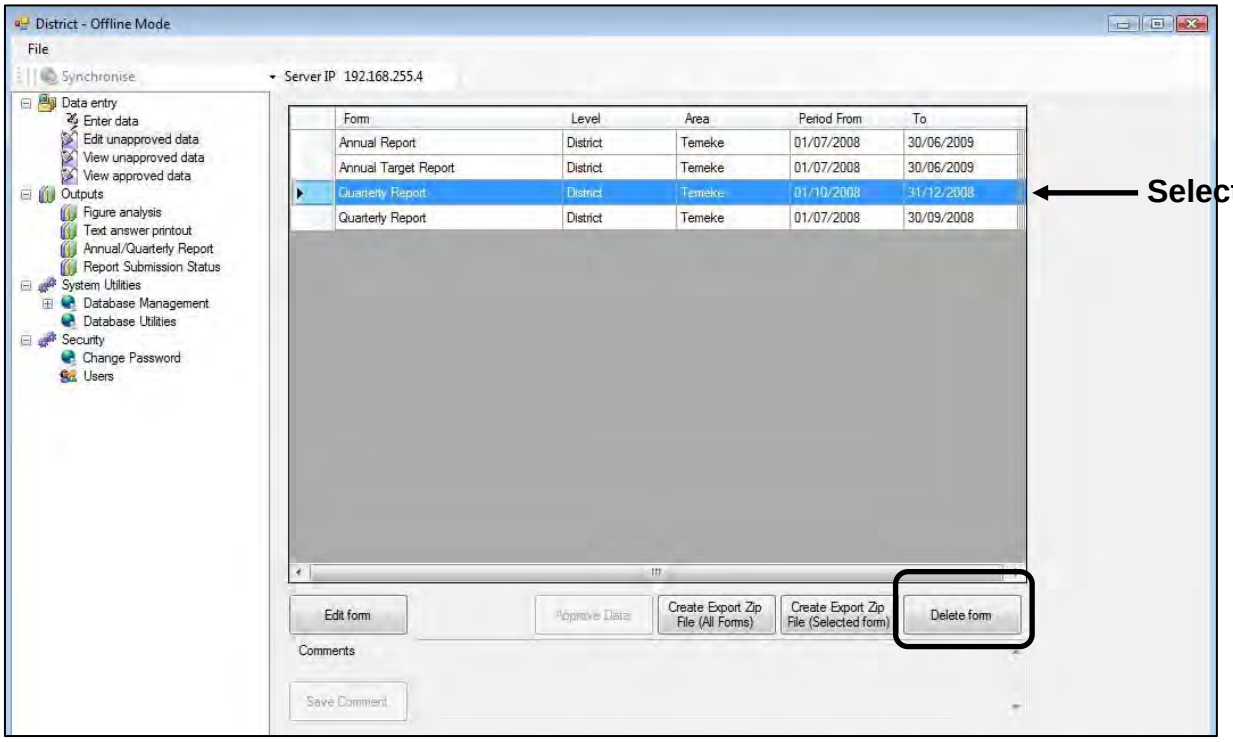
After clicking **View form**, you see the following screen.



To view another page, simply select the page from the drop-down list and **click Go.**

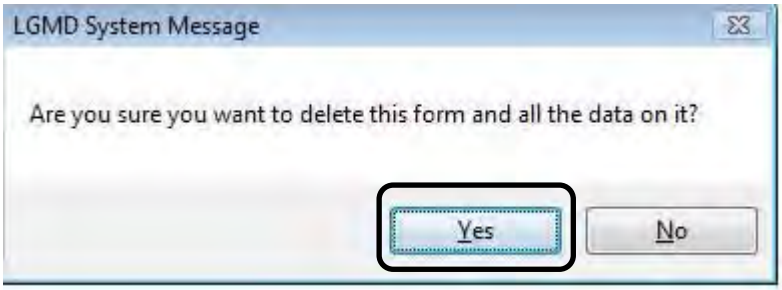
3.3 Deleting a Data Entry Form

- **Select > *Data Entry* > Edit unapproved data**
- **Select the form you want to delete (e.g., Quarterly Report) and click Delete form**



A confirmation message will appear.

- **Clicking <u>Yes</u>**



Chapter

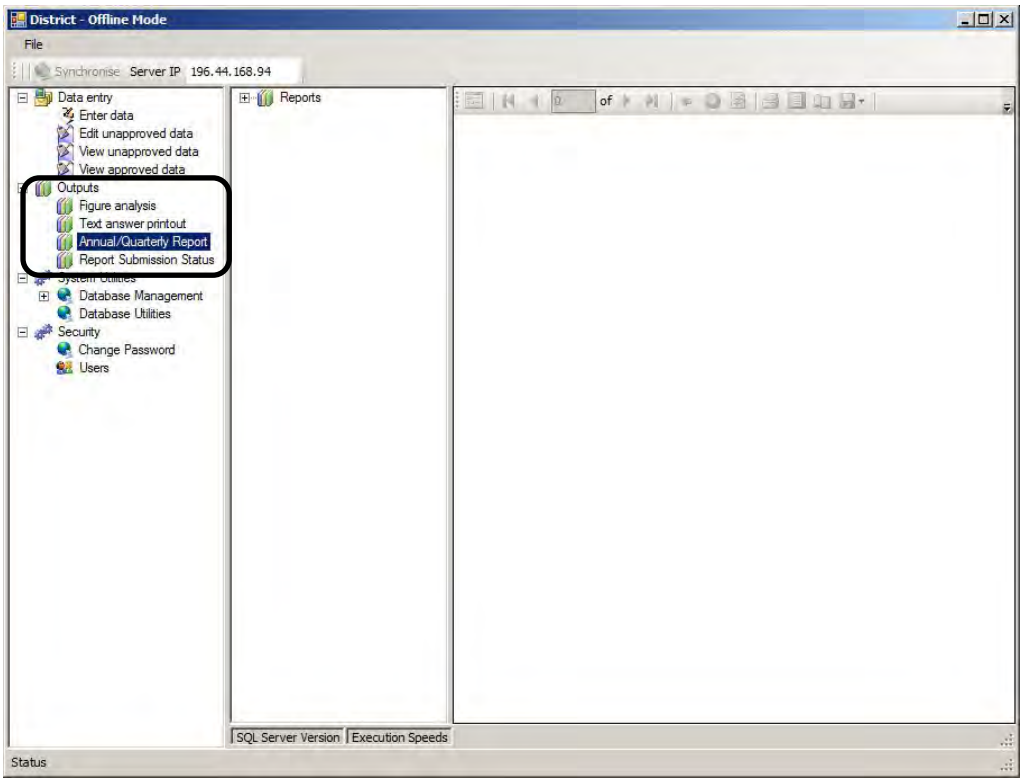
4

4 Output

4.1 Viewing the Annual and Quarterly Reports

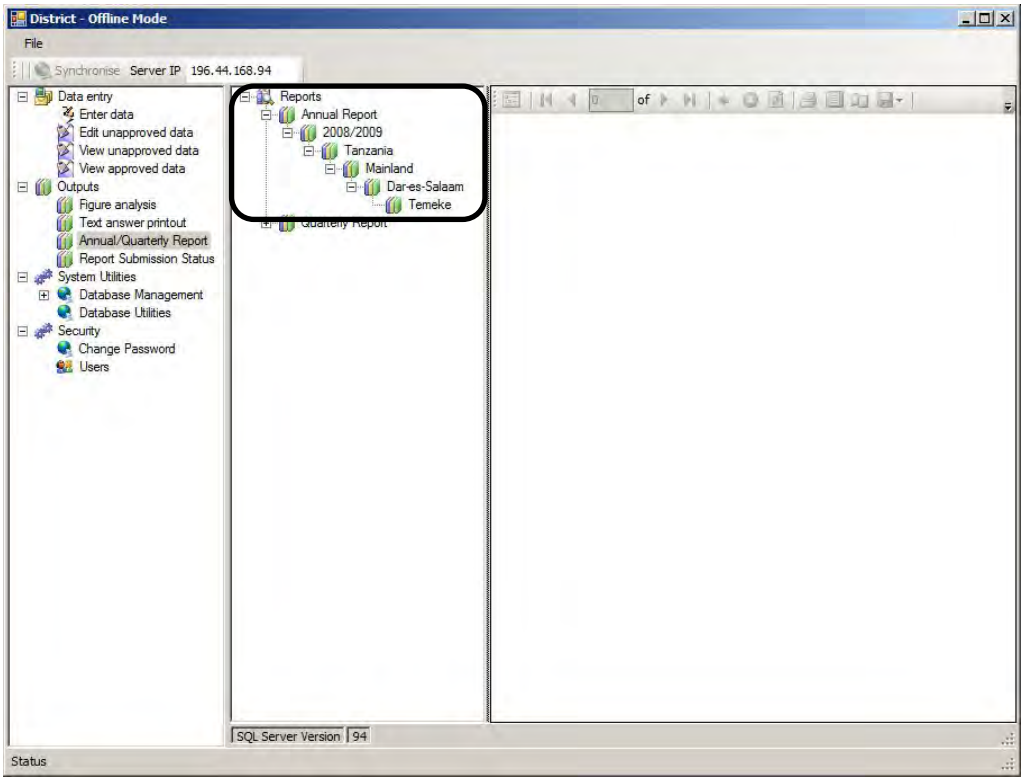
Data output is produced very simply in LGMD2. Select **Outputs/Annual/Quarterly Reports** from the tree view column. A second column will appears listing the Reports available. Click on the + sign to the left of the word **Reports** in the second tree view column. Expand the tree further until the relevant district is displayed. Highlight the district name to display the report. See the following example.

- **Select <u>Outputs</u> > <u>Annual/Quarterly Report</u>.**

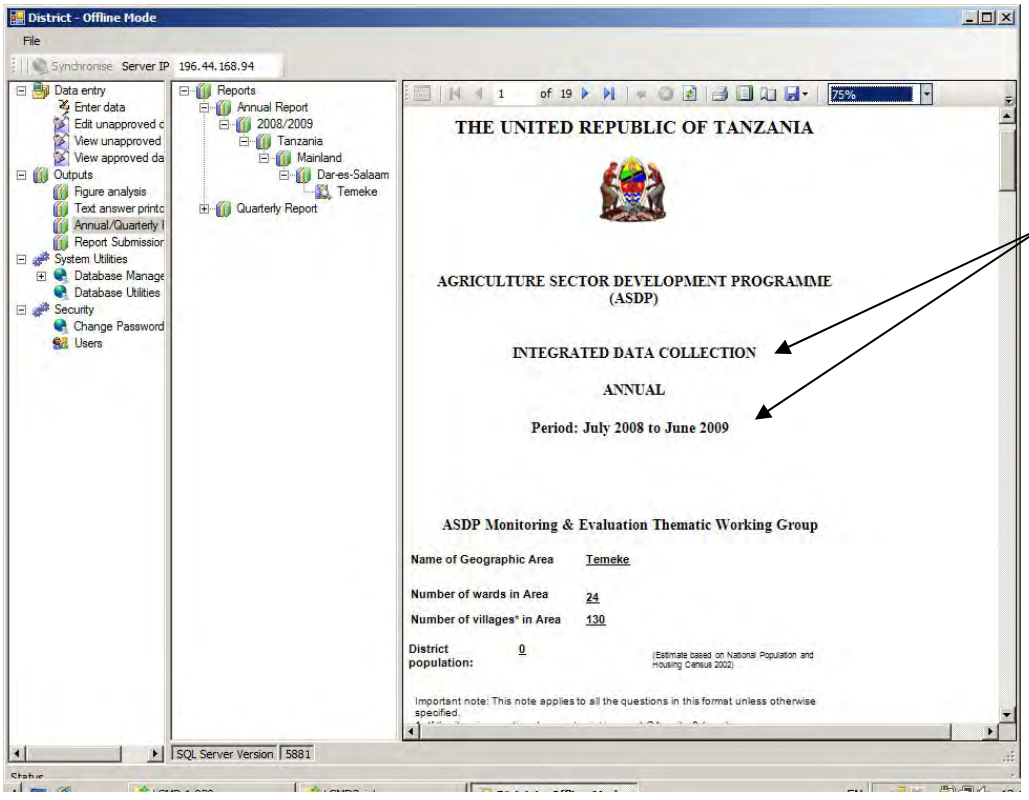


When you want to see the 2008/2009 Annual Report of your district (e.g., District Temeke),

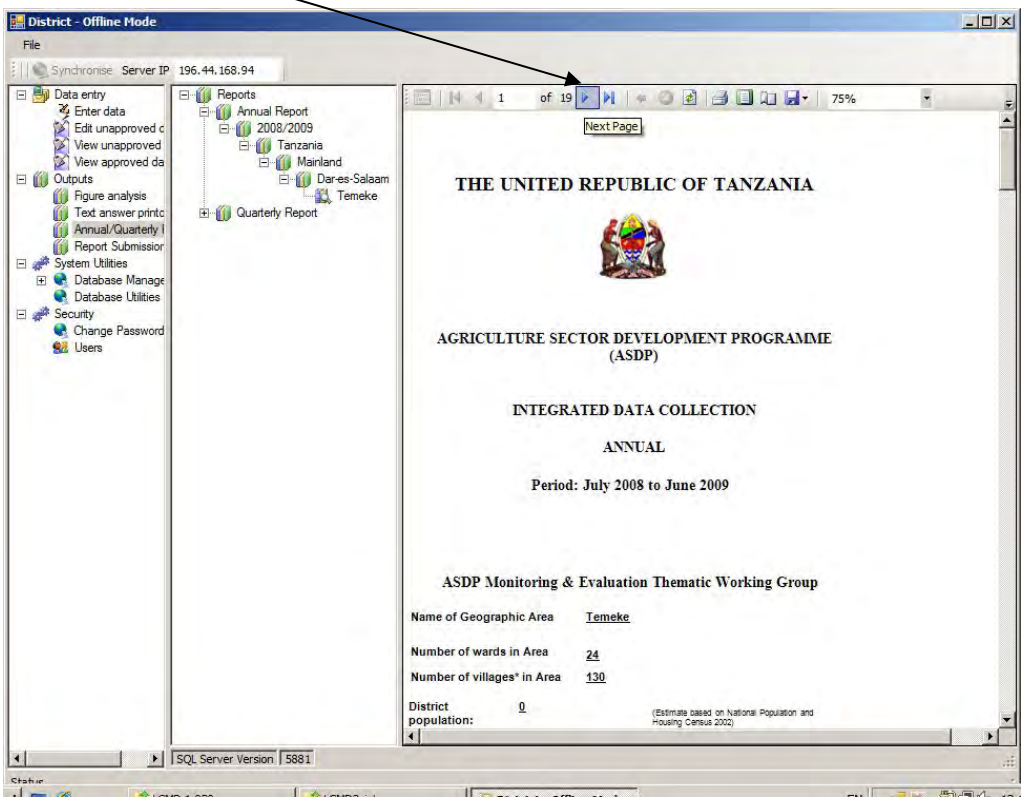
- **Go to <u>Annual Report</u> (click + mark) > <u>2008/2009</u> (click + mark) > <u>Tanzania</u> (click + mark) > <u>Mainland</u> (click + mark) > <u>Dar-es-Salaam</u> (click + mark) > <u>Temeke</u>.**



You see the following report ("INTEGRATED DATA COLLECTION ANNUAL" Period: July 2008 to June 2009).

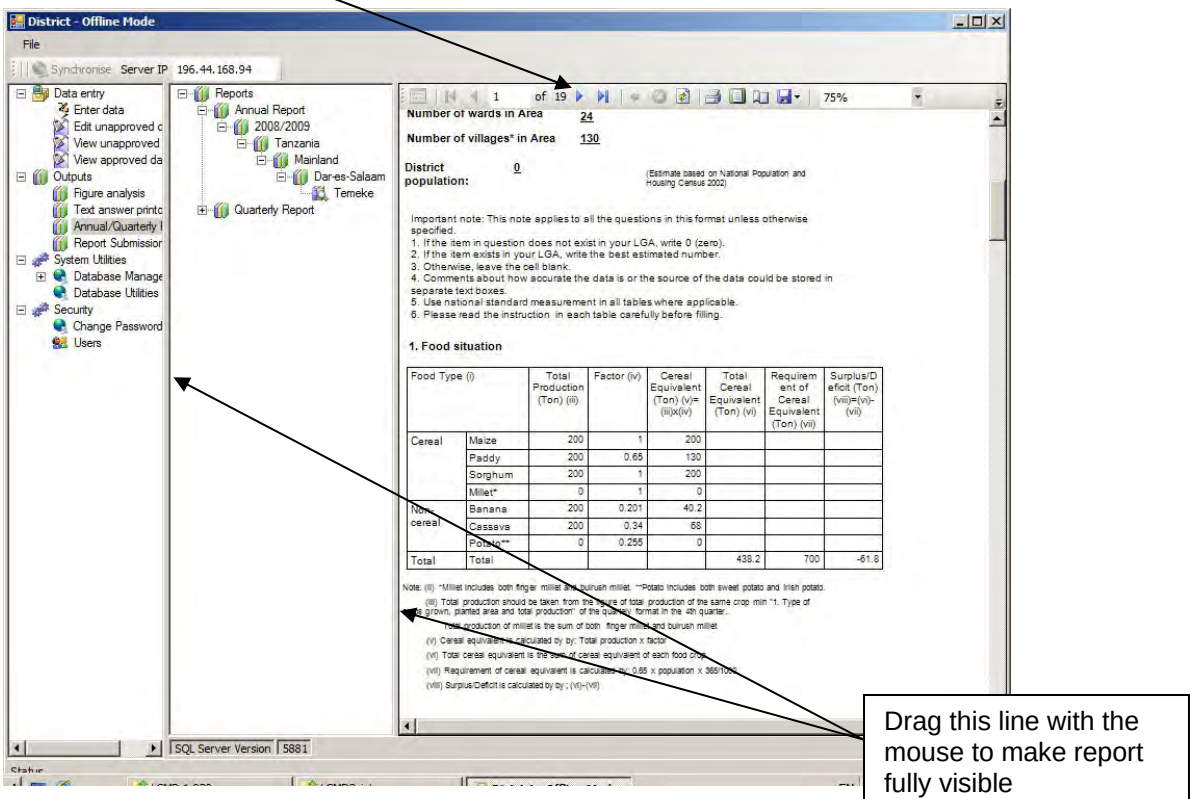


- **Click <u>triangle</u>.** You move to the next page.



You see the table which shows the data you have entered.

- **Hit <u>triangle</u>** again, to move to the next page. The width of the screen can also be adjusted as shown.



(Note)

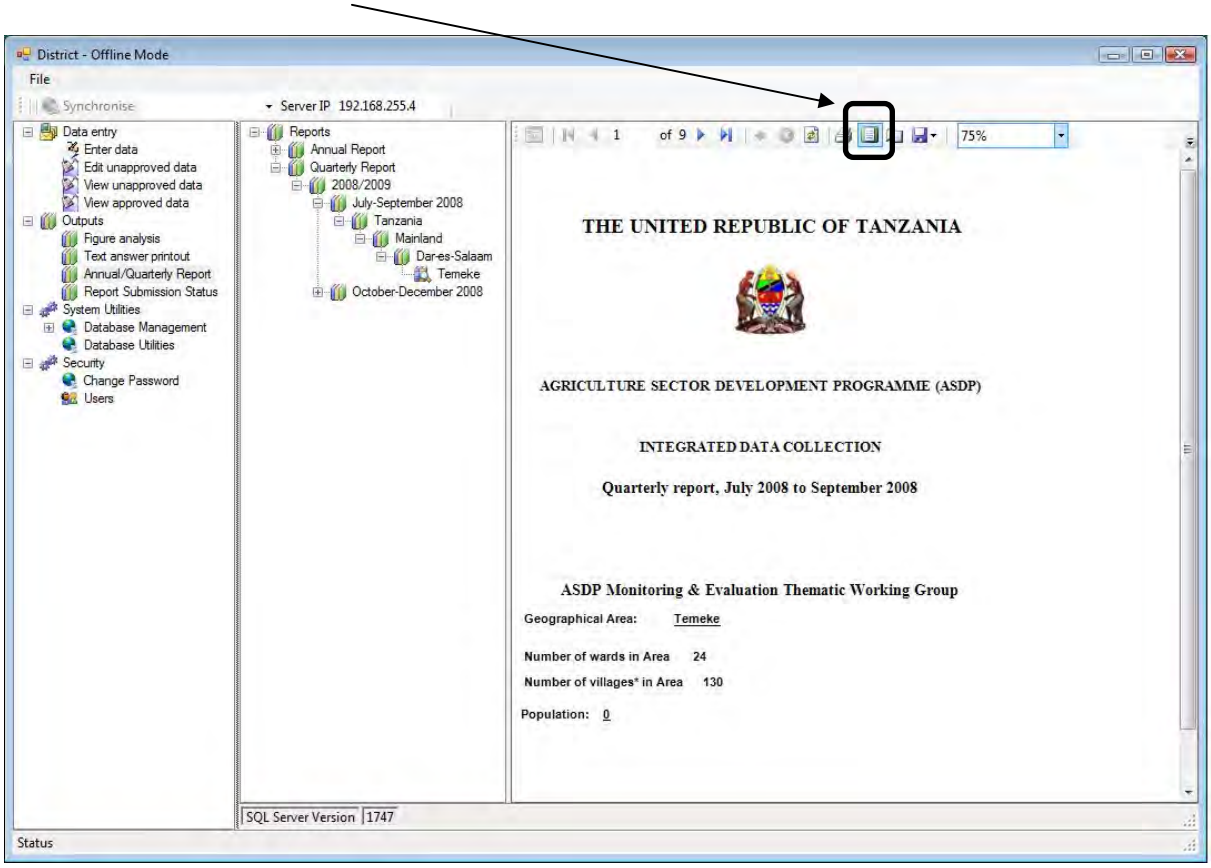
- If some page is empty at all, you might have not clicked “Save & go “ for that page when you entered data. Please go back to the entry form and follow proper procedure (see 3.2.1).
- If you did not enter any data for some table, that table does not appear in the report but only the table title is displayed.

You can also see the Quarterly Report by selecting **Quarterly Report** from the tree view column and following the same procedure as shown above.

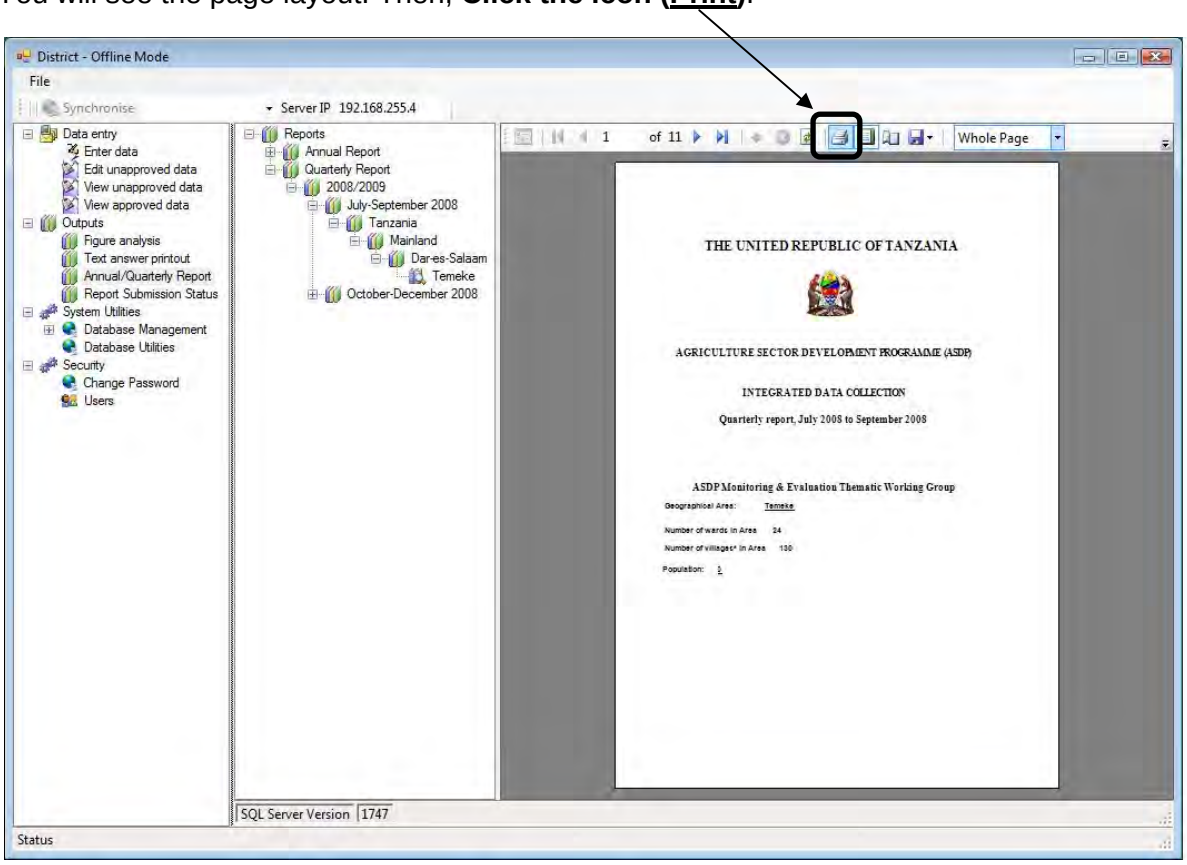
4.2 Printing the Annual and Quarterly Reports

You can also print the reports on the same screen that you view the report.

➢ **Click the icon (Print Layout)**



You will see the page layout. Then, **Click the icon (Print)**.

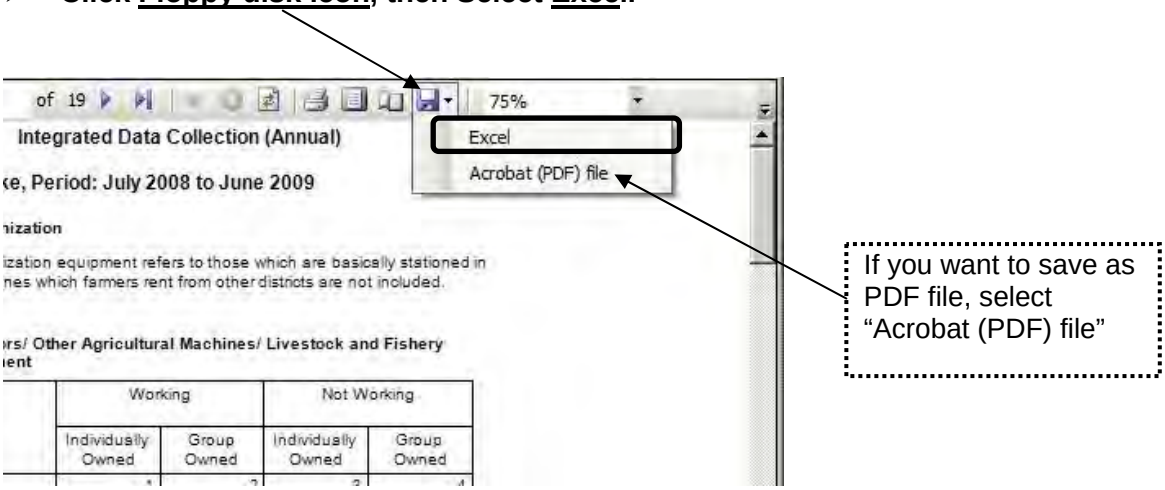


Then, a print screen of the printer connected to your computer will appear. Select print settings as you like and print.

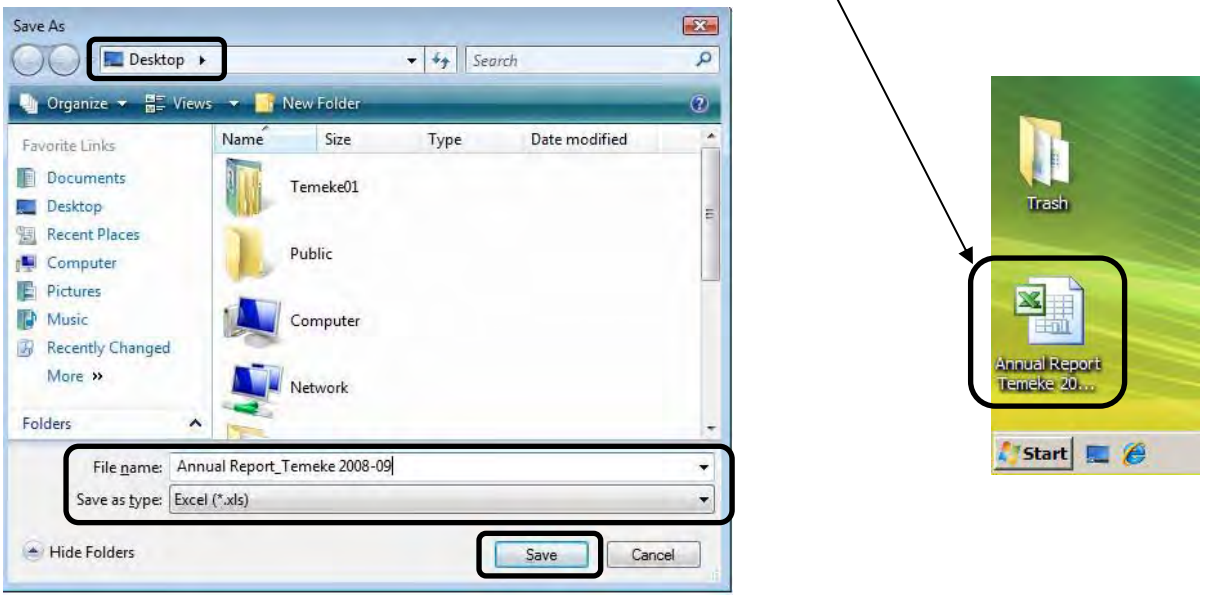
4.3 Saving the Annual and Quarterly Reports

LGMD2 has a function to export the report data displayed on the screen directly to an Excel spreadsheet for further manual analysis, or to PDF format. Simply press the button shown and the system will indicate the location of the file created. See the example below.

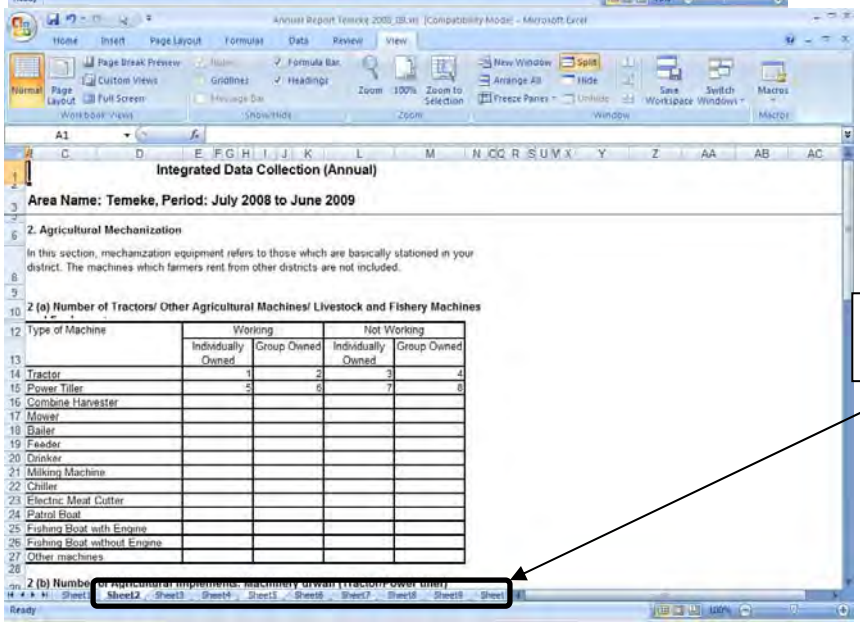
- **Open the Report** which you want to save (see 4.1).
- **Click Floppy disk icon, then Select Excel.**



Give appropriate name and save it in any location in your computer as you like (e.g., on the desktop). Then, open the Excel file you just saved.



You can see the report saved as Excel format.



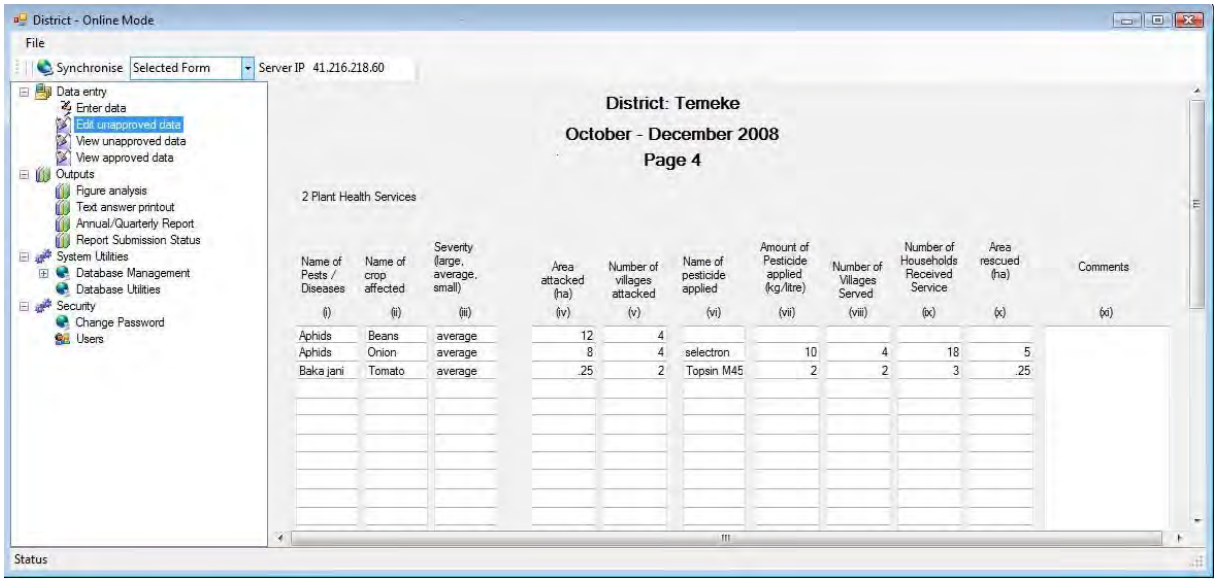
Click the following tabs to see the following pages.

(Note)

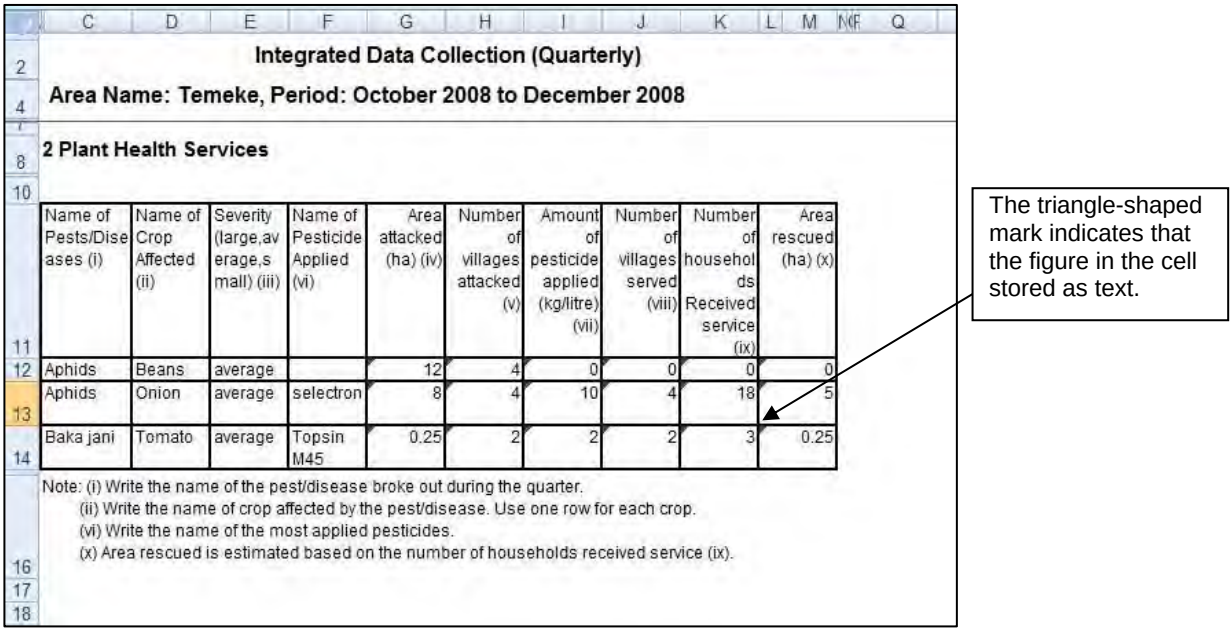
- If a table includes columns for text entry, all these columns appear to the left side followed by columns with numeric figures, regardless of the order of original table in the data entry form.
- If a table includes a column for **Remarks/Comments**, the numbers will not be shown as numbers but as text. Therefore, when you use the table for further analysis in Excel, you need to re-format the cells as numbers. This is done in Excel by selecting the cell, then clicking **Format/Cells** in the menu/tool bar, then the **Number** tab. Highlight the Number type in **Category** and click **OK**.

(Example: Table 2 'Plant Health Services' in the Quarterly Report)

Table 2 is displayed in the entry form as follow.



When saving and opening the report as an Excel file, Table 2 appears as follows.



Integrated Data Collection (Quarterly)

Area Name: Temeke, Period: October 2008 to December 2008

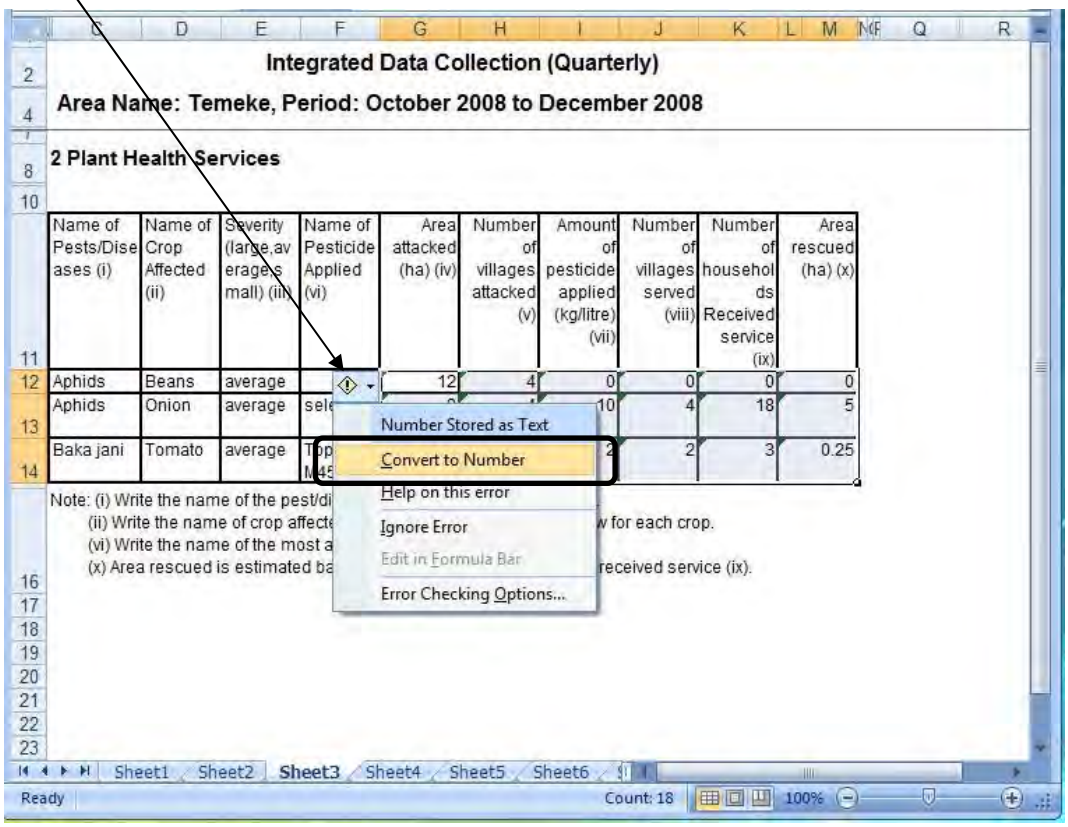
2 Plant Health Services

Name of Pests/Diseases (i)	Name of Crop Affected (ii)	Severity (large,average,small) (iii)	Name of Pesticide Applied (vi)	Area attacked (ha) (iv)	Number of villages attacked (v)	Amount of pesticide applied (kg/litre) (vii)	Number of villages served (viii)	Number of households Received service (ix)	Area rescued (ha) (x)
Aphids	Beans	average		12	4	0	0	0	0
Aphids	Onion	average	selectron	8	4	10	4	18	5
Baka jani	Tomato	average	Topsin M45	0.25	2	2	2	3	0.25

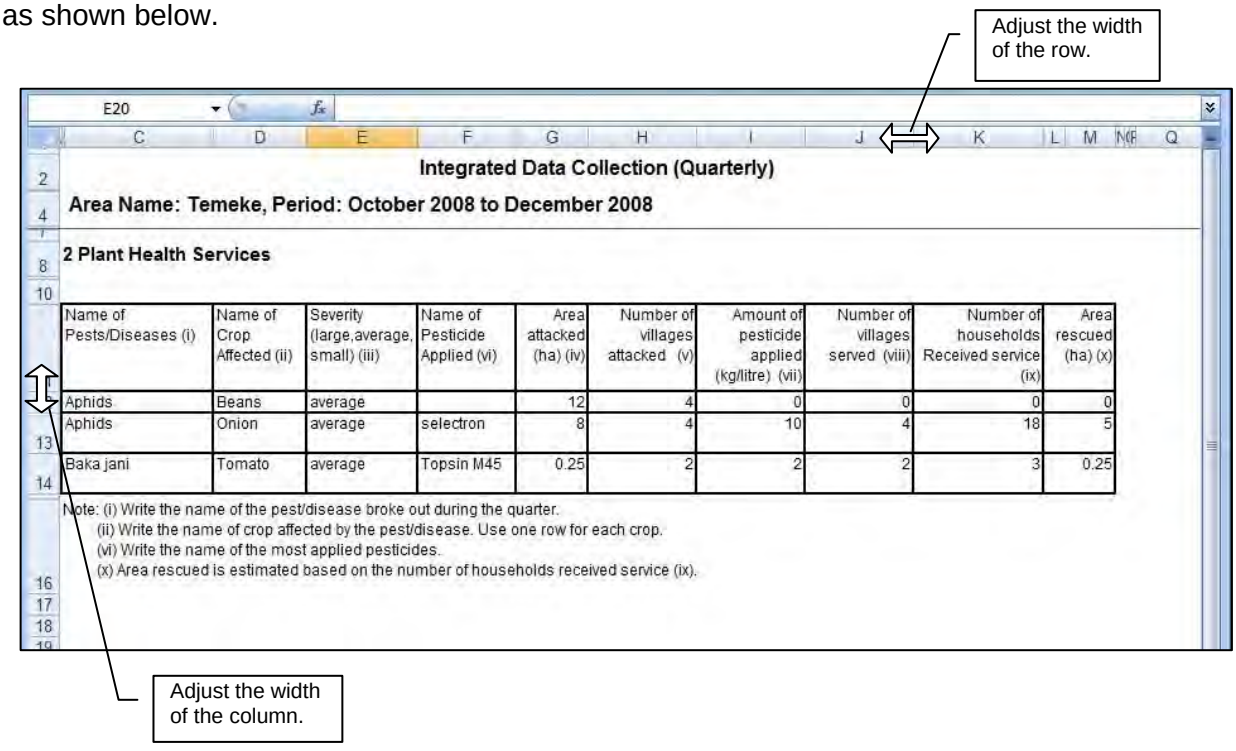
Note: (i) Write the name of the pest/disease broke out during the quarter.
(ii) Write the name of crop affected by the pest/disease. Use one row for each crop.
(vi) Write the name of the most applied pesticides.
(x) Area rescued is estimated based on the number of households received service (ix).

The triangle-shaped mark indicates that the figure in the cell stored as text.

Select the cells in which numeric data are stored as text data, click the icon, and select "**Convert to Number**".



You can also adjust the width of rows and column on the excel file to create a better layout as shown below.



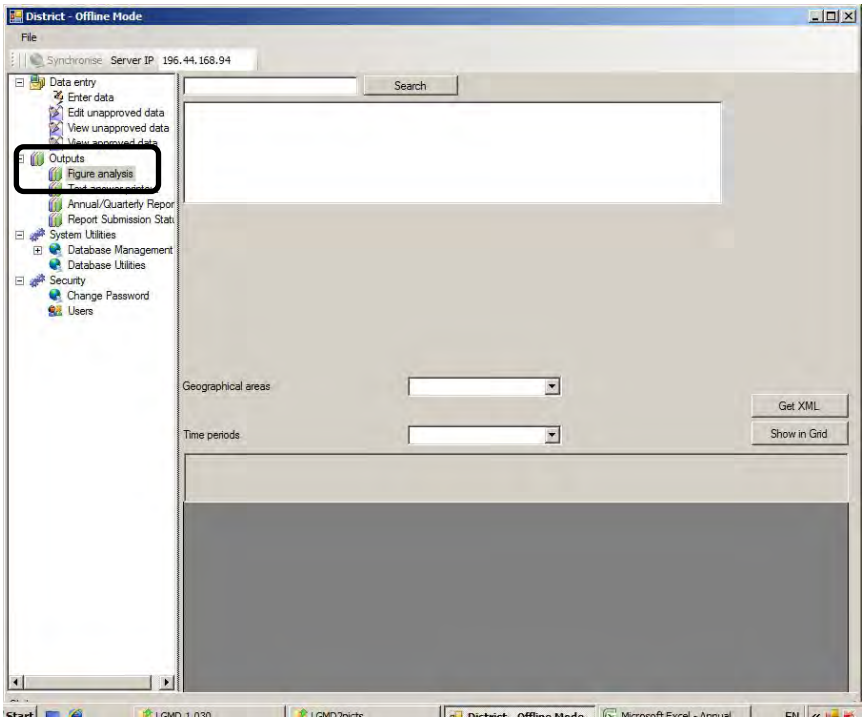
Name of Pests/Diseases (i)	Name of Crop Affected (ii)	Severity (large,average, small) (iii)	Name of Pesticide Applied (vi)	Area attacked (ha) (iv)	Number of villages attacked (v)	Amount of pesticide applied (kg/litre) (vii)	Number of villages served (viii)	Number of households Received service (ix)	Area rescued (ha) (x)
Aphids	Beans	average		12	4	0	0	0	0
Aphids	Onion	average	selectron	8	4	10	4	18	5
Baka jani	Tomato	average	Topsin M45	0.25	2	2	2	3	0.25

Note: (i) Write the name of the pest/disease broke out during the quarter.
(ii) Write the name of crop affected by the pest/disease. Use one row for each crop.
(vi) Write the name of the most applied pesticides.
(x) Area rescued is estimated based on the number of households received service (ix).

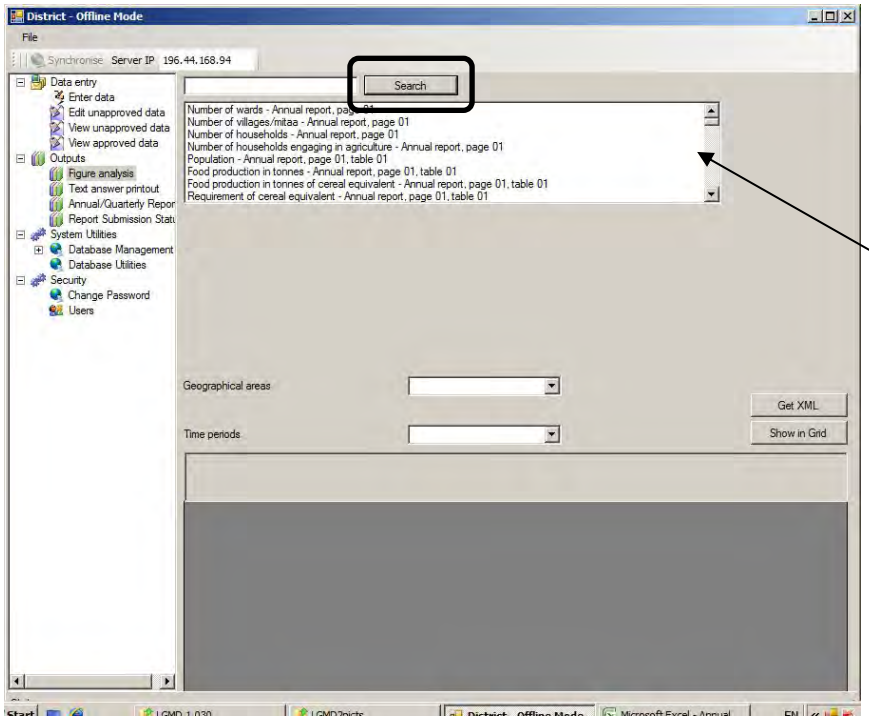
4.4 Using Figure Analysis Function

LGMD2 contains within the software itself powerful analytical functionality to enable users at district level to search for any particular data items, and time series, and display these either as rows of columns in a screen report or an XML export file as required. See the following example.

➢ **Select Outputs > Figure analysis.**



➢ **Click Search.**

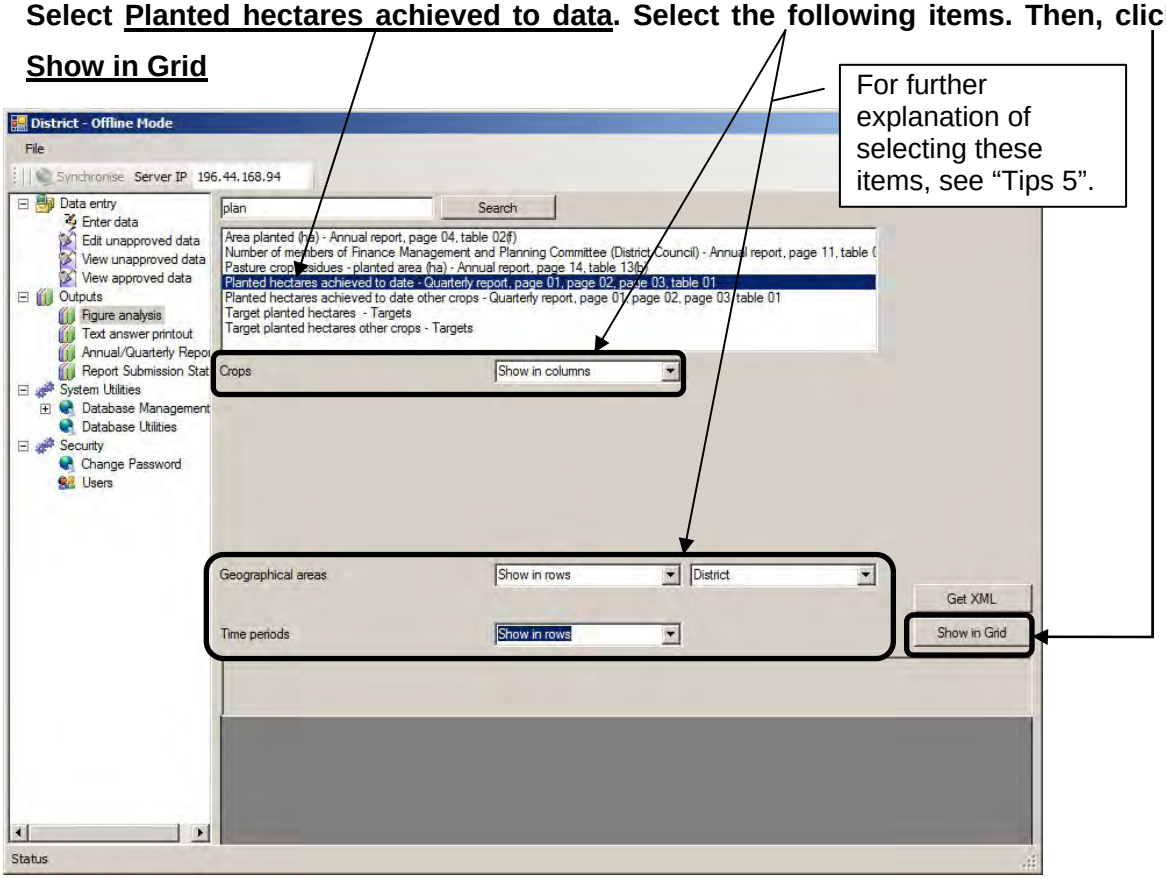


If you want to find a specific indicator, you should type some words (e.g., table title, report name, page number, table number, and column heading) in the above “search” box and Click **Search**. Then, the data items containing the keyword will be displayed. Then, you can select the item from the drop-down list.

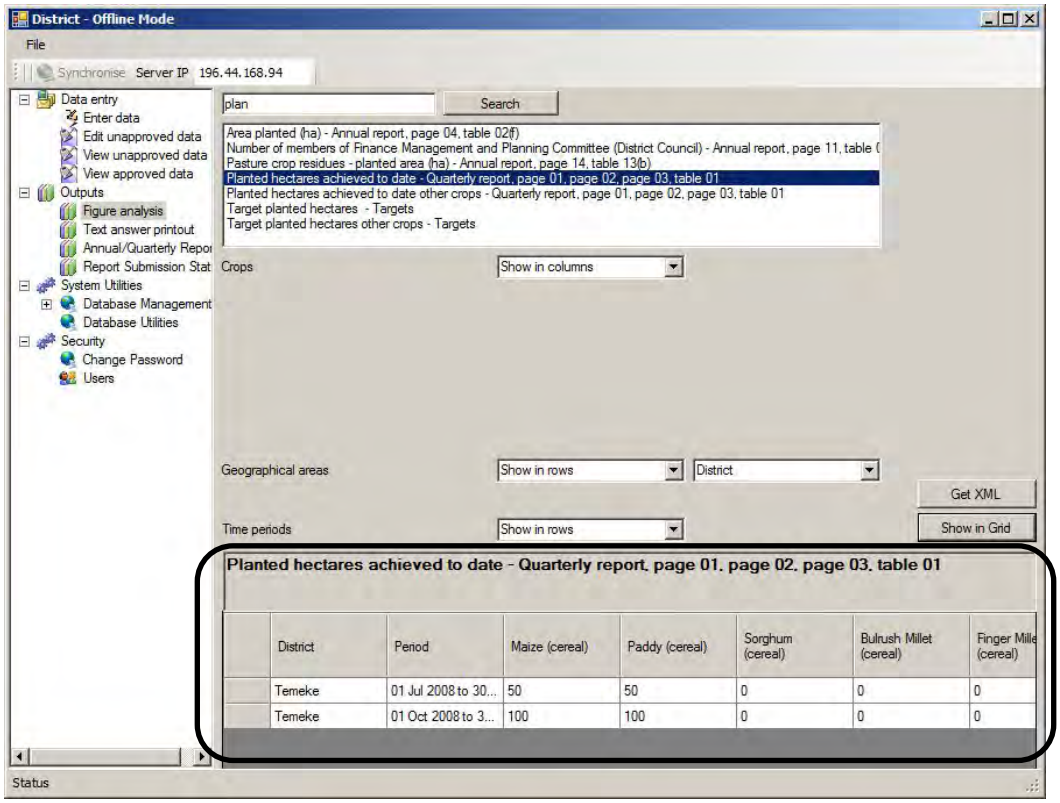
(Note)

- You can search for a page or table number, but it should be entered ‘page 08’ and not ‘page 8’.
- Row headings are not included in the search function.

➢ **Select Planted hectares achieved to data. Select the following items. Then, click Show in Grid**

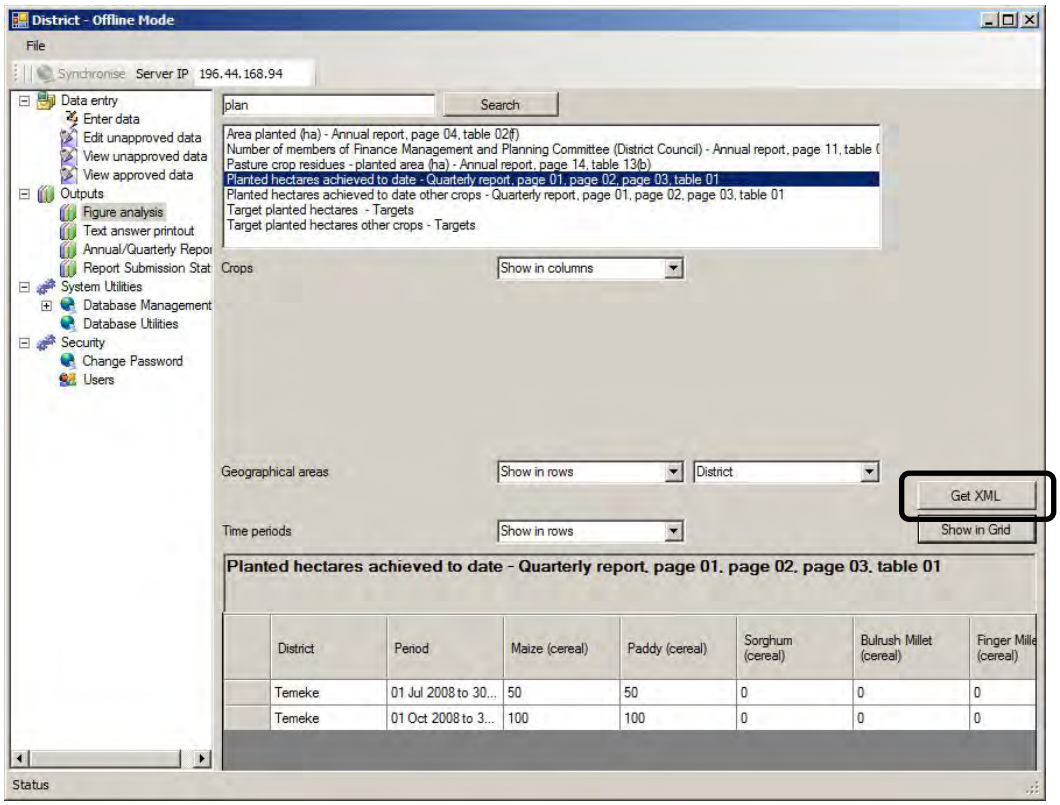


You see the table of which columns and rows were selected by you.

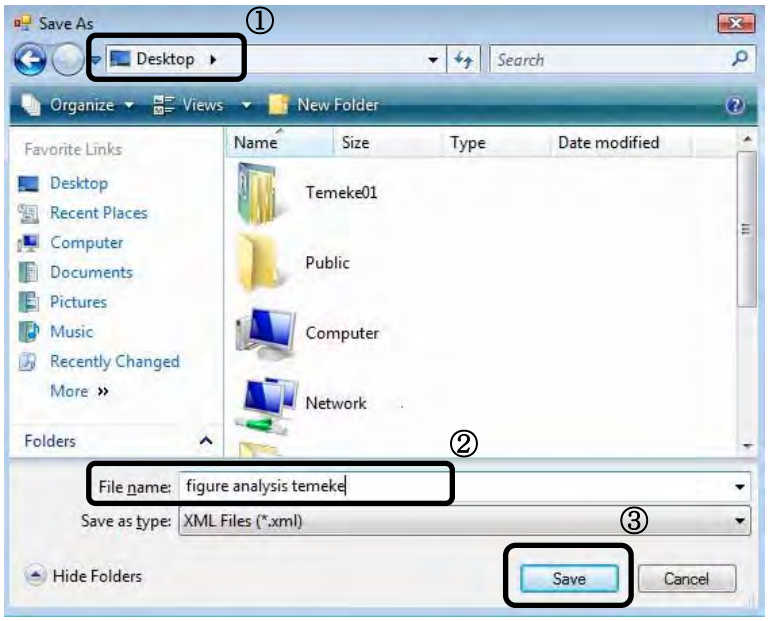


The data in the grid can be exported to an Excel file via an 'XML' file.

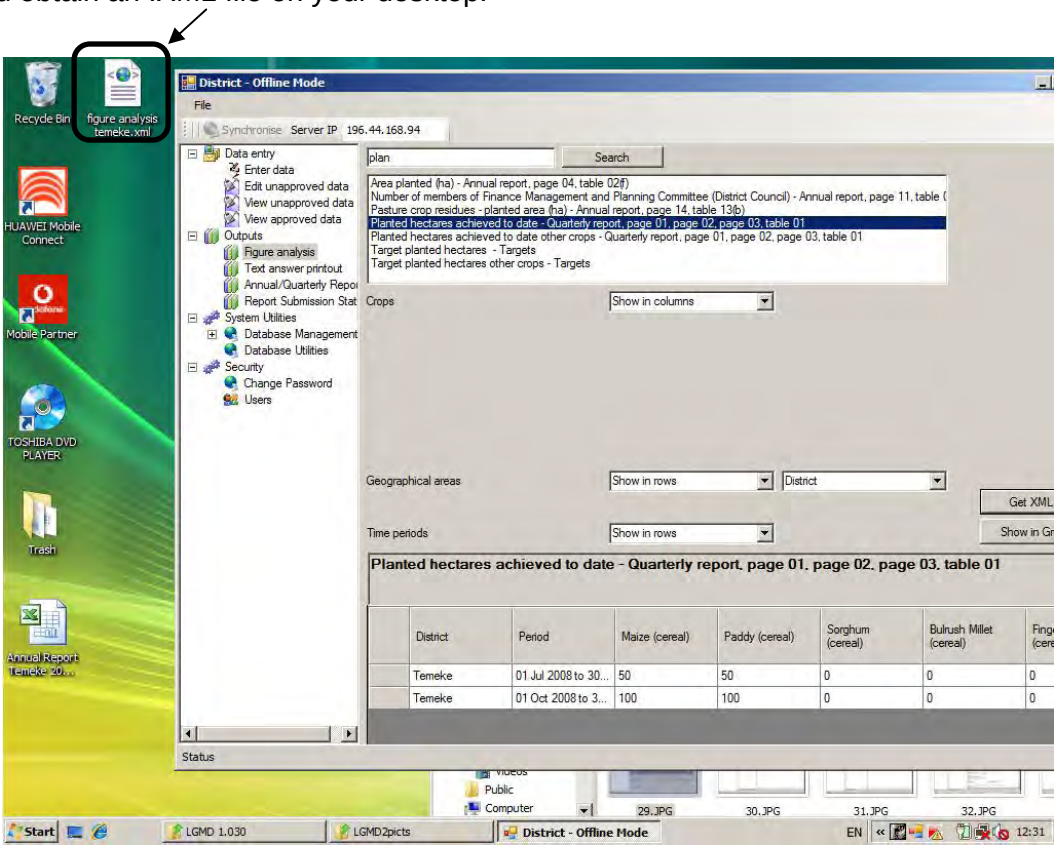
- **Click <u>Get XML</u>.**



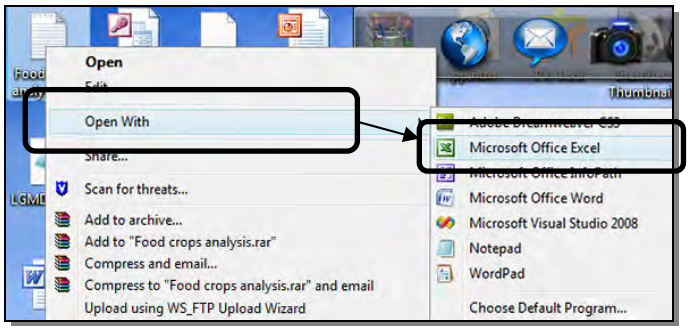
When the following screen appears, select any location in your computer (e.g., on the desktop) and name the file as appropriate (e.g., 'figure analysis temeke'). Then, **Click <u>Save</u>**,



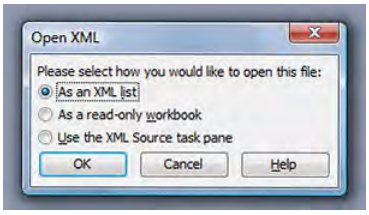
You obtain an .XML file on your desktop.



To open in Excel, first find the file on the computer, then **right click** on the name and select **Open with** and then **Microsoft Excel**.



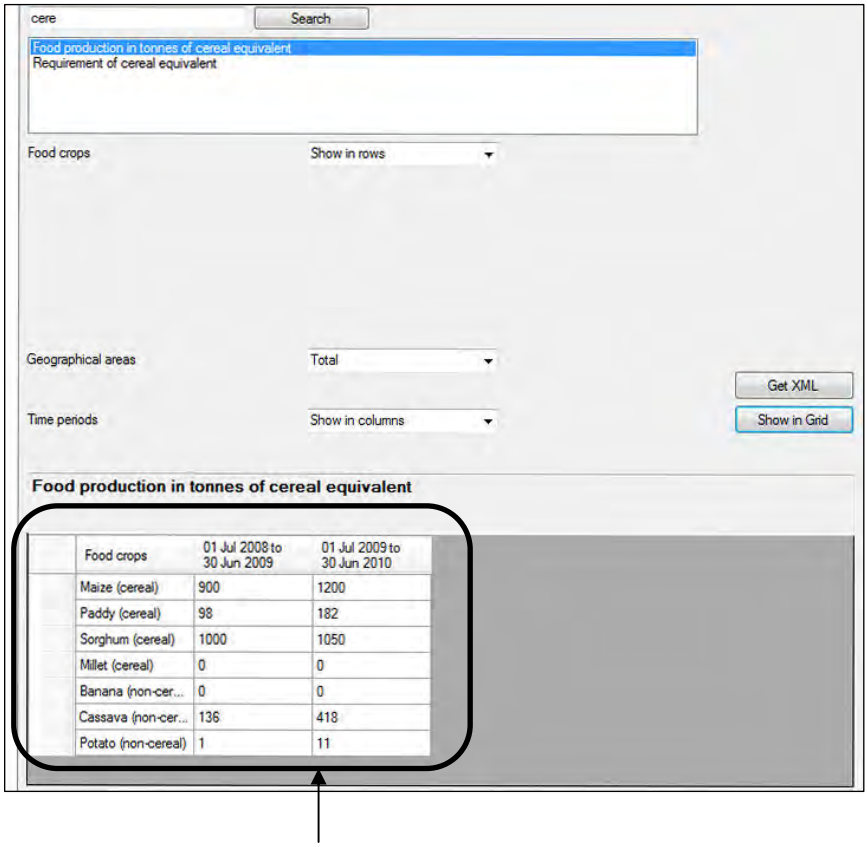
A dialogue box appears as on the right. Select '**As an XML list**', then **OK**. The Excel sheet will be then open and can be used for further analysis.



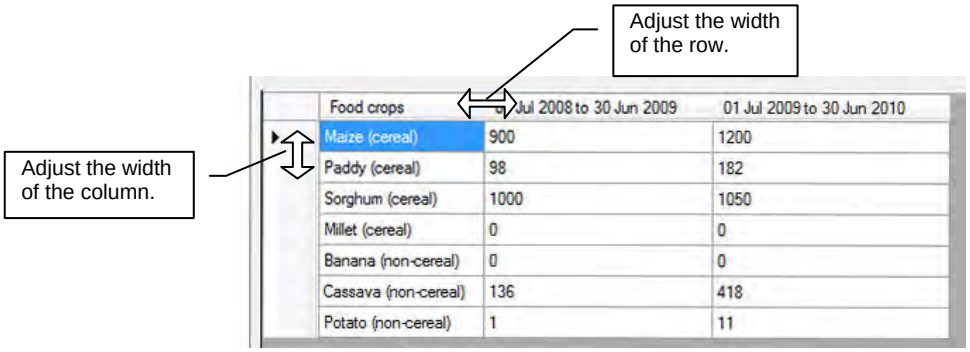
Tips 5

The following picture shows the figure analysis screen on which two tables are searched (the user typed 'cere' to find tables related to 'cereal'). Then, the user selects "Food production in tonnes of cereal equivalent".

The user is then prompted to select the mode of display for Food crops from a drop-down list. Select as required (rows for this example). Basically, you can select either to list all items (i.e. all crops) in column or row, to show just total (although it is not logical for most tables. You cannot add maize production and paddy production), or to choose one item (i.e. maize only). For some tables, more drop-down menus will appear to specify items. At district level, for geographical areas, select 'Total'. For time periods, select either to show time-series in column or row, or to choose one particular period ('Show in columns' for this example).



Depending on the data which has been entered, a table such as shown on the screen will be displayed by clicking **Show in Grid** button. Note that by using the mouse the width of the columns can be adjusted to create a better layout such as that illustrated as follows.



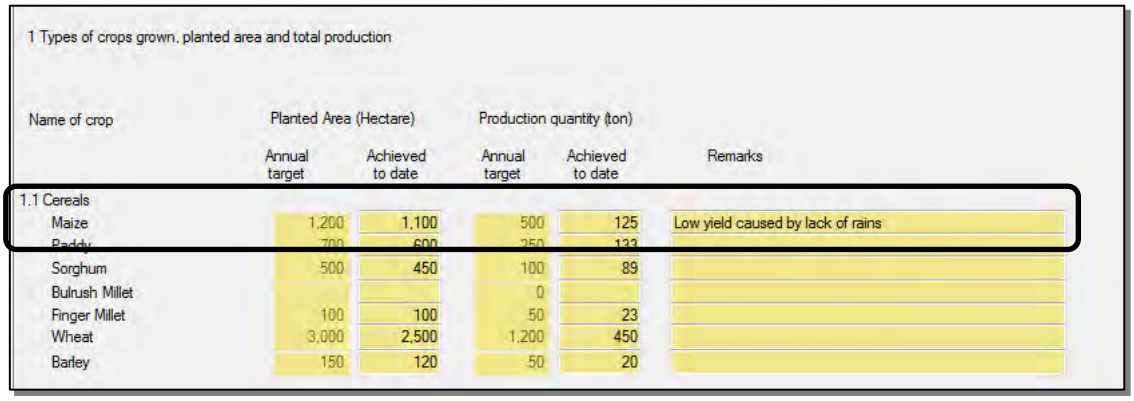
Automatically calculated figures such as subtotals or cumulative to date figures are not selectable in Figure Analysis. Where these figures are required, export the data to XML then Excel and calculate manually.

4.5 Text Answer Printout

LGMD2 contains a functionality to provide the user with a means of comparing data entries which are not in number form but in text form. An example can be given as follows:

- Enter text in the **Remarks** column opposite the very first item of Table 1.1 Cereals in the Quarterly Reports, namely 'Maize'.

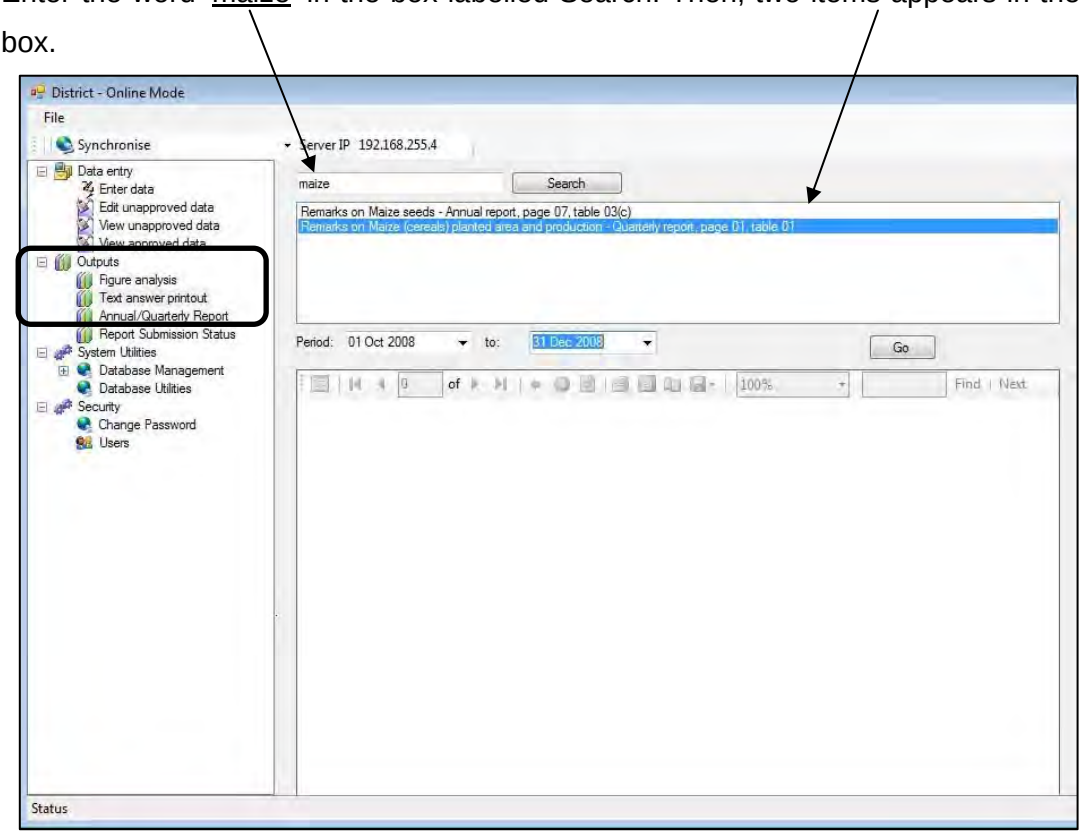
Make sure at least two quarterly reports have been entered and type different comments in the same box for maize. This is necessary to demonstrate how the system works.



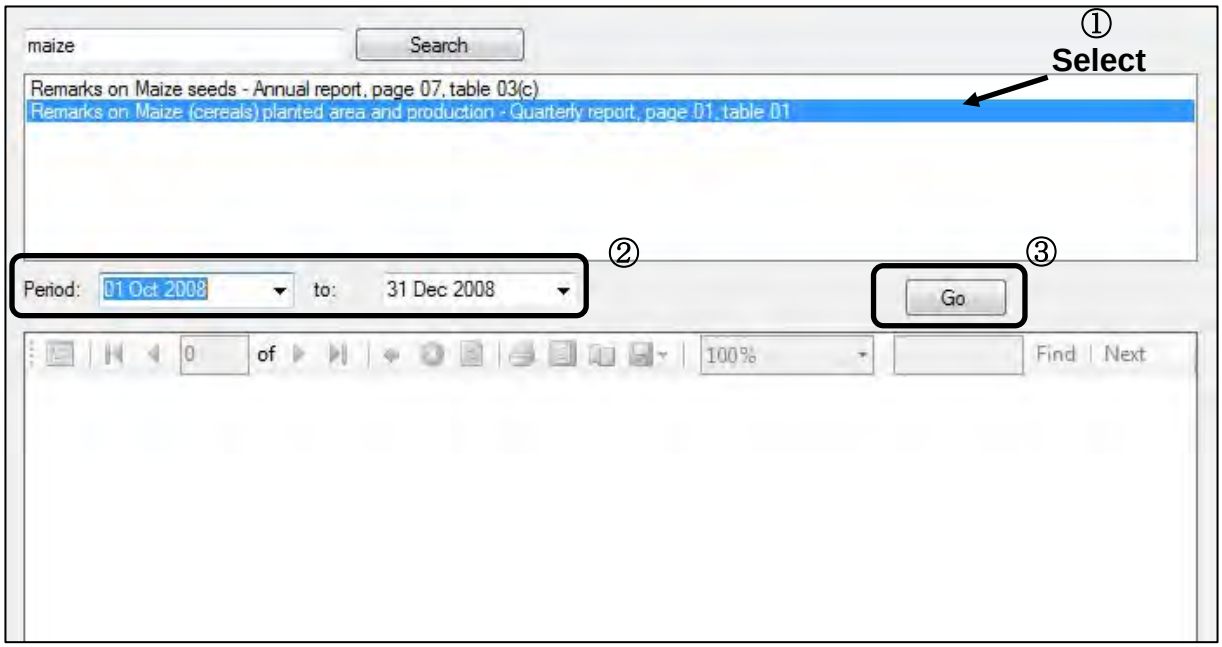
1 Types of crops grown, planted area and total production

Name of crop	Planted Area (Hectare)		Production quantity (ton)		Remarks
	Annual target	Achieved to date	Annual target	Achieved to date	
1.1 Cereals					
Maize	1,200	1,100	500	125	Low yield caused by lack of rains
Paddy	700	600	250	133	
Sorghum	500	450	100	89	
Bulrush Millet			0		
Finger Millet	100	100	50	23	
Wheat	3,000	2,500	1,200	450	
Barley	150	120	50	20	

- **Select > Outputs > Text answer printout** from the tree view and a search screen appears.
- Enter the word 'maize' in the box labelled Search. Then, two items appears in the large box.

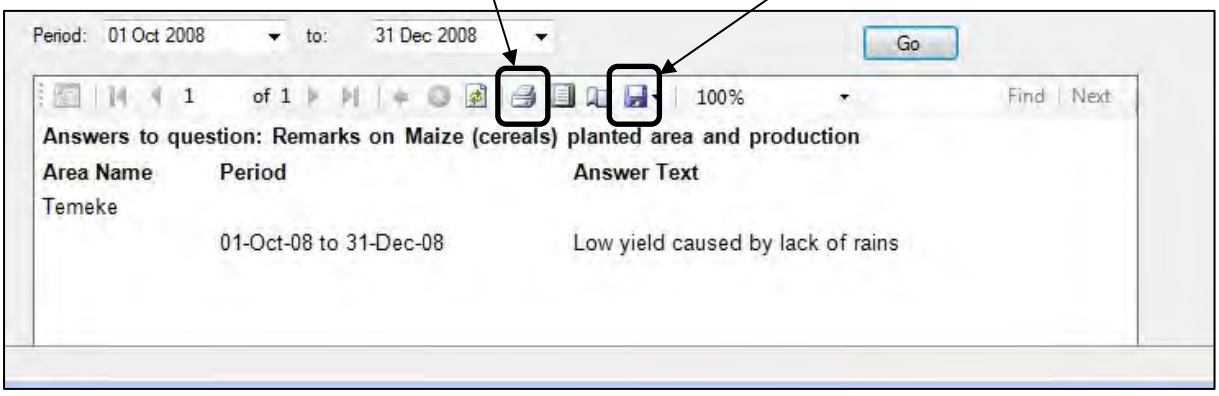


- Select the second item ('Remarks on Maize (cereals) planted area and production'), then dates are displayed in the boxes labelled **Period:** and **to:**.
- Select appropriate period as you want to see, and click **Go**.



The box should now display the remark concerning maize, which you entered earlier.

The contents of the box can be printed directly or exported as an Excel or pdf file by **clicking icon** in the menu bar.



(Note)

- You can view, save and print the text answers in a similar way for the Annual and Quarterly Report.

The functionality described above is of particular use at regional and national level for comparing comments from different LGAs on different issues, but it has some functionality at LGA level as described by showing the comparison of comments made each quarter or each year in the data collection forms.

Chapter

5

5 Data Submission

Submission of data from the district to the main LGMD2 server can be done in two distinct ways:

- By online Data Synchronisation
- By manual transfer of data

All data exported from the LGA are subject to approval first by the District Executive Director, and then the region. Approval by the region will be carried out by the use of LGMD2 set up as a regional system, only capable of reading data, and commenting on it, but not amending or deleting it.

The relevant regional staff accesses the data by online synchronisation with the main LGMD2 server. LGMD2 operating at regional level enables the authorised regional staff to approve, or not approve, any LGA data in that region.

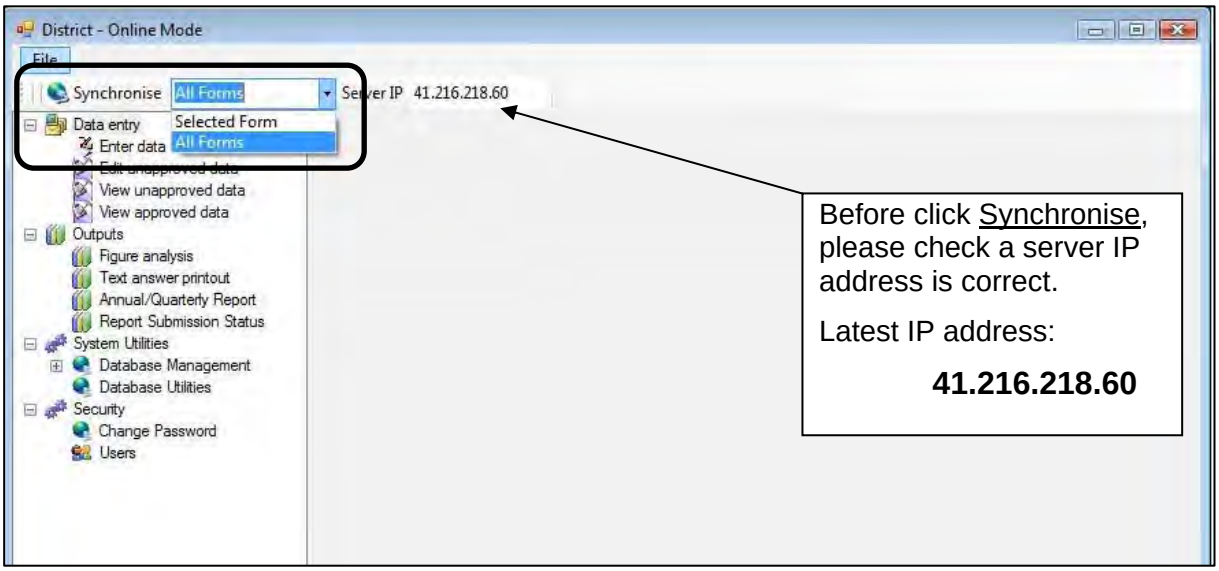
5.1 Data Synchronisation with the Main LGMD2 Server

Where there is an internet connection, LGMD2 can submit data to the main LGMD2 server at any time when the 'Synchronise' button is enabled (see 2.4.2). This submission of data or 'synchronisation' is carried out automatically 'behind the scenes' by the software without requiring the use of a 'web browser'.

Note that data synchronisation can be carried out even if the data entry in the system is incomplete. It is important therefore normally only to use this facility when the data entry is completed, and that it should only be permitted by District Executive Director.

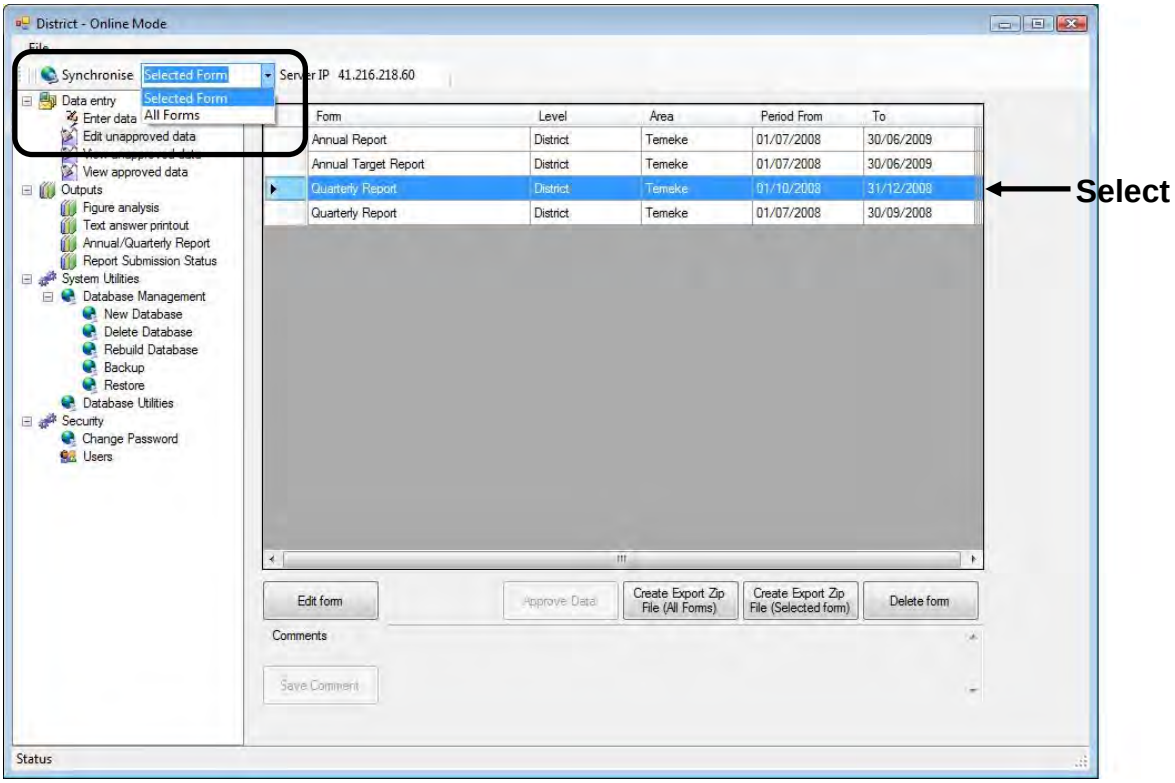
When you would like to submit all forms,

- **Connect Internet (by modem or LAN). Select <u>All Forms</u> from drop-down list and click <u>Synchronise</u>.**

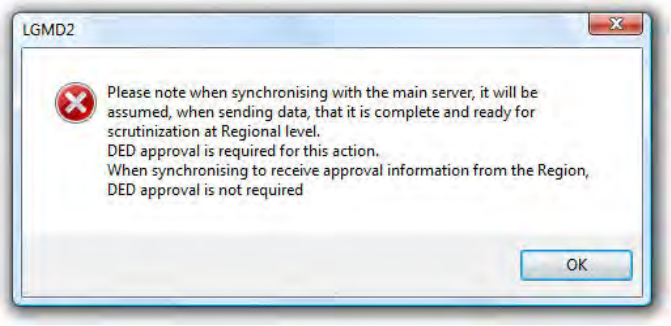


You can also submit the form one by one.

- **Connect Internet (by modem or LAN). Select <u>Data entry</u> > <u>Edit unapproved data</u>**
- **Select the form which you would like to submit (e.g., Quarterly Report).**
- **Select <u>Selected Form</u> from drop-down list and click <u>Synchronise</u>.**

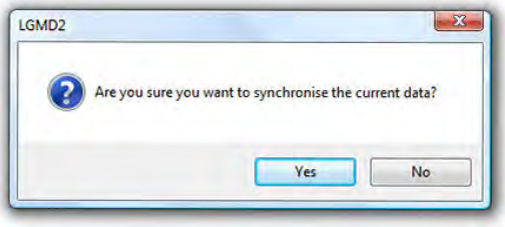


The warning message will appear as a reminder to you.



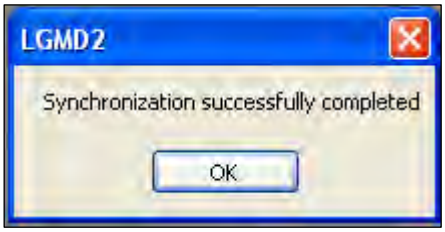
➢ **Click <u>OK</u>.**

Then, a further confirmation request appears.

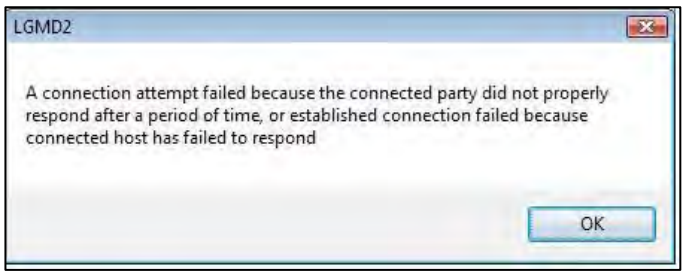


➢ **Click <u>Yes</u>.**

The hourglass will appear to the left below on the screen as the data are synchronised with the data on the main LGMD2 server.



If you can see the message shown to the left after a while, your reports have been successfully sent to the MAFC main server. So, click **<u>OK</u>**.



If the internet connection is too slow, a warning message will appear. Simply click **<u>OK</u>**.

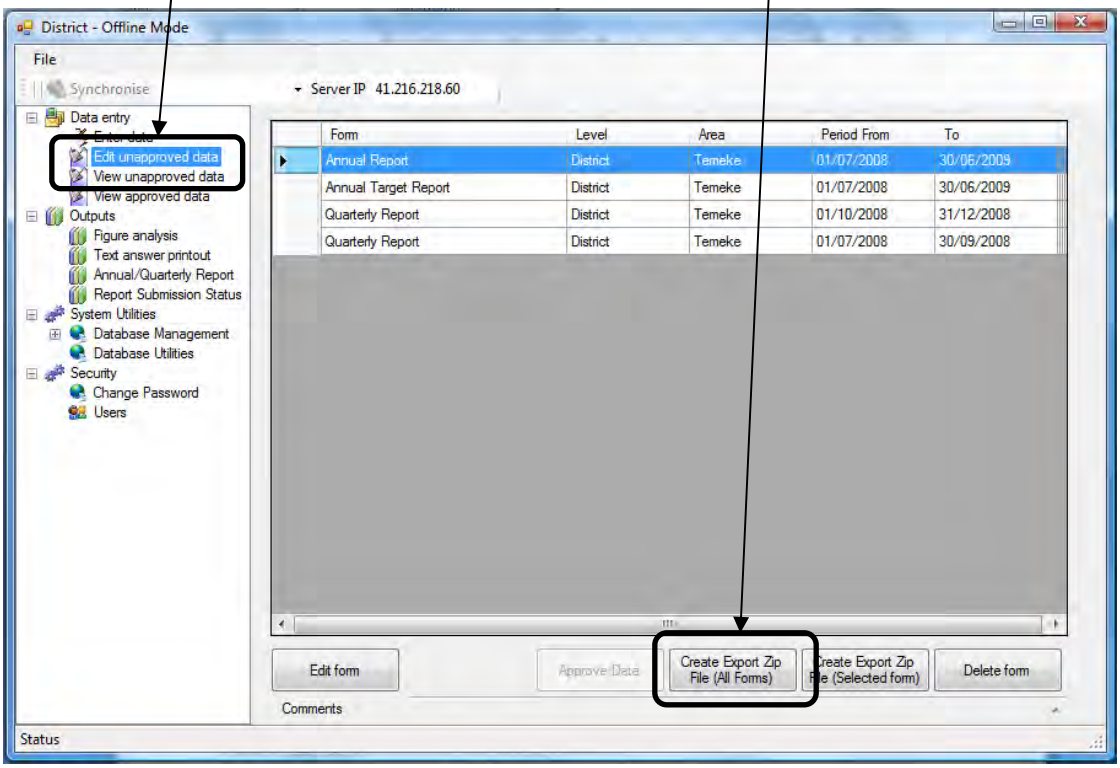
Then, you can see the massage to the left. It means that the reports could not be sent to the main server. Click **<u>OK</u>**.

In this case, you should try to synchronise later when the connection is faster.

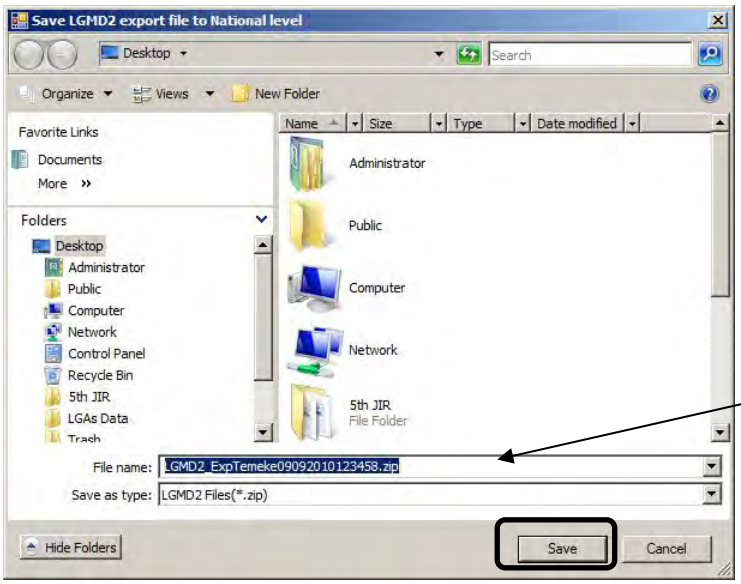
5.2 Manual Data Transfer

If an LGA does not have an internet connection, Manual Data Transfer must be carried out by exporting the data to a single file, which contains all necessary data, including the LGA name, time period of the data, etc.

➢ **Click <u>Edit unapproved data</u> and then, click <u>Create Export Zip File (All Forms)</u>**



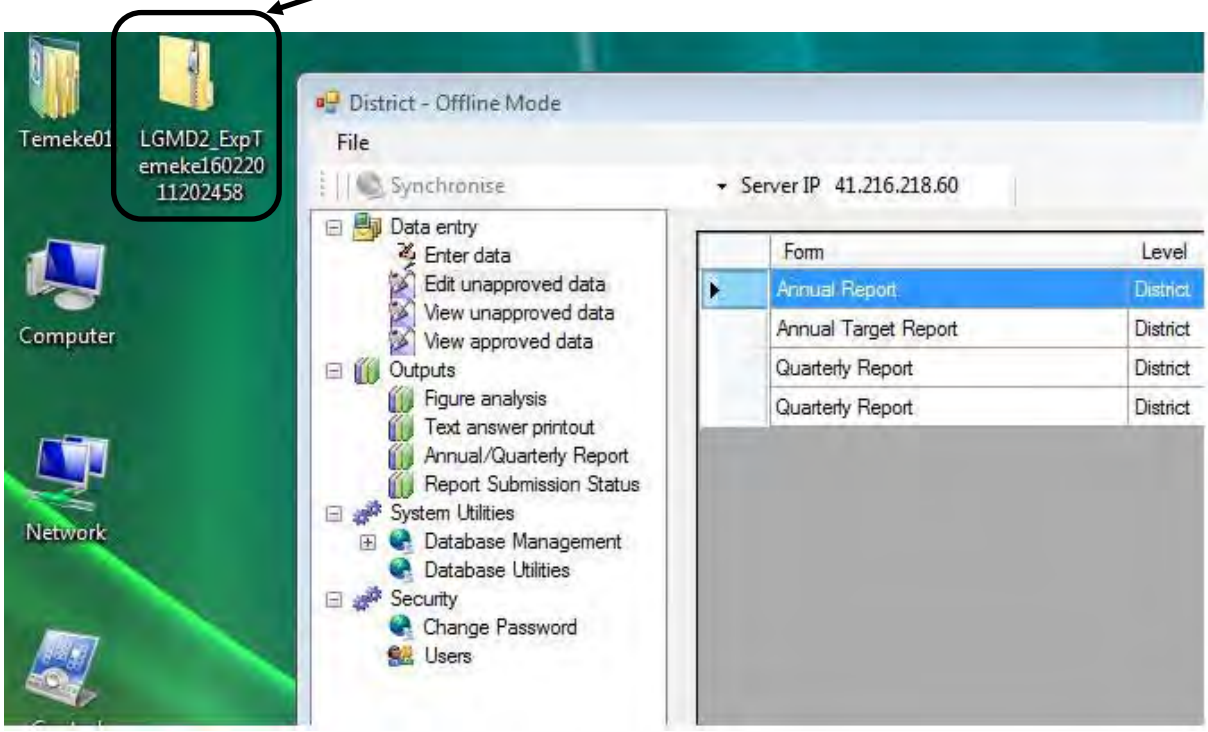
You see the following box. Simply **click <u>Save</u>.**



Do not change the default name of the file, which contains the information about the source and contents of the file.

You see the following message. Simply **click <u>OK</u>.**

Go to the desktop. You can see the Zip file. Send the Zip file as attachment by e-mail to MAFC office.



(Note)

- Even if you double-click this Zip file, you may not able to see anything inside. But it is appropriate.

The email address for submission is

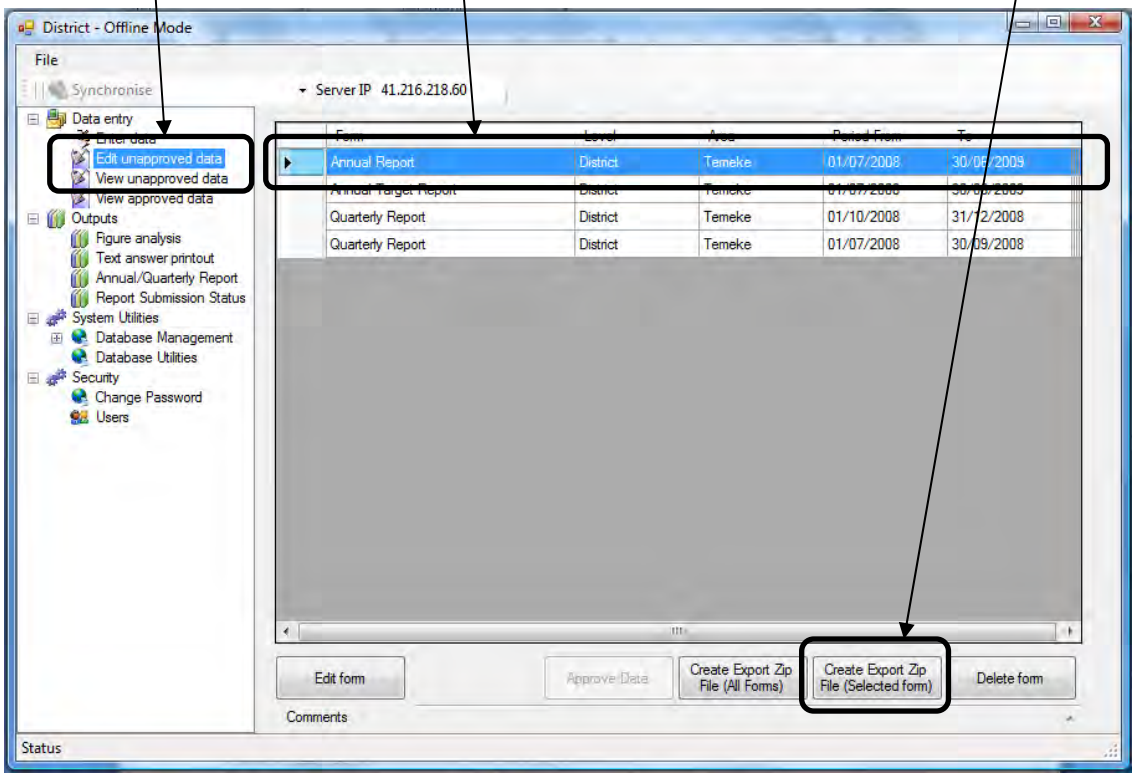
< lgmd2@kilimo.go.tz >

This manually exported file will be imported to the main server by the designated staff at the national level. Then, it will be available for the region to scrutinise. It will be treated the same way as the data exported by data synchronisation as described in 5.3.

You can also export data **file by file**.

➢ **Click <u>Edit unapproved data</u>. Then, select the file that you want to save as .zip file.**

Then, click <u>Create export Zip File (Selected form)</u>



Then, follow the same procedure for 'All forms'.

5.3 Data Scrutinisation by the Region

Once the data are synchronised, the authorities at regional level can view the data and are able to scrutinise the figures and comment as necessary. Users at district level can view the comments through synchronization with the main LGMD2 main server. (See 5.4).

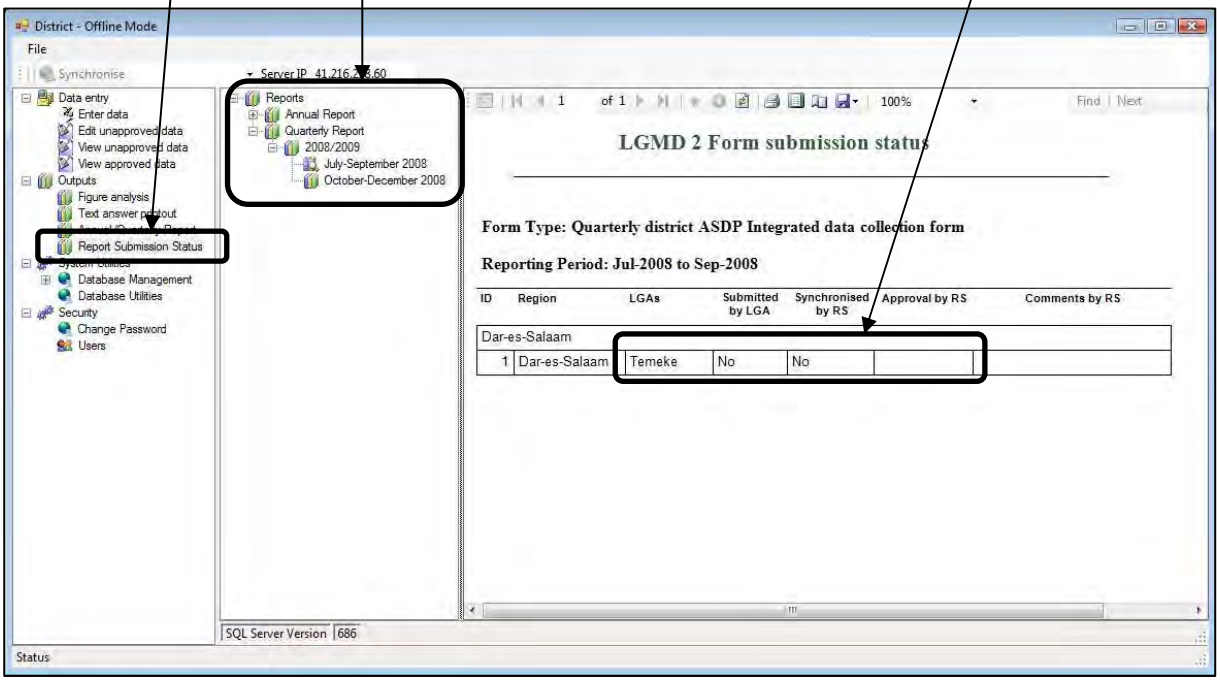
5.4 Report Submission Status

LGMD2 shows you the status of submission and the status of approval by Region. Before you are able to check them, **you should connect Internet and <u>Synchronise</u>** in order to receive the information on status of submission and approval at the MAFC's server.

(Checking the Status of Quarterly Report)

- **Go to Report Submission Status > Report (click + mark) > Quarterly Report (click + mark) > 2008/2009 (click + mark) > July-September 2008.**

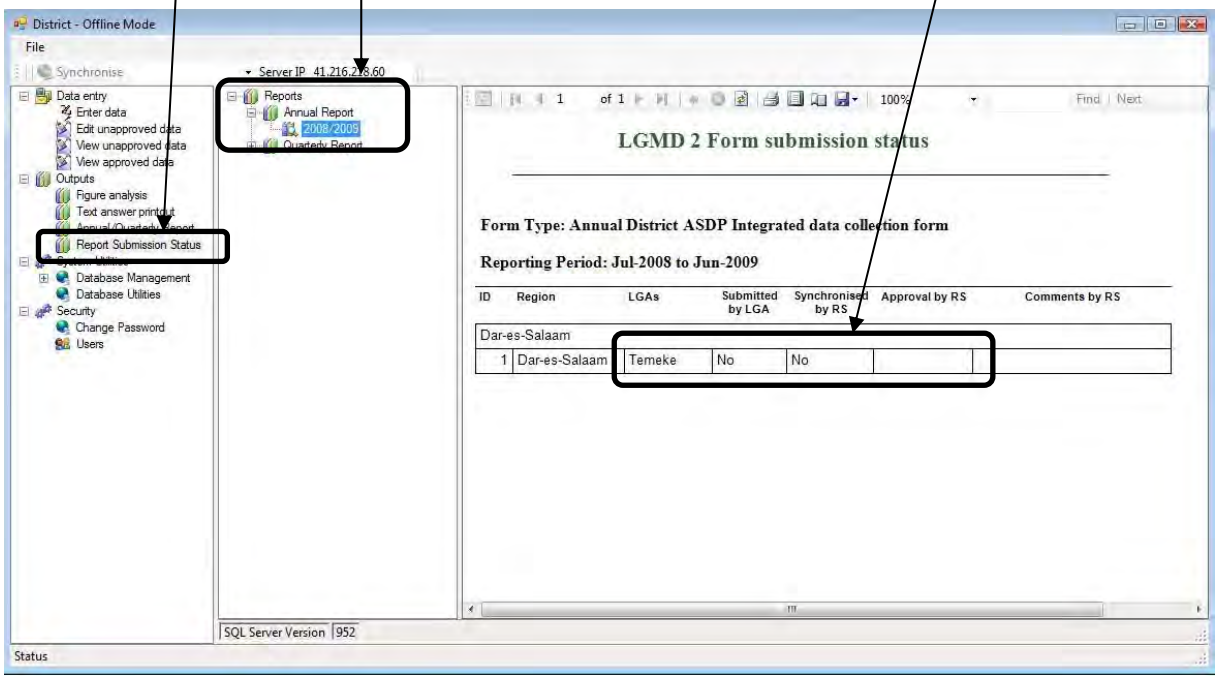
You can see the status of Temeke is "No".



(Checking the Status of Annual Report)

- **Go to Report Submission Status > Report (click + mark) > Annual Report (click + mark) > 2008/2009 (click + mark)**

You can see the status.



If your report has been already submitted, you can see “Yes” in the cell under “Submitted by LGA”. The next cell (Synchronised by RS) indicates whether the region already synchronised data from the main server or not. If your report has been approved by the region, you can see “Yes” in the cell under “Approval by RS”. In case that the report is not approved, you might see the comments from the region in the rightmost cell under “Comments by RS”

(Note)

- If there is comment from the RS and the report is not approved, the LGA must work on the comment and re-submit the report until getting approval.
- If the LGA has submitted the data through manual export of zipped file, “submitted” status will remain “No” until it is imported at the national level.

5.5 Data Correction after Approval

In case that you would like to correct data in the any report that was already submitted and approved, you can ask the authorised regional officer to remove the approval status. If this request is accepted, the regional officer remove approval status from the report and synchronise. Then, you also have to **Synchronise** and go to **Report Submission Status** on the LGMD2 screen as explained in 5.4. If you find “No” in the cell “Approved by RS” for that report, go to **> Data entry > Edit unapproved data**. The report now appears in the list of unapproved data, so you can correct data. After correction, you should follow data submission procedure again until the report is approved by the region.

Chapter

6

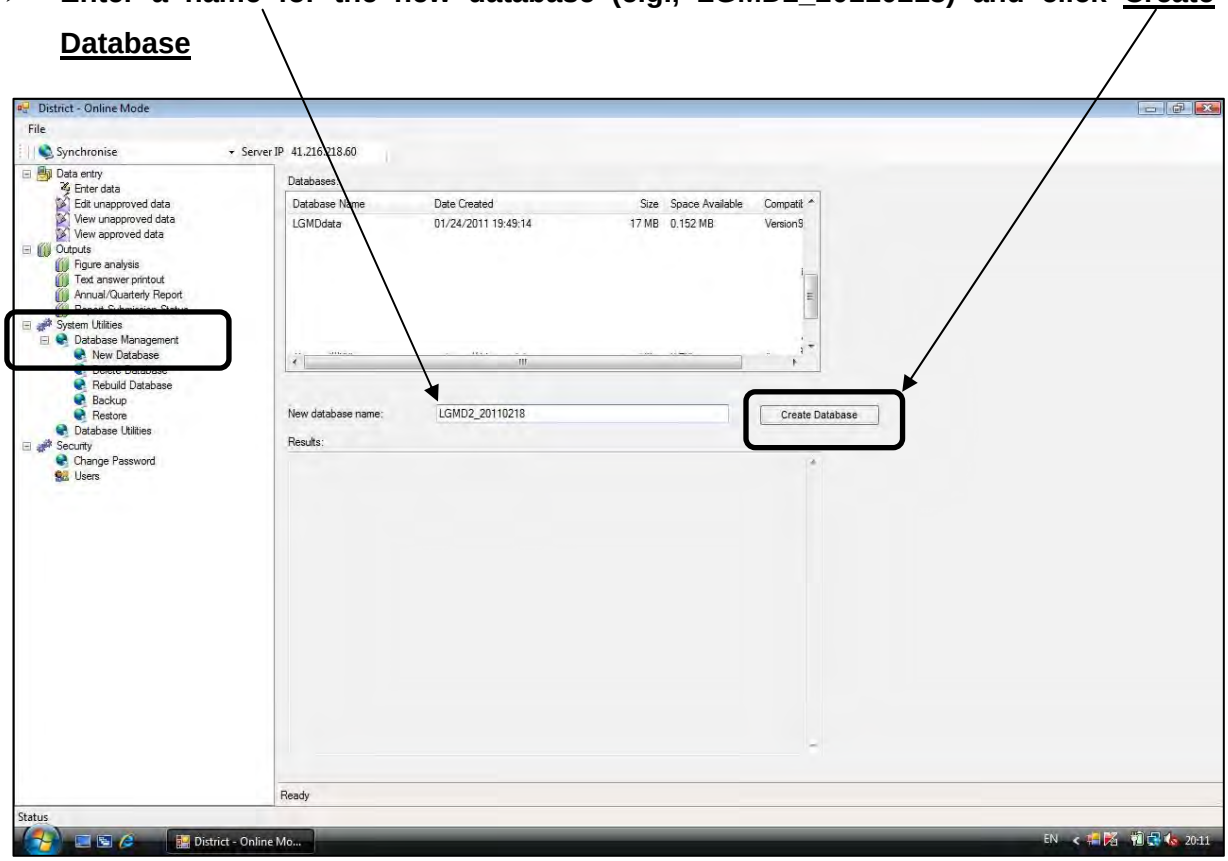
6 System Utilities

6.1 Database Management

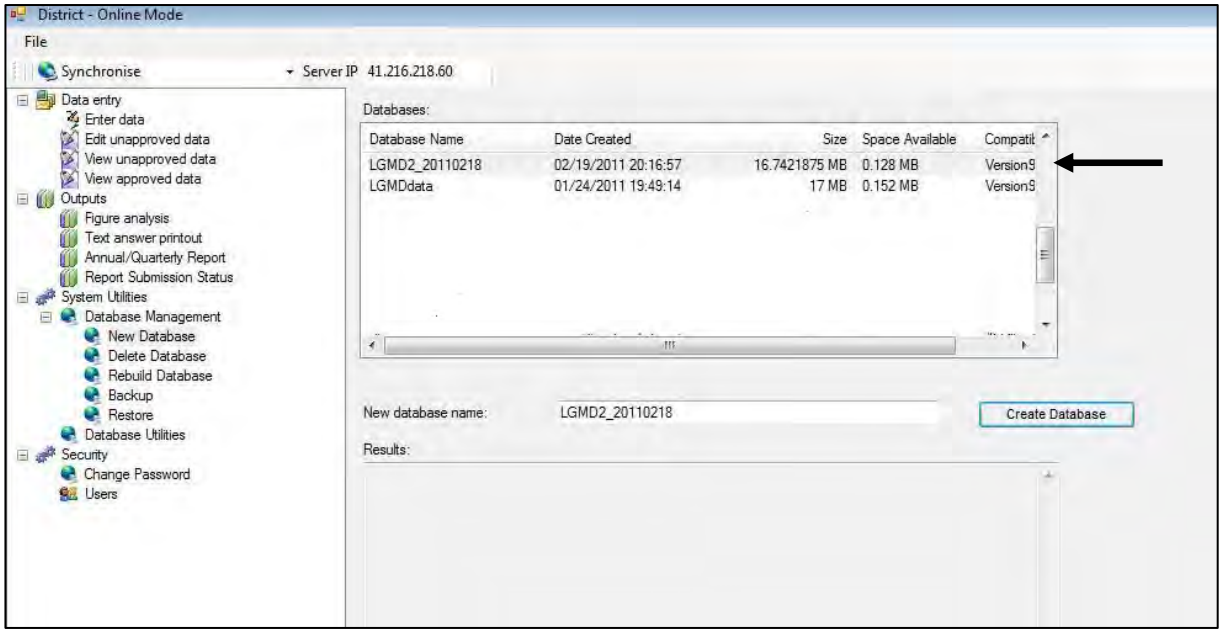
The LGMD2 system consists of a computer program or 'front end' and a database or 'back end'. When LGMD2 is installed, a database named 'LGMDdata' is created automatically and this will be the database used by the system at all times unless another database is created and the front end connected to it. It should never normally be necessary to create a new database. Where a problem has arisen, it may be necessary to create a new database and the method for doing this is described below.

6.1.1 Creating a New Database

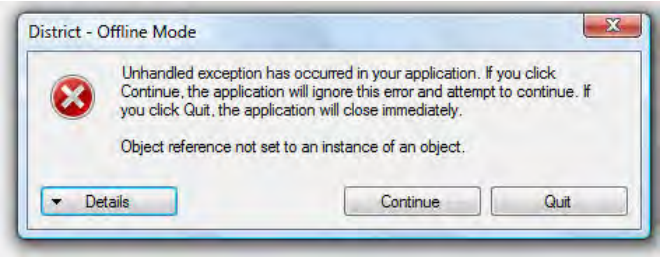
- **Select System Utility > Database Management (click + mark) > New Database.**
- **Enter a name for the new database (e.g., LGMD2_20110218) and click Create Database**



After a few moments, the new database will appear in the window at the top of the screen, with the date and time of its creation. This new database will be completely empty and will not be connected to the front end until the procedure described in 6.2 is carried out. (See also Annex 1 and 2 for step-by-step guide)



When creating a new database, the following error may sometimes occur.



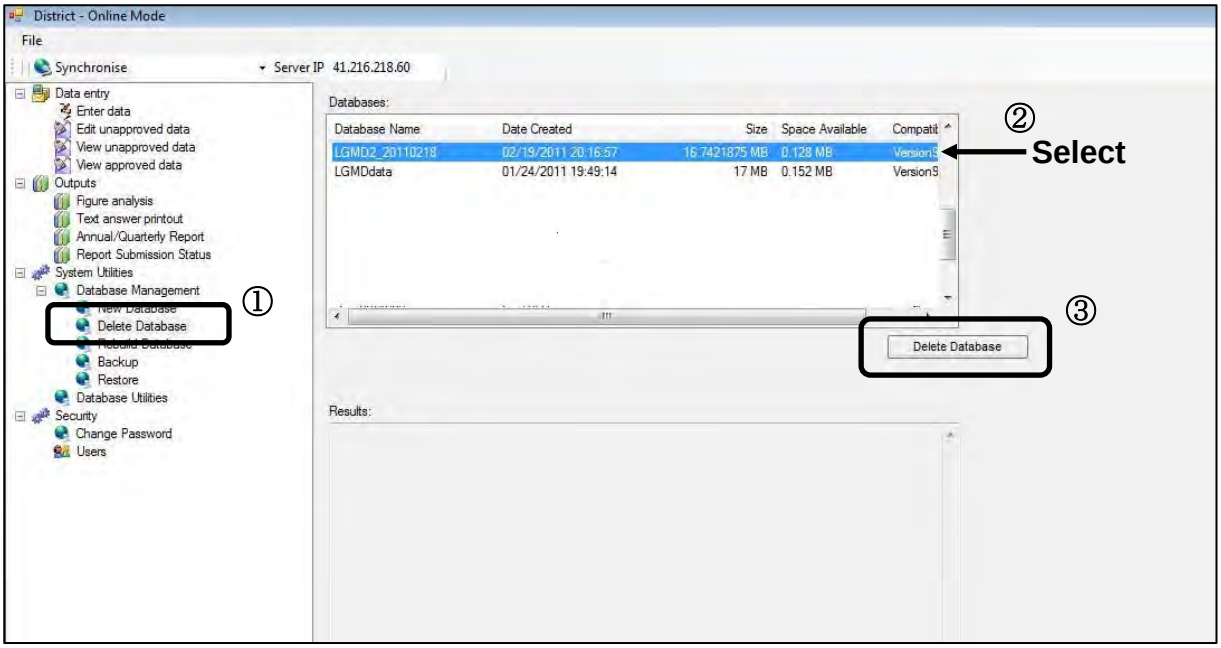
If it appears, simply close the system and go through the following procedure (See Tips 1 for details):

- Go to C:\Program Files\Microsoft SQL Server\MSSQL\Data\
- Right click on the folder name
- Select Properties
- Go to Security
- Create a user Everyone (If doesn't exist)
- Give the user full control
- Click OK

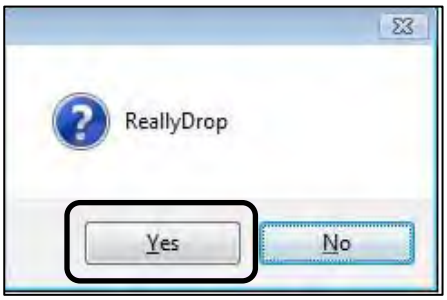
The database should then be created and appear in the top window of the screen.

6.1.2 Deleting a Database

- **Select System Utilities > Database Management (click + mark) > Delete Database.**
- **Select the database which you would like to delete (e.g., LGMD2_20110218) and click Delete Database**



You see the following message. Click **Yes** to confirm.

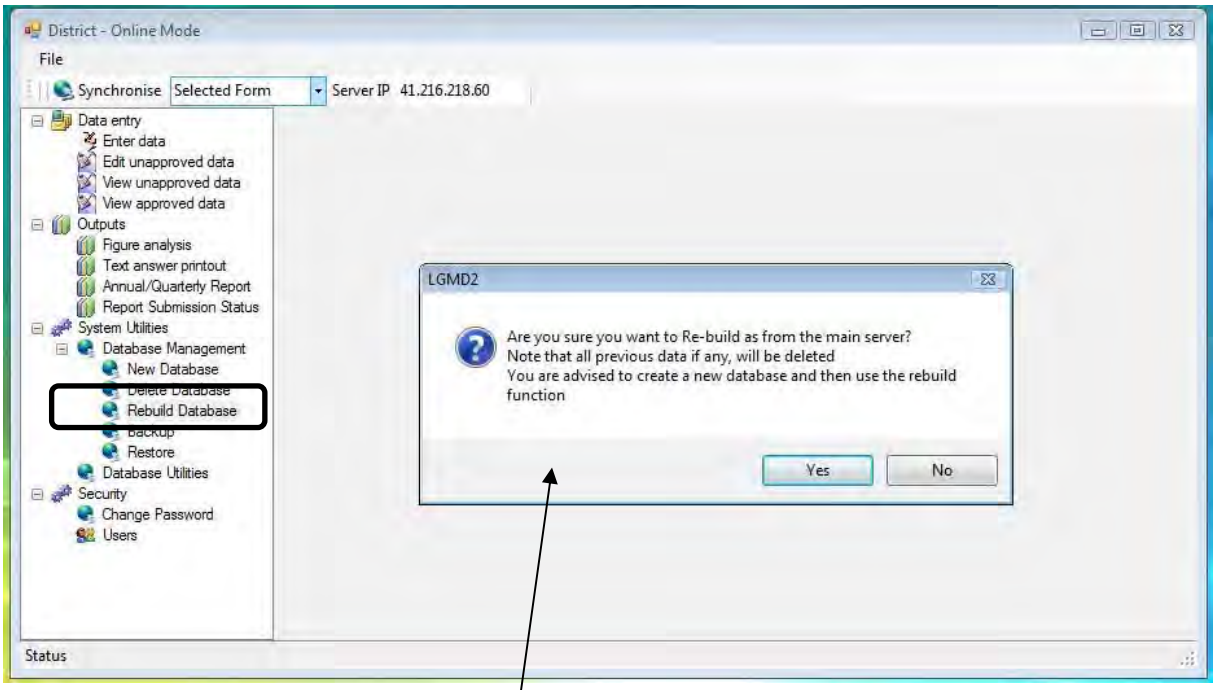


6.1.3 Rebuilding a Database

If a database which has already been synchronized with the main LGMD2 server, but afterwards has become corrupted or inadvertently deleted, it can be rebuilt by using this function***. It is recommended that only experienced users use this function as good data could be deleted inadvertently***.

Firstly, ensure that the computer is online.

- **Create a new database as described in 6.1.1.**
- **Select System Utilities > Database Management (click + mark) > Rebuild Database.**



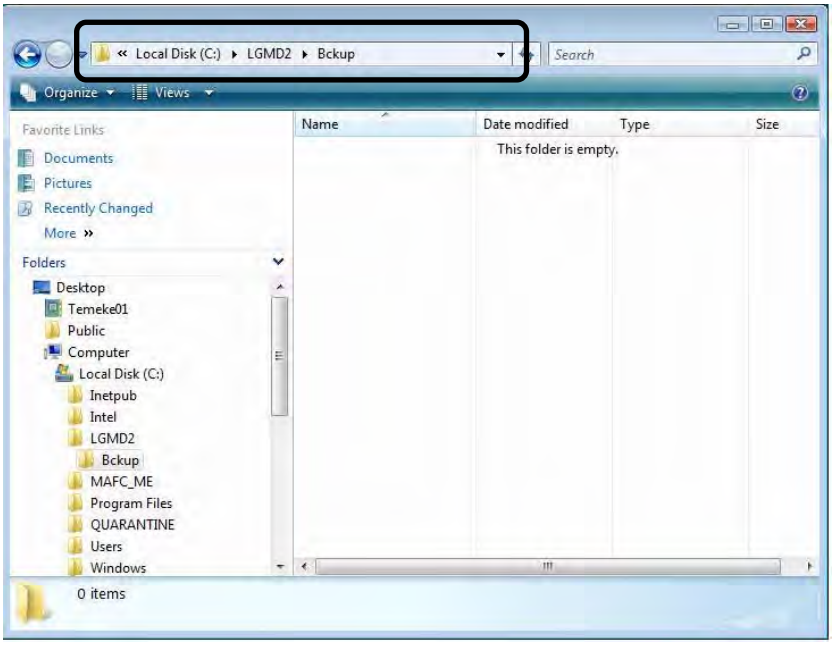
When clicking **Rebuild Database**, you see the warning message.

Clicking **Yes** will connect the computer to the main LGMD2 server and download the required data. If the LGMD2 server is not accessible, another error message will appear. When the server is accessible, the rebuilding will take place.

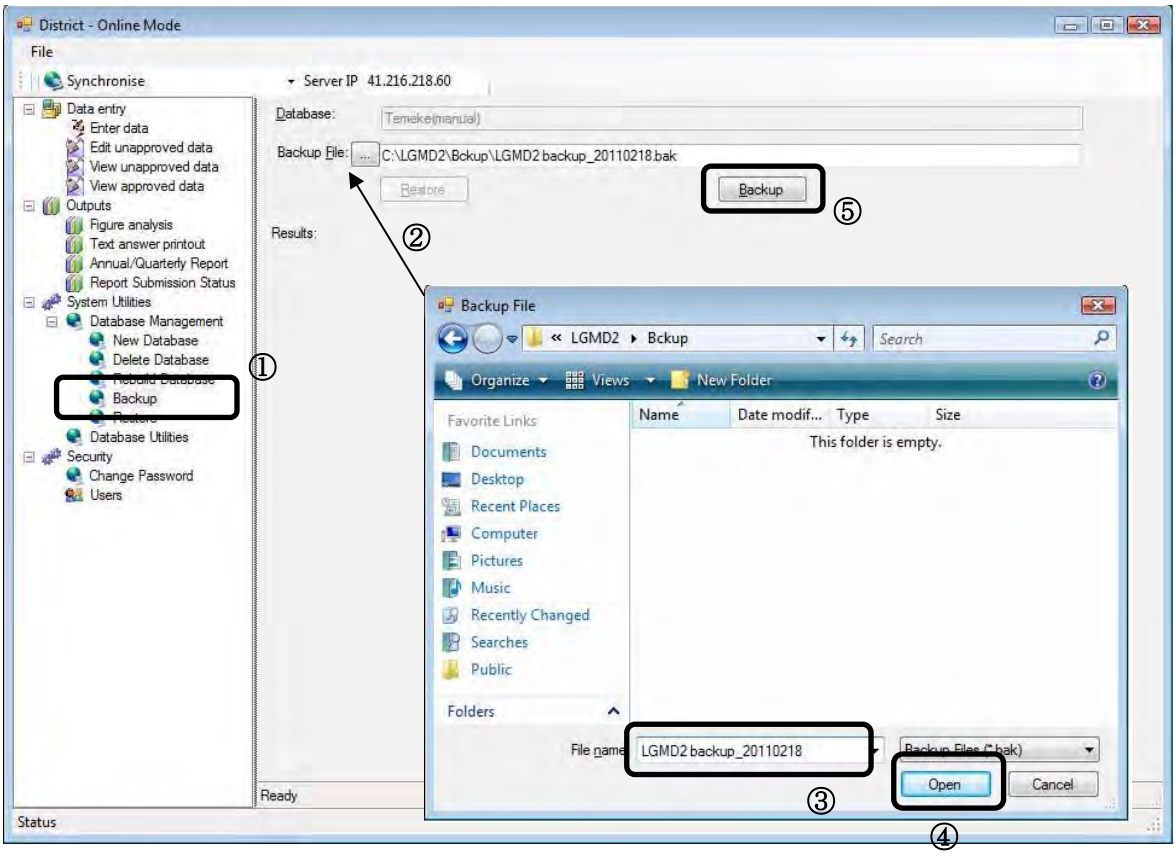
6.1.4 Backing up Databases

It is good practice when operating any software to make regular backups and store them remotely from the computer. This protects the data from loss if the computer crashes or is stolen. In LGMD2 once the data in the computer is synchronised with the main LGMD2 server, it is automatically backed up and can be available to the LGA if data is lost, using the rebuild function described above. However, it is strongly recommended that data backup be carried out regularly at LGA level in the event that the data entered have not yet been synchronised. Backup is carried out using the following procedure.

- **Create a folder in C drive** in your computer. For example, you can create a folder: **c:\LGMD2\backup**.



- On LGMD2 screen, **Select <u>System Utilities</u> > <u>Database Management</u> (click ⊞ mark) > <u>Backup</u>**
- Click on the box to the right of the words **Backup File** and navigate to the folder you have just created in (Do not save a backup file in Desktop).
- Enter a suitable file name (e.g., LGMD2 backup20110218), **select <u>Open</u>** and **click <u>Backup</u>**



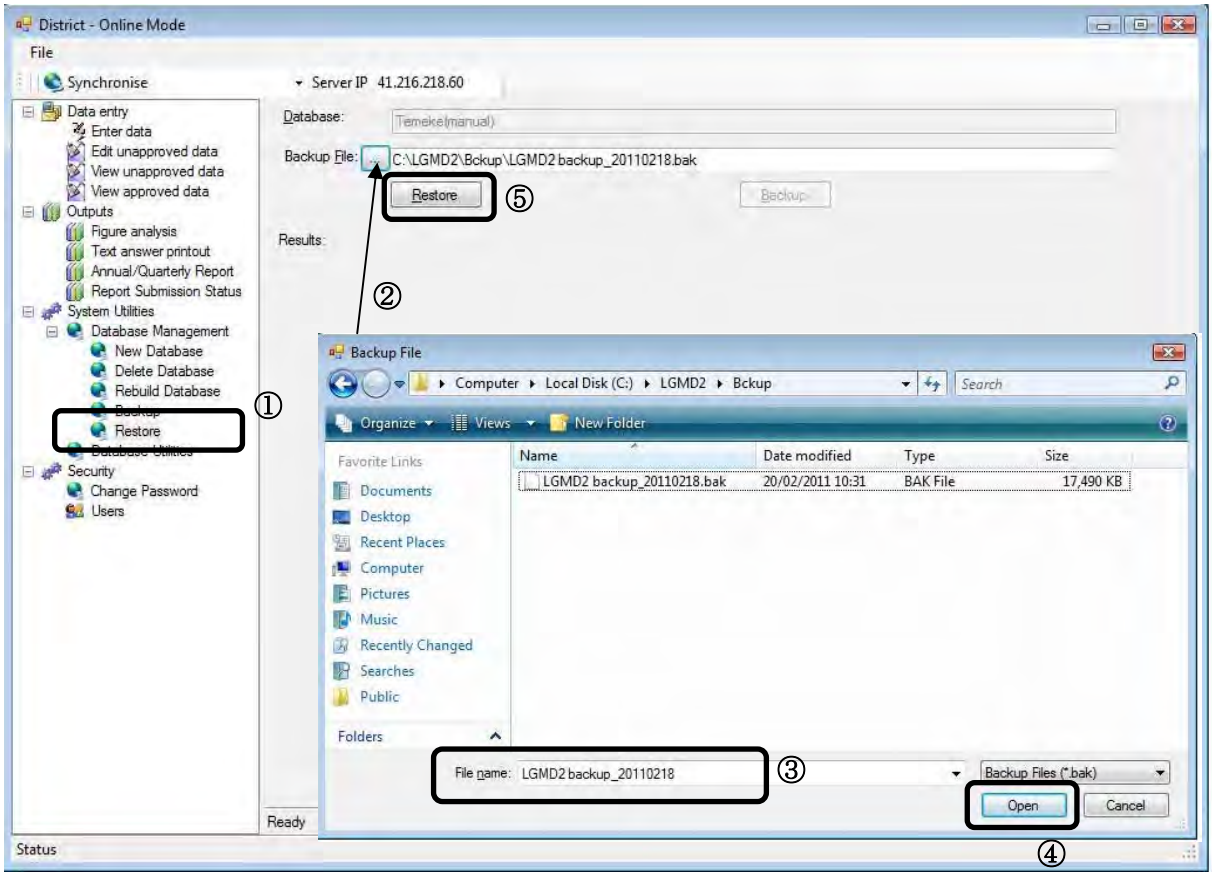
You see the following message. Click **OK** to confirm.
Then, the backup successfully completes.

Now copy the Backup file to another medium, such as a flash disk, so that the data is backed up in a different location from the computer.

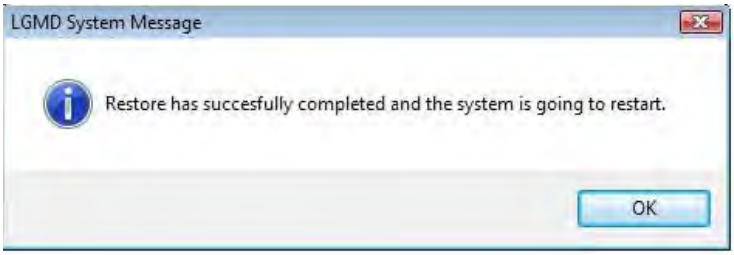
6.1.5 Restoring a Database

The user can restore data if required from the latest backup file created as described above. To restore data, at first, locate the latest backup file in the folder created in 6.1.4 (If you have the backup file in a storage medium such as a flash disk, copy the file to the folder created in 6.1.4). Then, go to the next steps as follows.

- **Select System Utilities > Database Management (click + mark) > Restore**
- Click on the box to the right of the words **Backup File** and navigate to the latest backup file (e.g., "LGMD2 backup_20110218").
- **Select Open** and **click Restore**



You see the following message. Click **Yes** to confirm



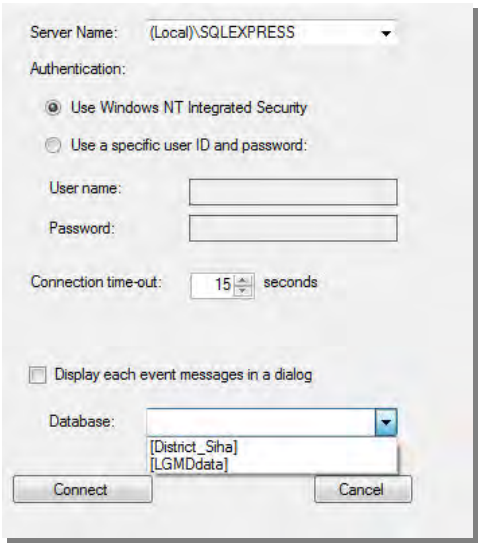
Then, a message indicating that the data is successfully restored appears.

Simply click **OK**.

6.2 Database Utilities

LGMD2 allows the experienced user to connect to different databases as required.

➢ **Select System Utilities > Database Utilities.** The following screen appears.



Ensure that the Server before using this function. The correct server name is **(Local)\SQLEXPRESS**. In some circumstances another server name might appear. This name should be deleted and the above name entered exactly as shown.

Select the database required from the drop-down list, and then click the **Connect** button. The system will then restart and the user will be required to log in again. Note that where the database has just been created, the system will restart and the user will be required to select the level of operation required and the district/region, and log in again. Note that the database created can be at any level and for any district or region, etc.

Chapter

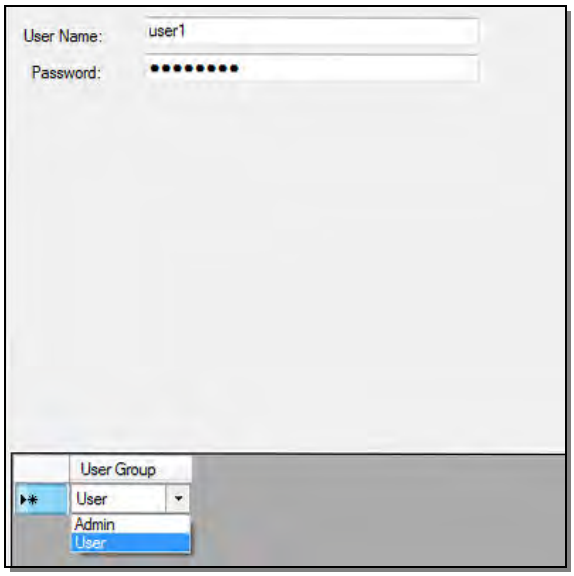
7

7 Security

Only authorised users should be allowed access to LGMD2. Access is controlled by the system administrator or supervisor, who alone should log in as 'administrator'. This person should start by creating users with login names and passwords, and should store these in a secure location.

7.1 Adding Users

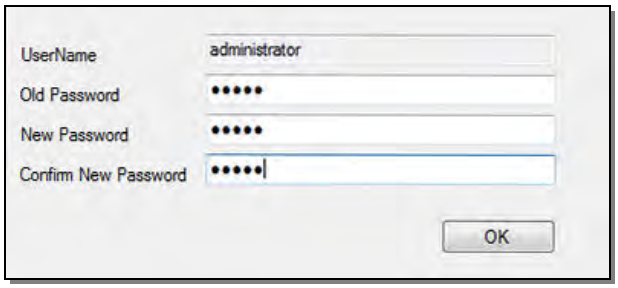
To add users at any level, first log in as Administrator, and then select **Security/Users** from the tree view column. The following screen appears:



Enter the user name and password, and then select the group (either Admin or User). The new user is now active.

7.2 Changing a password

Select Security/Change Password from the tree view. The screen shown below appears.



Enter the old password and then the new one. Confirm the new password and press OK. The password is now changed. Be sure to keep a careful note of the new password.

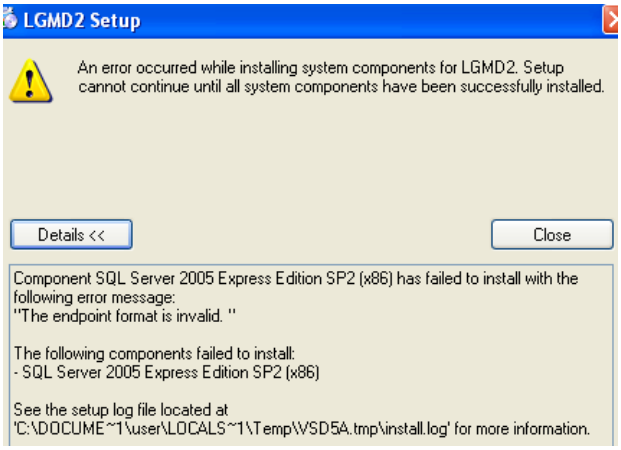
Chapter

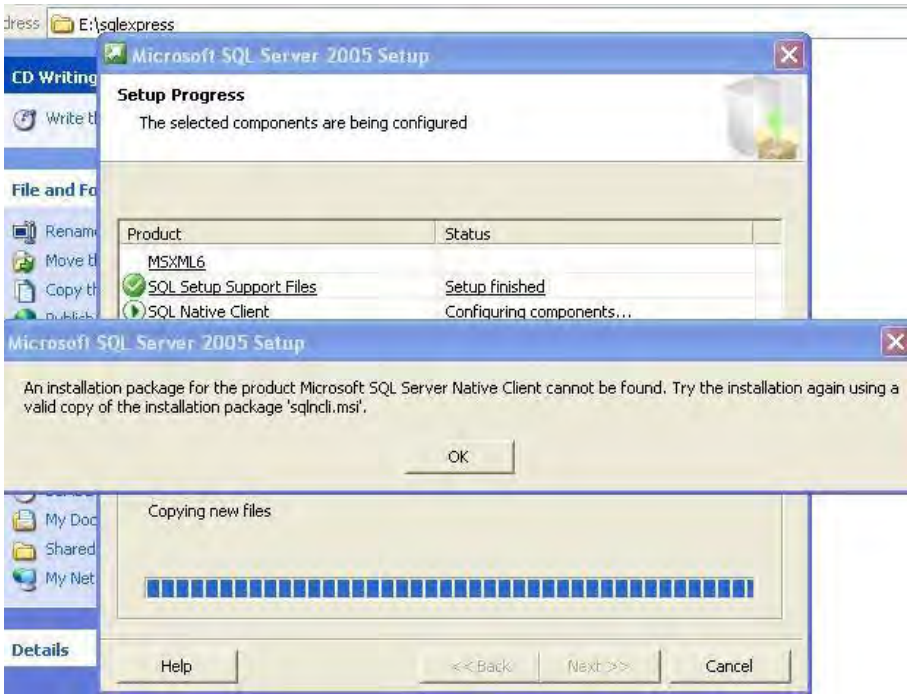
8

8 Problems and Solutions

8.1 Installation Errors

Where there is an existing installation of SQL Server, unpredictable results may occur, producing errors during the installation, as illustrated as follows.



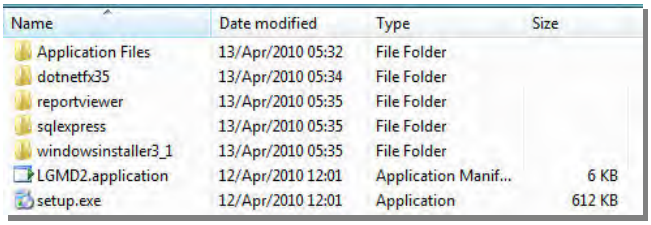


Where installation of LGMD2 fails with errors reported similar to those shown above, the cause may be the existence of an existing SQL Server installation on the computer. Another message which may be seen is *'An exception occurred while executing a Transact-SQL statement of batch'*. If any such message is displayed, first follow these instructions for manual installation.

8.1.1 Manual Installation of LGMD2

Remove the existing LGMD2 installation if there is one, as described under **Upgrading LGMD2 to a newer version** in Tips 3.

Using Windows Explorer, view the folders on the installation CD as follows, and open the folder called **sqlexpress.** Inside it is one file called ***sqlexpress.exe***.



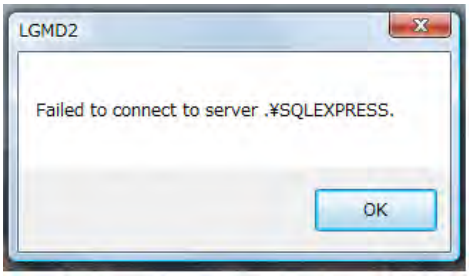
In Windows Vista, right-click this file, then left-click **Run as Administrator**. A warning message will appear. Click **Continue**. The SQL Server Express edition should then be installed step by step. If after a few attempts the problem persists, consult your systems administrator, or Regional ICT specialist.

The same manual installation procedure may be followed for the two other components of LGMD2, namely the 'dot net' framework v 3.5 and the Visual Studio Report Viewer, contained in the folders called **dotnetfx35** and **reportviewer** respectively. After having installed these components, then run "setup" for LGMD2.

If it still does not work, uninstall[1] pre-existing dot net and sql files in the computer. In doing so, uninstall from the latest [e.g. dot.net 4.0, then 3.5 sp1, then 3.5, then 3.0 then 2.0 then 1.0 versions].

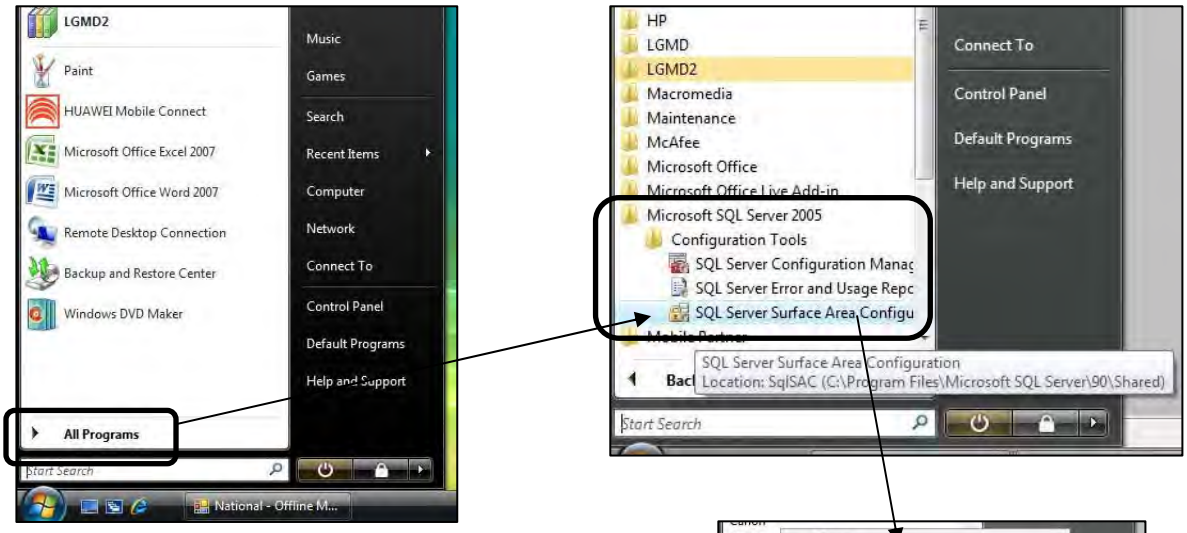
8.1.2 SQL Express Error

Where the error shown on the right appears, it is necessary to do the following:



- **Select <u>Start</u> > <u>(All) Program</u> > <u>Microsoft SQL Server 2005</u> > <u>Configuration Tools</u> > <u>SQL Server Surface Area Configuration</u>**

[1] Go to Control Panel/Programs and Features then select the newest version and click Uninstall

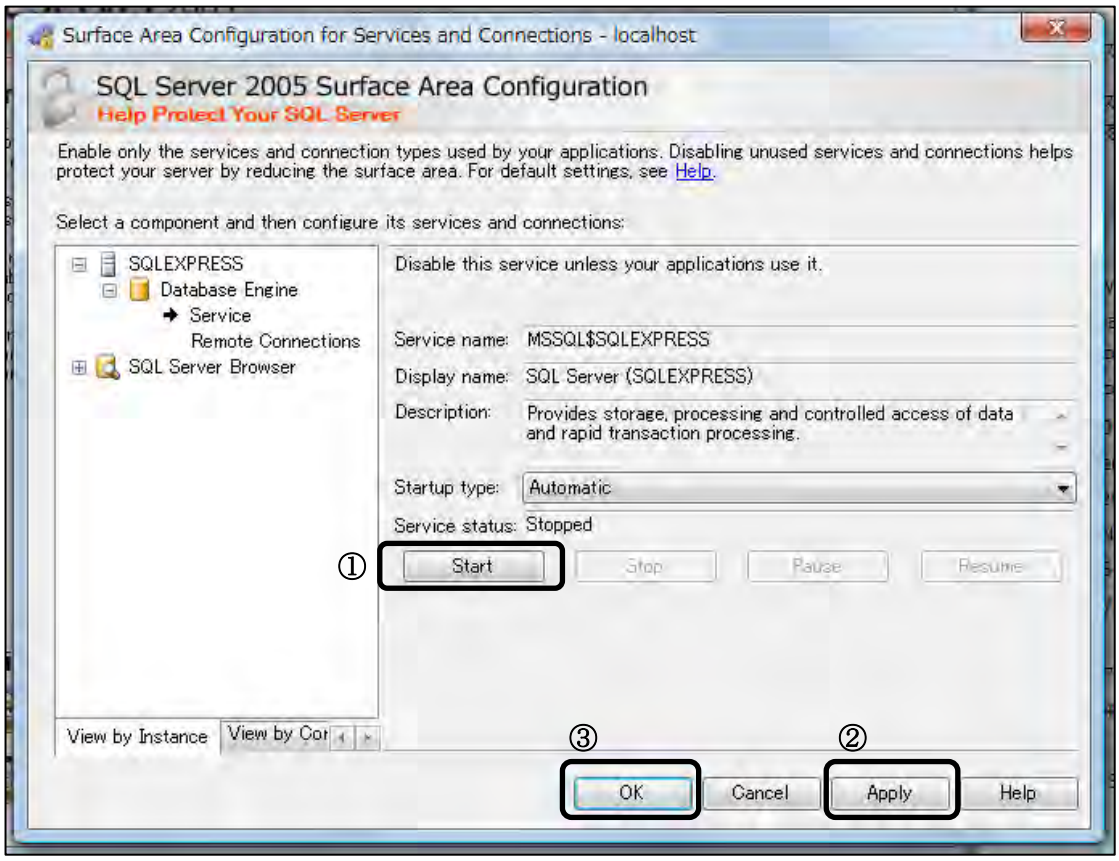


➢ (If using Windows vista or Windows 7) **Right click <u>SQL Server Surface Area Configuration</u> and left-click <u>Run as Administrator</u>**

Then, you can see the screen as shown below.

➢ **Click <u>Surface Area Configuration for Services and Connections</u>**

The next screen appears. Simply click the **Start** button to get the service connected to SQL Express. Click **Apply** and then **OK**.

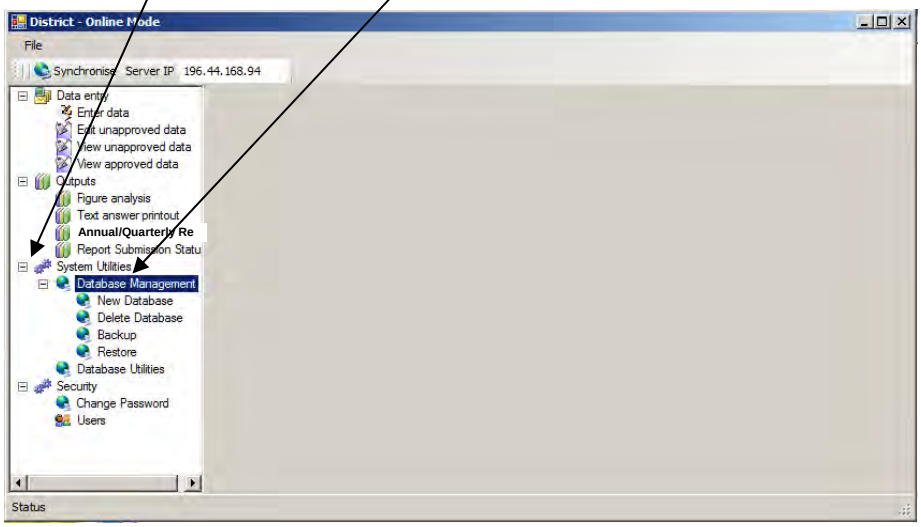


Annex 1

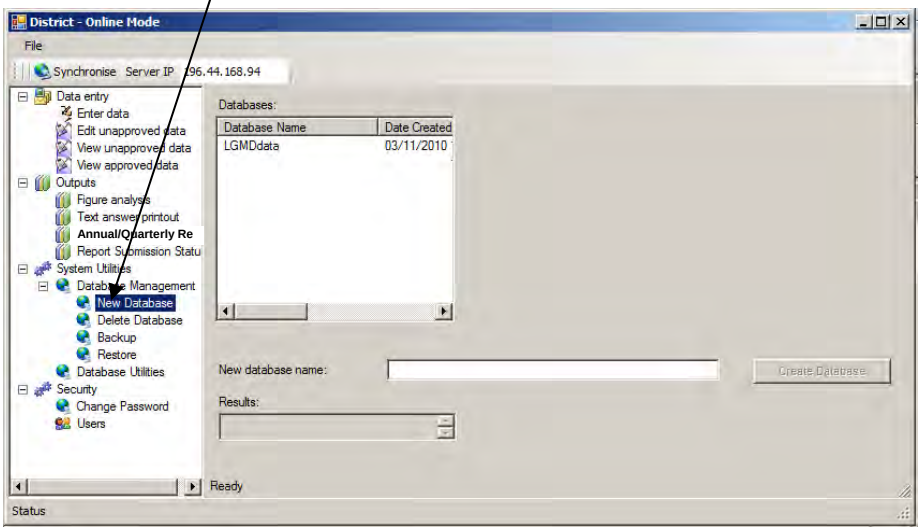
How to create a new District-level database

If you want to create a new database at District level and start fresh from the beginning, please follow the steps described in this annex.

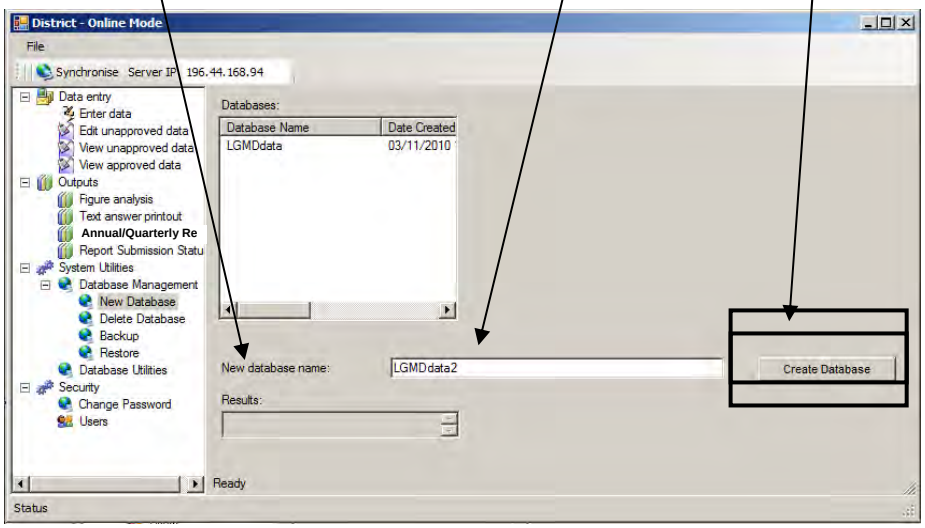
1. Click System Utilities > Database Management.



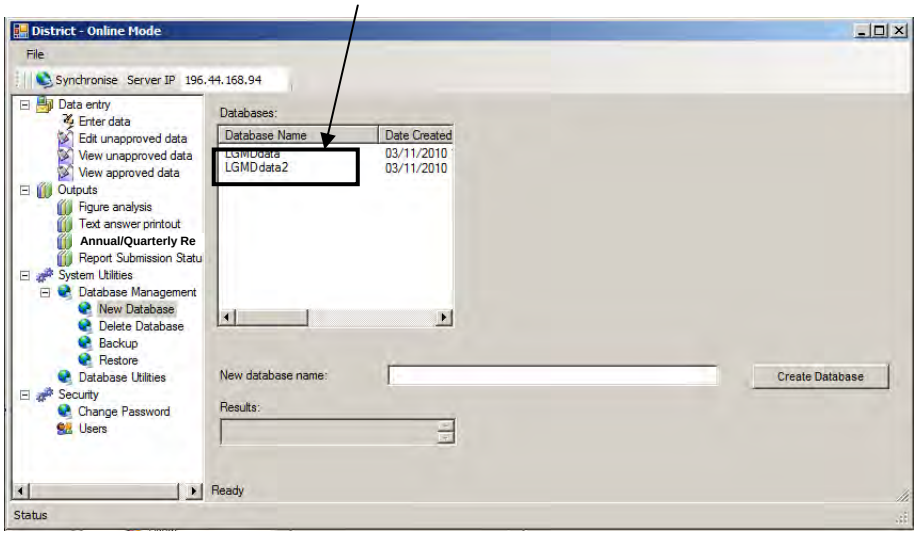
2. Then, click New Database.



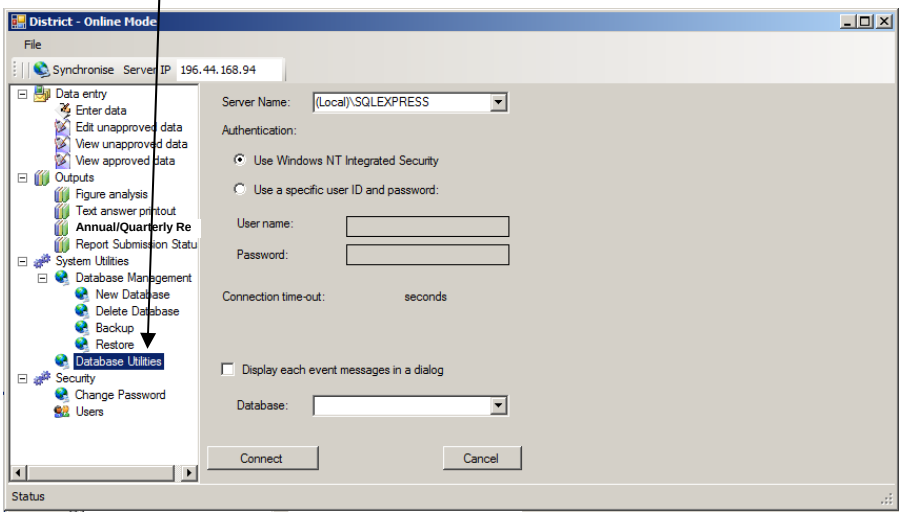
3. Type a New Database Name (e.g., LGMDdata2). Hit Create Database.



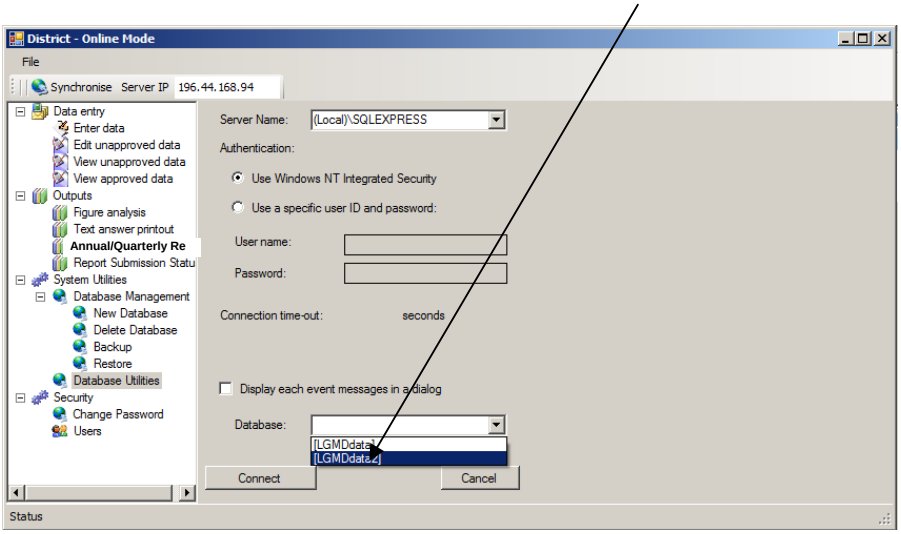
4. You see the new database name here.



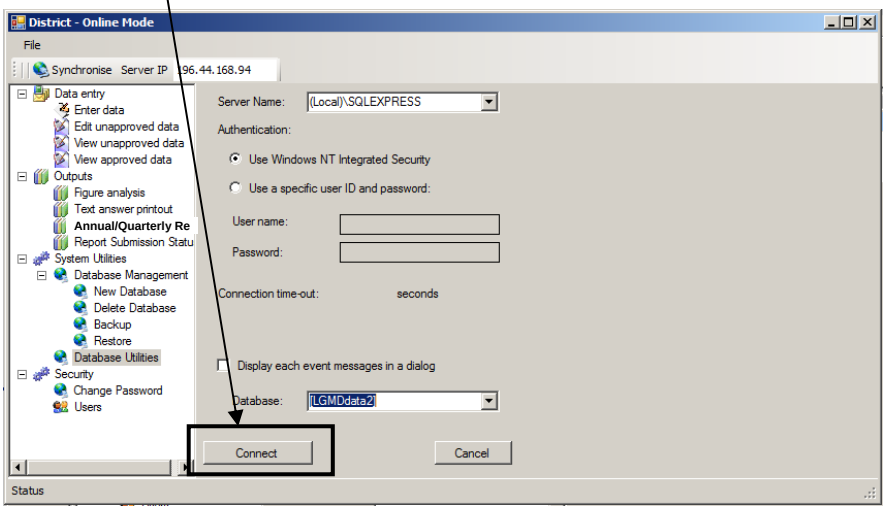
5. Click Database Utilities.



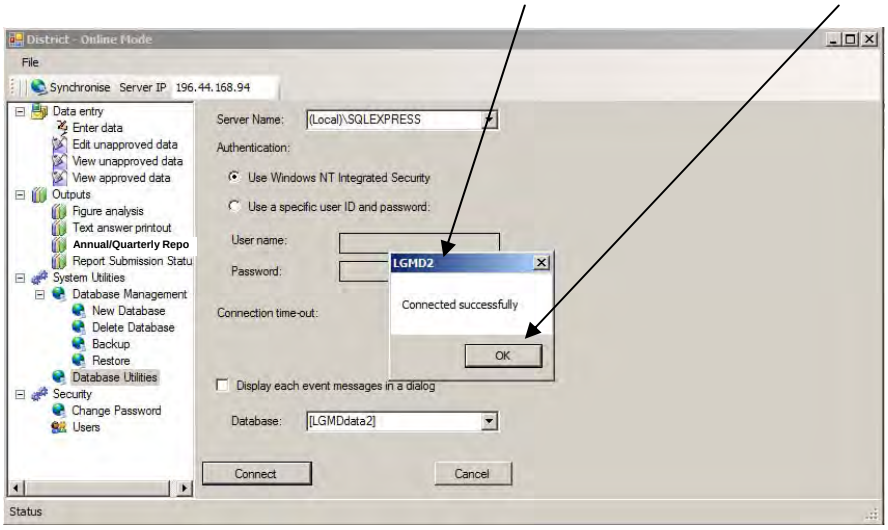
6. Select the database you created. (e.g., LGMDdata2)



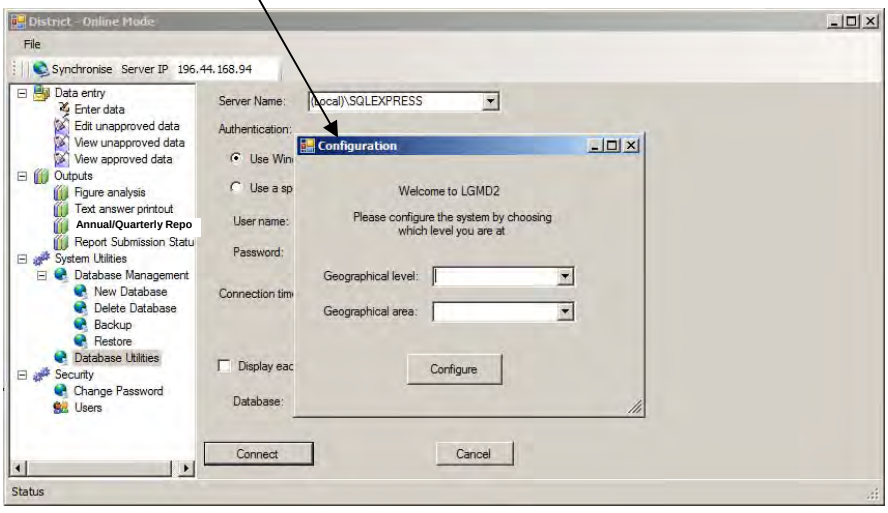
7. Select Connect.



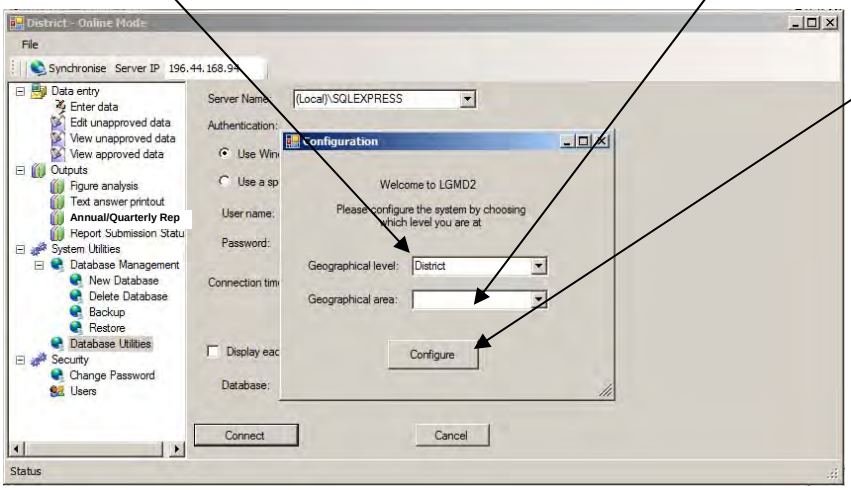
8. After a while, you see the message “Connected Successfully”. Hit OK.



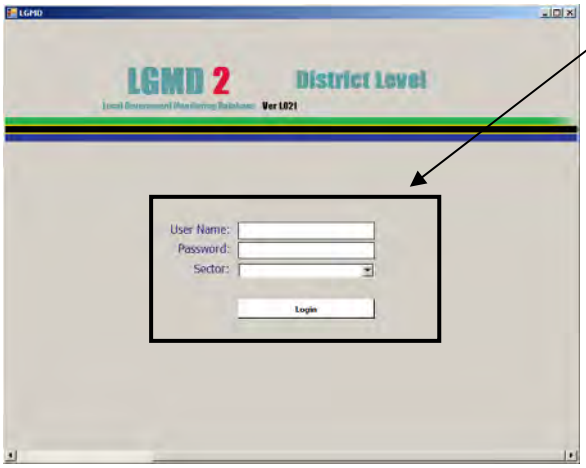
9. You see the Configuration box.



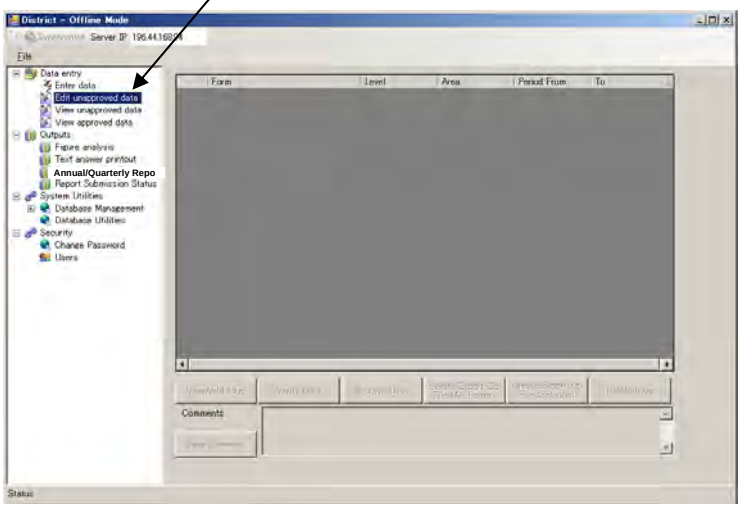
10. Select District for Geographical level. Select the name of your district. Hit Configure.



11. You can see the following screen. Please type User Name, Password, and Sector. Hit Login.



11. If you click Edit unapproved data, you can confirm no report exists.



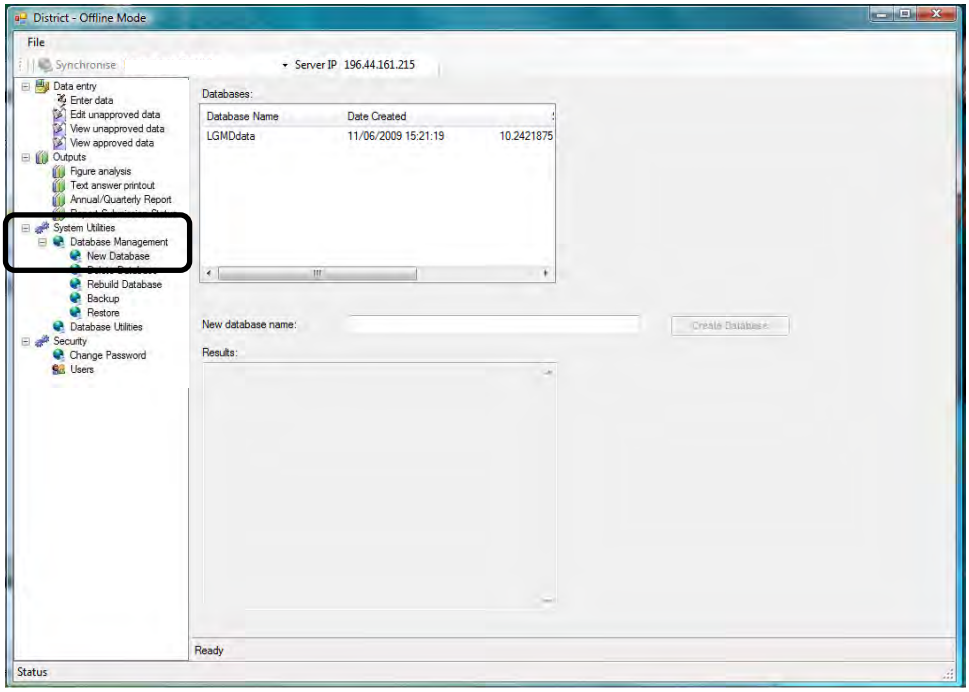
Ok, now you can make a new annual and quarterly report.

Annex 2
How to create a National-level database

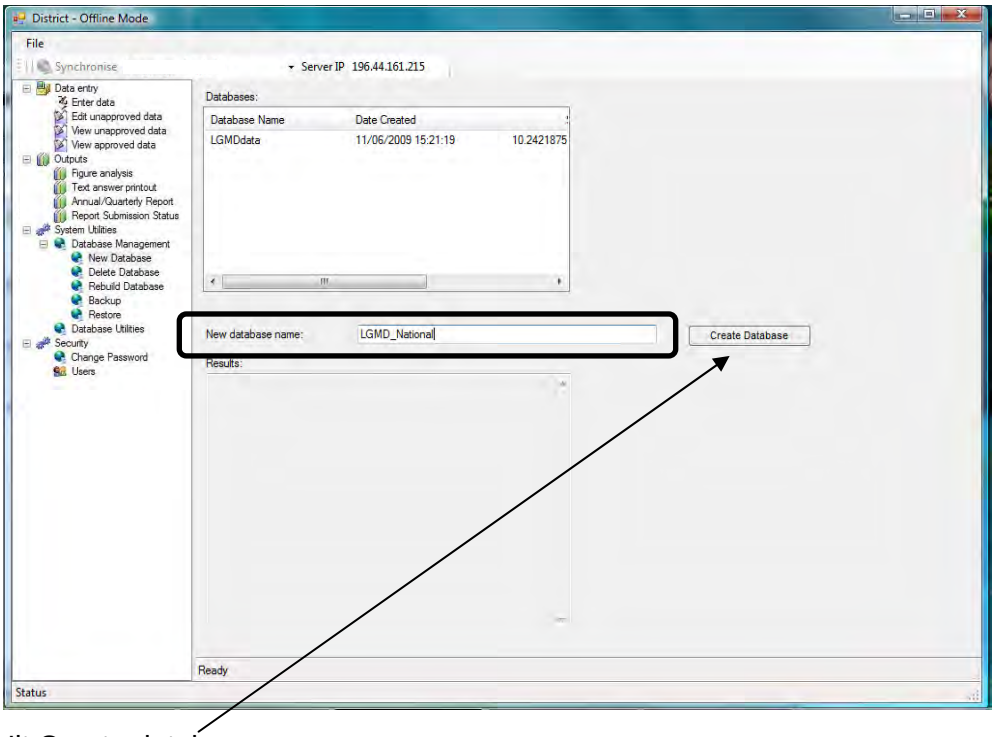
If you want to create a new database of National level,
please follow the steps described in this annex.
At national level, you can see data of any other districts.

1. Login to National level LGMD2

Select System Utilities > Database Management (click + mark) > New Database

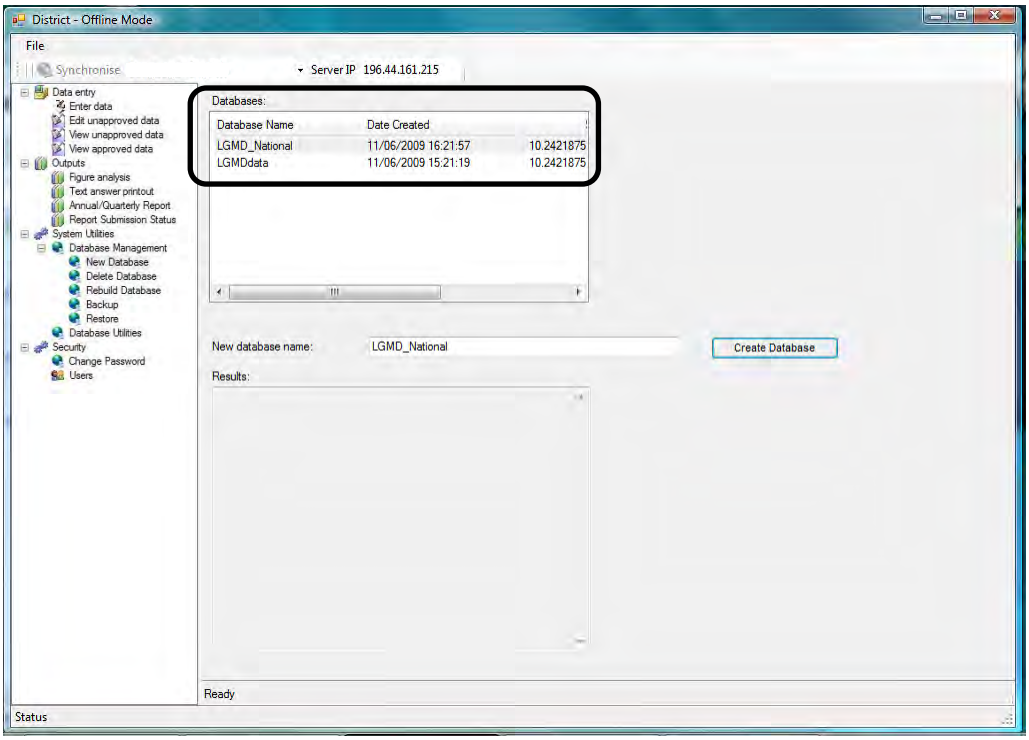


2. Type “LGMD_National” at New database name. (You can type any name you want.)

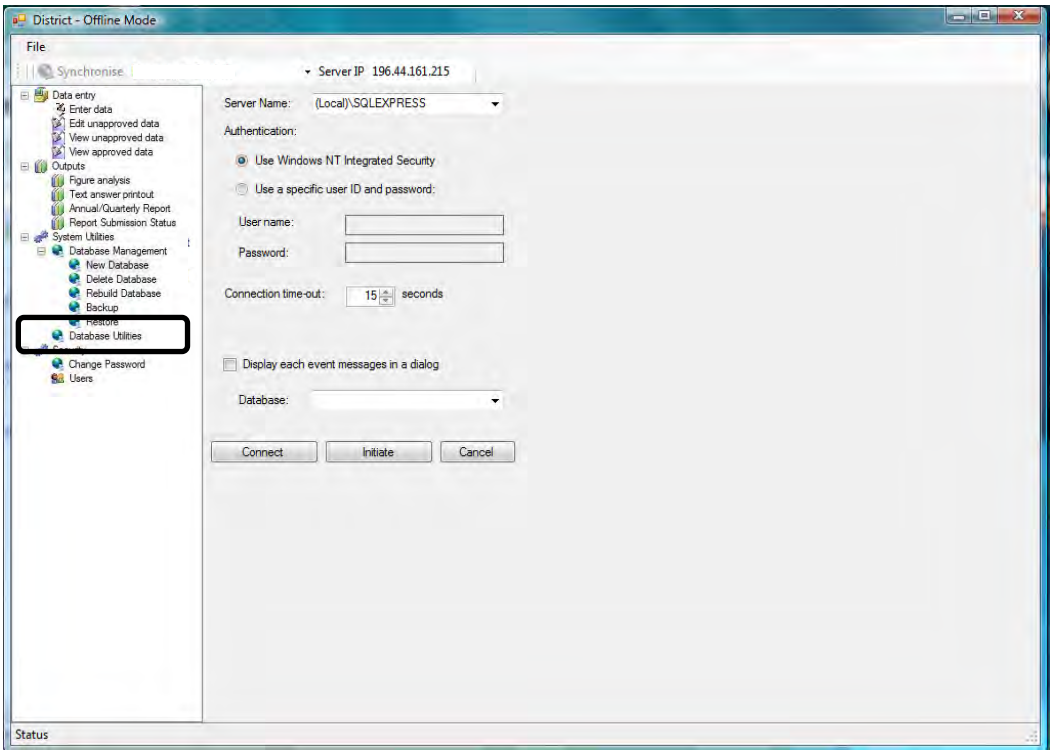


Hit Create database.

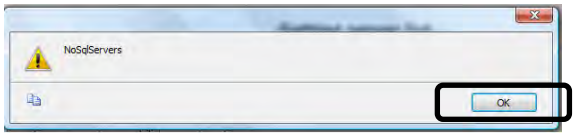
3. You see “LGMD_National” in Database.



4. Select System Utilities > Database Utilities.

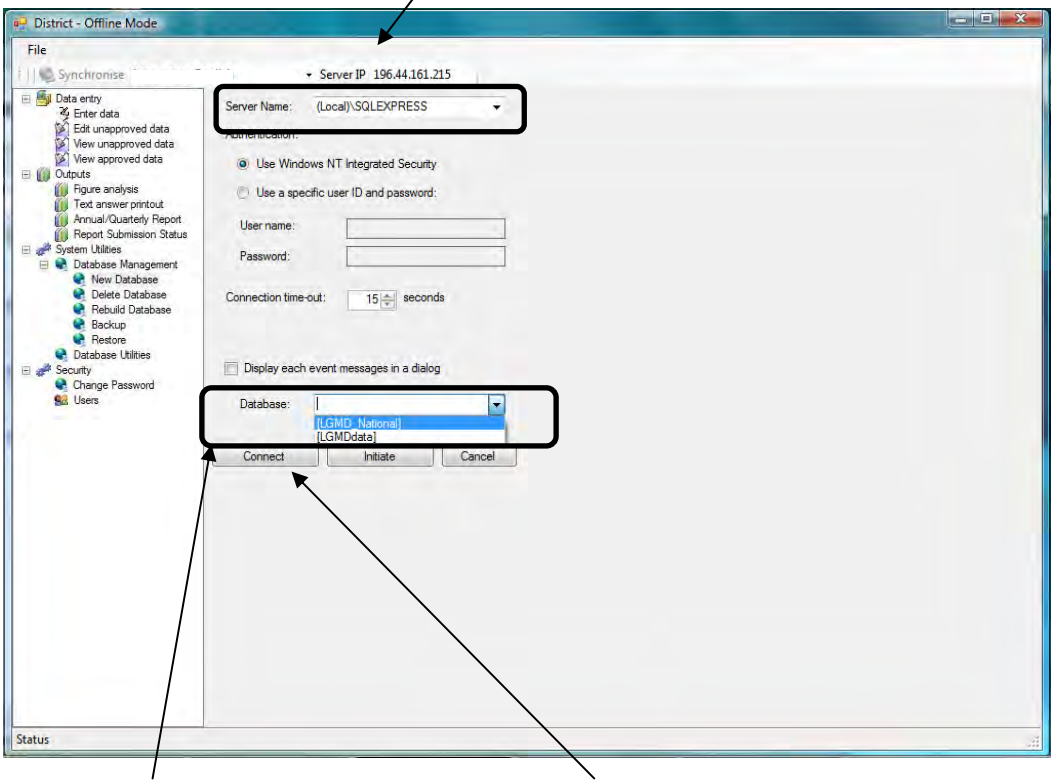


You may see the following dialogue box. Simply click OK.



(Whenever you see this box, simply click OK.)

5. Please confirm Server Name as (Local)\SQLEXPRESS. If it is not, simply type so in this box.

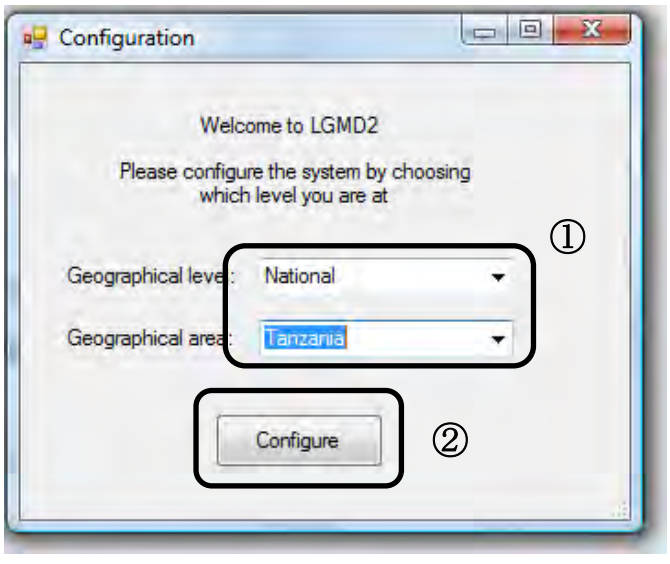


6. Select “LGMD_National” for Database. Hit connect.

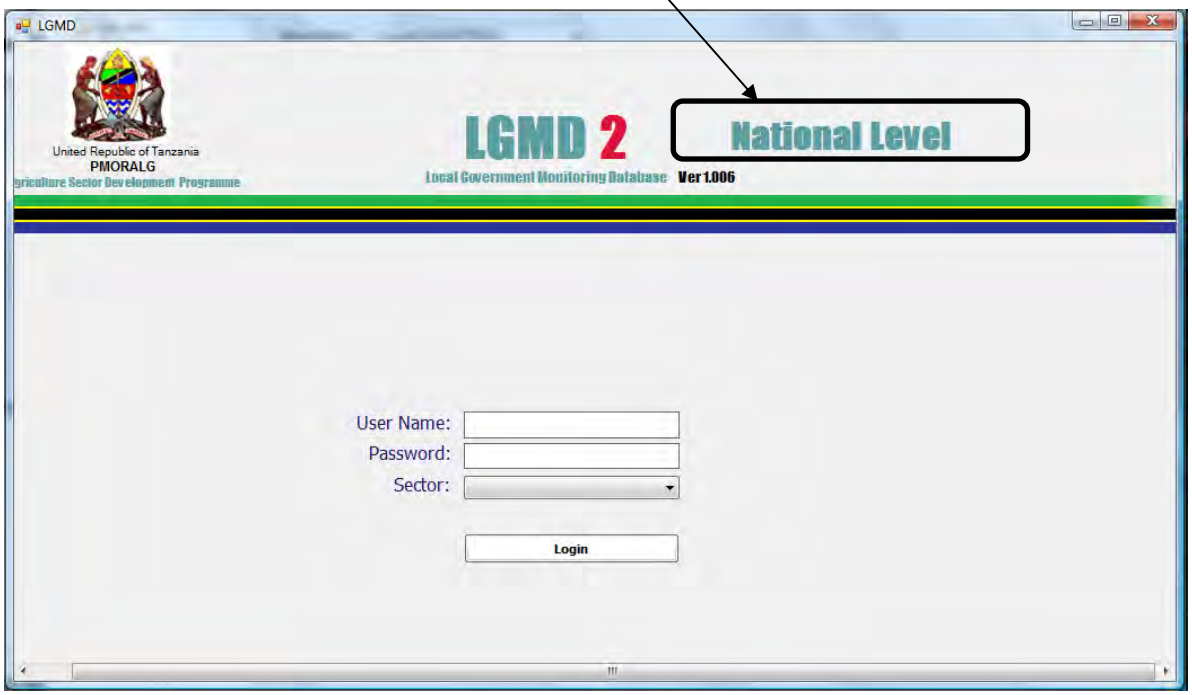
7. You see the following message. Hit OK.

8. Then, you see the following box.

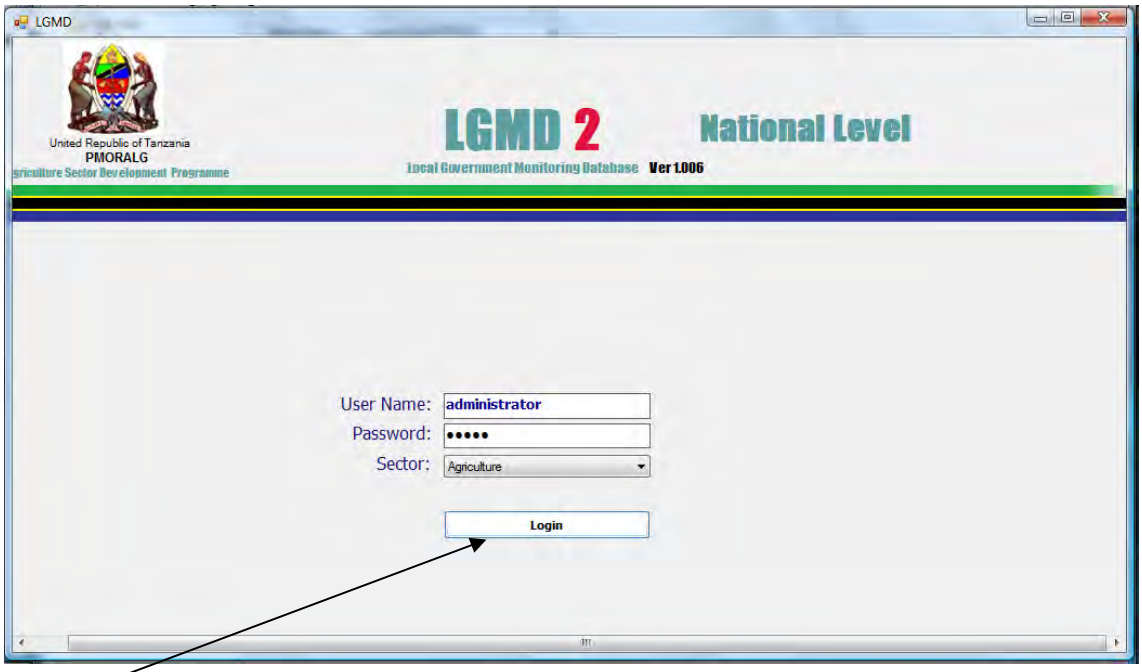
9. Select the followings. Then, hit Configure.



10. You see the following screen. Now you are in National Level LGMD2.



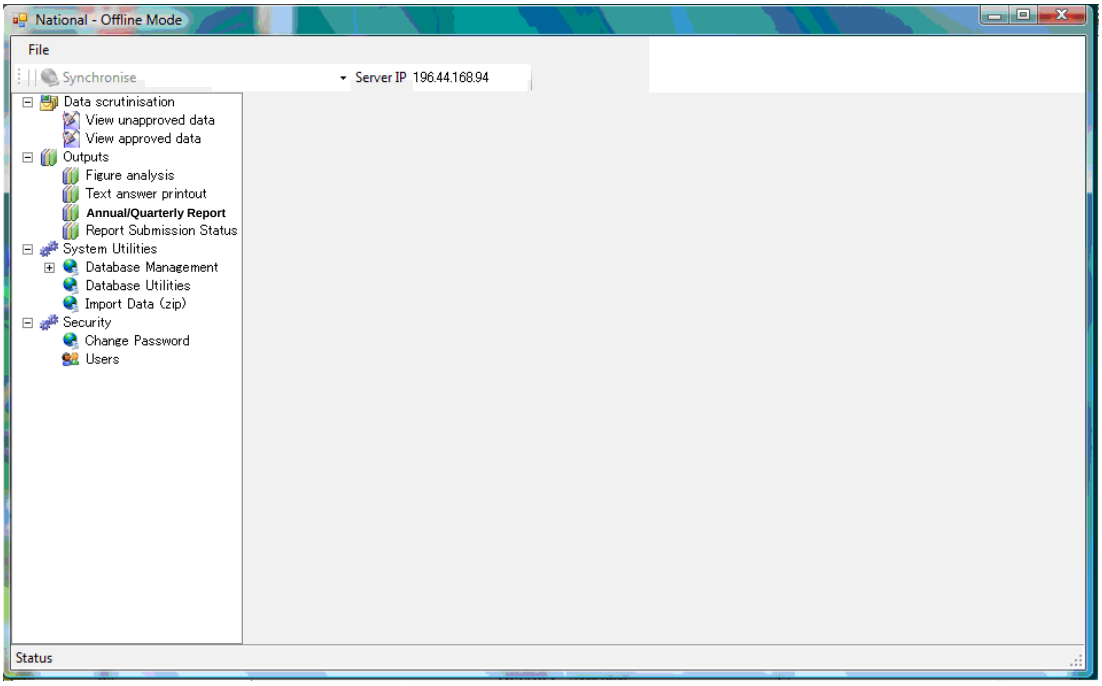
11. Type as follows.
    User name: administrator
    Password: admin
    And sector “Agriculture” for Sector



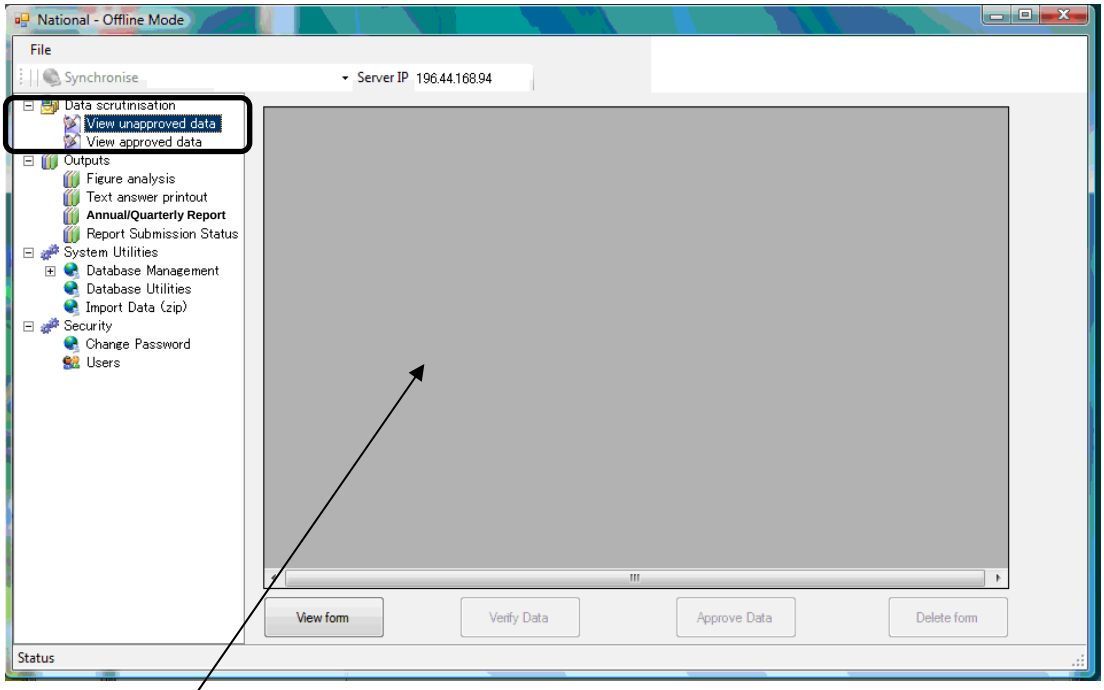
Hit login. You see the screen shown in the next page.

2. Synchronise and obtain all data from the national server

1. You see the following screen.



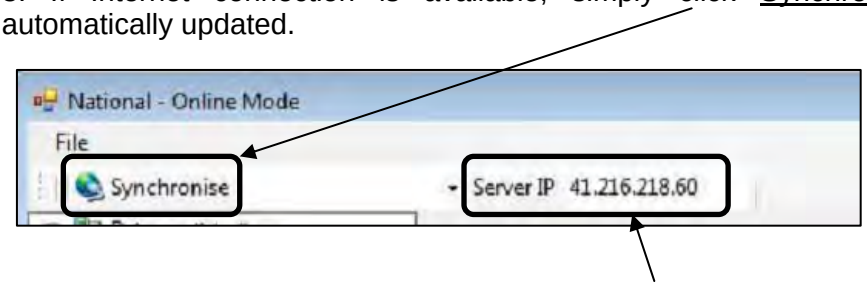
2. Select Data scrutinisation > View unapproved data



You see no data in this space.

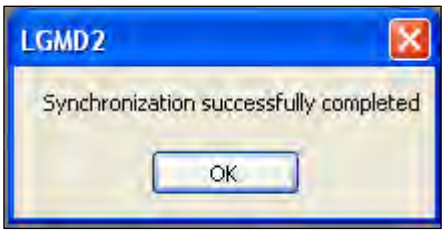
Synchronise (if you have Internet access)

3. If Internet connection is available, simply click Synchronise. The database is automatically updated.

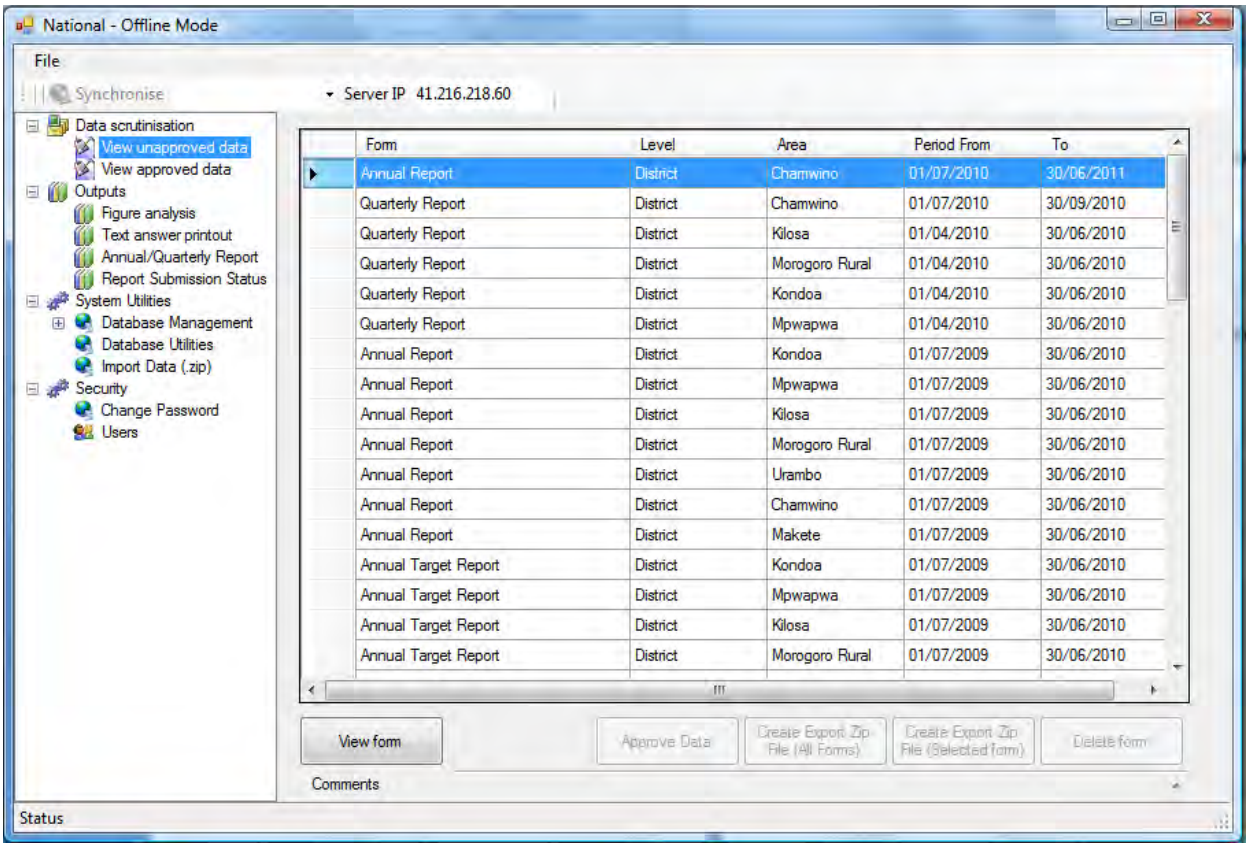


Before click Synchronise, **please check a server IP address is correct.**

4. Wait **15-25 minutes**. It takes long. Then, you can see the following message (Synchronisation successfully completed).



5. You will confirm that you received all data from the national server.



Annex 3.7 Revised M&E Framework

THE UNITED REPUBLIC OF TANZANIA

AGRICULTURAL SECTOR DEVELOPMENT PROGRAMME
(ASDP)

MONITORING AND EVALUATION FRAMEWORK

Revised Draft

January 2011

ASDP M&E Thematic Working Group

ASDP Monitoring and Evaluation Framework

Table of Contents

Acronyms

ASDP	Agricultural Sector Development Programme
ASDS	Agricultural Sector Development Strategy
ASLMs	Agricultural Sector Lead Ministries
A-WG	Agricultural Working Group of Development Partners
BF-SC	Basket Fund Steering Committee
DADP	District Agricultural Development Plan
DALDO	District Agricultural and Livestock Development Officer
DED	District Executive Director
DFT	District Facilitation Team
DPP	Director of Policy and Planning
DPs	Development Partners
DSC	Director of Sector Coordination
FAO	Food and Agricultural Organization
GoT	Government of Tanzania
JICA	Japan International Cooperation Agency
LGAs	Local Government Authorities
LGDG	Local Government Development Grant
LGMD	Local Government Monitoring Database
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MIT	Ministry of Industry and Trade
MLDF	Ministry of Livestock Development and Fisheries
M&E	Monitoring and Evaluation
MIS	Management Information System
MTEF	Medium-Term Expenditure Framework
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umasikini Tanzania
NBS	National Bureau of Statistics
NSGRP	National Strategy for Growth and Reduction of Poverty
PAF	Performance Assessment Framework
PMO-RALG	Prime Minister’s Office- Regional Administration and Local Government
PS	Permanent Secretary
RAS	Regional Administrative Secretary
RAA	Regional Agricultural Adviser
RDS	Routine Data System
RLA	Regional Livestock Adviser
RS	Regional Secretariat
RTA	Regional Trade Adviser
SWAp	Sector Wide Approach
TANGO	Tanzania Non-Governmental Organizations
TWG	Thematic Working Group
URT	United Republic of Tanzania
VAEO	Village Agricultural Extension Officer
VEO	Village Executive Officer
WAEO	Ward Agricultural Extension Officer
WEO	Ward Executive Officer
WFT	Ward Facilitation Team

ASDP Monitoring and Evaluation Framework

1. INTRODUCTION

1.1 Background

The Government of Tanzania has adopted the Agricultural Sector Development Strategy (ASDS) since 2001. The objective of the ASDS is to achieve a sustained agricultural growth rate of 5 to 6 percent per annum primarily through the transformation from subsistence to commercial agriculture. The Agricultural Sector Development Program (ASDP), developed in 2003, is a long-term process designed to implement the ASDS based on a Sector Wide Approach (SWAp). It establishes operational linkages between the Agricultural Sector Lead Ministries (ASLMs)[1] and other stakeholders. It forges the connection between demand-driven, field-based district planning processes, and the mobilization and monitoring of national and international investment in agriculture. With the launching of the ASDP, there is a growing interest in establishing a sector-wide monitoring and evaluation (M&E) system.

In September 2007, the first ASDP M&E framework which outlines how the M&E for the agricultural sector under the ASDP is conducted was developed and approved by the Committee of ASLMs Directors. The framework was developed by the ASDP M&E Thematic Working Group (TWG) which is composed of the officials of both the Government of Tanzania and Development Partners (DPs). As for the former, M&E specialists, Management Information System (MIS) experts and statisticians were appointed to be members of the TWG. Among the DPs who participated in the Working Group are FAO, Irish Aid, JICA, and World Bank. In developing the M&E framework, a lot of consultations were made with officials of Local Government Authority (LGA) and Regional Secretariats (RSs). Subsequently, the ASDP M&E Guideline which delineates actions to be taken by each stakeholder for ASDP M&E has been developed and approved by the Committee of ASLMs Directors. Both the framework and guideline have been disseminated to all the regions / districts.

It is now three years since the first M&E framework was adopted; it is high time to revise the framework to adjust to the implementation made in the ASDP since then. The revised M&E framework incorporates, among others, new short-listed indicators and improvement in the Agricultural Routine Data System. It also explains an envisaged M&E system of the ASDP. Some of them have already been implemented. Others are not in place yet, and the M&E TWG is currently working toward full operationalization of the framework.

1.2 Objectives

The overall objective of the M&E framework is to outline the M&E system for the agricultural sector under the ASDP. The M&E system will provide information that will enable stakeholders to track progress and enhance informed decision-making at all levels in the implementation of the ASDP.

The specific objectives of the ASDP M&E system are to:

- Promote the importance of systematic data/information collection and utilization of M&E results in the planning of the ASDP;
- Strengthen the M&E capacity of ASDP stakeholders to collect, analyze and use data/information; and
- Enhance the understanding of trends and changes in the levels of agricultural development, food security, and poverty reduction in the country over time.

[1] The ASLMs are the Ministry of Agriculture, Food Security and Cooperatives (MAFC), Ministry of Livestock Development and Fisheries (MLDF), Ministry of Industry and Trade (MIT) and Prime-Minister's Office - Regional Administration and Local Government (PMO-RALG).

1.3 Guiding Principles

The ASDP M&E will be undertaken under the following guiding principles.

- Harmonized with other government M&E systems, such as MKUKUTA II.
- Results-based management adopted.
- Existing mechanisms of data collection used.
- Using the baseline data / information as benchmark
- Ad-hoc surveys avoided as much as possible.
- Starting as simple as possible.
- Starting from the current situation.
- Incremental in capacity development.
- Recognizing the dynamic nature of the ASDP.
- Flexible in revising ASDP M&E framework.

1.4 Scope of the M&E Framework[2]

The M&E framework covers the following scopes.

- Performance measurement of the ASDP
- Data collection, reporting and reviews
- Institutional arrangements for ASDP M&E.

[2] M&E undertaken for each project in District Agricultural Development Plans (DADP) is not presented in this document.

2. PERFORMANCE MEASUREMENT OF THE ASDP

2.1 Overall framework

A part of the progress and development of ASDP is monitored and evaluated through indicators. The indicators should be developed at both national and district levels. Figure 2.1 shows the relationship between the indicators for ASDP and DADP.

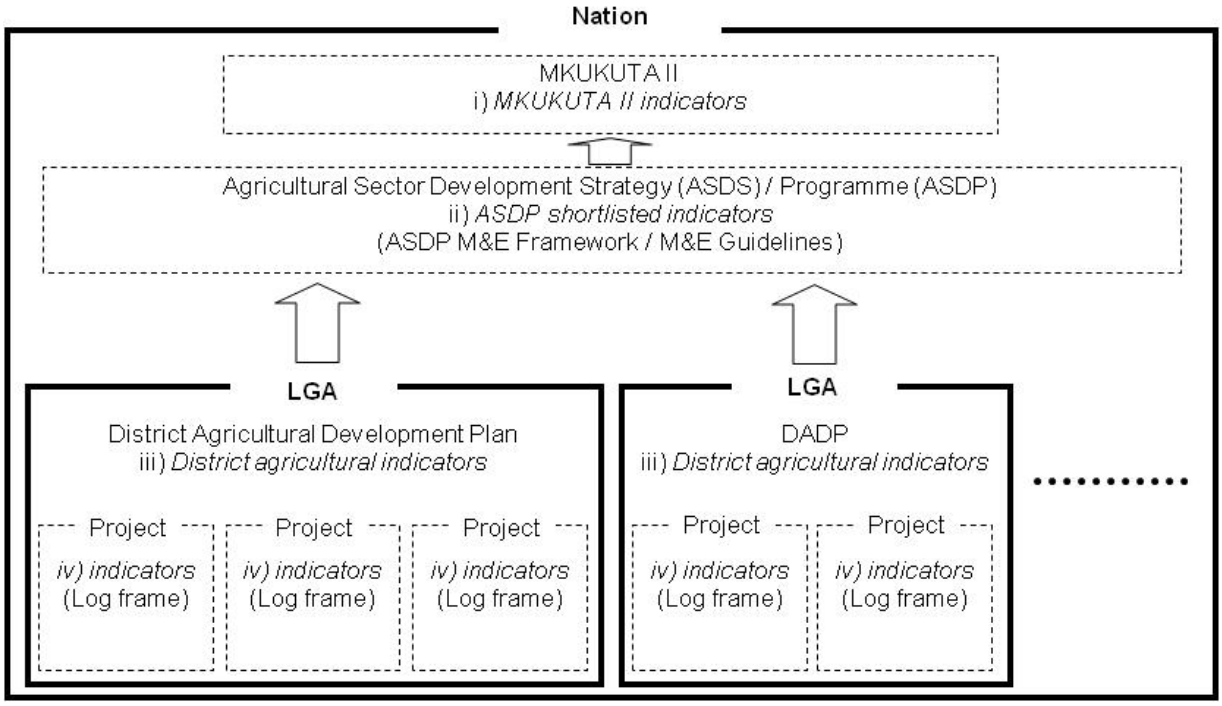


Figure 2.1 Four levels of indicators concerning ASDP/DADP

As shown in Figure 2.1, there are four levels of indicators. The first are the MKUKUTA II indicators. They have been already developed, and the attainment of MKUKUTA II goals is monitored and evaluated in light of these indicators. The second are the ASDP shortlisted indicators, which are explained in the next section. The national level progress of ASDP is measured through these indicators. The third are the district agricultural indicators. Each LGA may develop its own indicators in reference to its own agricultural development goals. But ASDP indicators should also be taken into account to ensure that the goal of agricultural development in each LGA is consistent with that of the nation. The fourth are those for each DADP project (activity / intervention). These indicators are developed when a log-frame for each project is prepared as explained in the DADP guidelines (Quick Guides). The third and fourth level indicators are explained in Section 2.3 and 2.4, respectively.

2.2 ASDP shortlisted indicators

In developing ASDP indicators, the outcome statements were first defined in referring to the strategic areas of the ASDP/ASDS. These outcome statements and strategic areas are shown in Figure 2.2. There are several steps between these outcome statements and the overall goals of the ASDP/ASDS. These steps are translated into (higher level) outcome statements, which correspond to the purpose and strategic objectives of the ASDS. For each of these outcome statements, output statements were also developed referring to ASDP/ASDS interventions. The linkages between the impact, outcome and output statements and their relationship with ASDP/ASDS are depicted in Figure 2.3.

ASDP indicators were developed with respect to each impact, outcome and output statement. In doing so, references were made to the indicators proposed by each ASLM and those stated in the documents concerning the ASDP (URT 2006c; URT 2003; and URT 2001). Relevant MKUKUTA indicators were

also selected. These formed the long-listed indicators as shown in Annex 1.

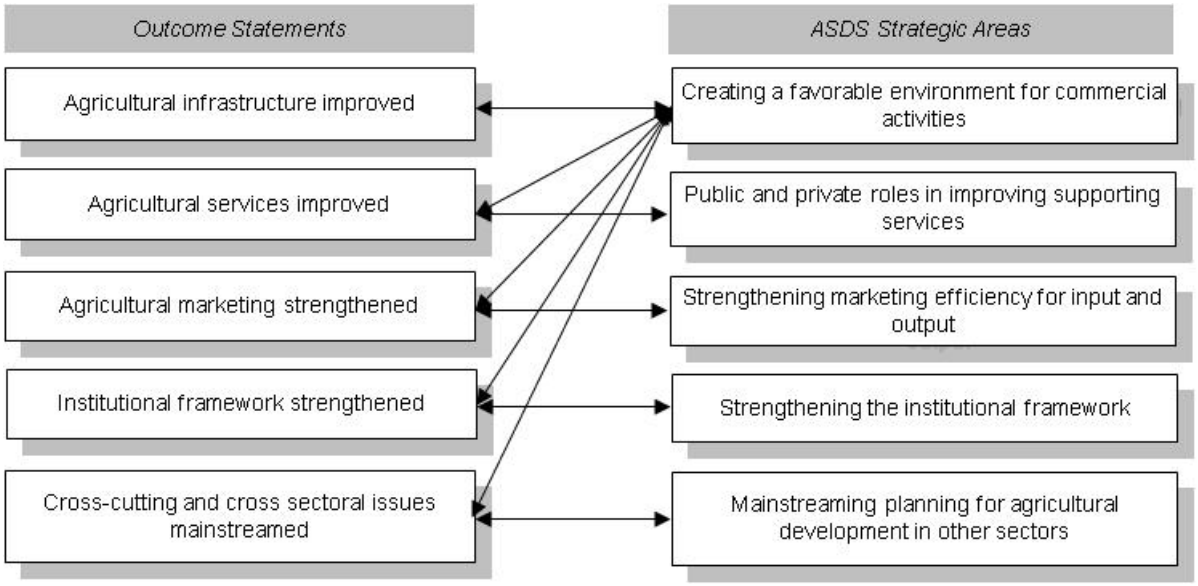


Figure 2.2 Relationship between outcome statements and ASDS strategic areas

The short-listed indicators were selected from the long-listed indicators, using the SMARTU criteria (Specific, Measurable, Accurate, Realistic, Timely and Useful) to make the number of indicators feasible in the short run. The short-listed indicators and their definitions are shown in Annex 2.

The shortlisted indicators have been modified to incorporate the changes in the ASDP priorities, the availability of new data and introduction of new sample surveys. Table 2.1 shows the latest list of the ASDP shortlisted indicators. The ASDP M&E TWG will review the indicators routinely so that the performance of ASDP is assessed accordingly.

The data for the ASDP shortlisted indicators are collected from a variety of sources, using the methods explained in the next section. The data on each indicator are collected, analyzed and summarized in the ASDP M&E Progress Report.

Input and process indicators were also developed for each strategic area of the ASDP/ASDS. However, they were not short-listed as the framework is result-oriented.

Disaggregation of information by particular groups (gender, disabled persons, youth and others) shall be accommodated basing on the user needs.

2.3 District agricultural indicators

It is suggested that each LGA develop district agricultural indicators to monitor and evaluate the progress of DADP. The indicators should reflect the district's agricultural policies and strategies as specified in the strategic plan and align with national level indicators. In MTEF system, districts are supposed to set indicators on sector basis in order to measure the achievement of the district objectives. The district agricultural indicators are referred to as those selected from the agricultural sector. It is important to start with minimum number of indicators to make the data collection and analysis feasible.

2.4 Project indicators

In addition to district agricultural indicators, it is suggested that LGAs develop indicators for each DADP project (intervention) and present them in a log-frame for each project. These indicators are used to monitor and evaluate the progress of each project. For more details of the log-frame, please refer to the DADP guidelines.

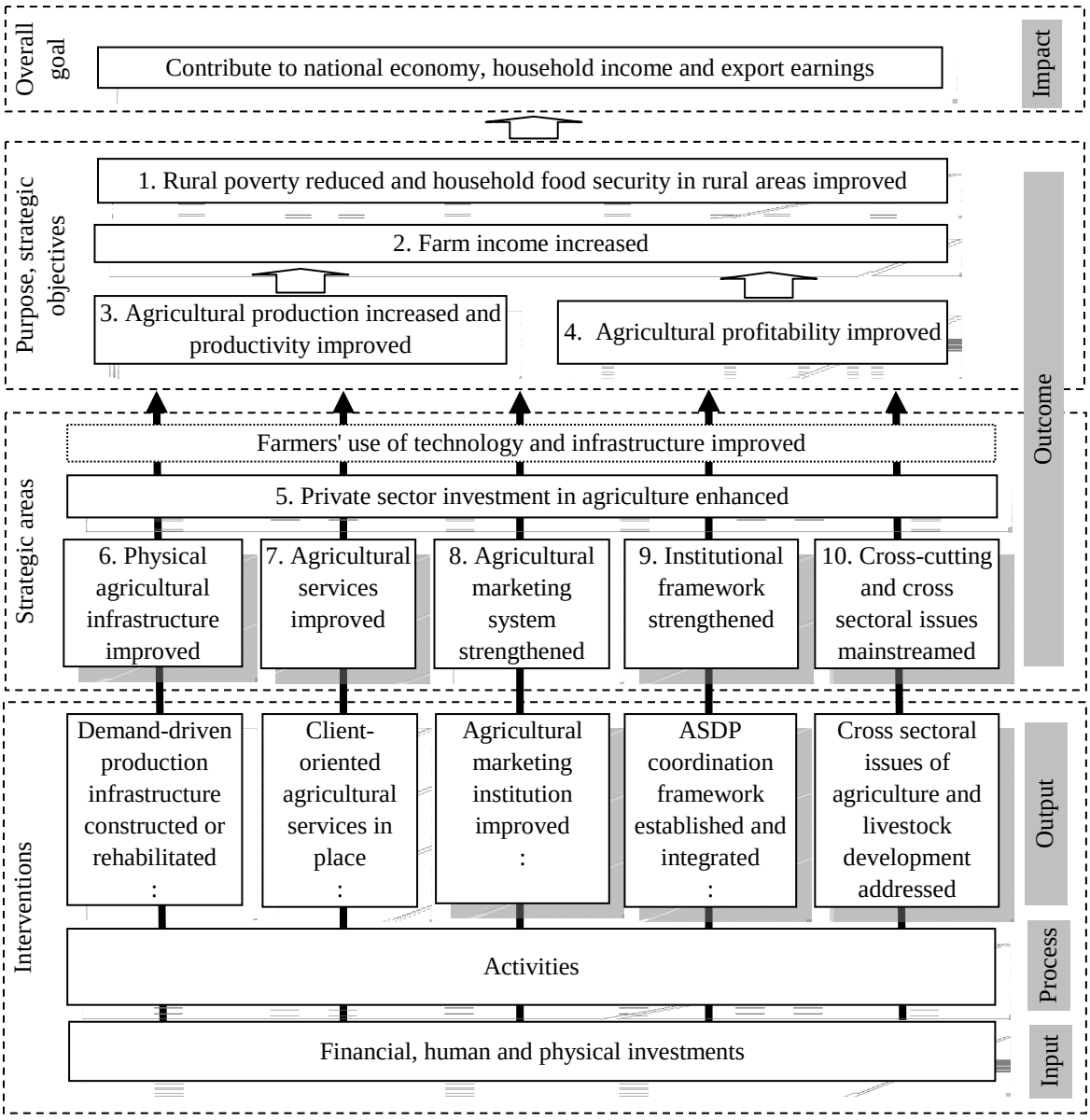


Figure 2.3 Structure of impact, outcome and output statements and their relationship with ASDP

Note: Dashed boxes are ASDS overall goal, purpose, strategic objectives, strategic areas and interventions.

Table 2.1 ASDP Short-listed impact, outcome and output indicators (as of December 2010)

	Indicators		Frequency	Disaggregation			Data source
				District	Region	National	
Impact (IM)	1. Real agricultural GDP growth rate per annum		Annual			√	NBS
	2. Headcount ratio in rural areas – basic needs poverty line		Periodical		√	√	NBS (HBS)
	3. Value of agricultural exports		Annual			√	TRA
Outcome (OC)	1. Food self-sufficiency ratio		Annual		√	√	MAFC
	2. Production and productivity of crops and livestock.	Maize	Periodical	√	√	√	NBS (NSCA),
		Paddy					
		Beef	Annual	√	√	√	MLDF
		Milk					
	3. Proportion of smallholder households using improved technologies	Improved seed	Periodical	√	√	√	NBS (NSCA)
		Chemical fertilizers					
		Irrigation					
		Improved dairy					
		Erosion control					
	4. Amount of lending to the agricultural sector by private banks		Annual			√	BOT
	5. Proportion of smallholder households using mechanization		Periodical	√	√	√	NBS (NSCA)
	6. Ratio of processed exported agricultural products to total exported agricultural products		Annual			√	TRA
	7. Number of smallholder households participating in contracting production and out-growers schemes		Annual	√	√	√	LGAs
	8. Proportion of LGAs that qualify to receive top-up grants		Annual			√	PMO-RALG
	9. Proportion of LGAs that qualify to receive performance bonus		Annual			√	PMO-RALG
	10. Proportion of farmers having visits from public or private extension staff		Periodical	√	√	√	NBS (NSCA)
	11. Amount of fertilizer consumed [PAF]		Annual			√	MAFC
	12. Number of Households using irrigation infrastructure (members of Irrigation Organizations) [PAF]		Annual			√	MAFC
Output (OP)	1. Number of agricultural production infrastructure	Dams	Annual	√	√	√	LGAs (MLDF)
		Charco dams					
		Cattle dips					
		Oxenization centres					
		Veterinary clinics					
	2. Number of agricultural marketing infrastructure and machinery	Livestock primary markets	Annual	√	√	√	LGAs
		Livestock secondary markets					
		Feeder road					
		Livestock holding ground					
		Abattoir					

		Slaughter house					
		Slaughter slabs					
		Hide and skin sheds					
		Pulperies / ginneries / shelling					
		Milling machine					
		Oil extracting machine					
	3. Number of extension officers trained on improved technological packages		Annual	√	√	√	LGAs
	4. Number of SACCOS, members and loans provided for agriculture		Annual	√	√	√	LGAs
	5. Number of agricultural marketing regulations and legislation in place		Annual			√	MIT, MAFC, MLDF
	6. Number of markets where wholesale or retail prices are collected		Annual			√	MIT
	7. Number of ASDP Basket Fund Steering Committee meetings held		Annual			√	ASDP Secretariat
	8. Proportion of DADP quarterly physical and financial progress reports submitted on time		Annual			√	PMO-RALG
	9. Proportion of female members of Planning and Finance Committee		Annual	√	√	√	LGAs
	10. Number of research projects related to crops, livestock and marketing/processing, conducted through ZARDEF		Annual			√	ASLMs

3. DATA COLLECTION, REPORTING AND REVIEWS

3.1 Data Collection and reporting

3.1.1 Type of data for ASDP M&E

Agricultural information used for ASDP M&E can be broadly categorized as shown in Table 3.1.

Table 3.1 Type of agricultural data / information

Data types		Examples
1. Project-related information (DADP, etc.)	1-1. Input	✓ Expenses, manpower, equipment used for each DADP project (intervention)
	1-2. Output	✓ Area (ha) of irrigation schemes developed / rehabilitated by DADP / DIDF projects, ✓ Number of cattle dip rehabilitated in a DADP project, ✓ Number of farmers trained in a DADP project, etc.
	1-3. Outcome / impact	✓ Number of farmers using improved technologies due to a DADP project, ✓ Increase in crop production as a result of a DADP / DIDF project, ✓ Improvement in crop yield as a result of a DADP project, ✓ Decrease in animal mortality rate due to a DADP project, ✓ Increase in income of a farmer due to a DADP project, etc.
2. Agricultural performance information (village, district, regional, national level)	2-1. Input	✓ Total agricultural budget for a district, ✓ Total number of extension officers in a district / region, ✓ Total number of vehicles / motorcycles in a district, etc.
	2-2. Output	✓ Total area under irrigation schemes (developed) in a district, ✓ Total number of certain agricultural machinery / implements in a district, ✓ Total number of cattle dips available in a district, ✓ Total number of farmers trained in a district,
	2-3. Outcome / impact	✓ Number of farmers using mechanization in a district /region /nation, ✓ Total amount of crop production and acreage in a district, ✓ Total amount of meat production in a district, ✓ Total number of farmers using new technologies, ✓ Overall changes in farmers' income ✓ Value of agricultural export

3.1.2 Project-related information

The first type of agricultural information is project-related ones. Information on input and output (1-1 and 1-2) of each DADP project are collected by respective project committee or DFT members and is summarized in the DADP Physical and Financial Quarterly Progress Report in each LGA. The report is submitted to respective regions, where they are consolidated into a regional report. The report is submitted to the Department of Sector Coordination (DSC), PMO-RALG. The DSC officials consolidate them into a national report and submit it to the ASDP Secretariat, which in turn prepares ASDP Quarterly Progress Reports by incorporating it with the information on ASDP National Component. The report is then submitted to the Committee of ASLMs Directors and ASDP Basket Fund Steering Committee.

To capture outcome information of each DADP project (1-3), a national standard format is being developed jointly by the DADP Planning and Implementation TWG and ASDP M&E TWG at present. The current plan is for LGAs to fill out the format for each project once a year and submit it to respective region. Regional officials consolidate them into a regional report and submit it to PMO-RALG. In PMO-RALG, the reports are consolidated into a national report, which is submitted to the

Committee of ASLMs Directors and ASDP Basket Fund Steering Committee as an annex to the 4th quarter DADP Physical and Financial Progress Report. The flow of input, output and outcome DADP project information is depicted in Figure 3.1.

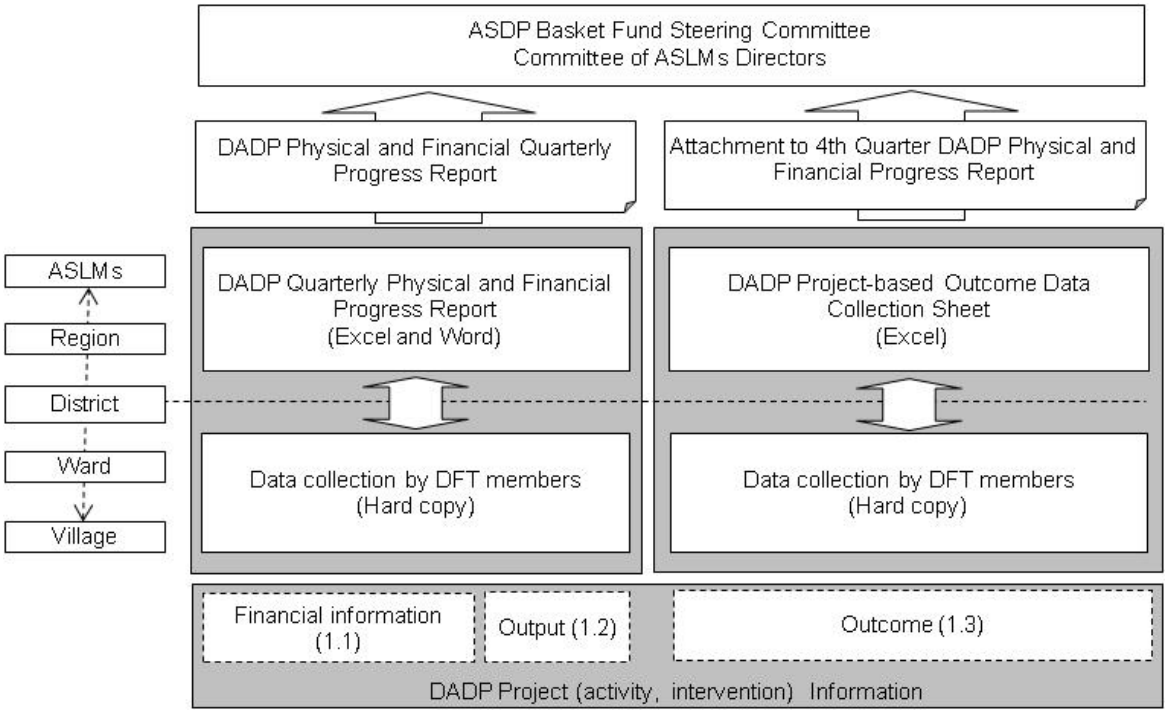


Figure 3.1 Flow of input, output and outcome DADP project information

It is important to note that outcome information for each DADP project (intervention) is different from agricultural performance information at village / district levels (2-3) in that the former addresses the changes at project level while the latter is concerned with the changes at village or district level as a whole. The difference is depicted in Figure 3.2. As seen in the figure, the project outcomes correspond to individual projects while the performance information represents the whole district covering both project-implemented villages/wards and non-project-implemented ones.

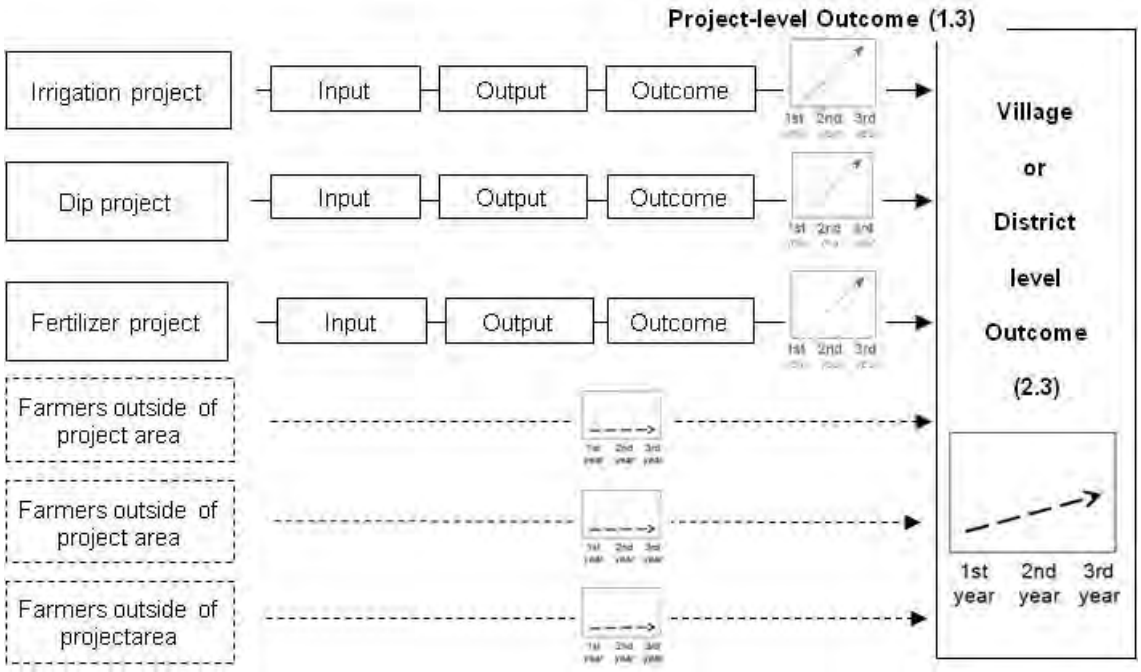


Figure 3.2 Project level outcome and village/district level outcome

3.1.3 Agricultural performance information

The second type is agricultural performance information at village / district / region / national level (type 2). The financial information (2-1) is transmitted using the normal government system as specified by the Ministry of Finance.

As for the output and outcome information (2-2 and 2-3), some sub-sectors have their unique systems in which the data are collected at LGAs or zones and transmitted to national level individually. They include, but not limited to, the following.

- Food forecasting and early warning (food security concerns)
- Livestock disease surveillance and diagnosis (livestock disease control)
- Marketing report (retail and wholesale prices for crops and livestock)
- Zonal irrigation report
- Fish catch assessment survey report
- Agricultural cooperative report
- Research institute report

Other general agricultural information are collected and transmitted through the agricultural Routine Data System. Most data in this type are originated at village / ward levels, which are collected and recorded by village / ward agricultural extension officers (VAEO / WAEO). Standard reporting forms (monthly, quarterly and annual) for VAEO / WAEO (VAEO / WAEO format) have been developed by the ASDP M&E TWG. The information submitted by WAEO is consolidated at district level, which are in turn transmitted to ASLMs via regions using computer software called Local Government Monitoring Database 2 (LGMD2) (quarterly and annual). The LGMD2 uses national standard forms called Integrated Data Collection Format[3].

The VAEO/WAEO format, Integrated Data Collection Format and LGMD2 collectively consist of the agricultural Routine Data System (ARDS).

Another method to collect outcome agricultural performance information (2-3) is agricultural surveys undertaken primarily by National Bureau of Statistics (NBS) and ASLMs. Key surveys concerning ASDP are summarized in Table 3.2.

Table 3.2 Types, frequency and disaggregation of surveys concerning agriculture

Types of survey	Frequency	Geographical disaggregation
National Sample Census of Agriculture (NSCA)	5 years (2002/03, 07/08)	District, Region, National
National Panel Survey (NPS)	Every year* (2008/09, 2010/11)	National
Household Budget Survey (HBS)	5 to 7 years (2000/01, 2007)	National, Rural / Urban / DSM
National Population and Housing Census	10 years (2002)	Village through national

* Although NPS is planned to be undertaken every year, it was not implemented in 2009/10 after its initial implementation in 2008/09. The second round is being conducted in 2010/11.

The agricultural surveys are said to provide more reliable information on ASDP outcomes than ARDS because the former directly asks farmers who are randomly sampled while the latter depends on observations of VAEO/WAEO and information from the key informants. On the other hand, a key shortcoming of these surveys is that they are implemented with a long interval (i.e., 5 years in the case of NSCA) except for NPS. Agricultural performance in Tanzania is greatly influenced by weather conditions, which vary largely from year to year. Thus, it is important to have surveys on an annual basis. NPS, if implemented annually, is able to provide annual agricultural information, but it is not certain if it is feasible to undertake a big survey like NPS every year. In addition, even if it is

[3] Both VAEO/WAEO format and Integrated Data Collection Format are attached to the ASDP M&E guideline.

undertaken every year, the estimates are available at national level only.

Figure 3.3 depicts the flow of input, output and outcome agricultural performance information.

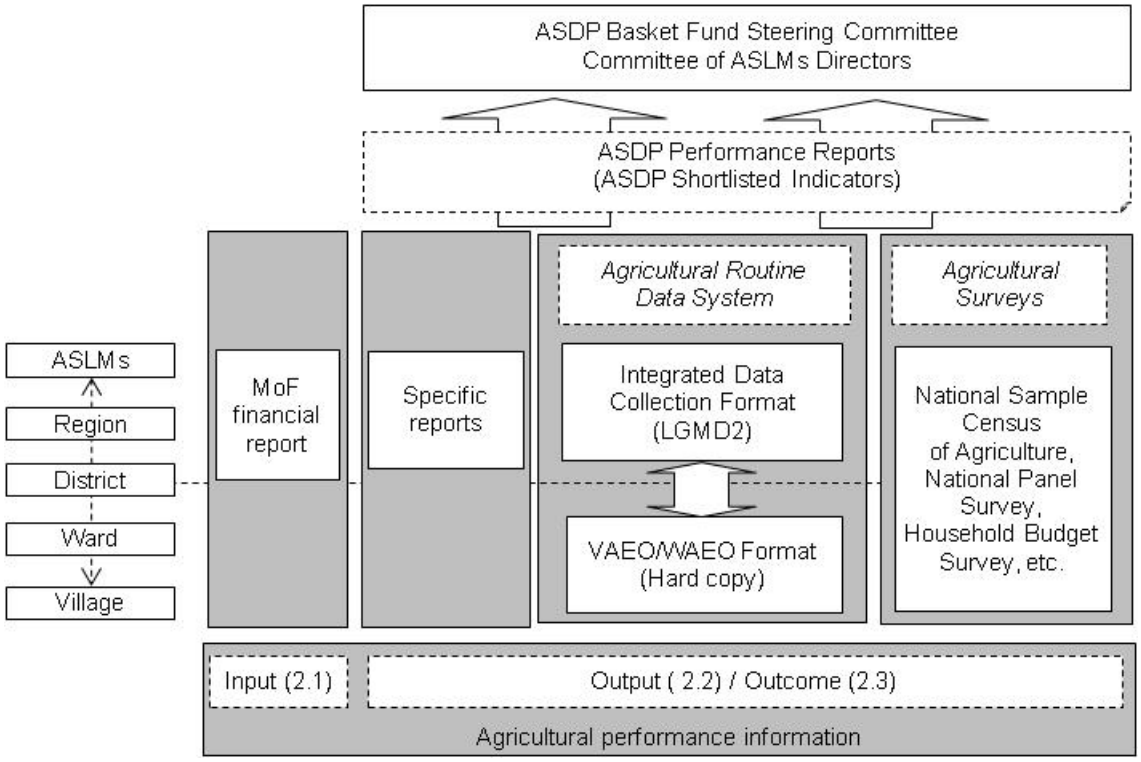


Figure 3.3 Flow of input, output and outcome agricultural performance information

3. 2 Assessment and Reviews

All the reports / survey results explained in the previous section are used for the assessment and reviews of the ASDP. There are primarily three types of assessment / reviews concerning ASDP as explained below.

3.2.1 Types of Reviews

(1) Joint Implementation Review

The Joint Implementation Review is conducted jointly by the ASLMs and DPs every year. The overall purpose of the review is to assess the progress of the ASDP, to evaluate implementation progress, and to identify constraints and hence suggest actions to be taken for smooth implementation of the programme. The review teams visit several districts and regions annually to observe the status of ASDP implementation and examine achievement and challenges with stakeholders such as government officials and farmers. The review provides input to the key ASDP committees, which are the ASDP Basket Fund Steering Committee and the Committee of ASLMs directors.

(2) Agricultural Sector Review and Public Expenditure Review

The Agricultural Sector and Public Expenditure Reviews (ASR/PER) are conducted by the ASLMs, private sector, civil society and DPs on an annual basis. The Review assesses agricultural sector performance and constraints. It also analyzes key policies, institutional reforms and their link to the performance of ASDP. The information/data collected and analyzed in the previous mechanism will be used as a key input for the review. The reviews provide input to the key ASDP committees such as the ASDP Basket Fund Steering Committee and the Committee of ASLMs directors.

(3) LGDG Reviews / Assessments

There are reviews / assessments which are implemented under the Local Government Development

Grant (LGDG) system which is undertaken by the PMO-RALG. The LGDG reviews are also relevant to the ASDP implementation because DADP funds are disbursed to each LGA using the channels of the LGDG system. The reviews under the LGDG system include Quarterly Technical Reviews and annual LGA assessment. The results of these reviews are also used for ASDP M&E.

3.2.2 Schedule of reviews and key committee meetings

In addition to specific reviews explained in the previous section, there are several committee meetings which also play an important role in ASDP M&E. Figure 3.4 shows a typical annual calendar of these reviews / meetings. They may change depending on the circumstances.

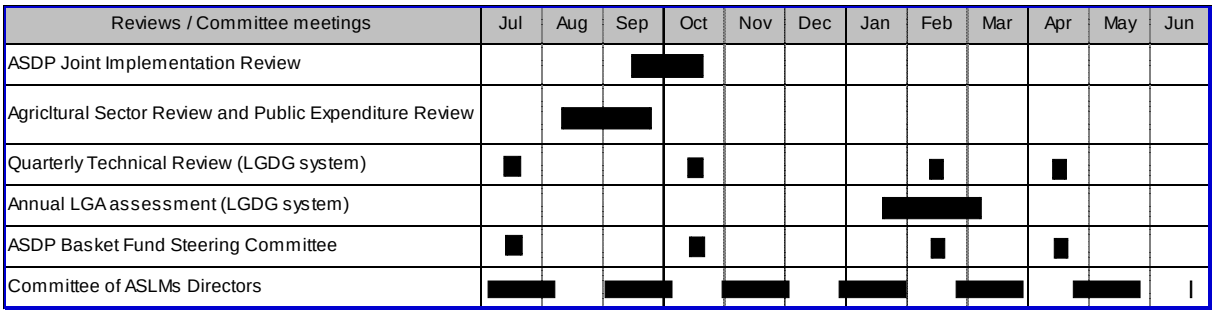


Figure 3.4 Schedule of the key ASDP reviews and committee meetings

4. INSTITUTIONAL ARRANGEMENTS

The responsibilities of key institutions and committees associated with ASDP M&E are summarized in Table 4.1.

Table 4.1: Responsibilities of Key Institutions and Committees in ASDP M&E

Institution / Committee	Major Responsibilities in M&E	Responsible officer
ASDP Basket Fund Steering Committee	• Take decisions on quarterly resource transfers based on work plans, budgets, quarterly physical and financial reports, and technical reports. • Monitor the performance and progress of all aspects of ASDP implementation through ASDP Physical and Financial Progress Reports, ASDP Performance Reports, Agricultural Sector Review / Public Expenditure Review Reports, Joint Implementation Reports, etc. • Review audit reports and decide actions for ASDP funding.	• Permanent Secretary, MAFC
Committee of ASLM Directors	• Review sector implementation reports and annual reviews on programme implementation. • Responsible for assembling and supervising Thematic Working Groups (TWGs) to implement inter-sectoral activities. • Supervise and manage technical and financial implementation of the ASDP.	• Director of Policy and Planning, MAFC
ASLMs	• Prepare reports on national component. • Review reports on local component and provide feedbacks. • Collate data needed to monitor ASDP implementation, analyze and comment on the monitoring results, and submit regular monitoring reports to the BF-SC. • DPPs lead the M&E functions such as assessing the performance of the DADPs. • Link the M&E system of the ASLMs and examine agricultural sector performance at national level. • Coordinate capacity building activities that support better M&E understanding and practices for planners and agricultural staffs in the ASLMs.	• Directors of Policy and Planning
PMO-RALG (specific tasks)	• Receive and review DADP Physical and Financial Quarterly Progress Reports from RSs, collate and forward them to the ASLMs. • Disseminate and maintain LGMD2 at regional and district offices • Report to the LGDG Technical Committee and Steering Committee.	• Director of Sector Coordination • Director of Information, Communication and Technology
National Bureau of Statistics	• Conduct census / surveys such as the National Sample Census of Agriculture and the National Panel Survey in collaboration with respective line Ministries.	• Director General
ASDP M&E Thematic Working Group (TWG)	• Operationalize M&E framework and revise it as need arises. • Develop and review M&E Guidelines. • Improve and disseminate agricultural routine data system. • Assist NBS in conducting agricultural surveys. • Collect the latest data for the ASDP M&E shortlisted indicators and compile them into ASDP performance	• Chairman of the TWG

	reports.	
Regional Secretariats	• Provide technical facilitation to LGAs on report preparation. • Monitor DADPs implementation and prepare supervision reports. • Provide feedback to LGAs on their reports. • Consolidate DADP Physical and Financial Quarterly Progress Reports and submit it to PMO-RALG. • Organize annual DADP review meetings. • Approve the data submitted by LGAs through LGMD2.	• Regional Administrative Secretary
Districts	• Collect filled-in VAEO/WAEO format and consolidate them to prepare district level report. • Submit district level information to regions / ASLMs using LGMD2. • Monitor DADP activities implemented in the district. • Collect DADP project input, output and outcome information and enter them in DADP Physical and Financial Quarterly Progress Reports.	• District Executive Director
Wards	• Monitor village activities. • Complete the VAEO/WAEO format in collaboration with VAEO and submit it to districts	• Ward Executive Officer
Villages / mtaa	• Monitor village activities. • Complete VAEO/WAEO format in collaboration with VEOs and submit it WAEO.	• Village Executive Officer
Development Partners	• Monitor agricultural sector policies and programme implementation. • Participate in ASDP reviews and TWGs.	• Chairman of Agricultural Working Group
Civil Societies	• Monitor the implementation and progress of ASDP. • Provide information for ASDP M&E.	• Chairman of TANGO

GLOSSARY[4]

Activities: Actions in the context of programming which are both necessary and sufficient, and through which inputs are mobilized to produce specific outputs or contribute to the outcome.

Baseline data: Data that describe the situation to be addressed by a programme/project and that serve as the starting point for measuring the performance of that programme/project. A baseline study would analyze and describe the situation prior to receiving assistance. This is used to determine the results and accomplishments of an activity and serve as an important reference for evaluation.

Evaluation: A time-bound exercise that attempts to assess systematically and objectively the relevance, performance and success of ongoing and completed programmes and projects. Evaluation can also address outcomes or other development issues. Evaluation is undertaken selectively to answer specific questions to guide decision-makers and/or programme managers, and to provide information on whether underlying theories and assumptions used in programme development were valid, what worked and what did not work and why. Evaluation commonly aims to determine relevance, efficiency, cross-cutting lessons from operation unit experiences and determining the need for modifications to the strategic results framework. Evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process.

Feedback: As a process, feedback consists of the organization and packaging in an appropriate form of relevant information from M&E activities, the dissemination of that information to target users and, most importantly, the use of the information as a basis for decision-making and the promotion of learning in an organization. Feedback as a product refers to information that is generated through M&E and transmitted to parties for whom it is relevant and useful. It may include findings, conclusions, recommendations and lessons from experiences. Feedback also means comments and responses provided to improve a report/document or a plan submitted from the lower level.

Impact: The broad changes (for example in economic and social terms) brought about by the project or program. The overall and long-term effect of intervention. Impact is the longer-term or ultimate result attributable to a development intervention – in contrast to output and outcome, which reflect more immediate results from the intervention. Examples: higher standard of living, increased food security, increased earnings from exports.

Inputs: The resources such as time, funds, labor, and materials that is necessary to carry out programme or project activities.

Indicator: In monitoring indicators need to be developed to measure performance and these should be quantifiable and easy to monitor. They are signals that reveal progress (or lack thereof) towards objectives; indicators are yardsticks to hint what is happening against what has been planned in terms of quantity, quality and timeliness. An indicator is a quantitative or qualitative variable that provides a simple and reliable basis for assessing achievements, changes or performance. The number of indicators tracked for a given result should be the minimum necessary to ensure that progress toward the result is sufficiently captured.

Monitoring: A continuing function that aims primarily to provide managers and main stakeholders with regular feedback and early indications of progress or lack thereof in the achievement of intended results. Monitoring tracks the actual performance or situation against what was planned or expected according to pre-determined standards. Monitoring generally involves collecting and analyzing data on implementation processes, strategies and results, and recommending corrective measures.

Outcome / Effect: Actual or intended change in development conditions that interventions are seeking to support. It describes a change in development conditions between the comparison of outputs and the achievement of impact. Examples: increased rice yield, increased income for the farmers.

[4] The glossary is developed based on the definitions drawn from UNDP (2002).

Outputs: Specific tangible products and services that emerge from processing inputs through programme or project activities. These are necessary to achieve the objectives of a programme or project. It is also the measurable results of activities. Example: agricultural extension services provided to rice farmers.

Process: Process means activities carried out by using inputs. It shows activities that have to be undertaken by the project in order to produce the outputs. Activities should be adequate to reflect and outline the indented strategy to accomplish each output.

Stakeholders: People, groups or entities that have a role and interest in the objectives and implementation of a programme/project. They include the community whose situation the programme seeks to change; project field staff who implement activities; project and programme managers who oversee implementation; donors and other decision-makers who decide the course of action related to the programme; and supporters, critics and other persons who influence the programme environment. In participatory evaluation, stakeholders assume an increased role in the evaluation process as question-makers, evaluation planners, data gatherers and problem solvers.

Supervision: Supervision is the process of guiding and helping people to improve their own performance.

REFERENCES

ASDP M&E Thematic Working Group, ASDP Monitoring and Evaluation Baseline Data Report, September 2008.

ASDP M&E Thematic Working Group, ASDP Monitoring and Evaluation Progress Report 2008/09, September 2009.

ASLM Working Group for Monitoring and Evaluation of ASDP, Report of Field Visit to Dodoma 11th to 15th December 2006.

Emoto, Satoko, (Final Draft) Study on ASLMs' Monitoring and Evaluation (M&E) Capacity for District Agricultural Development Plans (DADPs) implemented within the Agricultural Sector Development Programmed (ASDP), July 2006.

FAO-World Bank, ASDP Working paper on Monitoring and Evaluation, Third Draft, July 2003.

Ramadhani, Salum, and Daniel Ticehurst. Monitoring and Evaluation Framework: Draft Proposal for discussion", July 5, 2005

United Republic of Tanzania, Agricultural Development Support Program (ASDP), Joint Implementation Review April 10-24, 2007, Aide-Memoire, May 2007.

United Republic of Tanzania, Agricultural Sector Development Programmed (ASDP): Guidelines for District Agricultural Development Planning and Implementation, November 2006a

United Republic of Tanzania, A Memorandum of Understanding for the Establishment of the Agricultural Sector Development Programme Basket Fund Between The Government of the United Republic of Tanzania and Development Partners, 27 June 2006b.

United Republic of Tanzania, The Agricultural Sector Development Programmed (ASDP) Support Through Basket Fund Government Programmed Document, 25th May 2006c.

United Republic of Tanzania, President Office Regional Administration and Local Government, *Local Government Capital Development Grant (LGCDG) System Implementation and Operations Guide*, July 2005a.

United Republic of Tanzania, District Agricultural Development Plans Support Programmed July 2005-June 2012, A Sub-Component of the Agricultural Sector Development Programmed (ASDP): Volume II: Annexes, Annex 2 M&E Current Practices, Issues and Recommendations, Draft 9th May 2005b.

United Republic of Tanzania, The Agricultural Sector Development Programmed Framework and Process Document, March 2003.

United Republic of Tanzania, The Agricultural Sector Development Strategy, October 2001.

Wambura, Charles and Michio Watanabe, Fact Finding Study on the Uses of PlanRep/LGMD and Routine Data Collection System in Tanga Region, October 2006.

United National Development Programmed (UNDP), Handbook on Monitoring and Evaluating for Results, 2002.

ANNEX 1. Long-listed Indicators (Draft)

Indicators in bold are short-listed indicators.

Impact indicators

Component	Indicator	Data source
Contribute to national economy		
Impact	***Real GDP growth rate per annum (Agricultural sector, Livestock Sub-Sector) [MKUKUTA]***	NBS
Contribute to household income		
Impact	***Headcount ratio – basic needs poverty line [MKUKUTA]***	NBS (HBS)
Contribute to export earnings		
Impact	***Value of agricultural exports***	TRA

1. Rural poverty reduced and household food security in rural areas improved

Component	Indicator / Statement	Data source
Outcome	Proportion of households who take no more than one meal per day [MKUKUTA]	
1.1 Food security policies developed		
Output	Food security policy in place	
Output	Number of councils with by-laws which sets the minimum acreage of food crops for each household	
1.2 Plans for addressing household food insecurity promoted		
Output	Number of plans addressing household food insecurity	
Output	Number of households that have storage facilities	

2. Farm income increased

Component	Indicator	Data source
Outcome	***Production and productivity of crops and livestock***	NBS (HBS)

3. Agricultural production increased and productivity improved

Component	Indicator	Data source
Outcome	***Food self-sufficiency ratio [MKUKUTA]***	MAFC

Outcome	Proportion of districts reported to have food shortages [MKUKUTA]	
Outcome	Farmers agricultural production and productivity increased [MKUKUTA]	

4. Agricultural profitability improved

Component	Indicator / Statement	Data source
Outcome	Share of farm-gate prices to wholesale, retail and export prices	

5. Private investment in agricultural sector enhanced

Component	Indicator / Statement	Data source
Outcome	***Flow of private funds into agricultural and livestock sectors***	TIC
5.1 Policies and regulations that attract private investment in place (tax, budget allocation, information, laws)		
Output	Number of agricultural investment policies and regulations in place	
Output	Number of procedures and processes for investors reviewed	
Output	Number of agricultural investment incentives offered	
5.2 Effective procedures and processes to acquire land for agricultural investment in place		
Output	Proportion of land applications approved within 90 days	
Output	Number of LGAs in which agricultural land survey has been completed	
Output	Number of agricultural land survey experts in each district	

6. Physical agricultural infrastructure improved

Component	Indicator	Data source
Outcome	Proportion of households using physical agricultural infrastructure (dams, irrigation, wells, storage)	
Outcome	Volumes of marketed agricultural products	
6.1 Constructed or rehabilitated demand–driven agricultural production infrastructure		
Output	***Number of agricultural production infrastructure existing and in operation***	LGAs
Input	% of budget (GoT and DPs) on agricultural production infrastructure	
6.2 Constructed or rehabilitated demand-driven agricultural marketing infrastructure		
Output	***Number of agricultural marketing infrastructure and machinery existing and in operation***	LGAs
Input	% of budget (GoT and DPs) on agricultural marketing infrastructure	

7. Agricultural services improved

Component	Indicator / Statement	Data source
Outcome	Proportion of farmers satisfied with public and or private agricultural services (Extension, information, research, finance)	
Outcome	Proportion of households accessing public and or private agricultural services (Extension, research)	
Outcome	***Proportion of smallholder households using improved technologies (improved seeds, pesticides/fungicides, chemical fertilizers, irrigated farming, improved beef, improved dairy cow and erosion control)***	NBS (NSCA)
Outcome	% of smallholders who accessed formal credit (commercial banks and cooperatives (SACCOS/SACAS)) for agricultural purposes [MKUKUTA]	
Outcome	Amount of loan provided by commercial banks and cooperatives in the agricultural sector	
Outcome	***Proportion of smallholder households using mechanization (power tillers, tractors, combine harvesters and oxenization)***	NBS (NSCA)
7.1 Client-oriented agricultural services (Extension, information, research, finance) in place		
Output	Number of client-oriented programmes conducted by research institutes increased	
Output	Number of active private agricultural service providers	
Output	Number of farmers trained on new technologies	
Output	Number of technological packages promoted and disseminated (new varieties of seeds, pesticides, improved breeds, new animal drugs)	
Input	% of budget (GoT and DPs) on agricultural research and technology development	
7.2 Demand-driven agricultural extension system strengthened		
Output	Ratio of farmers to extension officers	
Output	***Number of extension officers trained on improved technological packages***	LGAs
Output	Number of private agricultural service providers trained	
Input	% of budget (GoT and DPs) for A-EBG. (Agricultural Extension Block Grant)	
7.3 Demand-driven agricultural training strengthened		
Output	Number of farmers trained	
Output	Number of training institutes that have reviewed and/or improved their curricula	
Input	% of budget (GoT and DPs) on agricultural training institutes	
7.4 Financial services improved		
Output	***Value of loans provided by SACCOs for agriculture***	LGAs
Output	Number of members of rural micro finance institutions (SACCOS/SACAS) trained	
Input	% of budget (GoT and DPs) for micro finance outreach programme	

8. Agricultural marketing system strengthened

Component	Indicator / Statement	Data source
Outcome	Value of agricultural product marketed increased (through processing)	
Outcome	***Ratio of processed exported agricultural products to total exported agricultural products***	TRA
Outcome	Proportion of farmers accessing market information	
Outcome	***Proportion of smallholder households participating in contracting production and out-growers schemes [MKUKUTA]***	LGAs
8.1 Agricultural marketing institutions improved		
Output	***Number of agricultural marketing regulations and legislation in place***	MIT
Output	Number of standards reviewed and implemented	
Input	% of MIT budget for marketing and processing	
8.2 Cross-border trade legalized and promoted		
Output	Number of barriers to cross-border trade removed	
Output	Average number of days by product it takes to complete export procedures	
8.3 Market information improved		
Output	Number of client-oriented information systems and centers in place	
Output	***Number of markets where wholesale and retail prices are collected***	MIT
Output	Number of media that provide market information	
8.4 Value chain improved		
Output	Proportion of agricultural and livestock products with value chain identified (traceability)	
8.5 Marketing skills strengthened		
Output	Number of persons trained on agribusiness	
8.6 Partnership promoted		
Output	Number of sensitization seminars on out-grower and contract-farming schemes conducted	
Output	Proportion of villages covered by telephone network	
Input	% of budget allocated for out-grower and contract-farming schemes outreach programme	
8.7 Access to input improved		
Output	Number of stockists trained	
Output	Number of licensed stockists	

9. Institutional framework strengthened

Component	Indicator / Statement	Data source
Outcome	***Proportion of LGAs that qualify to receive top-up grants***	PMO-RALG
Outcome	***Proportion of LGAs that qualify to receive performance bonus***	PMO-RALG
Outcome	Increased performance of stakeholders in implementation of the ASDP	
9.1 ASDP coordination framework established and integrated		
Output	***Number of Inter-Ministerial Coordination Committee (ICC) meetings held***	ASDP Secretariat
Output	Number of ASDP Basket Fund Steering Committee meetings held	
Output	Number of ASLMs Directors Committee meetings held	
Output	Number of activities carried out by ASDP Secretariat referencing ToR	
Input	Number of officers in the ASDP Secretariat	
Input	% of budget allocated to the ASDP Secretariat	
9.2 Capacity of ASLMs, regional secretariat, LGAs strengthened		
Output	Ratio of posts filled by qualified staff	
Output	Number of officers trained on ASDP	
Output	Number of monitoring reports submitted on time	
Output	***Proportion of quarterly progress reports submitted on time***	Regions/ASLMs
Output	% of LGA department (DALDO) having at least one vehicle	
Output	% of WAEO having a motorbike	
Output	% of VAEO having a bicycle	
Input	% of budget allocated for A-CBG (Agricultural Capacity Building Grant)	
9.3 Farmers organizations promoted		
Output	Number of farmer groups trained	
Output	Number of farmer groups provided with funds, equipment and materials	
Input	% of budget allocated for farmers field school (FFS) programme	
9.4 Civil society organizations promoted		
Output	Number of civil society organizations sensitized on ASDP	
Input	% of budget allocated for civil society outreach programme	

10. Cross-cutting and cross sectoral issues mainstreamed

Component	Indicator / Statement	Data source
Outcome	Existence of other sectors' plans supporting agriculture developed and implemented	
Outcome	Existence of other sectors' plans in agricultural plans	
Outcome	Proportional of HIV/AIDS affected households that have adopted coping strategies	
10.1 Cross sectoral issues of agriculture and livestock development addressed		
Output	Number of households that have access to potable water within 400m	
Output	Number of villages covered by electricity services	
10.2 Spread and impact of HIV/AIDS and malaria minimized		
Output	Number of seminars to enhance awareness on HIV/AIDS and malaria	
10.3 Gender issues mainstreamed in agricultural development plans		
Output	Number of seminars to enhance awareness on gender	
Output	***Proportion of female members of Planning and Finance Committee***	LGAs
Output	Number of agricultural technologies developed to reduce the workload of women	
10.4 Environmental management improved		
Output	Number of seminars on environmental management conducted	
Output	Number of soil and water conservation technologies developed	
Output	Number of projects under ASDP with environmental impact assessment plans	

ANNEX 2. Short-listed Indicators

IMPACT INDICATORS

Impact indicator 1	Agricultural GDP growth rate per annum (agricultural sector, crop and livestock sub-sectors)
Definition	Difference between GDP (of the particular sector) in year x+1 and GDP in year x (at constant prices), expressed as percentage of the GDP in year x.
Rationale	The indicator is used to monitor the growth of sectors of the economy in the country.
Frequency of reporting	Annual
Impact statement concerned	Contribute to national economy
Data sources	NBS National Account
Responsibility for data collection	NBS
Disaggregation	National
Risk	No risk
Comments	This is a MKUKUTA indicator.

Impact indicator 2	Headcount ratio in rural areas – basic needs poverty line
Definition	The proportion of the population who live in households for which the consumption expenditure falls below an internationally agreed poverty line for basic needs requirements.
Rationale	The indicator allows for monitoring the proportion of the national population that is considered poor using the national standards.
Frequency of reporting	Periodical
Impact statement concerned	Contribute to household income
Data sources	Household Budget Survey (HBS)
Responsibility for data collection	NBS
Disaggregation	Regional, National
Risk	The survey is supposed to be conducted every five years, but there have been longer intervals.
Comments	This is a MKUKUTA indicator.

Impact indicator 3	Value of agricultural export
Definition	The value (in US dollar) of the export of agricultural products from Tanzania to the rest of the world.
Rationale	An improvement in productivity and quality in agriculture is expected to lead to an increase in the value of exports of agricultural products and contributes to foreign currency earnings.
Frequency of reporting	Annual
Impact statement concerned	Contribute to export earnings
Data sources	TRA
Responsibility for data collection	TRA
Disaggregation	National
Risk	No risk
Comments	The same product categories by HS code shown in “Annex to Table IM3” should be used in the subsequent years.

OUTCOME INDICATORS

Outcome indicator 1	Food self-sufficiency ratio
Definition	The percentage ratio of gross domestic production to gross domestic food requirements.
Rationale	The indicator measures whether national food production meets gross food requirements. The same also applies at the regional level where the indicator tells the extent to which a region's annual food production satisfies its population needs. At 100% self-sufficiency ratio (SSR) the food produced in the current year will be equal to food required during the next consumption year. A situation where food produced is in the range of 100 - 120% is considered self-sufficient. When the SSR is 120% and above the situation is considered surplus. • SSR<100% Food deficit • 100%≤SSR<120% Self-sufficient • SSR≥120% Surplus
Frequency of reporting	Annual
Outcome statement concerned	Agricultural production increased and productivity improved
Data sources	Crop Monitoring and Early Warning, National Food Security Division, MAFC
Responsibility for data collection	MAFC
Disaggregation	National, Regional
Risk	No risk
Comments	This is a MKUKUTA indicator.

Outcome indicator 2	Production and productivity of crops and livestock
Definition	The indicators measure total quantity produced and quantity produced per unit of production for the following products. - Maize (tons; tons/hectare) - Paddy (tons; tons/hectare) - Beef (tons; kgs/head): total weight of cattle slaughtered x 55% - Milk (litres; litres/head)
Rationale	Production and productivity are the most important indicators for measuring performance of the agricultural and livestock subsectors.
Frequency of reporting	Maize and Paddy: Periodical (NSCA)/Annual (NPS) (For acronyms, see the data sources) Beef and Milk: Annual
Outcome statement concerned	Agricultural production increased and productivity improved
Data sources	Maize and Paddy: National Sample Census of Agriculture (NSCA), National Panel Survey (NPS) Agricultural Module Beef and Milk: MLDF
Responsibility for data collection	NBS, MLDF
Disaggregation	Region and District (NSCA), National (NSCA, NPS, MLDF)
Risk	No risk
Comments	1) Data may not be available on time due to delays in implementation of the surveys. 2) Data may not be accurate due to the methodology of data collection through interview and self-reporting from the respondents without physical measurements of farmlands and outputs.

Outcome indicator 3	Proportion of smallholder households using improved technologies
Definition	Proportion of smallholder households using improved technologies: - Improved seeds, - Chemical fertilizer, - Irrigation, - Improved dairy - Erosion control
Rationale	It describes the farming husbandry and technical interventions best practices recommended and used.
Frequency of reporting	Periodical (NSCA)/Annual (NPS) (For acronyms, see the data sources)
Outcome statement concerned	Agricultural services improved
Data sources	National Sample Census of Agriculture (NSCA) and National Panel Survey (NPS) Agricultural Module
Responsibility for data collection	NBS
Disaggregation	Region and District (NSCA), National (NSCA and NPS)
Risk	No risk
Comments	1) Data may not be available on time due to delays in implementation of the surveys. 2) Data may not be accurate due to the methodology of data collection through interview and self-reporting from the respondents without physical measurements of farmlands and outputs

Outcome indicator 4	Flow of private funds into the agricultural sectors
Definition	The amount (Tanzania Shilling) of lending to the agricultural sector by domestic private banks
Rationale	To measure medium and large investors investment supporting agriculture industry
Frequency of reporting	Annual
Outcome statement concerned	Private investment in the agricultural sector enhanced
Data sources	Bank of Tanzania
Responsibility for data collection	MAFC
Disaggregation	National
Risk	No risk
Comments	

Outcome indicator 5	Proportion of smallholder households using mechanization
Definition	Proportion of smallholder households using mechanization: - Ox plough - Ox planter - Ox cart - Tractor - Tractor Plough - Power tiller
Rationale	Mechanization is a necessary condition for farmers to improve productivity. These indicators show the degree of agricultural mechanization.
Frequency of reporting	Periodical (NSCA)/Annual (NPS) (For acronyms, see the data sources)

Outcome statement concerned	Agricultural services improved
Data sources	National Sample Census of Agriculture (NSCA) and National Panel Survey (NPS) Agricultural Module
Responsibility for data collection	NBS
Disaggregation	Region and District (NSCA), National (NSCA and NPS)
Risk	No risk
Comments	Data may not be available on time due to delays in implementation of the surveys.

Outcome indicator 6	Ratio of processed exported agricultural products to total exported agricultural products
Definition	(Value of processed exported agricultural products) / (Value of exported agricultural products).
Rationale	Currently many agricultural products have been exported without being processed. As a result, little value has been added domestically. The government has been eager to increase the export of processed agricultural products in order to increase the value-added within the country.
Frequency of reporting	Annual
Outcome statement concerned	Agricultural marketing system strengthened
Data sources	TRA
Responsibility for data collection	TRA
Disaggregation	National
Risk	No risk
Comments	The same product categories by HS code for agricultural products and processed agricultural products shown in “Annex to Table OC6” should be used in subsequent years.

Outcome indicator 7	Number of smallholder households participating in contracting production and out-growers schemes
Definition	Smallholder households who participate in contracting production and out-growers schemes, as percentage of all smallholder households. Contracting production is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products detailed in formal contracts. An out-growers scheme is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products that may not involve formal contracts. The company may provide smallholders some services, such as input credits, tillage, spraying and harvesting. The smallholder provides land and labor in return for the extension/input package.
Rationale	Contract farming and out-growers schemes are one of the important aspects of strengthened agricultural marketing system.
Frequency of reporting	Annual
Outcome statement concerned	Agricultural marketing system strengthened
Data sources	LGAs
Responsibility for data collection	LGAs
Disaggregation	District, Regional, National

Risk	No risk
Comments	This is a MKUKUTA indicator, and the MKUKUTA Monitoring Master Plan and Indicator Information (Dec. 2006, p.78) mentions the National Sample Census of Agriculture (NSCA) as a data source. However, NSCA does not contain information on this indicator. Thus, the data need to be collected from LGAs.

Outcome indicator 8	Proportion of LGAs that qualify to receive top-up grants
Definition	LGAs qualify to receive enhanced DADP when the following minimum conditions are met. 1. District qualifies for Capital Development Grant 2. Position of DALDO filled 3. Council has a DADP 4. Evidence of commitment to the participatory process 5. Evidence of a commitment to reform agricultural extension services.
Rationale	This indicator assesses the degree of fulfillment of LGCDG conditions, which is a part of LGAs' performance.
Frequency of reporting	Annual
Outcome statement concerned	Institutional framework strengthened
Data sources	PMO-RALG
Responsibility for data collection	PMO-RALG
Disaggregation	National
Risk	No risk
Comments	As the ASDP is implemented, there is a possibility that the minimum conditions be altered. In that case, consistency of the data may be violated.

Outcome indicator 9	Proportion of LGAs that qualify to receive performance bonus
Definition	The amount of performance bonus is assessed based on the following criteria. 1. DADP prepared and implemented according to guidelines and as part of DDP (35 points) 2. District Agricultural Services Reform and contracting (20 points) 3. Agricultural investments follow standards of compliance and technical audit conducted.(30 points) 4. Policy and regulatory (15 points)
Rationale	It assesses the performance of councils from the aspects of consistency with ASDP.
Frequency of reporting	Annual
Outcome statement concerned	Institutional framework strengthened
Data sources	LGDG System
Responsibility for data collection	PMO-RALG
Disaggregation	National
Risk	No risk
Comments	In 2006/07, only a part of the performance measures were used in the assessment. ASLMs and ASDP-supporting DPs have agreed that the assessment criteria be revised because a far larger number of LGAs than previously anticipated were qualified for performance bonus. A more rigorous standard may be applied, which may affect data consistency.

Outcome indicator 10	Proportion of farmers having visits from public or private extension staff
Definition	Proportion of farmers who receive extension advice for crop production or livestock extension advice by - Government extension, - NGO/development projects, - Cooperative or - Large scale farmers.
Rationale	It indicates the effectiveness of extension services and the degree of dissemination of improved technologies.
Frequency of reporting	Periodical
Outcome statement concerned	Agricultural services improved
Data sources	National Sample Census of Agriculture (NSCA) and National Panel Survey (NPS) Agricultural Module
Responsibility for data collection	NBS
Disaggregation	National
Risk	No risk
Comments	

Outcome indicator 11	Amount of fertilizer consumed
Definition	The amount of fertilizer consumed by farmers during the year
Rationale	It assesses the performance of councils from the aspects of consistency with ASDP.
Frequency of reporting	Annual
Outcome statement concerned	Agricultural services improved
Data sources	MAFC, Department of Crop Development
Responsibility for data collection	MAFC, , Department of Crop Development
Disaggregation	National
Risk	
Comments	This is an indicator for annual PAF (Performance Assessment Framework)

Outcome indicator 12	Number of households using irrigation infrastructure
Definition	Number of members that belong to Irrigation Organizations.
Rationale	It indicates the number of beneficiaries of irrigation scheme development
Frequency of reporting	Annual
Outcome statement concerned	Agricultural services improved
Data sources	MAFC, Department of Irrigation Technical Services
Responsibility for data collection	MAFC, Department of Irrigation Technical Services
Disaggregation	National
Risk	
Comments	

OUTPUT INDICATORS

Output indicator 1	Number of agricultural production infrastructure
Definition	Number of agricultural production infrastructure existing and in operation (as of 30th June of each year) : - Dams (excluding hydro-power dams) - Charco dams - Dips - Oxenization centers - Veterinary clinics
Rationale	It indicates capability of ASLMs and LGAs to improve and expand agricultural production infrastructure.
Frequency of reporting	Annual
Output statement concerned	Constructed and/or rehabilitated demand-driven agricultural production infrastructure enhanced
Data sources	LGAs
Responsibility for data collection	LGAs
Disaggregation	District, Regional, National
Risk	No risk
Comments	None

Output indicator 2	Number of agricultural marketing infrastructure and machinery
Definition	Number of agricultural marketing infrastructure and machinery existing and in operation (as of 30th June of each year) - Livestock primary market - Livestock secondary market - Livestock holding ground - Feeder road (km) - Abattoirs - Slaughter house - Slaughter slab - Hide and skin sheds - Pulperies, ginneries, shelling - Milling machine - Oil extracting machines
Rationale	It indicates capability of ASLMs and LGAs to improve and expand agricultural marketing infrastructure and machinery
Frequency of reporting	Annual
Output statement concerned	Constructed or rehabilitated demand-driven agricultural marketing infrastructure enhanced
Data sources	LGAs
Responsibility for data collection	LGAs
Disaggregation	District, Regional, National
Risk	No risk
Comments	None

Output indicator 3	Number of extension officers trained on improved technological packages
Definition	Number of extension officers trained on improved technological packages on crop, livestock, and marketing and processing.

	Improved technological packages include improved seeds, herbicides, pesticides, fungicides, crop storage, fertilizer, spacing, erosion control, irrigation, vermin/rodent control, agro-forestry, etc.
Rationale	It is a proxy indicator for farmers' adoption of improved agricultural technologies.
Frequency of reporting	Annual
Output statement concerned	Demand-driven agricultural extension system strengthened
Data sources	LGAs
Responsibility for data collection	LGAs
Disaggregation	District, Region, National
Risk	No risk
Comments	Extension officers receive training not only at MATIs/LITIs but also at different occasions such as those offered by NGOs. Thus, districts are a better place than MATIs/LITIs to obtain this information.

Output indicator 4	Number of SACCOS, members and loans provided for agriculture
Definition	The number of SACCOS members, amount of loans provided by SACCOS for agriculture, livestock, and business (e.g., marketing and processing).
Rationale	Rural micro finance is very important for farmers to improve productivity. This indicator addresses farmers' accessibility to credit.
Frequency of reporting	Annual
Output statement concerned	Financial services improved
Data sources	LGAs
Responsibility for data collection	Cooperatives Development Officer, LGAs
Disaggregation	District, Region, National
Risk	No risk
Comments	This indicator focuses on SACCOS because SACCOS is the most important micro finance institution for farmers. SACAS is under the jurisdiction of the Ministry of Home Affairs, and it is more difficult to collect data. As for the number of SACCOS, it is also available from Cooperatives Development Division, MAFC, although some regions/LGAs fail to submit data regularly.

Output indicator 5	Number of agricultural marketing regulations and legislation in place
Definition	Number of agricultural marketing acts which create an enabling environment for commercialization in place.
Rationale	To harmonize the existing fragmented and inconsistent laws in agricultural marketing to standardize marketing activities.
Frequency of reporting	Annual
Output statement concerned	Agricultural marketing institutions improved
Data sources	MAFC, MLD, MIT
Responsibility for data collection	MIT
Disaggregation	National

Risk	
Comments	

Output indicator 6	Number of markets where wholesale or retail prices are collected
Definition	Number of places (markets) where wholesale or retail prices information on agricultural produce are collected
Rationale	It indicates the availability of market information to stakeholders.
Frequency of reporting	Annual
Output statement concerned	Market information improved
Data sources	MIT
Responsibility for data collection	MIT
Disaggregation	District, Regional, National
Risk	No risk
Comments	None

Output indicator 7	Number of ASDP Basket Fund Steering Committee meetings held
Definition	Number of ASDP Basket Fund Steering Committee (BF-SC) meetings organized and held during the year under ASDP
Rationale	This indicator shows the extent to which the ASLMs are brought together through ASDP BF-SC meetings during the implementation of ASDP.
Frequency of reporting	Annual
Output statement concerned	ASDP coordination framework established and integrated
Data sources	ASDP BF-SC minutes
Responsibility for data collection	ASDP Secretariat
Disaggregation	National
Risk	No risk
Comments	None

Output indicator 8	Proportions of regions submitted quarterly progress reports on time
Definition	Proportion of DADP Physical and Financial Quarterly Progress Reports submitted by regions to PMO-RALG in each quarter.
Rationale	The indicator indicates the effectiveness of reporting flows from LGAs to ASLMs, which is a part of institutional strengthening.
Frequency of reporting	Annual
Output statement concerned	Capacity of ASLMs, regional secretariat, LGAs strengthened
Data sources and verification	PMO-RALG
Responsibility for data collection	PMO-RALG
Disaggregation	District, Regional, National
Risk	No risk
Comments	The deadline of report submission, “within two weeks” is reasonable but close follow up is necessary.

Output indicator 9	Proportion of female members of Planning and Finance Committee
Definition	Proportion of female members of Planning and Finance Committee in each district.
Rationale	It indicates the level of involvement of women in planning,

	implementation and decision making processes.
Output statement concerned	Gender issues mainstreamed in agricultural development plans
Data sources	LGAs
Frequency of reporting	Annual
Responsibility for data collection	LGAs
Disaggregation	District, Regional, National
Risk	
Comments	Village level information is very difficult to obtain.

Output indicator 10	Number of research projects related to crops, livestock and marketing/processing, conducted through ZARDEF
Definition	Number of research projects related to crops, livestock and marketing/processing, conducted through ZARDEF
Rationale	It indicates implementation of demand–oriented research activities.
Output statement concerned	Client-oriented agricultural services (Extension, information, research, finance) in place
Data sources	Zonal research offices
Frequency of reporting	Annual
Responsibility for data collection	MAFC, MLDF
Disaggregation	National
Risk	No risk
Comments	

Annex 3 Commodities included in "agricultural exports" (Impact Indicator 3)

HS Code	Description	HS Code of Commodities included
Section 1: Animal and Animal Products		
01	Live animals	0101-0105
02	Meat and edible meat offal	0201-0207, 0209, 021011-021020
03	Fish and crustaceans, mollusks and other aquatic invertebrates	Not included
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	All: 0401-0410
05	Products of animal origin, not elsewhere specified or included	0502-0506, 051110, 051199
Section 2: Vegetable Products		
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	All: 0601-0604
07	Edible vegetables and certain roots and tubers	All: 0701-0714
08	Edible fruit and nuts; peel of citrus fruit or melons	All: 0801-0814
09	Coffee, tea, maté and spices	All: 0901-0910
10	Cereals	All: 1001-1008
11	Products of the milling industry; malt; starches; inulin; wheat gluten	All: 1101-1109
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	1201-1211, 121291-121299, 1213-1214
13	Lac; gums, resins and other vegetable saps and extracts	All: 1301-1302
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	All: 1401-1404
Section 3: Animal or Vegetable Fats and Oils and their Cleavage Products, Prepared Edible Fats, Animal or Vegetable Waxes		
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	1501-1503, 1505-1522
Section 4: Prepared Foodstuffs, Sprits and Vinegar, Tobacco and Manufactured Tobacco Substitutes		
16	Preparations of meat, of fish or of crustaceans, mollusks or other aquatic invertebrates	1601-1603
17	Sugars and sugar confectionery	All: 1701-1704
18	Cocoa and cocoa preparations	All: 1801-1806
19	Preparations of cereals, flour, starch or milk; pastry cooks' products (bakers wares)	All: 1901-1905
20	Preparations of vegetables, fruit, nuts or other parts of plants	All: 2001-2009
21	Miscellaneous edible preparations	All: 2101-2106
22	Beverages, spirits and vinegar	All: 2201-2209
23	Residues and waste from the food industries; prepared animal fodder	All: 2301-2309
24	Tobacco and manufactured tobacco substitutes	All: 2401-2403
Section 7: Plastics and Articles Thereof; Rubber and Articles Thereof		
39	Plastics and articles thereof	Not included
40	Rubber and articles thereof.	4001
Section 8: Raw Hides and Skins, Leather, Fur skins and Articles Thereof, Saddlery and Harness, Travel Goods, Handbags and Similar Containers, Articles of Animal Gut (Other than Silk-Worm Gut)		
41	Raw hides and skins (other than fur skins) and leather	All: 4101-4115
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	Not included
43	Fur skins and artificial fur; manufactures thereof	4301-4302
Section 11: Textiles and Textile Articles		
50	Silk	5001-5003
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	5101-5105
52	Cotton	5201-5203
53	Other vegetable textile fibers; paper yarn and woven fabrics of paper yarn	5301-5305
Chapters 54-63 of this section are not shown here since they are man-made fibers, textiles and apparels.		

Annex 4 Commodities included in "Processed agricultural export" (Outcome indicator 6)

HS Code	Description	HS Code of commodities included
Section 1: Animal and Animal Products		
01	Live animals	None
02	Meat and edible meat offal	None
03	Fish and crustaceans, mollusks and other aquatic invertebrates	Not included in agric. exports
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	0401-0406, 04090010
05	Products of animal origin, not elsewhere specified or included	None
Section 2: Vegetable Products		
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	None
07	Edible vegetables and certain roots and tubers	0710-0711
08	Edible fruit and nuts; peel of citrus fruit or melons	0811-0813
09	Coffee, tea, mate and spices	090121-090190, 090230, 090240, 090412, 090420, 090620
10	Cereals	None
11	Products of the milling industry; malt; starches; inulin; wheat gluten	All: 1101-1109
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	None
13	Lac; gums, resins and other vegetable saps and extracts	None
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	None
Section 3: Animal or Vegetable Fats and Oils and their Cleavage Products, Prepared Edible Fats, Animal or Vegetable Waxes		
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	1501-1503, 1505-1522
Section 4: Prepared Foodstuffs, Sprits and Vinegar, Tobacco and Manufactured Tobacco Substitutes		
16	Preparations of meat, of fish or of crustaceans, mollusks or other aquatic invertebrates	1601-1603
17	Sugars and sugar confectionery	All: 1701-1704
18	Cocoa and cocoa preparations	1803-1806
19	Preparations of cereals, flour, starch or milk; pastry cooks' products (bakers wares)	All: 1901-1905
20	Preparations of vegetables, fruit, nuts or other parts of plants	All: 2001-2009
21	Miscellaneous edible preparations	All: 2101-2106
22	Beverages, spirits and vinegar	All: 2201-2209
23	Residues and waste from the food industries; prepared animal fodder	All: 2301-2309
24	Tobacco and manufactured tobacco substitutes	2402-2403
Section 7: Plastics and Articles Thereof; Rubber and Articles Thereof		
39	Plastics and articles thereof	Not included in agric. exports
40	Rubber and articles thereof	None
Section 8: Raw Hides and Skins, Leather, Fur skins and Articles Thereof, Saddler and Harness, Travel Goods, Handbags and Similar Containers, Articles of Animal Gut (Other than Silk-Worm Gut)		
41	Raw hides and skins (other than fur skins) and leather	4104-4115
2	Articles of leather; saddler and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk worm gut)	Not included in agric. exports
43	Fur skins and artificial fur; manufactures thereof	4302
Section 11: Textiles and Textile Articles		
50	Silk	None
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	5105
52	Cotton	5203
53	Other vegetable textile fibers; paper yarn and woven fabrics of paper yarn	None
Chapters 54-63 of this section are not shown here since they are man-made fibers, textiles and apparels.		

Note: A complete set of HS codes can be obtained from World Business Contact Centre, *HS Codes: Harmonization System Codes - Commodity Classification* (http://www hscodes.com/)

Annex 3.8 M&E Guideline

JAMUHURI YA MUUNGANO WA TANZANIA

PROGRAMU YA KUENDELEZA SEKTA YA KILIMO

(ASDP)

MWONGOZO WA UFUATILIAJI NA TATHMINI

RASIMU 2

Mei 2010

KIKUNDI KAZI CHA
UFUATILIAJI NA TATHMINI YA PROGRAMU

YALIYOMO

TAFSIRI YA VIFUPISHO

ARDS	Agricultural Routine Data System
ASDP	Agricultural Sector Development Programme
ASLMs	Agricultural Sector Lead Ministries
ASR	Agricultural Sector Review
BF-SC	Basket Fund Steering Committee
CDs	Committee of Directors
DADPs	District Agricultural Development Plans
DALDO	District Agriculture and Livestock Development Officer
DED	District Executive Director
DFT	District Facilitation Team
DMIS	Director of Management Information System
DPLO	District Planning Officer
DPP	Director of Policy and Planning
DSC	Director of Sector Coordination
ICC	Inter-Ministerial Coordination Committee
JIR	Joint Implementation Review
LGAs	Local Government Authorities
LGDG	Local Government Development Grant
LGMD	Local Government Monitoring Database
MAFC	Ministry of Agriculture, Food Security and Cooperatives
M&E	Monitoring and Evaluation
MES	Monitoring, Evaluation and Statistics
MITM	Ministry of Industry, Trade and Marketing
MWI	Ministry of Water and Irrigation
MLDF	Ministry of Livestock Development and Fisheries
PER	Public Expenditure Review
RAA	Regional Agricultural Advisor
RAS	Regional Administrative Secretary
RLA	Regional Livestock Advisor
RS	Regional Secretariat
RTA	Regional Trade Advisor
TRA	Tanzania Revenue Authority
VAEOs	Village Agricultural Extension Officers
WAEOs	Ward Agricultural Extension Officers
WFT	Ward Facilitation Team

1. UTANGULIZI.

1.1 Madhumuni ya Mwongozo wa Ufuatiliaji na Tathmini (M&E)

Mwongozo wa Ufuatiliaji na Tathmini umeanzishwa ili kuufanya mfumo wa Ufuatiliaji na Tathmini uweze kutumika. Lengo kuu la mwongozo huu ni kutoa maelekezo ya namna ya mfumo wa Ufuatiliaji na Tathmini wa Programu ya Kuendeleza Sekta ya Kilimo (ASDP) utakavyotekelezwa kwa kuelezea majukumu ya kila mdau. Mwongozo huu hasa unawakusudia/unawalenga maafisa wa Serikali za Mitaa (Maafisa Ugani, watalaam bingwa, timu za wawezeshaji wanaotekeleza Mipango ya Maendeleo ya Kilimo ya Wilaya- DADPs), Sekratariati za Mikoa, Watalaam wa Ufuatiliaji na Tathmini wa Wizara za Kisekta. Mwongozo huu utakuwa ni sehemu ya miongozo ya mipango ya Kuendeleza Sekta ya Kilimo ya Wilaya, na utakuwa unapitiwa mara kwa mara na kufanyiwa marekebisho kadri uhitaji unapojitokeza.

1.2 Mpaka wa Mwongozo wa Ufuatiliaji na Tathmini

Mwongozo huu umepangwa kama ifuatavyo. Sura ya 2 inaelezea hatua muhimu zinazoweza kuchukuliwa na kila mdau kuanzia ngazi ya kijiji hadi ngazi ya kitaifa wakati wa Ufuatiliaji na Tathmini ya Programu.

1.3 Ukusanyaji na Uwasilishaji wa Taarifa

Ukusanyaji na uwasilishaji wa taarifa ni kipengele muhimu katika Ufuatiliaji na Tathmini. Bila ya kuwepo kwa utaratibu na uwasilishaji wa takwimu kwa wakati Ufuatiliaji na Tathmini wenye tija hauwezi kufanyika. Pia, Ili Ufuatiliaji na Tathmini ufanyike kwa ufasaha ni lazima takwimu zinazokusanywa ziwe sahihi, zinazoendana na wakati, na zinapatikana. kwa hiyo, watekelezaji wa Programu ni lazima wawe na utaratibu makini wa ukusanyaji wa takwimu kutoka vyanzo sahihi kama vile miradi, jamii na wadau wengine.

2. MAJUKUMU YA KILA MDAU.

Sura hii, inaelezea majukumu ya kila mdau yanayohusiana na mfumo wa uwasilishaji wa taarifa kama ifuatavyo:.

- Taarifa za utekelezaji na fedha za mpango wa maendeleo ya Kilimo ya wilayani,
- Mfumo wa taarifa za kilimo (zikiwemo za LGMD2).

Kazi kuhusu taarifa maalum, uchunguzi na sensa hazijaelezwa katika sehemu hii kwa sababu mifumo hii ilishaanzishwa.

I. Ngazi ya Serikali za Mtaa (LGAs)

2.1 Ngazi ya Kijiji/Mtaa

Mhusika	Jukumu/Kazi	Wakati gani
Maafisa Ugani wa Vijiji (VAEOs)	Kuandaa na kuwasilisha taarifa ya kijiji ya kilimo kwa mwezi/ robo mwaka/ mwaka	Kila mwisho wa mwezi/ robo mwaka/ mwaka

2.1.1 Ufuatiliaji na Uwasilishaji taarifa katika ngazi ya kijiji/mtaa

- VAEOs watatembelea vikundi vya wakulima, mkulima mmoja mmoja, wakala wa pembejeo, n.k. ili kukusanya taarifa muhimu kama sehemu ya shughuli za ugani.
- VAEOs wataandaa taarifa ya Kilimo ya kijiji ya mwezi, robo mwaka na ya mwaka. VAEOs walikuwa wanaandaa taarifa mbili (2) ya kilimo na ya mifugo. Taarifa hizi sasa zimeunganishwa kuwa taarifa moja ya sekta ya kilimo.
- VAEOs watawasilisha taarifa ya kilimo ngazi ya kijiji ya mwezi, robo mwaka na ya mwaka kwa Maafisa Ugani wa Kata (WAEOs) kila mwisho wa mwezi.
- Muundo uliopendekezwa wa taarifa za Sekta ya Kilimo ya mwezi, robo mwaka na mwaka katika ngazi ya kijiji umetengenezwa na Kikundi Kazi cha Ufuatiliaji na Tathmini cha Programu kwa kushirikiana na Serikali za Mtaa na Sekretariati za Mikoa (kiambatanisho Na.1 cha Mwongozo).

2.2 Ngazi ya Kata

Mhusika	Jukumu/Kazi	Wakati gani
Timu ya Wawezeshaji wa Kata (WFT).	Kufanya Ufuatiliaji wa kawaida	
Maafisa Ugani wa Kata (WAEOs)	Kuchanganua taarifa ya sekta ya Kilimo ya mwezi, robo mwaka na ya mwaka katika ngazi ya kijiji na kuwasilisha mrejesho kwa VAEOs	Kila mwezi, robo mwaka, na mwaka ndani ya wiki mbili baada ya kuzipokea.
	Kuandaa na kuwasilisha taarifa ya Sekta ya Kilimo ya mwezi, robo mwaka na ya mwaka katika ngazi ya kata	Mwishoni mwa wiki ya kwanza ya kila mwezi, robo mwaka, na mwaka.

2.2.1 Ufuatiliaji wa kawaida katika ngazi ya kata.

- Wajumbe wa WFT watafuatilia utekelezaji wa shughuli za kila siku za Sekta ya Kilimo katika ngazi za kata na kijiji/mtaa mara kadhaa.

2.2.2 Taarifa ya Kilimo ngazi ya kata

- WAEOs watachambua na kutathimini taarifa ya Kilimo ya mwezi/robo mwaka na mwaka na kutoa mrejesho kwa VAEOs husika.
- Kwa kuzingatia mchanganuo wa hapo juu na kuongeza taarifa kuhusu shughuli za Kilimo katika Kata zilizopatikana kwa kutembelea vijiji, WAEOs wataandaa taarifa ya Kilimo ya mwezi/robo mwaka na mwaka ngazi ya kata.
- WAEOs watawasilisha taarifa ya Kilimo ya mwezi, robo mwaka na mwaka kwa Afisa kilimo na mifugo wa wilaya (DALDO) ifikapo mwisho wa wiki ya kwanza ya kila mwezi.
- WAEOs watabandika taarifa ya Kilimo ya mwezi, robo mwaka na mwaka ya ngazi ya kata kwenye ubao wa matangazo wa ofisi ya kata ili kila mtu (wakiwemo VAEOs) aweze kuiona taarifa hiyo kama sehemu ya mrejesho.

- Muundo uliopendekezwa wa taarifa za Sekta ya Kilimo ya mwezi, robo mwaka na mwaka katika ngazi ya kata umetengenezwa na Kikundi Kazi cha Ufuatiliaji na Tathmini cha Programu kwa kushirikiana na Serikali za Mtaa na Sekretariati za Mikoa (kiambatanisho Na.1 cha Mwongozo).

2.3 Ngazi ya Wilaya

Mhusika	Jukumu/Kazi	Wakati gani
Timu ya Uwezeshaji ya Wilaya (DFT).	Ufuatiliaji wa kawaida	
Maafisa Wa Kilimo na Mifugo wa Wilaya (DALDOs[1])	Kuandaa na kuwasilisha taarifa ya utekelezaji wa DADPs Kwa siku zijazo, taarifa hii itawasilishwa kwa kutumia PlanRep2 - Micro	Ndani ya wiki mbili baada ya kila mwisho wa robo mwaka husika
DALDOs	Kuchanganua taarifa za Sekta ya Kilimo za mwezi na kutoa mrejesho kwa WAEOs.	Kila mwezi ndani ya wiki mbili baada ya kuzipokea
	Kuandaa na kuwasilisha taarifa za Sekta ya Kilimo za kila mwezi	Kwa kufuata tarehe ya mwisho ya kila LGA
	Kuandaa na kuwasilisha faili la takwimu la LGMD2	Ndani ya wiki mbili baada ya mwisho wa kila robo mwaka

2.3.1 Ufuatiliaji wa kawaida katika ngazi ya Wilaya.

- Wajumbe wa DFT watafuatilia utekelezaji wa shughuli za kila siku za Sekta ya Kilimo katika ngazi za Wilaya mara kadhaa kwa uratibu wa Afisa wa Ufuatiliaji na Tathmini.

2.3.2 Uaandaji wa taarifa za utekelezaji wa DADPs kwa robo mwaka katika ngazi ya Wilaya

- DALDO ataandaa taarifa za utekelezaji za DADPs kwa kila robo ya mwaka na kuziwasilisha kwa Mkurugenzi Mtendaji wa Wilaya (DED) ikielekezwa aione Afisa Mipango wa Wilaya (DPLO) na nakala kwa Mshauri wa Kilimo/Mifugo wa Mkoa (RAA/RLA) ndani ya wiki mbili katika kila mwisho wa robo mwaka.
- Muundo wa taarifa za utekelezaji za DADPs za kila robo mwaka zimeambatishwa kama kielelezo Namba 2.

2.3.3 Uandaaji wa faili la PlanRep2 katika ngazi ya Wilaya [2]

- Kwa kushirikiana na DALDOs, DPLOs wataingiza taarifa za utekelezaji zinazojumuisha zile za DADPs katika PlanRep2 na kuwasilisha kwa Katibu Tawala wa Mkoa (RAS) na kupeleka nakala Ofisi ya Waziri Mkuu - Tawala za Mikoa na Serikali za Mitaa (OWM-TAMISEMI).

[1] DALDOs ni pamoja na Maafisa Biashara wa Wilaya katika mwongozo huu.
[2] 2.3.2 na 2.3.3 hazitafanywa kwa pamoja. 2.3.2 inawakilisha utaratibu wa kufanya wakati 2.3.3. inaelezea utaratibu wa siku za baadaye.

2.3.4 Taarifa za kilimo na faili la LGMD2 katika ngazi ya Wilaya

- DALDOs watachambua na kutathmini taarifa za mwezi, robo mwaka na za mwaka na kutoa mrejesho kwa WAEOs wanaohusika

- DALDOs watajumuisha takwimu kutoka WAEOs. Iwapo takwimu hizo zitakosekana DALDOs watawasiliana na WAEOs husika.
- Kwa kuzingatia uchambuzi wa taarifa za kila mwezi, robo mwaka na za mwaka za sekta ya kilimo na pamoja na taarifa za shughuli za sekta ya kilimo wilayani, DALDOs wataandaa taarifa za kilimo za mwezi na robo mwaka katika ngazi ya wilaya.
- DALDOs watabandika taarifa hizo za sekta ya kilimo katika mbao za matangazo za wilaya ili wadau wote (wakiwemo WAEOs/VAEOs) waweze kusoma ikiwa ni mrejesho.
- Katika kuaandaa taarifa za sekta ya kilimo ngazi ya wilaya, DALDOs wanaweza kupata ushauri kutoka kwa RAA/RLA katika masuala ya kitaalamu.
- DALDOs watawasilisha taarifa (Mwezi, Robo mwaka na Mwaka) za sekta ya kilimo katika ngazi ya wilaya kwa DED na kutuma nakala kwa RAA/RLA.
- DALDOs pia wataingiza takwimu katika faili la LGMD2 ndani ya wiki mbili baada ya mwisho wa robo mwaka husika na takwimu hizo zitapitishwa na DED kabla ya kuziwasilisha kwa ajili ya majumuisho katika kitunza takwimu kikuu.
- Miundo ya LGMD2 (robo mwaka/mwaka) imeonyeshwa katika viambatanisho Na. 3 na 4 katika Mwongozo huu.

2.4 Ngazi ya Mkoa

Mhusika	Jukumu	Wakati gani
Mshauri wa Kilimo wa Mkoa (RAA) /Mshauri wa Mifugo wa Mkoa (RLA) /Mshauri wa Biashara wa Mkoa (RTA)	Ufuatiliaji na kutoa mrejesho wa kitaalam	
RAA/RLA/RTA na/au Sekretarieti ya Mkoa (RS)	Kuunganisha taarifa za utekelezaji za mkoa za robo mwaka za DADPs (Kwa siku zijazo, taarifa hii itawasilishwa kwa kutumia PlanRep2 –Meso	Si zaidi ya siku 15 baada ya robo mwaka husika kuisha
RAA/RLA/RTA	Kuchambua takwimu za wilaya za LGMD2 (robo mwaka/mwaka) na kutoa mrejesho kwa DALDOs	Ndani ya majuma (week) mawili baada ya kupokea
	Kuidhinisha takwimu za wilaya katika LGMD2	Si zaidi ya siku 15 baada ya robo mwaka husika kuisha
RAA/RLA/RTA	Kushiriki katika mapitio mbalimbali	

2.4.1 Ufuatiliaji na kutoa mrejesho wa kitaalam katika ngazi ya mkoa

- RAA/RLA/RTA atafanya ufuatiliaji wa mipango na utekelezaji wa shughuli za ASDP/DADPs katika ngazi ya wilaya na kutoa mrejesho wa kitaalam

2.4.2 Kuunganisha taarifa za utekelezaji za robo mwaka za wilaya katika ngazi ya mkoa.

- RAS (RAA/RLA/RTA) ataunganisha taarifa za utekelezaji za robo mwaka za DADPs na kuziwasilisha OWM-TAMISEMI (ikielekezwa kwa Mkurugenzi wa Uratibu wa Sekta (DSC)) katika majuma matatu baada ya mwisho wa kila robo mwaka. (Kwa maelezo zaidi, tafadhali wasiliana na DSC, OWM-TAMISEMI)

2.4.3 Maandalizi ya faili la mfumo wa PlanRep2 katika ngazi ya mkoa

- Baada ya kupokea mafaili ya PlanRep2 kutoka wilayani, Maafisa wa RS watayaunganisha kuwa faili moja na kuliwasilisha OWM-TAMISEMI (likielekezwa kwa Mkurugenzi wa Mifumo ya Upashanaji Habari (DMIS))

2.4.4 Taarifa za kilimo na faili la mfumo wa LGMD2 katika ngazi ya mkoa.

- RAA/RLA/RTA atachambua na kutathmini taarifa za kilimo za wilaya na kuhakiki takwimu katika mfumo wa LGMD2 (robo mwaka/mwaka) na kutoa mrejesho wa maandishi kwa DALDOs husika.
- Kwa kuzingatia uchambuzi wa hapo juu ikiwa ni pamoja na kuongeza taarifa kuhusu shughuli za kilimo katika ngazi ya mkoa, RAA/RLA/RTA ataandaa taarifa za kilimo za mkoa (nusu mwaka) na kuziwasilisha kwa Katibu Mkuu, OWM-TAMISEMI (ikielekezwa kwa DSC) na kuwasilisha nakala kwa Katibu Mkuu, MAFC (ikielekezwa kwa Mkurugenzi wa Sera na Mipango (DPP), Seksheni ya Ufuatiliaji, Tathmini na Takwimu (MES)).
- RAA/RLA/RTA ataidhinisha takwimu za LGMD2 ndani ya majuma matatu baada ya mwisho wa robo mwaka

2.4.5 Ushiriki katika mapitio mbalimbali ngazi ya mkoa

- RAA/RLA/RTA atashiriki katika kutathmini kama mjumbe wa timu za tathmini chini ya mfumo wa Ruzuku ya Maendeleo kwa Serikali za Mitaa (LGDG).
- RAA/RLA/RTA atashiriki katika mapitio mengine kama vile Mapitio ya Kitaalam ya robo mwaka kuhusu mfumo wa LGDG na Mapitio ya Pamoja ya Utekelezaji (JIR) wa ASDP wakati mapitio yanapofanyika katika mikoa husika.
- RAA/RLA/RTA ataandaa mkutano wa mwaka wa wadau zikiwemo Halmashauri za wilaya, miji, manispaa na majiji kwa lengo la kubadilishana uzoefu na kujifunza kuhusu ufuatiliaji na tathmini, masuala yanayohusu matokeo ya utekelezaji, takwimu zilizokusanywa wakati wa utekelezaji, mapitio ya utekelezaji wa viashiria vilivyotolewa na serikali za ngazi za chini, ufuatiliaji na maendeleo kuelekea kufanikisha malengo yatajadiliwa. Utekelezaji wa mapitio yatafanyika kwa zamu katika LGAs.

II. Ngazi ya Taifa

2.5 OWM- TAMISEMI

Mhusika	Hatua ya Utekelezaji	Wakati gani
Idara ya Uratibu wa Kisekta Kitengo cha Kilimo	Kuandaa na kuwasilisha taarifa ya kila robo mwaka ya utekelezaji wa DADPs (kwa siku za mbeleni taarifa hii itatolewa kwa kutumia Plan Rep2 kitaifa).	Ndani ya mwezi mmoja baada ya kila robo mwaka
	Kupokea faili la takwimu za msingi (LGMD2) kutoka mikoani.	Ndani ya mwezi mmoja baada ya kila robo mwaka

2.5.1 Kuandaa taarifa ya utekelezaji ya Mpango wa Maendeleo ya Kilimo wa Wilaya kila robo mwaka katika ngazi ya Taifa

- Idara ya Uratibu wa Sekta- kitengo cha Kilimo OWM-TAMISEMI watahusika na uchambuzi na maandalizi ya taarifa za DADPs kwa kutumia takwimu za msingi kutoka Mikoani na kuziwasilisha kwa Katibu Mkuu Wizara ya Kilimo, Chakula na Ushirika, ikielekezwa kwa DPP ndani ya mwezi mmoja baada ya kila robo mwaka.
- Idara ya Uratibu wa Sekta-kitengo cha Kilimo OWM-TAMISEMI wataanda taarifa za mrejesho wa maoni kuhusu uchambuzi wa taarifa ya utekelezaji wa mpango wa maendeleo ya Kilimo ya Wilaya kwenda Halmashauri ya Wilaya kuptia kwa Katibu Tawala Mkoa.

2.5.2 Maandalizi ya Taarifa ya PlanRep2 Ngazi ya Taifa [3]

- Baada ya kupokea taarifa za PlanRep2 kutoka Mikoani, Idara ya DMIS - OWM-TAMISEMI itandaa taarifa ya PlanRep2 na kutuma faili kwa kutumia mtandao kwenda Idara ya Uratibu wa Sekta.
- Wataalamu wa Idara ya Uratibu wa Sekta OWM-TAMISEMI wataandaa taarifa ya Utekelezaji wa DADPs kwa kuzingatia faili la PlanRep2 kitaifa na kuiwasilisha kwa Katibu Mkuu Wizara ya Kilimo, Chakula na Ushirika ikielekezwa kwa DPP.

2.5.3 Kutumia LGMD2

- Taarifa zilizohifadhiwa katika kitunza taarifa kikuu (main server) kilichopo Wizara ya Kilimo, Chakula na Ushirika zitatumika kuandaa taarifa mbalimbali za kilimo.

[3] 2.5.1 na 2.5.2 hazitafanywa kwa pamoja. 2.5.1 inaelezea utaratibu uliopo wakati 2.5.2 inaelezea utaratibu kwa siku za baadae.

2.6 Wizara za Sekta ya Kilimo (MAFC, MLDF, MITM and MWI)

Mhusika	Hatua ya Utekelezaji	Wakati gani
Wizara ya Kilimo, Chakula na Ushirika (MAFC) / Wizara ya Maendeleo ya Mifugo na Uvuvi (MLDF)/ Wizara ya Viwanda, Biashara na Masoko (MITM)/ Wizara ya Maji na Umwagiliaji (MWI)	Kuandaa taarifa ya Utekelezaji kwa kila Wizara ya Kisekta kuhusu shughuli zinazofanywa katika ngazi ya kitaifa kupitia Fedha za Mfuko wa pamoja wa Kuendeleza Sekta ya Kilimo nchini.	Ndani ya mwezi mmoja baada ya mwisho wa kila robo ya mwaka.
Vitengo vya Ufuatiliaji na Tathmini vya Wizara za Sekta za Kilimo	Kuchambua na kutathmini faili la takwimu za mkoa kuhusu LGMD2 na kutoa mrejesho kwa RAA/RLA/RTA.	
	Kuandaa na kuwasilisha taarifa ya Utekelezaji kwa kila wizara ya kisekta.	Kufikia katikati ya mwezi Agosti.
DPP, MAFC (Timu ya Kuratibu shughuli za ASDP)	Kuchambua na kuziunganisha taarifa za Utekelezaji za robo mwaka kutoka OWM-TAMISEMI na Wizara za Kisekta ili kuandaa taarifa za Utekelezaji za robo mwaka za ASDP	Kila robo ya mwaka kabla ya kikao cha Kamati Inayosimamia Mfuko wa pamoja wa programu ya Kuendeleza Sekta ya Kilimo (ASDP BFSC)
	Kuchambua taarifa ya kitaifa ya utekelezaji (kitaalamu) kutoka Wizara za kisekta na kuziunganisha ili kuandaa Taarifa ya Mwaka ya utekelezaji wa ASDP	Mwishoni mwa mwezi Agosti
Mapitio	Kushiriki mapitio mbalimbali	

2.6.1 Utayarishaji wa taarifa za Utekelezaji za robo mwaka za wizara za kisekta

- Kitengo cha Ufuatiliaji na Tathmini cha kila wizara ya kisekta kitaandaa taarifa za utekelezaji ya robo mwaka kuhusu shughuli zinazotekelezwa kupitia Mfuko wa Pamoja wa ASDP katika ngazi ya Taifa.
- Kitengo cha Ufuatiliaji na Tathmini cha kila wizara ya kisekta kitawasilisha taarifa kwa Katibu Mkuu, MAFC kupitia kwa DPP, ndani ya mwezi mmoja baada ya mwisho wa kila robo ya mwaka.

2.6.2 Utayarishaji wa taarifa za utekelezaji za Wizara za Kisekta

- Kitengo cha Ufuatiliaji na Tathmini cha kila wizara ya kisekta kitaratibu matayarisho ya taarifa ya kitaifa ya utekelezaji (kitaalamu) ya kila wizara kwa kuzingatia taarifa zitokanazo na mfumo wa LGMD2, taarifa maalum na utafiti wa kilimo/sensa nk. Taarifa kuhusu orodha fupi ya viashiria vya sekta pia zitakusanywa na kujumuishwa katika taarifa hizo.
- Katibu Mkuu (Kitengo cha Ufuatiliaji na Tathmini, DPP) wa kila wizara ya kisekta atawasilisha taarifa kwa Katibu Mkuu, MAFC na nakala itawasilishwa katika timu inayoratibu shughuli za ASDP chini ya DPP, MAFC ifikapo tarehe 15 ya mwezi Agosti.

2.6.3 Utayarishaji wa Taarifa za utekelezaji za robo mwaka na mwaka kuhusu shughuli za ASDP

- Timu ya kuratibu shughuli za ASDP inayoundwa na maafisa kutoka Idara ya Sera na Mipango, MAFC pamoja na wale wa wizara za kisekta itapokea Taarifa ya Utekelezaji ya robo mwaka kuhusu DADPs kutoka OWM-TAMISEMI na Taarifa ya kitaifa ya Utekelezaji ya robo mwaka kutoka kila wizara ya kisekta, itazichambua na kuziunganisha ili kupata Taarifa ya Utekelezaji ya robo mwaka ya ASDP. Aidha, timu itawasilisha taarifa hiyo kwa Kamati ya Wakurugenzi (CDs), ASDP BFSC na Kamati ya Uratibu ya Wizara za Sekta (ICC) kupitia DPP, MAFC.

- Timu ya kuratibu shughuli za ASDP itapokea Taarifa za Utekelezaji za mwaka kutoka wizara za kisekta, itazichambua na kuziunganisha ili kuandaa Taarifa ya Utekelezaji ya mwaka ya ASDP ifikapo tarehe 31 ya mwezi Agosti na kuiwasilisha kwa Kamati ya Wakurugenzi (CDs), ASDP BFSC na ICC kupitia DPP, MAFC.

2.6.4 Kufanya mapitio mbalimbali

- Mapitio ya Utekelezaji ya Pamoja (JIR), Mapitio ya Sekta ya Kilimo (ASR), Mapitio ya Matumizi ya Umma (PER) n.k. ni sehemu ya shughuli za Ufuatiliaji na Tathmini za Programu ya Kuendeleza Sekta ya Kilimo na yamekuwa yakifanyika kila mwaka.
- Maafisa wa Wizara za sekta ya kilimo watashiriki katika mapitio mbalimbali ya utekelezaji kama vile JIR, ASR, PER na Mapitio ya robo mwaka ya kitaalam kuhusu Mfumo wa Maendeleo wa Serikali za Mitaa
- Maafisa wa wizara za sekta ya kilimo watahudhuria mikutano ya mapitio ya wadau ngazi ya mkoa ya mwaka ili kutoa mrejesho wa kitaalam na kubadilishana uzoefu hususan kuhusu mbinu bora.

2.7 Kikundi kazi cha Ufuatiliaji na Tathmini cha Programu (ASDP M&E TWG)

Mhusika	Jukumu	Wakati gani
ASDP M&E TWG	Kukusanya taarifa kuhusu orodha fupi ya viashiria.	Mwezi Agosti
	Kufanya mapitio ya orodha fupi ya viashiria na muundo wa ufuatiliaji na tathmini.	Kadri uhitaji utakapojitokeza
	Kupitia Mwongozo wa Ufuatiliaji na Tathmini wa ASDP.	Kadri uhitaji

		utakapojitokeza

2.7.1 Ukusanyaji wa Taarifa kuhusu orodha fupi ya Viashiria

- Kitakusanya taarifa kuhusu orodha fupi ya viashiria kutoka Wizara, Idara na Wakala (MDAs) na Mamlaka za Serikali za Mtaa ifikapo mwezi Agosti na kuziwasilisha kitengo cha ufuatiliaji na tathmini cha kila Wizara ya Sekta ya kilimo ili kuzijumuisha kwenye taarifa zao za utekelezaji za mwaka. Kwa siku za mbeleni taarifa zote kuhusu orodha fupi ya viashiria zitakusanywa na Wizara za Sekta ya Kilimo.

2.8 Kamati ya Wakurugenzi (CDs) wa Wizara za Sekta ya Kilimo (ASLMs)

Njia	Jukumu	Wakati gani
Kusimamia Kikundi kazi cha Kitalaamu cha Ufuatiliaji na Tathmini (M&E TWG)	Kusimamia kazi za M&E TWG na kuidhinisha utendaji wake kama vile Muundo na Mwongozo wa Ufuatiliaji na Tathmini	
Kuratibu mapitio	Kuratibu mapaitio ya taarifa ya utekelezaji wa Mpango wa Maendeleo ya Sekta ya Kilimo na kila Wizara ya Sekta ya Kilimo na mapitio ya mwaka ya pamoja ya utekelezaji wa programu	

2.9 Kamati Inayosimamia Mfuko wa Pamoja wa Program ya Kuendeleza Sekta ya Kilimo (ASDP BF-SC)

Mhusika	Jukumu	Wakati gani
Mapitio	Kufanya maamuzi juu ya upelekaji wa rasilimali kila robo mwaka kwa kuzingatia Mpango Kazi, bajeti na taarifa ya fedha.	
	Kufuatilia utendaji kazi na maendeleo katika nyanja zote za utekelezaji wa ASDP kwa kupitia taarifa za utekelezaji, nk.	
	Kujadili taarifa ya ukaguzi wa fedha na kuamua matokeo na hatua kwa ajili ya kutoa fedha kwa Miradi ya Utekelezaji wa ASDP.	

2.10 Kamati ya Uratibu ya Wizara za Sekta (ICC)

Mhusika	Jukumu	Wakati gani
Mapitio	Kufuatilia utendaji kazi wa jumla wa Programu ya Kuendeleza Sekta ya Kilimo (ASDP)	
	Kupitia taarifa za utekelezaji na utendaji kazi kuhusu Programu.	

Kiambatanisho Na. 2. Fomu ya taarifa ya utekelezaji

1.0. Executive Summary

1.1. Introduction

1.2. Physical Progress

(i) Overall Assessment of Performance and Implementation Status

(ii) Summary of Key Achievement of Set Targets

(iii) Implementation Challenges

1.3. Financial Report

(i) Disbursement Status

(ii) Financial Expenditure by Activity

(iii) Cash Flow Forecast

1.4. Procurement Status

(Report the status according to the level, either of the District or Regional)

1.5. Way Forward

(i) Area for Improvement/Actions

(ii) Targets for Next Quarter

2.0. Physical and Financial Progress Report in the form of the directed format.

Planned interventions		**Financial Progress**					**Sources of Funds**					**Remarks**
	Implementation status	Approved budget '000'	Amount Received	Amount spent	Cummulative expenditure	Balance	LGAs own sources	ASDP Basket Fund (CBG, DADG, EEB,DIDF)	CDG (Capital Development Grants)	Beneficiaries contribution	Others (NGOs, CBOs, other projects	

Annex 3.9 ASDP Performance Report 2009/10

THE UNITED REPUBLIC OF TANZANIA

AGRICULTURAL SECTOR DEVELOPMENT PROGRAMME (ASDP)

ASDP PERFORMANCE REPORT

2009/2010

DRAFT 5

FEBRUARY 2011

ASDP M&E Working Group

National level Summary of the Progress of ASDP through Short-listed Indicators

	Indicator			2002/03	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Page
Impact (IM)	1. Agricultural GDP growth rate per annum (%)		*Projection*					*3.3*	*2.4*	*3.8*	*5.3*	*5.9*	4
			Actual		4.3	3.8	4.0	4.6	3.2				
	3. Value of agricultural exports (US$ million)		*Target*				*607*	*663*	*707*	*741*	*816*		5
			Actual		568	504	648	726	821				
Outcome (OC)	1. Food self-sufficiency ratio (%)		*Target*					*122*	*126*				6
			Actual		102	112	109	104	102	112			
	2.Production and productivity of crops and livestock	Maize (mil. ton)	Actual	2.6			5.4						7
		Paddy (mil. ton)	Actual	0.6			1.4						
		Beef (1,000 ton)	Actual		42	46	53	79					
		Milk (mil. litre)	Actual		417	576	546	577					
	3.Proportion of smallholder households using improved technologies (%)	Improved seed	Actual	18			24						11
		Chemical fertilizers	Actual	12			13						
		Irrigation	Actual	8			7						
		Improved dairy	Actual	2			4						
		Erosion control	Actual	10			9						
	4.Flow of private funds into the agricultural sector (Tsh. Billion)		Actual		177	258	286	516	467				15
	5.Proportion of smallholder households using mechanization (%)	Tractor	Actual	2.8			4.4						16
		Power tiller	Actual				0.3						
		Ox plough	Actual	23.1			14.6						
	6.Ratio of processed exported agricultural products to total exported agricultural products (%)		*Target*				*20.8*	*22.0*	*22.6*	*23.3*	*23.4*		17
			Actual		18.7	21.8	27.7	29.6	23.3				
	8.Proportion of LGAs that qualify to receive top-up grants (%)		*Target*							*100*	*100*	*100*	18
			Actual		40	51	83	96	97				
	9.Proportion of LGAs that qualify to receive performance bonus (%)		*Target*							*100*	*100*	*100*	19
			Actual		NA	73	64	61	90				
	10. Percentage of farmers having visits from public or private extension staff	Crop	Actual	33			60						20
		Live stock	Actual				90						

	Indicator			2002/03	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Page
Output (OP)	5. Number of agricultural marketing regulations and legislation in place	Regulations	*Target*						*4*	*5*	*6*		29
			Actual		1	2	2	3	4				
		Legislation	*Target*						*13*	*14*	*15*		
			Actual		9	10	11	17	20				
	6. Number of markets where wholesale or retail prices are collected	Crop (wholesale)	*Target*					*21*	*21*	*21*			30
			Actual		21	21	21	21	21				
		Crop (retail)	*Target*					*93*	*115*	*133*			
			Actual		63	73	73	93	107				
		Livestock (retail)	*Target*					*45*	*50*	*60*			
			Actual		5	14	30	46	52				
	7. Number of ASDP Basket Fund Steering Committee meetings held		*Target*			*4*	*4*	*4*	*4*	*4*	*4*		31
			Actual			4	4	4	4				
	8. Number of quarterly progress reports submitted on time (out of 21 regions)		*Target*										31
			Actual			6	7	13	16				
	10. Number of research projects related to crops, livestock and marketing/ processing, conducted through ZARDEF		Actual					73	126				33

Executive Summary

This report presents the progress of the ASDP in light of the ASDP shortlisted indicators. The latest figures for each indicator are collected and compared with the targets and those of previous years. Positive or negative changes found in each indicator are analyzed, and complementary tables are added in some indicators for better interpretation.

The report shows that broadly speaking ASDP is on the right track as it is achieving its objectives:

- To enable farmers to have better access to and use of agricultural knowledge, technologies, marketing systems and infrastructure, all of which contribute to higher productivity, profitability, and farm incomes;
- To promote private investment based on an improved regulatory and policy environment.

Positive changes are observed in farmers' agricultural knowledge (OC10 as a proxy: percentage of farmers having visits form extension staff), farmers' use of improved technologies (OC3 for improved seeds and chemical fertilizer; OC5 for tractors and power tillers), farmers' access to marketing system (OP6 as a proxy: number of markets where price information is collected) and farmers' access to and use of agricultural infrastructure (OP1 and OP2 as a proxy: agricultural production and marketing infrastructure). Regulatory and policy environment has also been improved as seen in the number of agricultural marketing regulation and legislation (OP5), the number of LGAs that qualify to receive top-up grants/performance bonus (OC8 and OC9) and the number of progress reports submitted on time (OP8), among others.

As a result, agricultural productivity increased in major crop and livestock products (OC2) and the value of agricultural export increased (IM3). Other key indicators such as agricultural GDP growth rates (IM1) and export of processed agricultural products (OC6) also had a positive trend although it decreased slightly in 2009/10 due partly to drought and world economic and financial crisis. Private investment in agriculture also had a similar trend as seen in OC4 (flow of private funds into the agriculture).

It spite of the progress in ASDP, the agricultural sector in Tanzania is still with full of challenges including farmers' inadequate access to credit, underdevelopment of irrigation and low levels of agro-processing.

In addition, it should be noted that M&E for ASDP is often hampered by shortages of reliable and timely data. To further facilitate monitoring of ASDP performance, improvement is needed in accuracy, reliability and timeliness of the data generated by agricultural sample surveys and LGAs.

ASDP M&E Performance Report 2009/10

Table of Contents

Acronyms

ASDP	Agricultural Sector Development Programme
ASDS	Agricultural Sector Development Strategy
ASLMs	Agricultural Sector Lead Ministries
A-WG	Agricultural Working Group of Development Partners
BF-SC	Basket Fund Steering Committee
DADP	District Agricultural Development Plan
DALDO	District Agricultural and Livestock Development Officer
DDP	District Development Plan
DED	District Executive Director
DFT	District Facilitation Team
DPP	Director of Policy and Planning
DPs	Development Partners
DSC	Director of Sector Coordination
DSM	Dar es Salaam
FSSR	Food Self Sufficiency Ratio
GDP	Gross Domestic Products
IM	Impact
LGA	Local Government Authority
LGDG	Local Government Development Grant
LGMD	Local Government Monitoring Database
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MIT	Ministry of Industry and Trade
MLFD	Ministry of Livestock and Fisheries Development
M&E	Monitoring and Evaluation
MIS	Management Information System
MTEF	Medium-Term Expenditure Framework
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umasikini Tanzania
NBS	National Bureau of Statistics
NGO	Non Governmental Organization
NSCA	National Sample Census of Agriculture
NSGRP	National Strategy for Growth and Reduction of Poverty
OC	Outcome
OP	Output
PMO-RALG	Prime Minister’s Office- Regional Administration and Local Government
RDS	Routine Data System
RDDR	Food Self-Sufficiency Ratio
SACCOS	Savings and Credit Cooperative Socity
SSR	Self Sufficiency Ratio
TMA	Tanzania Meteological Agency
TRA	Tanzania Revenue Authority
TWG	Thematic Working Group
URT	United Republic of Tanzania
VAEO	Village Agricultural Extension Officer
VEO	Village Executive Officer
WAEO	Ward Agricultural Extension Officer
WEO	Ward Executive Officer
WFT	Ward Facilitation Team
ZARDEF	Zonal Agricultural Resource Development Fund

1. Introduction

Monitoring and evaluation (M&E) plays an important role in tracking the progress of implementation and evaluating the achievements of a programme. The M&E for the ASDP is implemented in accordance with the ASDP M&E Framework which was approved by the Committee of ASLM Directors in August 2007. ASDP progress shall be partly tracked by comparing the situations before and within/after the programme. The comparison shall be made in reference to the indicators developed to capture the key features of the ASDP.

In the Framework, about 100 (long-listed) indicators were identified for this purpose. In order to make the number of indicators feasible and practical under the current situation, 21 short-listed indicators have been selected. The baseline information of the short-listed indicators were collected and compiled in the ASDP Baseline Data Report which was submitted to the Committee of ASLM Directors in September 2008.

The first M&E Progress Report was developed and submitted to the Committee of ASLM Directors in September 2009. This is the second M&E Progress Report for the ASDP (now it is called the ASDP Performance Report). Two indicators (Outcome Indicator 10 and Output Indicator 10) have been added to the short-listed indicators to address greater perspectives of the ASDP. The latest information on each short-listed indicator has been collected, analyzed and compared with the baseline data. This report summarizes the current progress of the ASDP in respect to each indicator. In brief, the ASDP has been in progress steadily as most outputs have been increasing and positive changes observed in outcomes and impacts.

The ASDP M&E Thematic Working Group (TWG) would like to thank all people involved in developing this report. They include officers from, but not limited to, ASLMs, Regional Secretariats, LGAs, National Bureau of Statistics, Tanzania Revenue Authority, and the Bank of Tanzania. The ASDP M&E TWG will disseminate this report to all the ASDP stakeholders and expects that the report will contribute to a better understanding of the progress of the programme and improve decision making in the implementation of the ASDP.

2. Short-listed Indicators

The short-listed indicators for ASDP M&E are shown in Table 1.

Table 1: ASDP short-listed impact, outcome and output indicators

	Indicators	Frequency	Disaggregation			Data source
			District	Region	National	
Impact (IM)	1. Real GDP growth rate per annum [MKUKUTA]	Annual			√	NBS
	2. Headcount ratio in rural areas – basic needs poverty line [MKUKUTA]	Periodical		√	√	NBS (HBS)
	3. Value of agricultural exports	Annual			√	TRA
Outcome (OC)	1. Food self-sufficiency ratio [MKUKUTA]	Annual		√	√	MAFC
	2. Production and productivity of crops and livestock.	Periodical	√	√	√	NBS (NSCA),
		Annual			√	MLDF
	3. Proportion of smallholder households using improved technologies	Periodical	√	√	√	NBS (NSCA)
	4. Flow of lending into the agricultural sector	Annual		√	√	BOT
	5. Proportion of smallholder households using mechanization	Periodical	√	√	√	NBS (NSCA)
	6. Ratio of processed exported agricultural products to total exported agricultural products	Annual			√	TRA
	7. Proportion of smallholder households participating in contracting production and out-growers schemes [MKUKUTA]	Annual	√	√	√	LGAs
	8. Proportion of LGAs that qualify to receive top-up grants	Annual			√	PMO-RALG
	9. Proportion of LGAs that qualify to receive performance bonus	Annual			√	PMO-RALG
	10. Percentage of farmers having visits from public or private extension staff	Periodical	√	√	√	NBS (NSCA)
Output (OP)	1. Number of agricultural production infrastructure	Annual	√	√	√	LGAs, MLDF
	2. Number of agricultural marketing infrastructure and machinery	Annual	√	√	√	LGAs
	3. Number of extension officers trained on improved technological packages	Annual	√	√	√	LGAs
	4. Number of SACCOs, its members and value of loans provided for agriculture	Annual	√	√	√	LGAs
	5. Number of agricultural marketing regulations and legislation in place	Annual			√	MIT (MAFC, MLDF)
	6. Number of markets where wholesale or retail prices are collected	Annual			√	MIT
	7. Number of ASDP Basket Fund Steering Committee meetings held	Annual			√	ASDP Secretariat
	8. Proportion of regions which submitted DADP quarterly progress reports on time	Annual			√	Regions, ASLMs
	9. Proportion of female members of Planning and Finance Committee	Annual	√	√	√	LGAs
	10. Number of research projects related to crops, livestock and marketing/ processing, conducted through ZARDEF	Annual			√	MAFC MLDF

Note: Indicators with [MKUKUTA] are from the Poverty Monitoring Master Plan.

3. Methodology of Data Collection

The ASDP M&E TWG collected all the data from various sources, whereby a small task force was formed within the TWG, that collected the data from databases and reports prepared by relevant national institutions such as TRA, NBS, Bank of Tanzania and ASLMs. The other information was collected using a questionnaire distributed to LGAs officers. The questionnaire survey was conducted between March and June in 2010. Table 2 explains the methods used in data collection for each indicator.

Table 2: Data collection methods for the short-listed indicators

Indicators	Time Period	Sources/Methodology
OC: 2 , 3, 5 and 10	June 2010	Collected from the 2007/08 National Sample Census of Agriculture conducted by NBS.
IM: 1 and 3 OC: 1, 4, 6, 8 and 9 OP: 5, 6, 7, 8 and 10	March – August 2010	Collected from databases and reports prepared by other relevant national institutions in DSM (TRA, Bank of Tanzania and ASLMs).
OC: 2 (livestock), 7 OP: 1, 2, 3, 4 and 9	March – June 2010	Collected through a questionnaire distributed to LGAs.

IM: Impact, OC: Outcome, OP: Output

The following points are worthy noting,

For the National level data:

- Information on IM2 is not included in this report because its data source is the Household Budget Survey and there is no updated information (for the latest information on this indicator, see ASDP M&E Progress Report 2008/09) .

For the data collected from LGAs:

- 129 out of 132 LGAs submitted filled-in questionnaires (see Annex 2 and 3). The remaining three LGAs (See Annex 3 in this report) did not submit in spite of repeated request by the M&E TWG.
- The data/information presented in the questionnaire submitted by LGAs were often incomplete (some data were questionable or not provided) in spite of the explanation made by the M&E TWG members at regional workshops in June 2010. This has greatly constrained the analysis undertaken in this report. It may be necessary to consider whether to change the data source of some indicators such as number of SACCOS (OP4) from LGAs to MAFC.
- The questionnaire used in the baseline survey was modified based on the feedback from the LGAs. For some indicators, therefore, the progress is analyzed not based on the baseline data or the target presented in the ASDP M&E Baseline Data Report 2007/08 but the figures of the previous years presented in this year's questionnaire.
- In the process of data collection, the M&E TWG members held workshops at 10 regional headquarters all over the country, inviting officers from all the LGAs, which was a costly and time-consuming exercise. In future, LGMD2, a database under development by the M&E TWG to deliver the agricultural routine data from LGAs to ASLMs, shall be used for this purpose.

4. Progress of ASDP

In this section, information on each indicator is presented with its definition, baseline, latest data and target values.

IMPACT INDICATORS

IM1 Agricultural GDP Growth Rate per Annum

Definition	The difference between GDP (of the particular sector) in year x+1 and GDP in year x (at constant prices), expressed as percentage of the GDP in year x.
Rationale	The indicator is used to monitor the growth of the agricultural sector in the country.

The agricultural GDP increased from 3.8 percent in 2006 to 4.6 percent in 2008, exceeding the projection of 2008 as shown in figure IM1a. But the growth in the agricultural sector slowed down to 3.2 percent in 2009. This is due to drought experienced in 2008/09 especially in the northern part of Tanzania, which contributed to low production of crops and pasture and water shortages for livestock. Global economic and financial crisis also attributed to the decline in growth rates as it affected the demand for and prices of traditional exports.

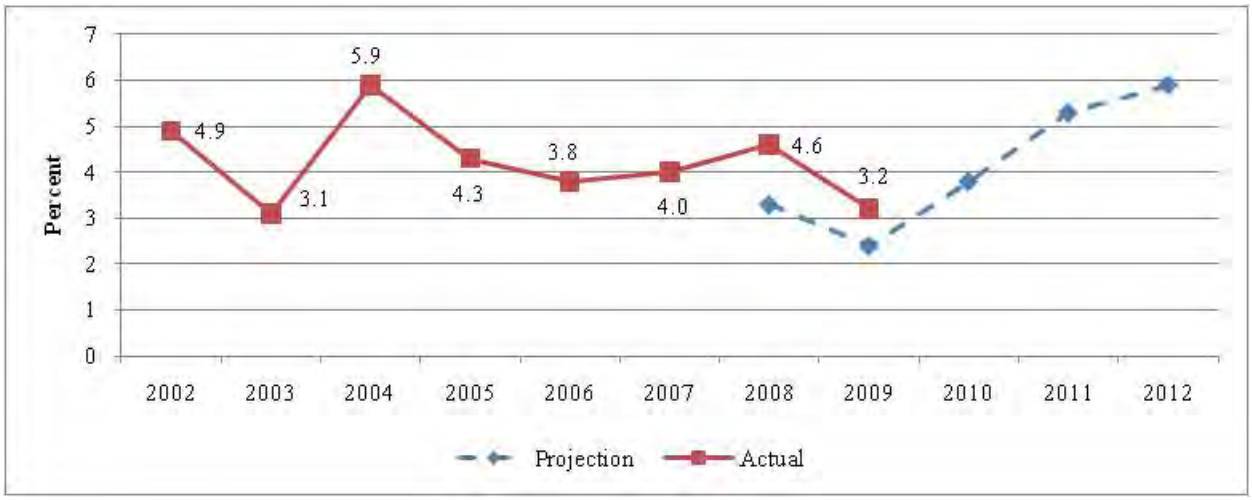


Figure IM1a: Real agricultural GDP growth rates per annum at 2001 constant price

Source: Actual 2002-2009: Ministry of Finance and Economic Affairs, 2010: National Economic Survey,
Projection 2008-2012: Ministry of Finance and Economic Affairs, URT, 2009 Guideline for the Preparation of Medium Term Plan and Budget Framework for 2009/10 – 2011/12, page 87.
Note: Agriculture includes crop, livestock, hunting and forestry.

The growth rate of the crop sub sector declined to 3.4 percent in 2009 from 5.1 percent in 2008 (Fig. IM1b). Crops whose production declined include tea, tobacco, maize, sorghum/millet and cassava. The growth of the livestock sub sector also dropped to 2.3 percent in 2009 from 2.6 percent in 2008. According to MKUKUTA II, the growth rates of 6.5 and 4.9 are targeted for crop and livestock sub sectors in 2015, respectively. The target for the agricultural sector as a whole is 6.3 percent in 2015.

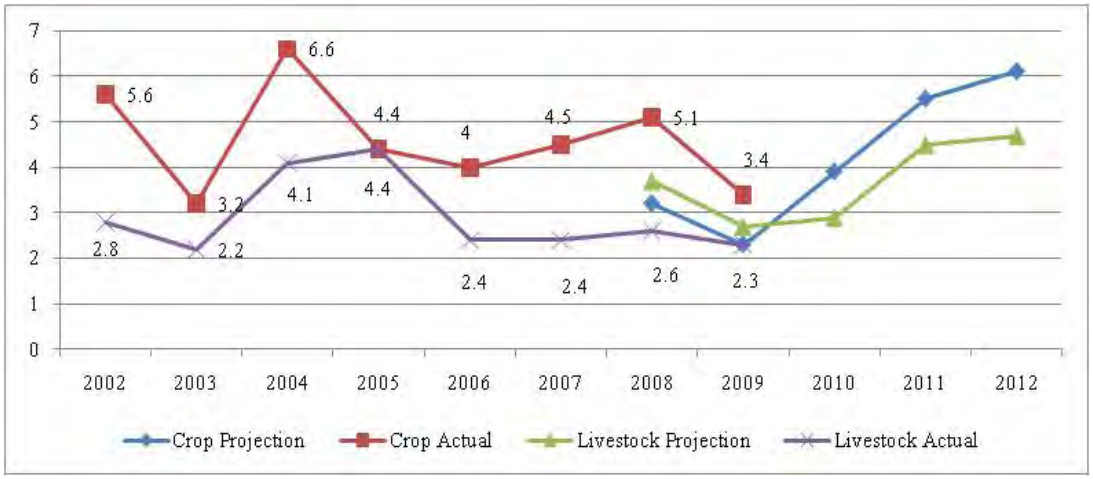


Figure IM1b: Crop and livestock annual growth rates

Source: Same as Figure IM1a.

IM3 Value of agricultural export

Definition	The value (in US dollar) of the export of agricultural products from Tanzania to the rest of the world.
Rationale	An improvement in productivity and quality in agriculture is expected to result in an increase in the value of exports of agricultural products and contributes to foreign currency earnings.

The exports of agricultural products continued to increase in 2009. Barring 2006, the trend has steadily been upward since 2005 (Figure IM3). The total export increased by 63 percent from 2006 to 2009. Key products which contributed to an increase in the agricultural exports included unrooted cuttings and slips (from US$ 2.8 million in 2006 to US$ 18.7 million in 2009 or 568 percent increase), dried pea (from US$ 9.3 million to US$ 33.7 million, 264 percent), dried leguminous vegetables (US$ 0.99 million to US$ 13.8 million), cashew nuts (US$ 35. 6 million to US$ 68.4 million, 92 percent), sesame seed (US$ 21.4 million to US$ 64.5 million, 201 percent), and cotton (not carded or combed) (US$ 45.9 million to US$ 89.0 million, or 94 percent).

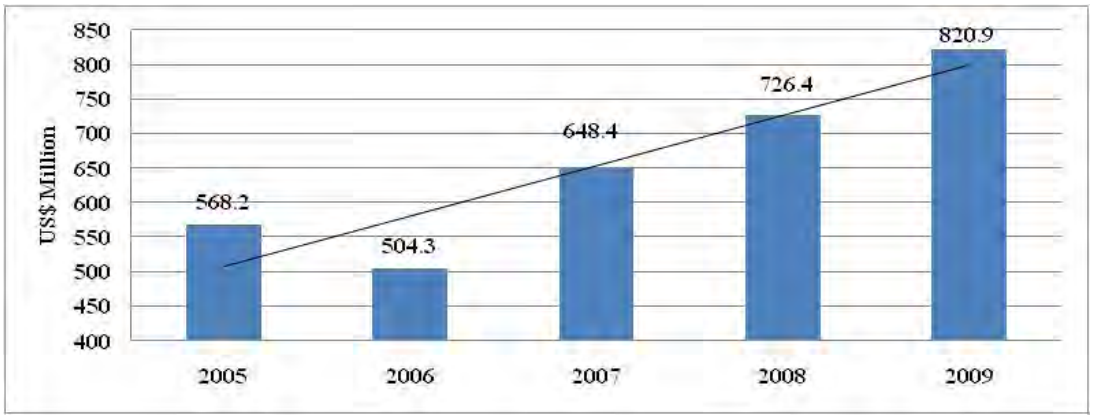


Figure IM3: Value of agricultural exports

Source: Tanzania Revenue Authority, 2010

On the other hand, the agricultural products whose export decreased over the same period include maize (from US$ 5.98 million in 2006 to US$ 0.44 million in 2009), and tobacco (US$ 96.4 million to

US$ 90.0 million).

OUTCOME INDICATORS

OC1 Food self-sufficiency ratio

Definition	The percentage ratio of gross domestic production to gross domestic food requirements.
Rationale	Food self-sufficiency ratio (FSSR) is computed as the ratio of gross domestic production to gross domestic food requirements. Gross domestic production is determined based on 12 crops: maize, sorghum, finger millet, bulrush millet, rice, wheat, beans, other pulses, bananas, cassava, sweet potatoes, and Irish potatoes. Gross domestic production is the aggregation of the production of these crops. (Those of bananas, cassava and potatoes are divided by 3 before aggregation in order to adjust water contents.) Gross domestic requirements (GDR) are computed based on per capita consumption per day per person which is 650 grams (i.e., 237 kg/year/person). It includes seed and food uses, post-harvest losses and trade. No carryover stock from previous years is taken into account. The indicator measures whether national food production meets gross food requirements. The same also applies at the regional level where the indicator tells the extent to which a region's annual food production satisfies its population needs. At 100% self-sufficiency ratio (SSR) the food produced in the current year will be equal to food required during the next consumption year. A situation where food produced is in the range of 100 - 120% is considered self-sufficient. When the SSR is 120% and above the situation is considered surplus. • SSR<100% Food deficit • 100%≤SSR<120% Self-sufficient • SSR≥120% Surplus

The FSSR for the national level declined from 112 in 2006/07 to 102 in 2009/10. But it is forecasted to increase to 112 in 2010/11 (Figure OC1a).

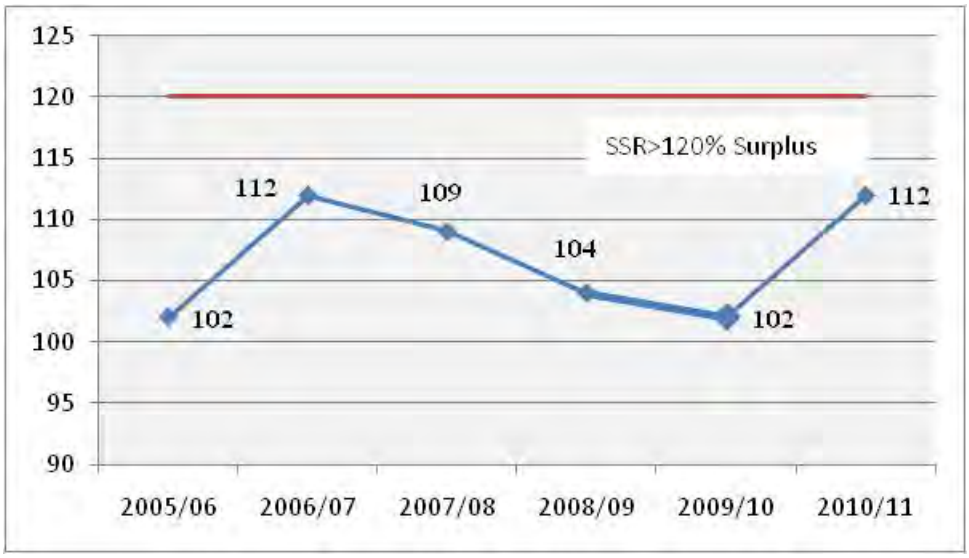


Figure OC1a: National Level Food Self Sufficiency Ratio in 2005/06 – 2010/11
Source: MAFC, 2010
Note: FSSR for 2010/11 are preliminary.

For 2009/10, food was surplus (FSSR>120) in the regions of Iringa, Kagera, Kigoma, Mbeya, Mtwara, Rukwa and Ruvuma. On the other hand, food was deficit in the regions of Arusha, Coast, DSM, Dodoma, Kilimanjaro, Manyara, Mara, Mwanza, Shinyanga, Singida and Tanga (Figure OC1b).

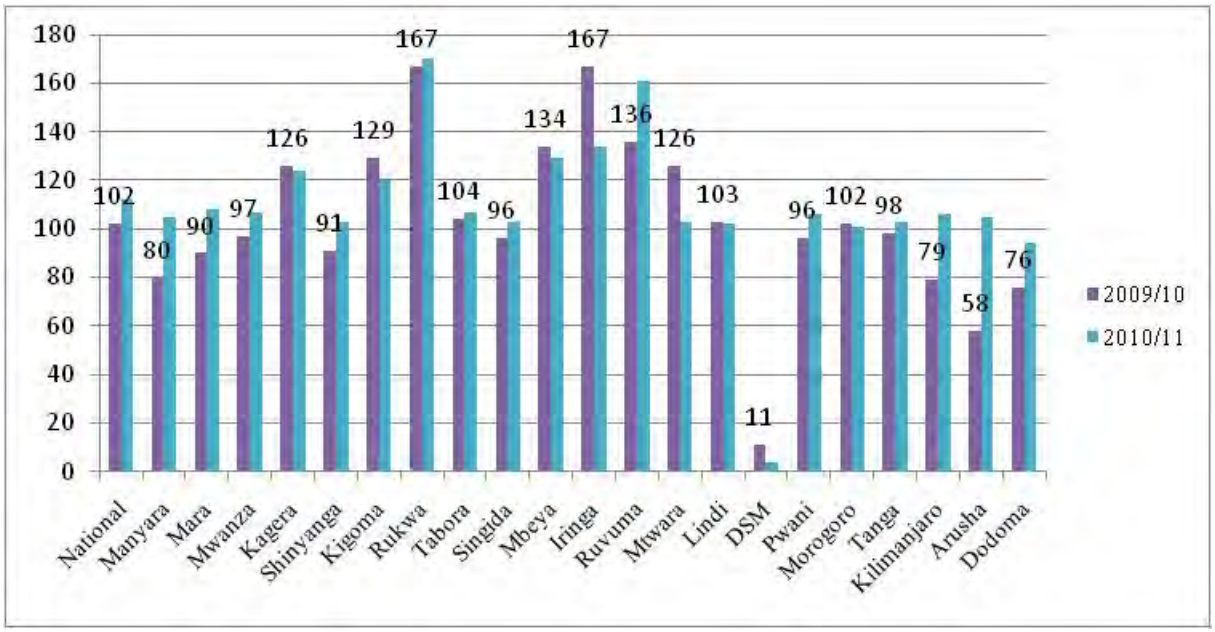


Figure OC1b: Regional Level Food Self Sufficiency Ratio in 2009/10 and 2010/11
Source: MAFC, 2010
Note: FSSR for 2010/11 are preliminary.

OC2 Production and productivity of crop and livestock

Definition	The indicator measures total quantity produced and yield (productivity). - Maize (tons; tons/hectare) - Paddy (tons; tons/hectare) - Beef (kg-Carcass weight) - Milk (litres)
Rationale	Production and productivity are the most important indicators for measuring performance of the crop and livestock subsectors.

Maize

The data for this indicator (maize and paddy) is taken from the National Sample Census of Agriculture. The Sample Census is conducted with an interval of 5 years. Thus, the data are only available in 2002/03 and 2007/08.

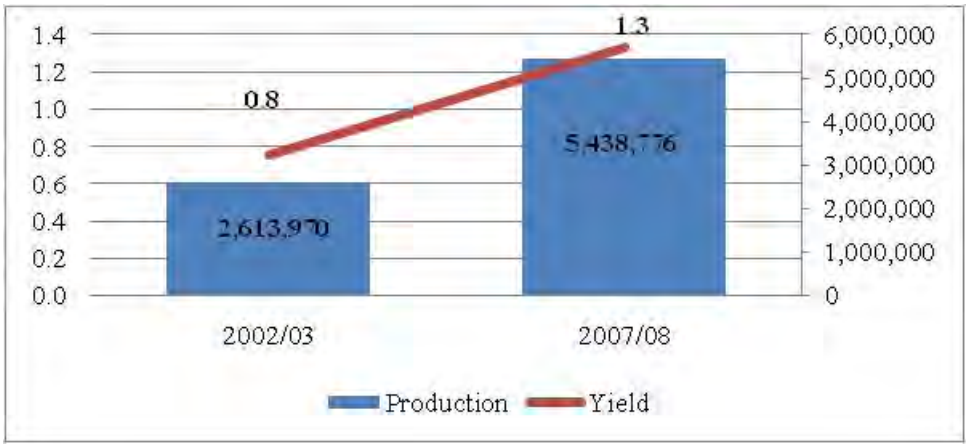


Figure OC2a: Production and Productivity of maize in 2002/03 and 2007/08

Source: NSCA 2002/03 and 2007/08

Quantity of maize produced in Tanzania mainland increased more than twice from 2,613,970 tons in 2002/3 to 5,406,088 tons in 2007/08. This has been attributed, among other factors, to an increase in productivity from 0.8 tons / ha to 1.3 tons / ha (78 percent).

Maize productivity increased in varying proportions. With exception of Kigoma region which recorded a 6 percent decrease, all the regions improved its paddy productivity, which varied from 23 percent in Ruvuma region (from 1.3 ha/ton to 1.6 ha/ton) to 220 percent in Singida region (from 0.4 to 1.3).

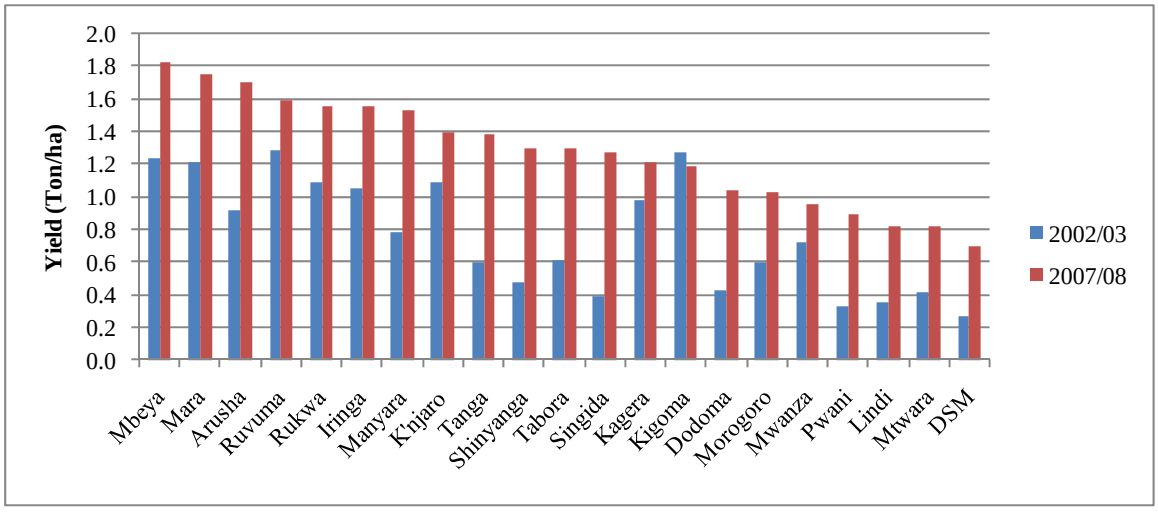


Figure OC2b: Productivity of maize by Region

Source: NSCA 2002/03 and 2007/08

Paddy

Quantity of paddy produced also increased more than twice from 594,619 tons in 2002/03 to 1,396,163 tons in 2007/08. This increase is equivalent to 135 percent.

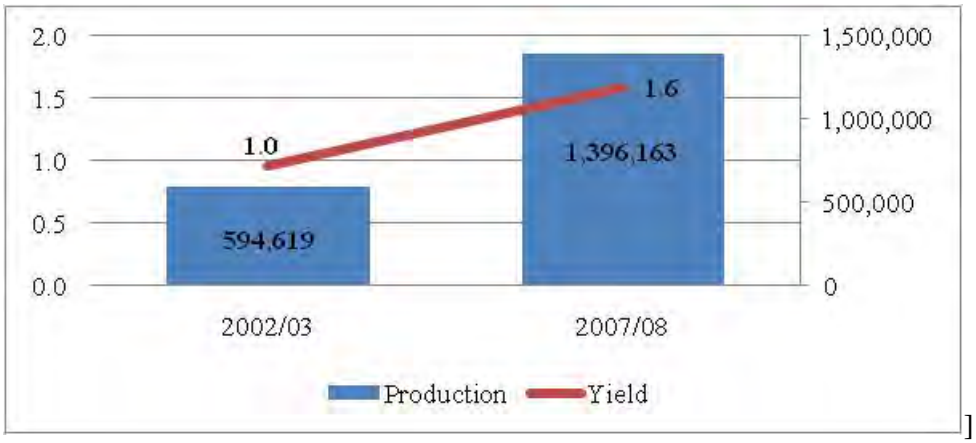


Figure OC2c: Production and Productivity of Paddy in 2002/03 and 2007/08

Source: NSCA2002/03 and 2007/08

The highest production of 293,816 tons for the year 2007/08 was recorded in Morogoro region and the lowest (1,983 tons) was in Dodoma region. The highest paddy productivity (3.4 tons / ha) was found in Manyara region and the lowest (0.7 tons / ha) in Dodoma region. Paddy productivity decreased in Arusha, Kigoma and Kilimanjaro regions. The rest of the regions recorded an increased paddy productivity ranging from 3 percent in Manyara region to 370 percent in Pwani region (Figure OC2d).

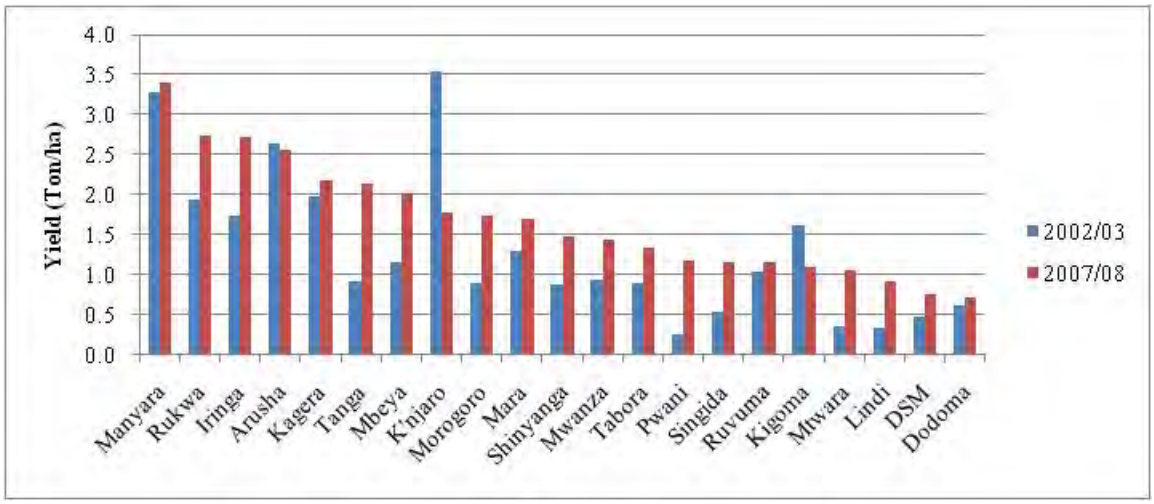
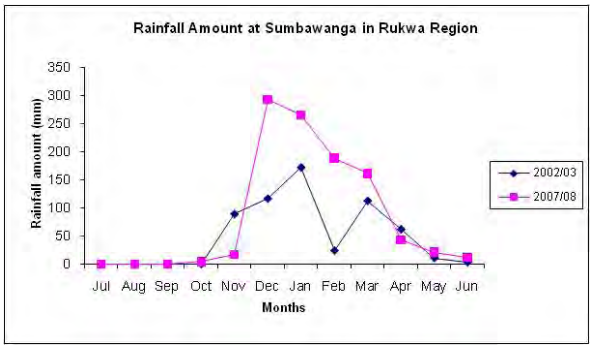


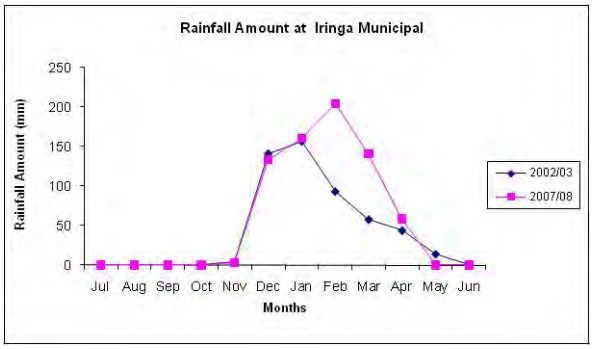
Figure OC2d: Productivity of Paddy by Region

Source: NSCA2002/03 and 2007/08

It should be noted that weather conditions especially rainfall amount and reliability have significant influences on productivity of both maize and paddy. The two years of agricultural censuses under consideration were quite different in terms of weather condition. While in the year 2002/03 there was a considerable degree of drought, the year 2007/08 had a moderate to good weather condition (see monthly distribution of rainfall in Sumbawanga and Iringa, centres of leading maize producing regions). Amounts of rainfall in 2007/08 were significantly greater than those in 2002/03. The high percentage increase in productivity between the two years should be associated with, among other factors, the differences in weather conditions. There is a need to have annual surveys in between the

census years in order to clearly capture the trend of crop production and productivity for these crops.





Source: TMA

Meat

Meat production has been increasing over time. Beef production decreased in 2006/07 due to Rift Valley Fever but recovered thereafter quickly (Figure OC2e).

Figure OC2e: Production of Meat (carcass weight)

Source: MLDF, 2010

In spite of the increase, livestock production levels are still low which is contributed by low genetic potential and unrecorded livestock products produced from informal slaughtering points.

Milk and Eggs

Production of milk and eggs has increased tremendously over time as seen in Figure OC2f.

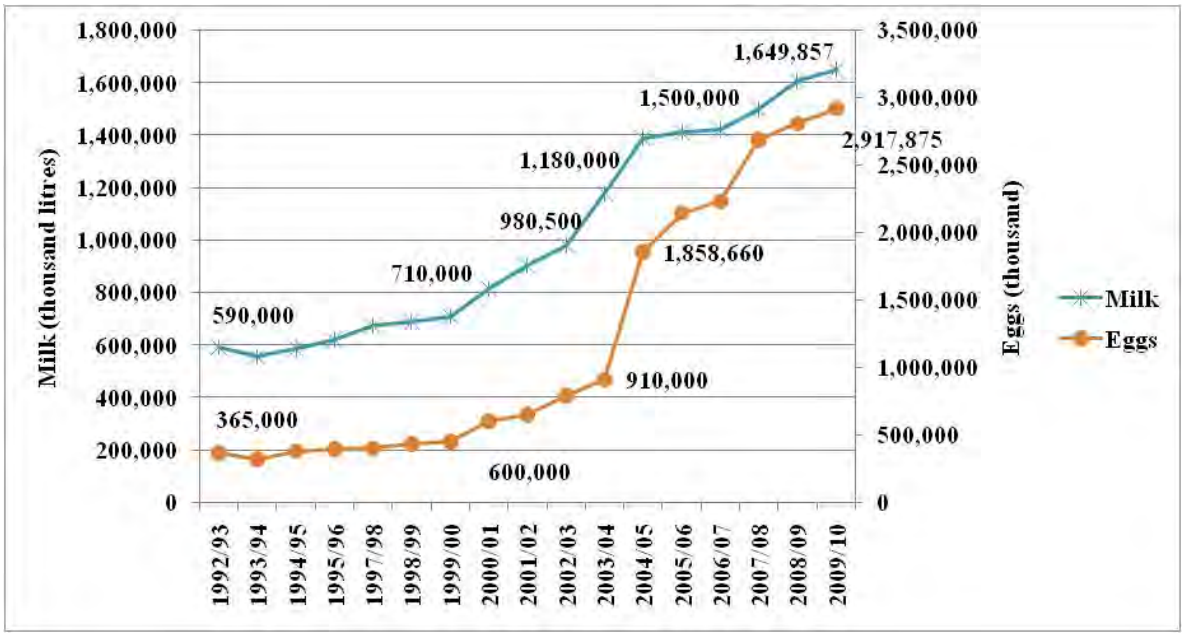


Figure OC2f: Production of Milk and Eggs

Source: MLDF, 2010

OC3 Proportion of smallholder households using improved technologies

Definition	Proportion of smallholder households using improved technologies – improved seeds, chemical fertilizer, irrigation, agro-forestry (erosion control), improved cattle, etc.
Rationale	It describes the farming husbandry and technical interventions best practices recommended and used.

The proportion of crop growing households using improved technologies between the two agricultural census years in Tanzania mainland increased for improved seeds, chemical fertilizers and dairy husbandry. On the other hand the proportion of households using insecticides/fungicides, irrigated farming and erosion control decreased over the periods of 2002/03 and 2007/08.

Improved Seed

Crop farming households using improved seeds in Tanzania mainland increased from 18 percent in 2002/03 to 24 percent in 2007/08. The increases are found in 14 regions with Mtwara having the largest change (from 4 to 11.8, or 196 percent) and Tanga the smallest (5 percent). Regions which recorded a negative change are Mwanza, Kagera, Mara, Kigoma, Dar-es-Salaam, Ruvuma and Pwani.

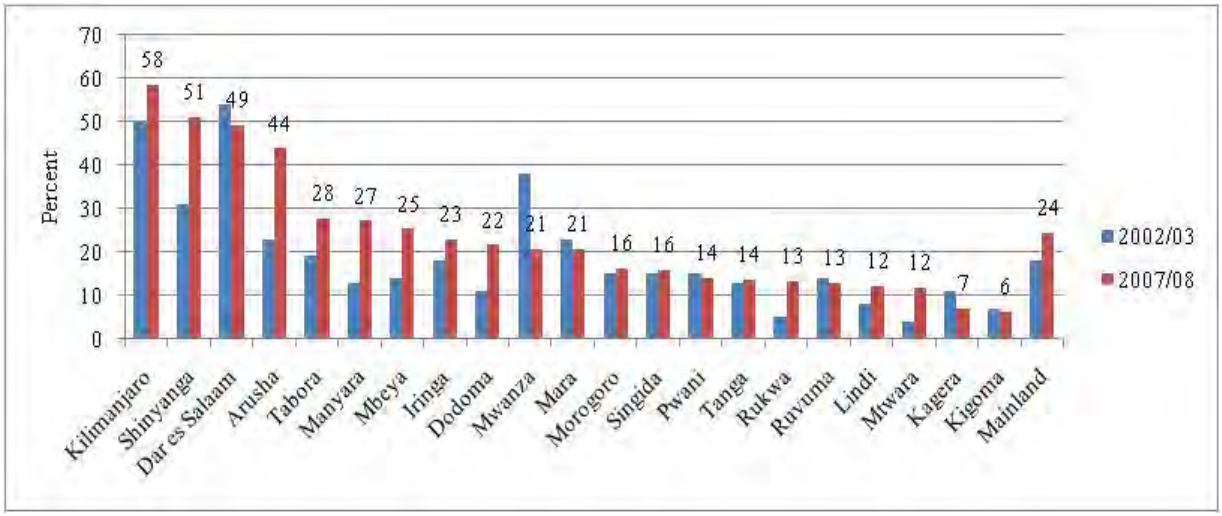


Figure OC3a: Proportion of farmers using improved seeds in 2002/03 and 2007/08

Source: NSCA 2002/03 and 2007/08

Chemical Fertilizer

The proportion of crop farming households using chemical fertilizers in Tanzania mainland increased marginally from 12 percent during the year 2002/03 to 13 percent in 2007/08. Nine regions recorded an increased proportion with Morogoro having the largest percent increase and Iringa the lowest. The other regions that have positive changes are Singida, Rukwa, Mara, Manyara, Kilimanjaro, Dar-es-salaam and Mbeya. The proportion of households using chemical fertilizer for Tabora region remained constant, and the remaining regions had a decreased proportion.

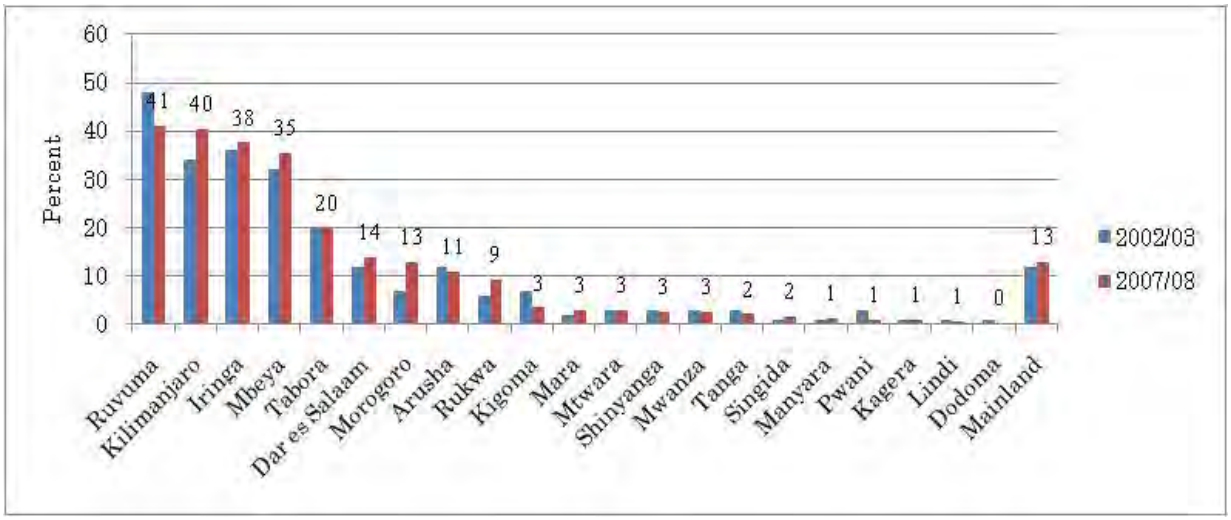


Figure OC3b: Proportion of farmers using chemical fertilizer in 2002/03 and 2007/08

Source: NSCA 2002/03 and 2007/08

Although the change in the proportion of households using chemical fertilizers between 2002/03 and 2007/08 is small, the amount of fertilizer made available to farmers has been increasing since 2007/08. The amount of fertilizer distributed through the voucher system has also increased although it has not met the amount required (Figure OC3c).

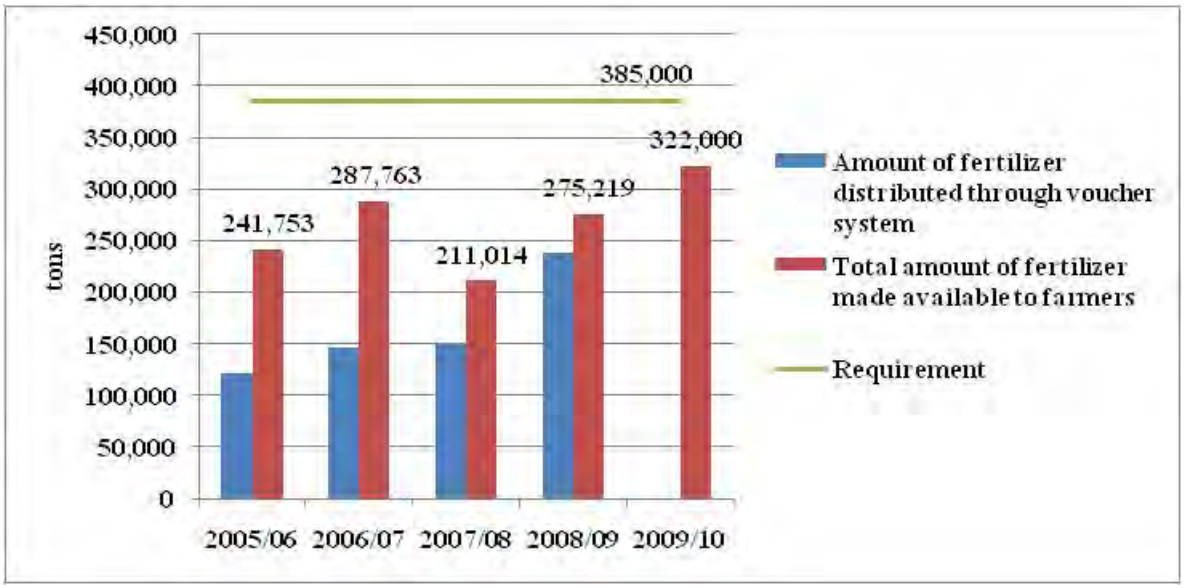


Figure OC3c: Amount of chemical fertilizer made available to farmers

Source: MAFC, 2010

Insecticide and Fungicide

Proportion of crop farming households using insecticide and fungicide in Tanzania mainland decreased from 17 percent in 2002/03 to 14 percent in 2007/08. There are only four regions (Shinyanga, Dar-es-salaam, Manyara and Morogoro) that have recorded an increased use of fungicides. Application of this input in the other regions dropped.

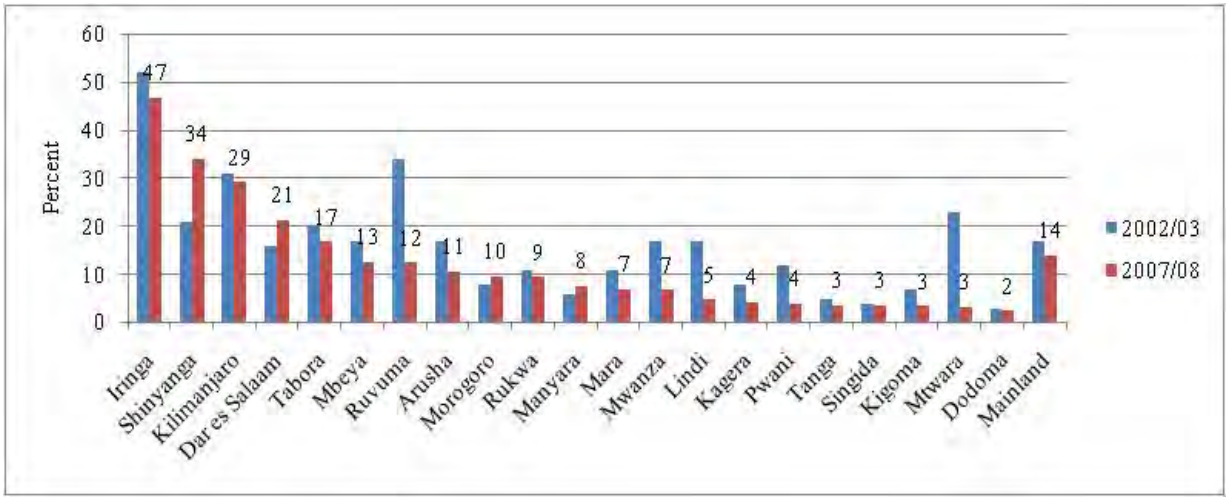


Figure OC3d: Proportion of farmers using insecticides and fungicide in 2002/03 and 2007/08

Source: NSCA 2002/03 and 2007/08

Irrigated Farming

The proportion of smallholder households using irrigation farming techniques (including bucket and watering can outside irrigation schemes) decreased from 8 percent during the year 2002/03 to 7 percent in 2007/08. This is primarily because there was an abundant rain in 2007/08, and it was not necessary for some farmers to use the irrigated farming techniques. However, the proportion increased in 9 regions: Mwanza, Dar-es-salaam, Kilimanjaro, Pwani, Shinyanga, Mara, Morogoro, Kagera and Manyara. Irrigation farming practices decreased in the rest of the regions (Source: NSCA 2002/03 and 2007/08).

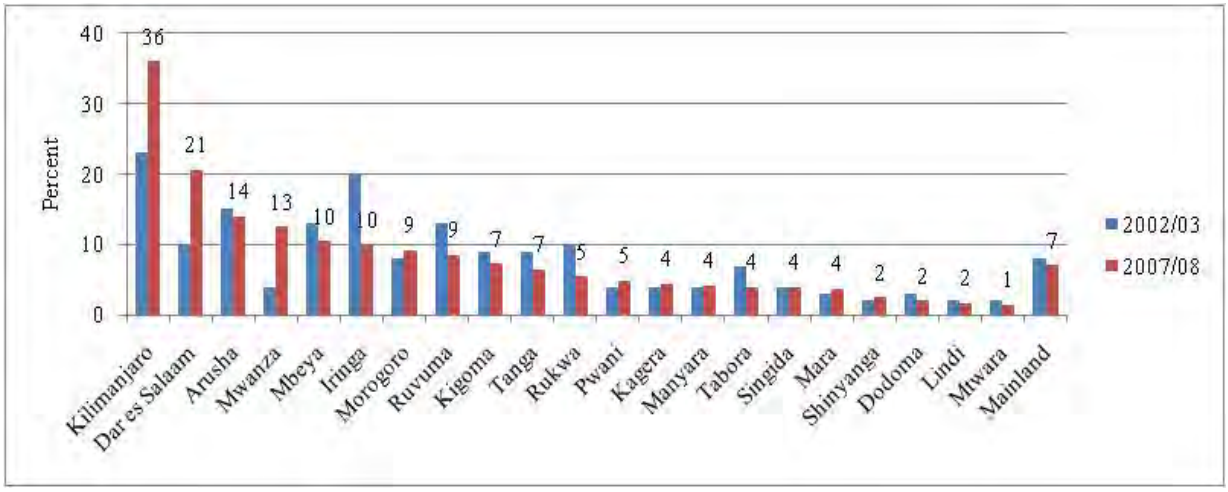


Figure OC3e: Proportion of farmers using irrigated farming in 2002/03 and 2007/08

Source: NSCA 2002/03 and 2007/08

On the other hand, the area under irrigation scheme has been increasing on average by over 20,000 hectare per year. Thus, it is expected that the number of farmers cultivating in irrigation schemes is increasing.

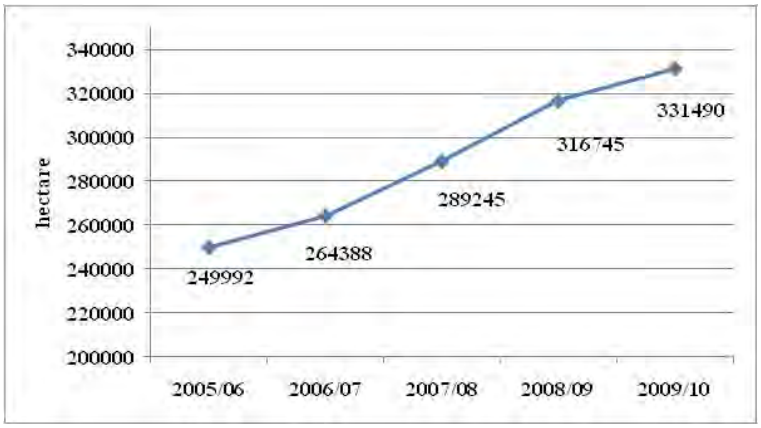


Figure OC3f: Area under irrigation scheme

Source: MAFC, 2010

Improved dairy

The proportion of farmers practising dairy farming in Tanzania mainland has doubled from 2 percent in 2002/03 to 4 percent in 2007/08. Five regions have an increased proportion of household practicing dairy farming with Arusha region having the largest increase (from 4.0 percent to 15.6 percent) followed by Manyara (1.0 to 2.6 percent), Mbeya, Kagera and Kilimanjaro. Seven regions that have had insignificant proportion of households practicing dairy farming during 2002/03 were found to have a significant proportion of households that adopted the technology during 2007/08. These regions include Dodoma, Kigoma, Mwanza, Rukwa, Shinyanga, Singida and Tabora. Dairy farming has dropped in Morogoro, Tanga, Mara, Iringa, Pwani, Dar-es-salaam, Ruvuma, Lindi and Mtwara.

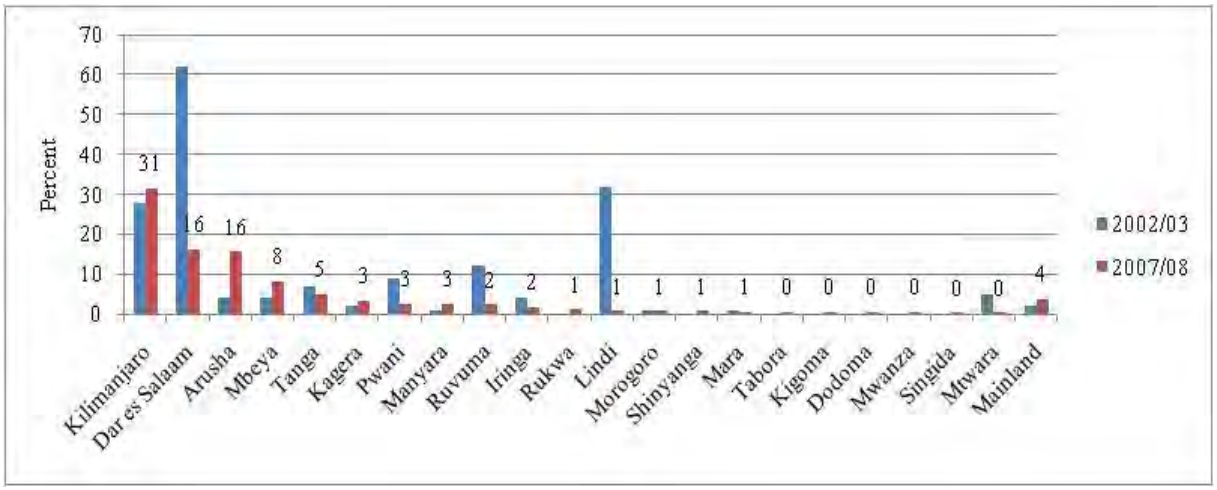


Figure OC3g: Proportion of farmers using improved dairy in 2002/03 and 2007/08

Source: NSCA 2002/03 and 2007/08

Erosion Control

The proportion of crop farming households with erosion control and/or water harvesting structures in their farming land in Mainland Tanzania decreased from 10 percent during the year 2002/03 to 9 percent in 2007/08. Erosion control practices increased in Tabora, Kagera, Dodoma, Singida, Manyara, Morogoro, Shinyanga, Rukwa and Mwanza. The rest of the regions have a decreased proportion of

households practicing erosion control measures.

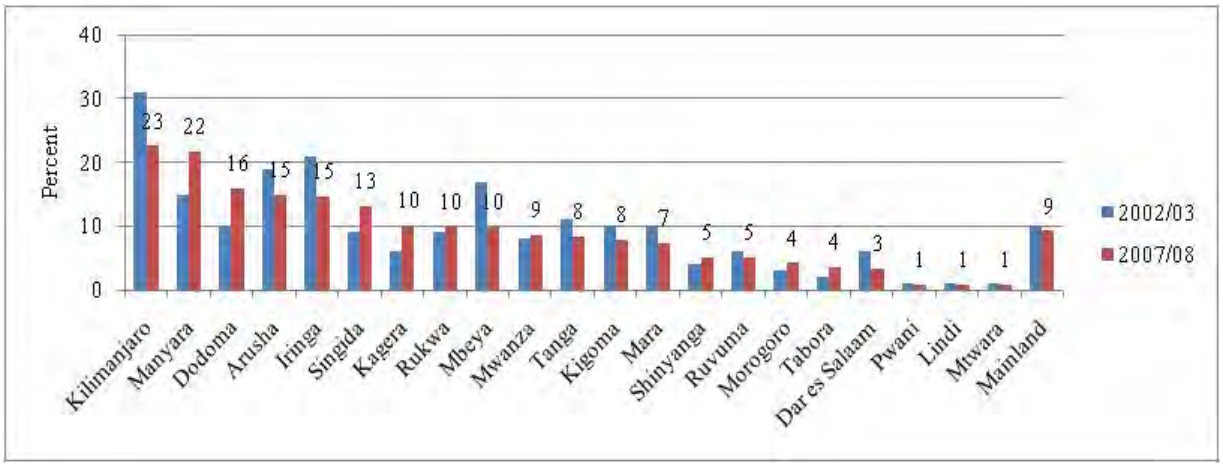


Figure OC3h: Proportion of farmers using erosion control in 2002/03 and 2007/08

Source: NSCA 2002/03 and 2007/08

OC4 Flow of lending into the agricultural sector

Definition	The amount (Tanzania Shilling) of lending to agricultural sector by domestic commercial banks
Rationale	To measure medium and large investors supporting agriculture industry

Flow of lending to the agriculture sector by domestic commercial banks in 2009 decreased to Tsh. 467.1 billion from Tsh. 515.9 billion in 2008 (by 9.5 percent) despite the fact that the flow trend had been rising from 2005 to 2008 (Fig. OC4). Despite these indications of progress, access to credit is still limited to a small number of enterprises with solid collateral in key urban areas. Small and medium enterprises as well as firms located outside the main urban areas are virtually excluded. Commercial banks have displayed increasing risk aversion in lending, preferring to hold a large portion of their liquidity in risk-free government securities. Lending interest rates have remained high and the spread between lending and deposit rates remains wide at 13.3 percent in 2006. These high rates will continue to deter investments, especially by small and medium entrepreneurs. The impact of increased competition in the banking sector on interest rates will receive a boost from the Government which has started to address aversion to lending by commercial banks, as well as their preference towards holding risk free government paper.

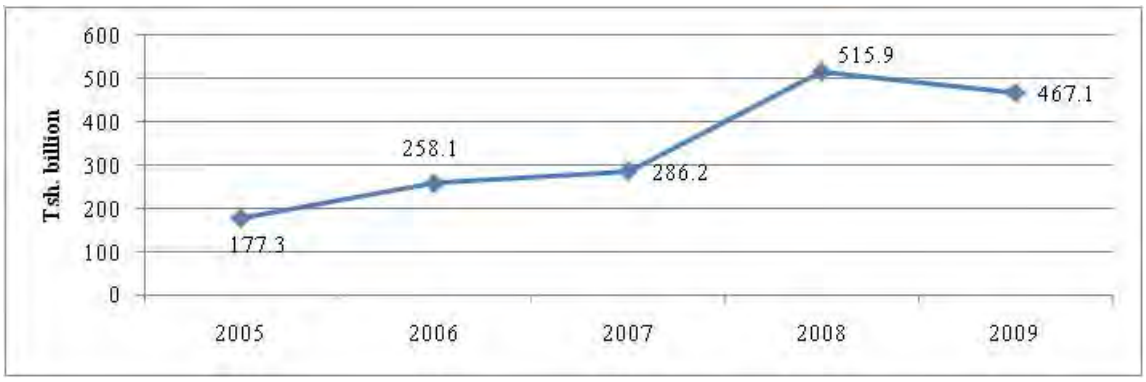


Figure OC4: Flow of lending into the agricultural sector

Source: BoT 2010

The decrease in the flow of lending to the agriculture sector was part of general decline in credits given to the private sector (nine sectors out of twenty three recorded decrease) driven mainly by continued cautious stance taken by banks in extending credit to the private sector following global financial crisis.

OC5 Proportion of smallholder households using mechanization

Definition	Proportion of smallholder households using mechanization - Tractors (including power tillers), oxen, and Ox-carts.
Rationale	Mechanization is a necessary condition for farmers to improve productivity. These indicators show the degree of agricultural mechanization.

The use of agricultural mechanization shows a clear change in 2007/08 compared to 2002/03. The use of ox-plough and ox-cart decreased from 23.1 percent to 14.6 percent and from 4.9 percent to 4.4 percent, respectively (Fig OC5a). On the other hand, the proportion of farmers using tractors increased from 2.8 percent to 4.4 percent. Since power tillers is a new technology, the data for the year 2002/03 were not collected. According to NSCA 2007/08, 14,608 households (or 0.3 percent) are using power tillers.

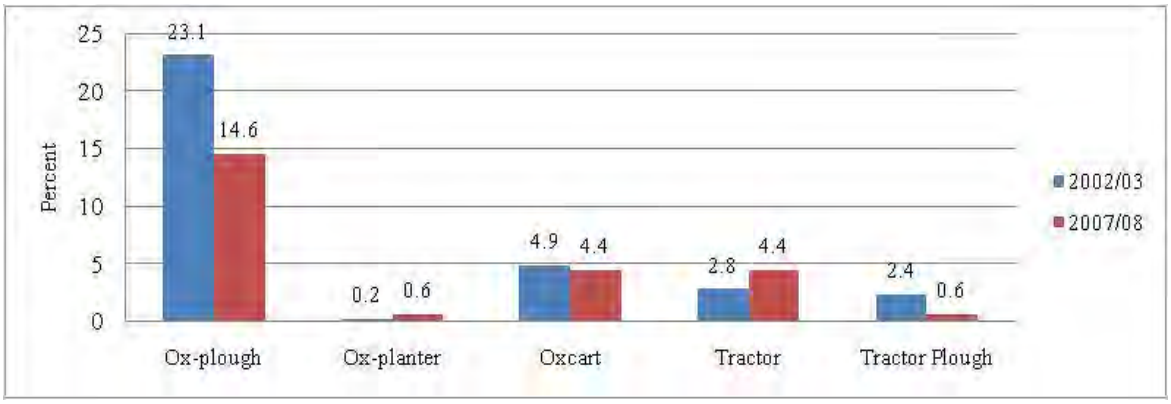


Figure OC5a: Proportion of Crop Farming Households using agro-mechanization implements by Type of Technology and Year

Source: NSCA 2002/03 and 2007/08

To complement the information, the number of tractors and power tillers imported has increased every year. Over the 5 years, 2,364 tractors and 3,214 power tillers have been imported.

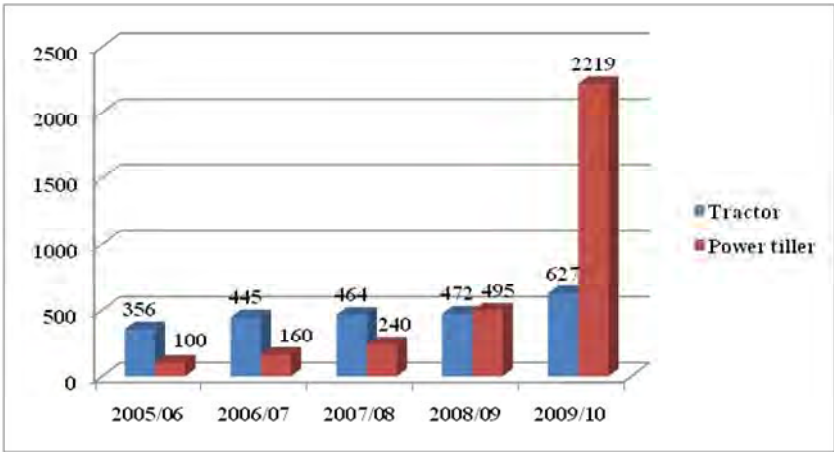


Figure OC5b: Number of tractor and power tiller imported per year

Source: MAFC, 2010.

OC6 Ratio of processed exported agricultural products to total exported agricultural products

Definition	(Value of processed exported agricultural products)/ (Value of exported agricultural products).
Rationale	Currently many agricultural products have been exported without being processed. As a result, little value has been added domestically. The government has been eager to increase the export of processed agricultural products in order to increase the value-added within the country.

The ratio of processed exported agricultural products to the total exported agricultural products recently declined to 23.3 percent in 2009 from 29.6 percent in 2008 (Figure OC6). Detailed analysis of disaggregated exported processed agricultural exports reveals that the increase was largely contributed by an increase in the export of black tea fermented (from US$ 28.2 million in 2006 to US$ 65.8 million in 2009, or 134 percent), and oil-cake of sunflower seeds (from US$ 34,000 to US$ 11.9 million). On the other side, the exports of the following agricultural processed products decreased: juggery beet sugar (from US$ 6.5 million in 2006 to US$ 0.17 million in 2009), and cotton (carded or combed) (US$ 22.6 million to US$ 21.9 million).

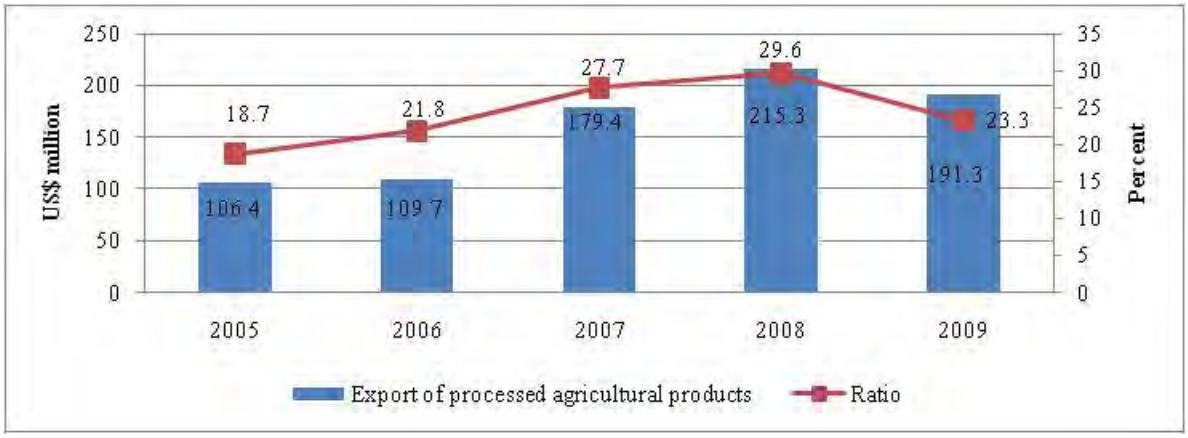


Figure OC6: Ratio of processed exported agricultural products to total exported agricultural products

Source: TRA 2010.

OC7 Number of smallholder households participating in contracting production and out grower schemes

Definition	Smallholder households who participate in contracting production and out-growers schemes, as percentage of all smallholder households. Contracting production is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products detailed in formal contracts. An out-growers scheme is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products that may not involve formal contracts. The company may provide smallholders some services, such as input credits, tillage, spraying and harvesting. The smallholder provides land and labour in return for the extension/input package.

Rationale	Contract farming and out-growers schemes are one of the important aspects of strengthened agricultural marketing system.

According to the information provided by LGAs, contract farming is not common in the country with only fourteen regions practising it. The greatest number of farmers engaged in contracting production is found in Tabora while out grower schemes are mostly practised in Iringa region. The data used here, however, were obtained from LGAs through the questionnaire and many LGAs did not submit or responded to the question, which has gravely constrained the analysis.

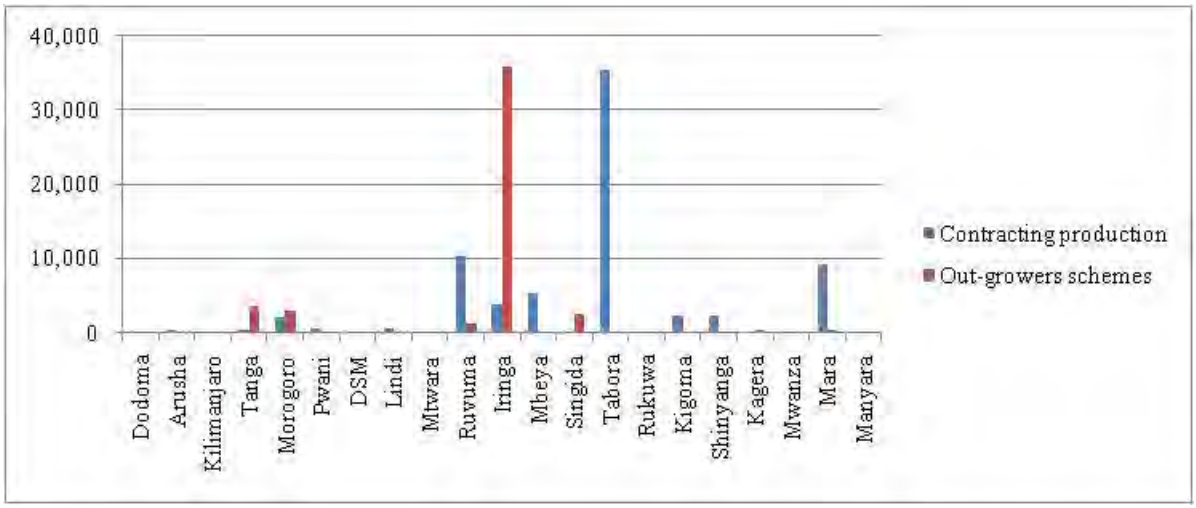


Figure OC7: Number of smallholder households participating in contracting farming and out-grower schemes in 2008/09

Source: LGA, 2010

Note: The number of LGAs that reported the information for contracting farming and out-growers schemes in 2008/09 is 85 and 79, respectively.

The regions with large numbers of farmers practising contract farming includes Tabora, Mara, Ruvuma, Mbeya, Iringa, Kigoma and Shinyanga. The number of farmers practising outgrowers scheme was noted to be high and increasing in regions which grow cash crops such as sugarcane and coffee. Figure OC7 shows that 10 regions have farmers practising outgrowers scheme. The other regions do not have such farmers or they are not recorded.

Comparatively, the number of farmers engaging in either contracting production or outgrower scheme has increased over the years. The increase reflects that farmers have become aware of the benefits of having valid contracts with companies operating in the crop production value chain.

OC8 Proportion of LGAs that qualify to receive top-up grants

Definition	LGAs qualify to receive enhanced DADP grants when the following minimum conditions are met. 1. District qualifies for Capital Development Grant 2. Position of DALDO filled 3. Council has a DADP 4. Evidence of commitment to the participatory process 5. Evidence of a commitment to reform agricultural extension services.
Rationale	This indicator assesses the degree of fulfilment of LGDG conditions, which is a part of LGAs' performance.

The number of LGAs that qualified to receive top-up grants has been increasing since 2005/06, and it has reached almost 100 percent in 2008/09 and 2009/10 as shown in Figure OC8.

Figure OC 8: Proportion of LGAs qualified to receive top up grants

Source: PMO- RALG, 2010

OC9 Proportion of LGAs that qualify to receive performance bonus

Definition	The amount of performance bonus is assessed based on the following criteria. 1. DADP prepared and implemented according to guidelines and as part of DDP (35 points) 2. District Agricultural Services Reform and contracting (20 points) 3. Agricultural investments follow standards of compliance and technical audit conducted.(30 points) 4. Policy and regulatory (15 points)
Rationale	It assesses the performance of councils from the aspects of consistency with ASDP.

The performance assessment started in 2006/07, and 73 percent of the LGAs qualified for the bonus in that year. In 2009/10, 90 percent of the LGAs qualified to receive performance bonus as shown in Figure OC9.

Figure OC9: Proportion of LGAs that qualify to receive performance bonus

Source: URT (PMO-RALG), Annual Assessment of Minimum Conditions and Performance Measures for Local Councils under the LGCDG System for Financial Year 2009/10: National Synthesis Report, 2007, Annex 1, pp. 53-66.

OC10 Proportion of farmers having visits from public or private extension staff

There has been a significant increase in the proportion of crop growing households receiving crop

extension advices from various sources. The Government of Tanzania is the main extension service provider. During agricultural year 2002/03, about 33 percent of total crop growing households received advices on crops from Government extension staff. This proportion increased to 60 percent in 2007/08. Proportion of households receiving extension advices from NGOs/Developments projects were 5.3 percent in 2002/03 and 7.9 percent in 2007/08 (see Figure OC10a).

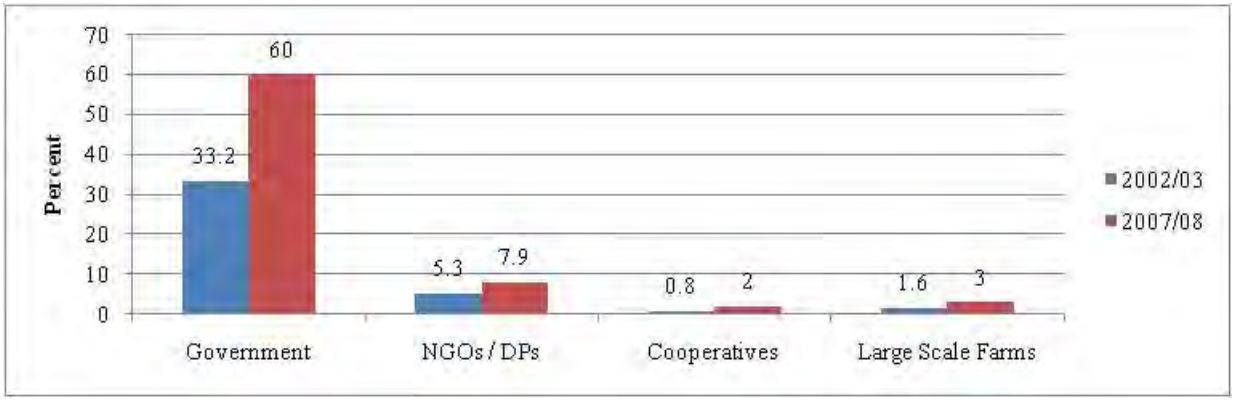


Figure OC10a: Proportion of crop farmers receiving advice

Source: NSCA 2002/03 and 2007/08.

Information on the proportion of livestock rearing households receiving advice was not reported for 2002/03, and thus only the data for 2007/08 is reported here (Figure OC10b). The majority (90.8 percent) of the farmer households receives advice from the government, followed by NGO/Development projects (12.1 percent).

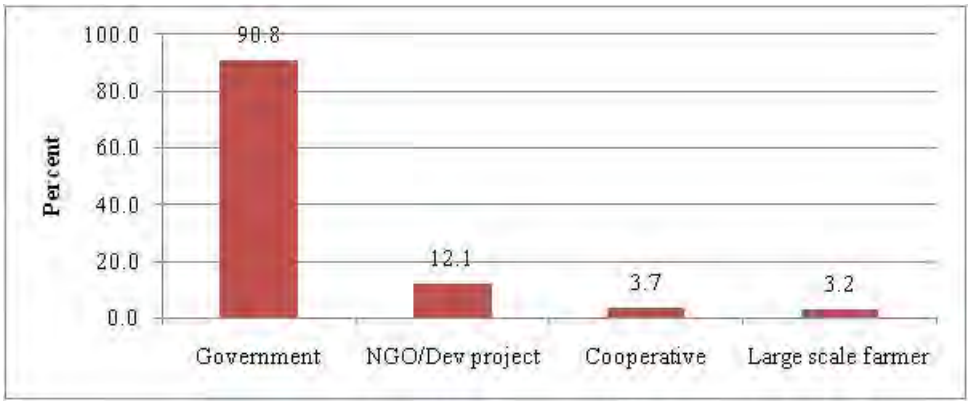


Figure OC10b: Proportion of livestock farmers receiving livestock advice in 2007/08

Source: NSCA 2007/08.

OUTPUT INDICATORS

OP1 Number of agricultural production infrastructure

Definition	Number of agricultural production infrastructure existing and in operation (as of 30th June of each year) : - Dams (excluding hydro-power dams) - Charco dams (for livestock) - Cattle dips - Oxenization centres - Veterinary clinics

Rationale	It indicates capability of ASLMs and LGAs to improve and expand agricultural production infrastructure.

For this indicator, the data were obtained from LGAs through questionnaire. Although a lot of efforts have been made by the ASDP M&E TWG, some LGAs failed to submit the filled-in questionnaire. In addition, not all the tables/cells were filled by the LGAs. Thus, the analysis shown below is incomplete.

Dams

From 2005/06 to 2008/09, the number of dams (working) reported by LGAs increased from 145 to 239. But there are 111 LGAs that provided the number of dams for 2008/09 while only 106 LGAs did so for 2005/06, and therefore the actual increase in the number of dams is like to be smaller. By region, many dams are found in Arusha and Tanga, followed by Tabora and Mwanza regions in 2008/09.

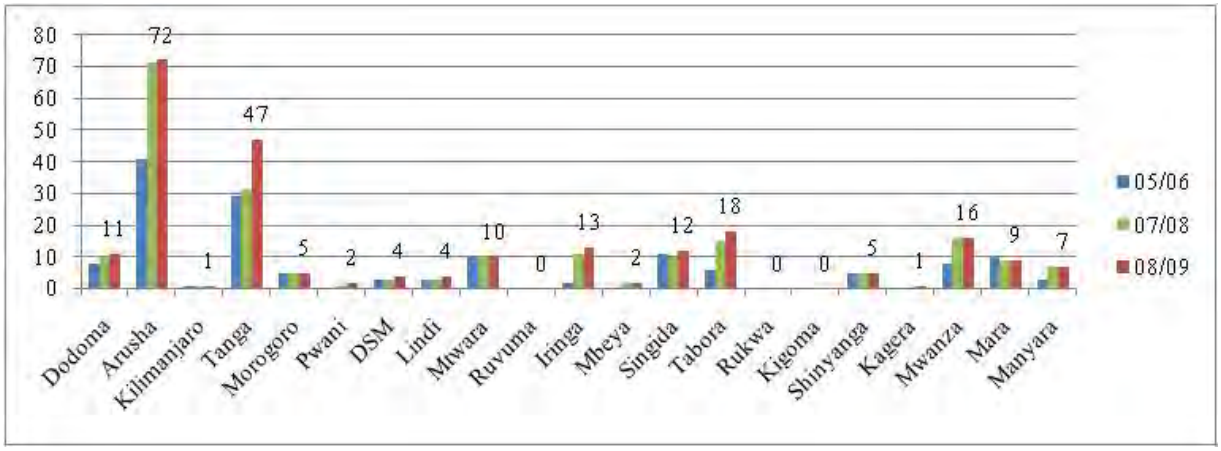


Figure OP1a: Number of dams by region
Source: LGAs, 2010
Note: The number of LGAs that reported the number of dams for 2005/06, 2007/08 and 2008/09 is 106, 111 and 111, respectively.

Charco dams

The number of charco dams also increased from 712 in 2006/07 to 1089 in 2008/09. The analysis, however, is based on observation from 120 LGAs for 2008/09 and 109 LGAs for 2005/06, and therefore the increase is likely to be overstating. Many charco dams are found in the regions of Tabora, Arusha, Mwanza, Singida, Mara, Shinyanga and Manyara.

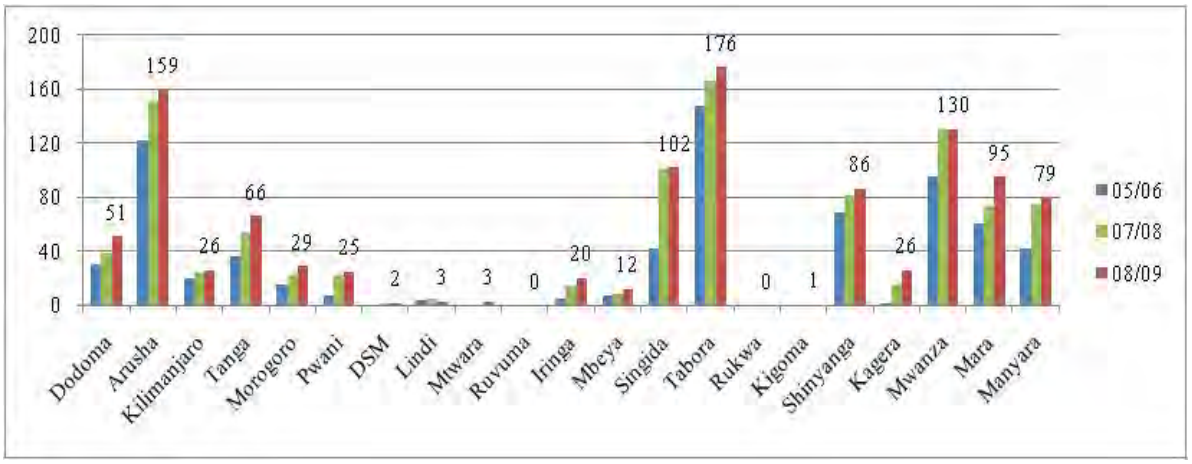


Figure OP1b: Number of charco dams by region

Source: LGAs, 2010

Note: The number of LGAs that reported the number of charcos for 2005/06, 2007/08 and 2008/09 is 109, 116 and 120, respectively.

Cattle Dips

The number of cattle dips working has been increasing over time. There are also a number of dips which are not working, which require rehabilitation.

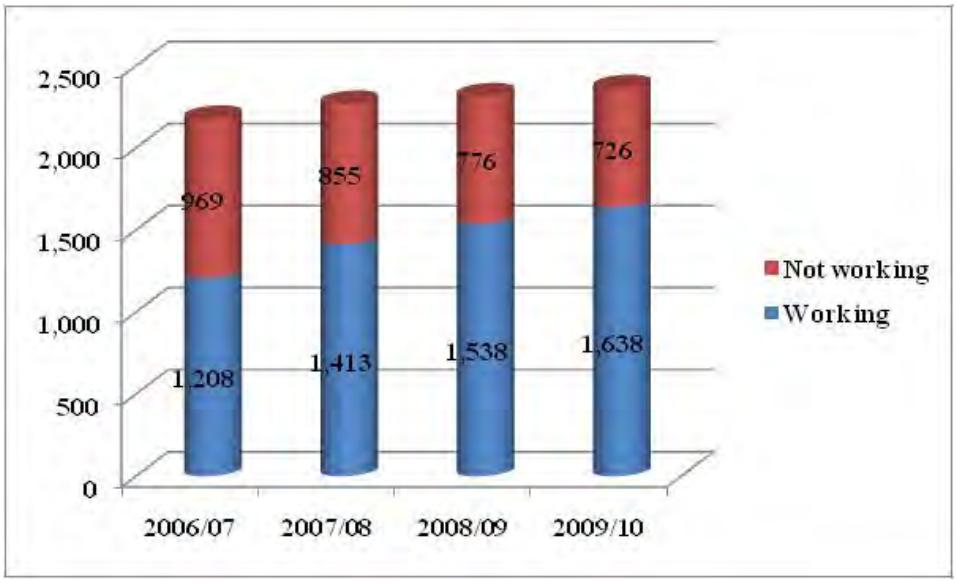


Figure OP1c: Number of cattle dips

Source: MLDF, 2010

Oxenization Centres

The total number of oxenization centres in the country increased by 36 from 43 in 2005/06 to 79 in 2008/09. But the analysis is constrained by unequal number of LGAs reporting the figures in the two years (see note for Figure OP1d). By region, many oxenization centres are found in DSM, Iringa, Mbeya, Singida and Tabora.

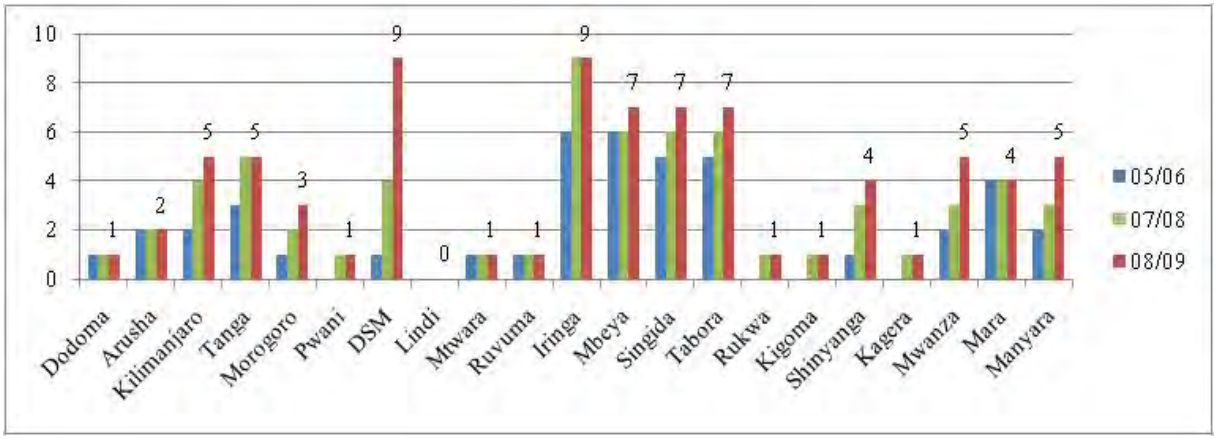


Figure OP1d: Number of oxenization centres by region

Source: LGAs, 2010

Note: The number of LGAs that reported the number of oxenization centres for 2005/06, 2007/08 and 2008/09 is 106, 111 and 111, respectively.

Veterinary Clinics

The total number of veterinary clinics increased by 33 from 101 in 2005/06 to 134 in 2008/09. The analysis, however, is constrained by the difference in the number of LGAs that reported the number of veterinary clinics in the two years (See note for Figure OP1e). Many veterinary clinics are found in the regions of Kilimanjaro, DSM, and Tanga. On the other hand, few clinics are found in Ruvuma, Rukwa and Kigoma regions.

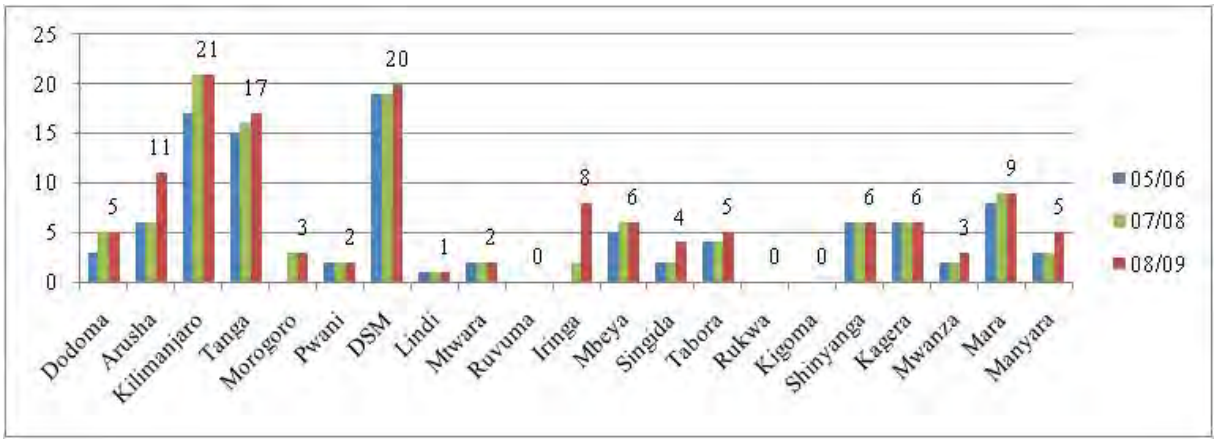


Figure OP1e: Number of veterinary clinics by region

Source: LGAs

Note: The number of LGAs that reported the number of veterinary clinics for 2005/06, 2007/08 and 2008/09 is 106, 112 and 113, respectively.

OP2 Number of agricultural marketing infrastructure and machinery

Definition	Number of agricultural marketing infrastructure and machinery existing and in operation (as of 30th June of each year) - Livestock primary market (place where livestock keepers/farmers meet traders) - Livestock secondary market (place where traders meet butcher men or other traders) - Feeder road (km) (road that connect villages to main roads) - Livestock holding ground - Abattoirs (a modern building where animals are slaughtered and meat processed into products, e.g. sausages, canned meat) - Slaughter house (a facility where animals are slaughtered into carcasses (no processing)) - Slaughter slabs (a flat concrete floor where animals are slaughtered in an open air) - Pulperies/ ginneries/ shelling (coffee, cacao, cotton, cashew nut, etc.) - Hide and skin sheds - Milling machine (rice and maize) - Oil extracting machines
Rationale	It indicates capability of ASLMs and LGAs to improve and expand agricultural marketing infrastructure and machinery

Like Output Indicator 1, the data for this indicator were collected from LGAs through questionnaire. In spite of the efforts of the ASDP M&E TWG, it was not possible to collect the filled-in questionnaire

from all the LGAs. In addition, even those that submitted the filled-in questionnaire, some table were not filled, which made the analysis more difficult.

The number of livestock primary market increased from 295 to 366 from 2005/06 to 2008/09 in the country (Figure OP2a), although 11 LGAs failed to report the number for 2005/06 while they did for 2008/09. Many livestock primary markets are found in the regions of Dodoma, Manyara, Arusha, Singida and Shinyanga. On the other hand, the number of livestock secondary market increased from 14 to 16 only over the same period (not shown in graph). The secondary markets are found in the regions of Dodoma, Arusha, Kilimanjaro, Tanga, Morogoro, DSM, Ruvuma, Singida, Tabora, Rukwa, Shinyanga, Kagera and Mwanza.

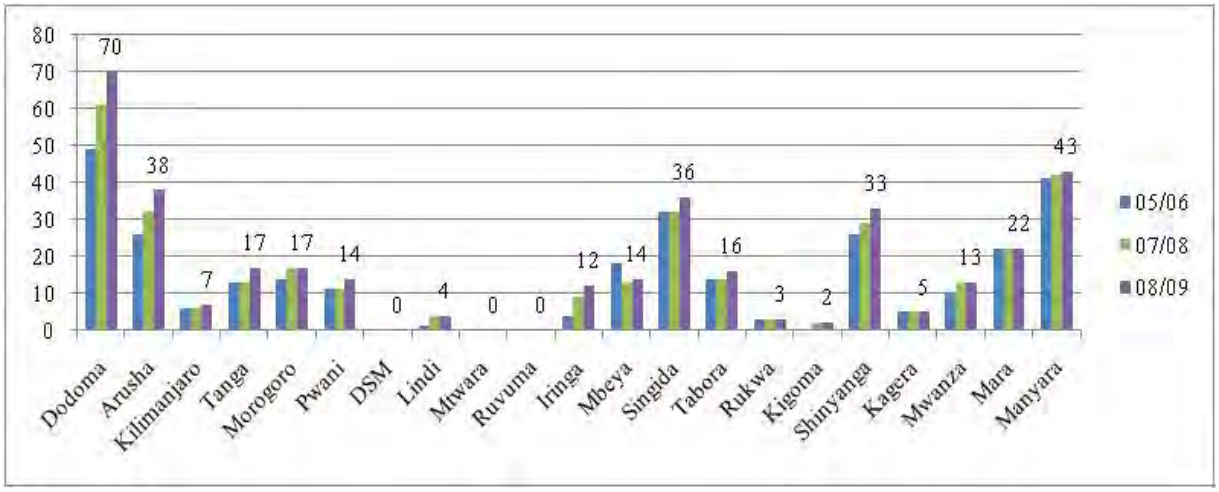


Figure OP2a: Number of livestock primary markets by region

Source: LGAs, 2010

Note: The number of LGAs that reported the number of livestock primary markets for 2005/06, 2007/08 and 2008/09 is 108, 116 and 119, respectively.

In 2008/09, there are at least 70 non-working livestock primary markets in the country. The reasons include poor infrastructure, inaccessibility due to bad road conditions particularly in rainy seasons, and little demand from traders.

The length of feeder roads is generally increasing. At least 13 LGAs show an increase of more than 100 km since 2005/06. Some feeder roads are not working due to the lack of resources for rehabilitation, inaccessibility during rainy seasons, and poor conditions.

The number of livestock holding ground (working) increased from 33 in 2005/06 to 45 in 2008/09. The livestock holding ground are relatively abundant in Shinyanga, Dodoma, Singida and Mwanza regions (See Figure OP2b).

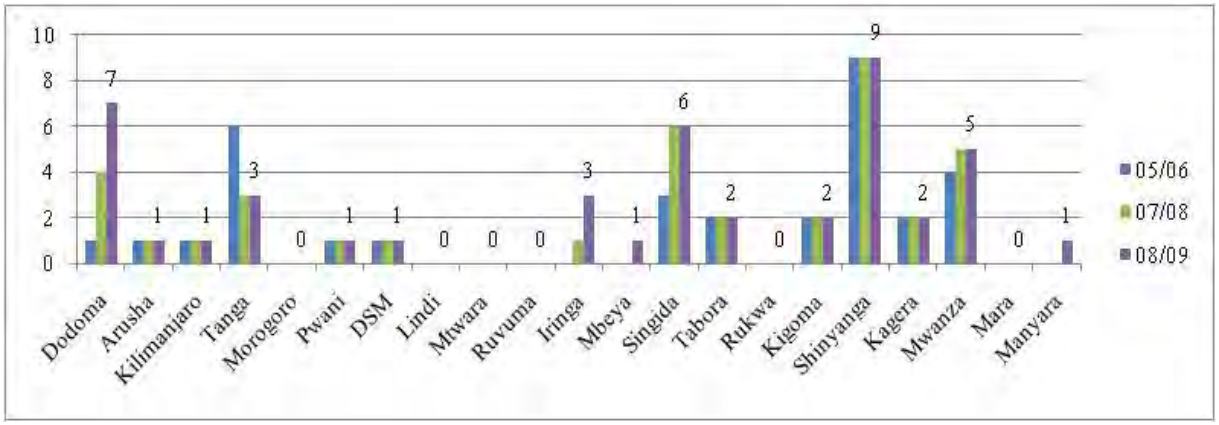


Figure OP2b: Number of livestock holding ground by region

Source: LGAs, 2010

Note: The number of LGAs that reported the number of livestock holding ground for 2005/06, 2007/08 and 2008/09 is 104, 111 and 110, respectively.

The number of slaughter houses (working) in the country increased from 126 in 2005/06 to 160 in 2008/09 (Figure OP2c), although there are 4 more LGAs that reported the number for 2008/09 than for 2005/06. There are many slaughter houses in Mbeya, Iringa, and Mwanza regions. LGAs report that at least 20 slaughter houses are not working in the country because of insufficient water supply and worn-out facility.

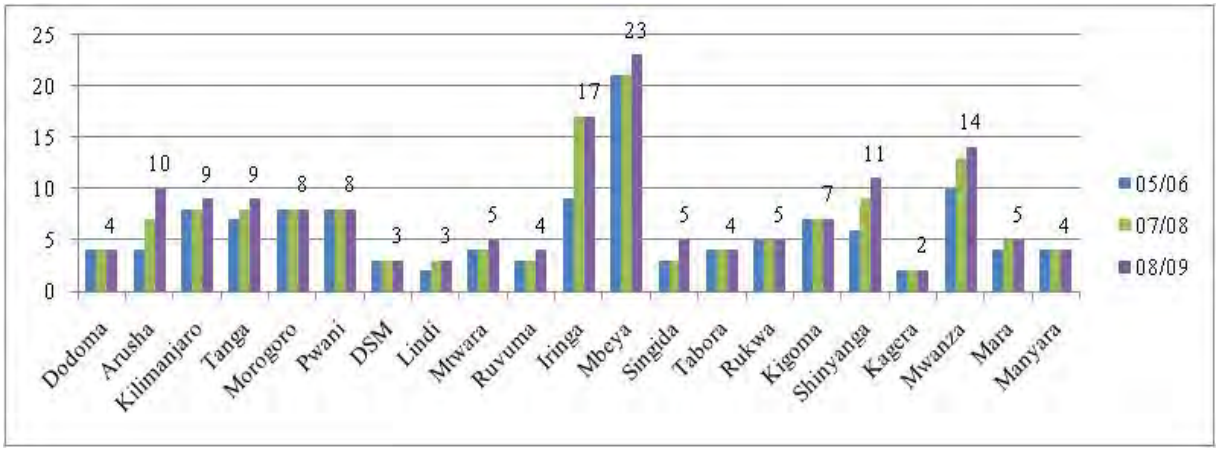


Figure OP2c: Number of slaughter houses by region

Source: LGAs, 2010

Note: The number of LGAs that reported the number of slaughter houses for 2005/06, 2007/08 and 2008/09 is 114, 119 and 118, respectively.

At least 33 LGAs showed an increase in the number of slaughter slabs from 2005/06 to 2007/08. As a result, as shown in Figure OP2d, the total number of slaughter slabs increased from 1258 in 2005/06 to 1502 in 2008/09 (note that there are 6 more LGAs which reported the number for 2008/09 than for 2005/06). Kilimanjaro region has the largest number of the working facilities, or 647 slabs in 2007/08 as Moshi D.C, Rombo and Hai have more than 100 slabs. On the other hand, in at least 10 LGAs, the number of slabs not working increased. The reasons for not working include the need for rehabilitation and low demand of meat.

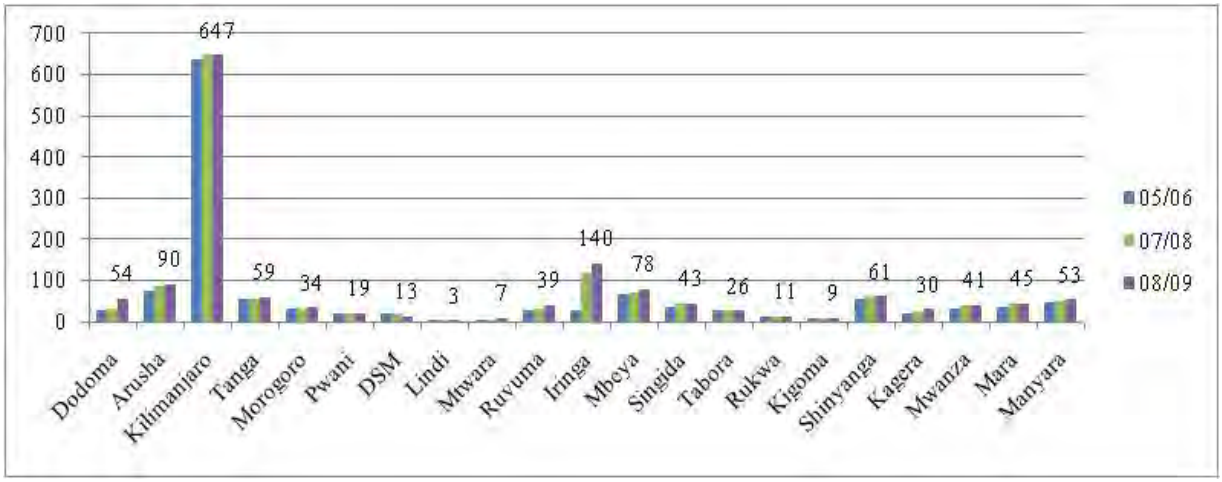


Figure OP2d: Number of slaughter slabs by region

Source: LGAs, 2010

Note: The number of LGAs that reported the number of slaughter slabs for 2005/06, 2007/08 and 2008/09 is 114, 120 and 120, respectively.

The number of hides and skin sheds increased at least in 20 LGAs. In total, there are at least 219 working sheds in the country in 2008/09, which increased from 146 in 2005/06 (Figure OP2e). But there are 8 LGAs which did not report the number for 2005/06 although they did for 2008/09, thus an actual increase is likely to be smaller. It seems that many sheds are found in the regions of Mwanza, Mbeya, Iringa, Dodoma and Singida. The number of the hides and skin sheds not working also increased at least in 7 LGAs. The reasons for not working include worn-out facility, unavailability of hides / skins, need for rehabilitation / repair, poor infrastructure, no formal markets, and low rate of animal slaughtering.

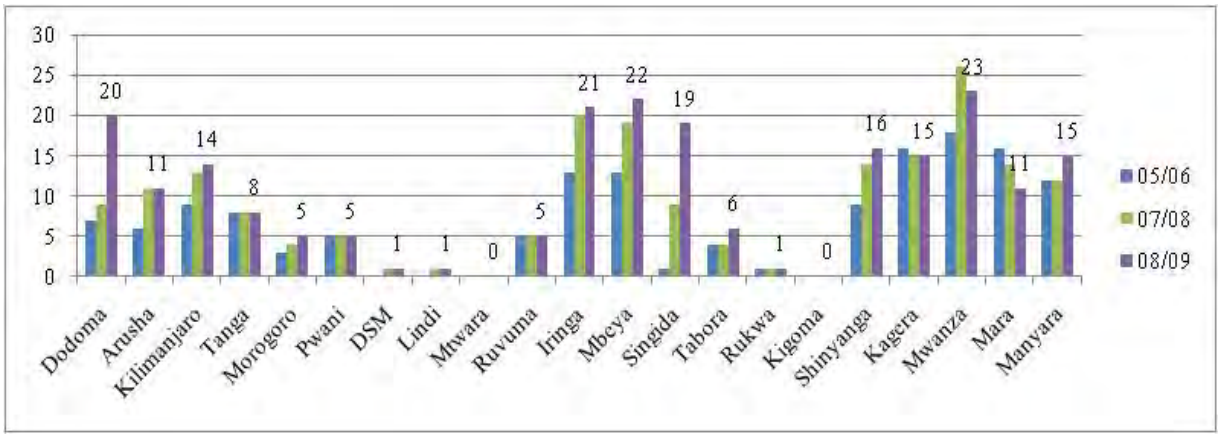


Figure OP2e: Number of hide and skin sheds by region

Source: LGAs, 2010

Note: The number of LGAs that reported the number of hide and skin sheds for 2005/06, 2007/08 and 2008/09 is 106, 115 and 114, respectively.

The number of milling machines has increased at least in 86 LGAs since 2005/06. 17 LGAs have more than 300 machines while Mufindi DC has the largest number (816), followed by Mbozi DC (714). There are also machines not working at least in 38 LGAs. The reasons for not working include the

needs for repairing, lack of spare parts, high running cost and broken-down.

The number of oil extracting machines also increased at least in 59 LGAs, and in 14 LGAs it increased by more than 10. At least 21 LGAs have the machines not working, and the reason for not working include the need for rehabilitation, not repairable and no electricity.

OP3 Number of extension officers trained on improved technological packages

Definition	Number of extension officers trained on improved technological packages on crop, livestock, and marketing and processing. Improved technological packages include improved seeds, herbicides, pesticides, fungicides, crop storage, fertilizer, spacing, erosion control, irrigation, vermin/rodent control, agro-forestry, etc.
Rationale	It is a proxy indicator for farmers' adoption of improved agricultural technologies.

Information for this indicator was also obtained through the questionnaire from LGAs, and there are at least 20 LGAs that provided "the number of extension officers" instead of "the number of extension officers who received training", in spite of M&E TWG's repeated explanation. This inappropriate reply has made the analysis very difficult.

However, generally, it appears that the number of extension officers who received training on improved agricultural packages is increasing. Of the three types of training (crop, livestock, marketing and business), training on marketing and business appears to be weak; more training has concentrated on crop and livestock. Training on marketing and business may need to be strengthened. By gender, in general, male extension officers have greater opportunities to receive training than their female colleagues, except in DSM.

OP4 Number of SACCOS , its members and value of loans provided for agriculture

Definition	The amount of loans provided by SACCOS for agriculture, livestock, and business (e.g., marketing and processing).
Rationale	Rural micro finance is very important for farmers to improve productivity. This indicator addresses farmers' accessibility to credit.

The data for this indicator were obtained from LGAs through the questionnaire. Not all the LGAs filled out the questions for this indicator, thus the analysis is incomplete.

Overall, the number of SACCOS, its members and the amount of SACCOS lending for agriculture (including livestock and business) have been increasing, which should have positive effects on agricultural/livestock production and famers' standards of living.

Figure OP4a shows the number of SACCOS by region in 2007/08 and 2008/09. For the whole country, the number increased from 4,048 to 4381, although there are a few LGAs that failed to submit the data. Some districts have seen more than doubling of the number of SACCOS. The largest numbers of SACCOS are found in the districts of Geita (225) and Sengerema (107) in Mwanza region, and Ilala (208) in DSM.

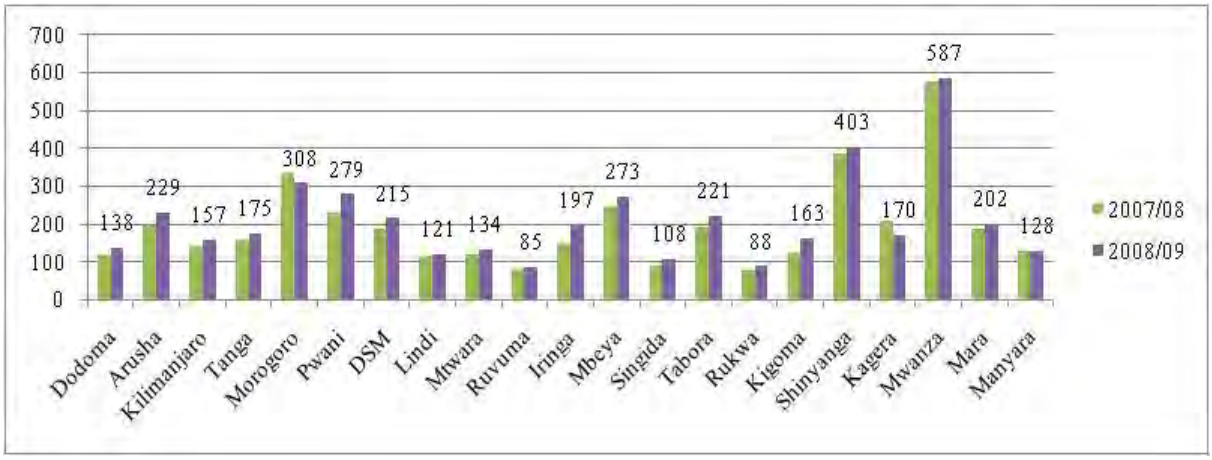


Figure OP4a: Number of SACCOS

Source: LGAs, 2010

Note: The number of LGAs that reported the number of SACCOS for 2007/08 and 2008/09 is 127 and 130, respectively.

The number of SACCOS members has also increased largely over the last two years, and in many districts the number has more than doubled. There are more than 10,000 SACCOS members in the districts of Arusha (Arusha region), Kilosa (Morogoro), Ilala (DSM), Songea (Ruvuma), Kondoa (Dodoma), and Karagwe (Kagera). The participation of women in SACCOs is also encouraging. In at least 70 districts, the proportion of female members in SACCOS is more than 40%. Such districts include Longido, Karatu (Arusha), Moshi M.C, Rombo (Kilimanjaro), Mkinga (Tanga), Shinyanga M.C, Bagamoyo (Pwani), Songea M.C (Ruvuma) and Iringa M.C,

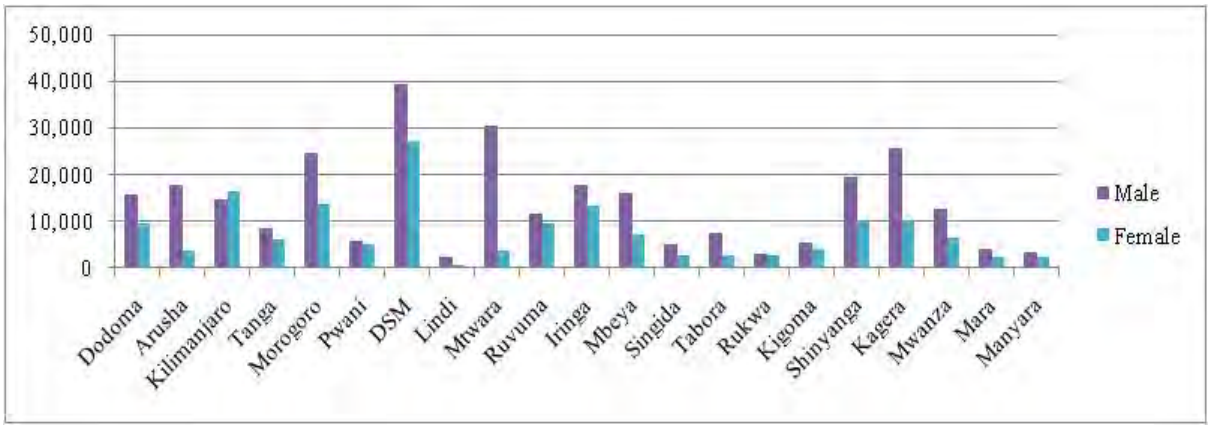


Figure OP4b: Number of male and female SACCOS members in 2008/09

Source: LGAs, 2010

Note: The number of LGAs that submit the number of male and female SACCOS members in 2008/09 is 120.

It is more difficult to analyze the amount of loan provided for agriculture, livestock and business as sometimes the information are only available as an aggregate of the three or many districts failed to provide the information. In general, however, the amount of loan provided by SACCOS appears to be increasing.

OP5 Number of agricultural marketing regulations and legislation in place

Definition	Number of agricultural marketing acts which create an enabling environment for commercialization in place.
Rationale	To harmonize the existing fragmented and inconsistent laws in agricultural marketing to standardize marketing activities.

Since 2004/05 when six new acts on agricultural marketing were approved, the number of legislation has increased every year. Six new legislations were enacted in 2009. Likewise, the number of regulations on agricultural marketing has also increased steadily. These figures have met the target set for 2009/10.

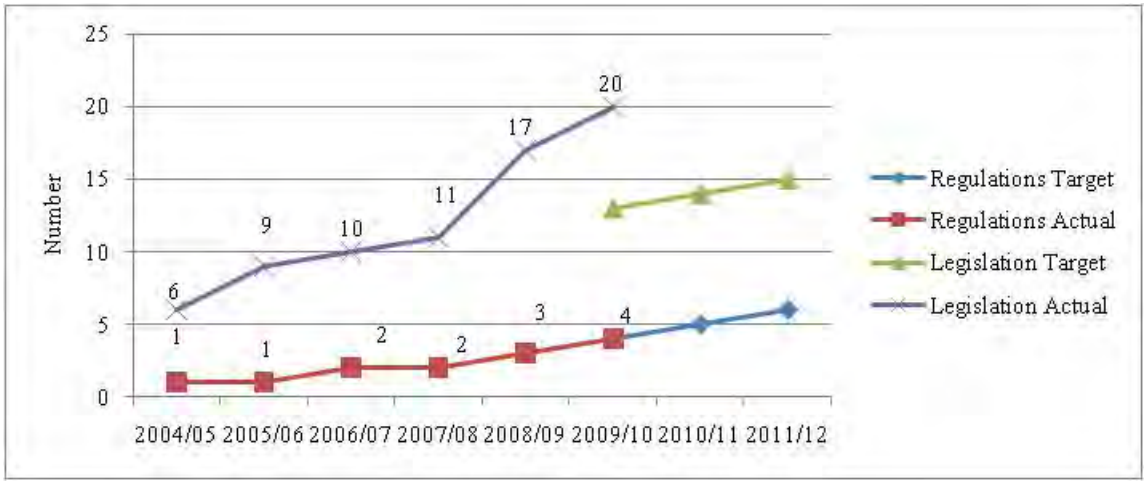


Figure OP5: Number of agricultural marketing regulations and legislation in place
Source: MIT, MLDF, MAFC, 2010

OP6 Number of markets where wholesale or retail prices are collected

Definition	Number of places (markets) where wholesale or retail prices information on agricultural produce are collected.
Rationale	It indicates the availability of market information to stakeholders.

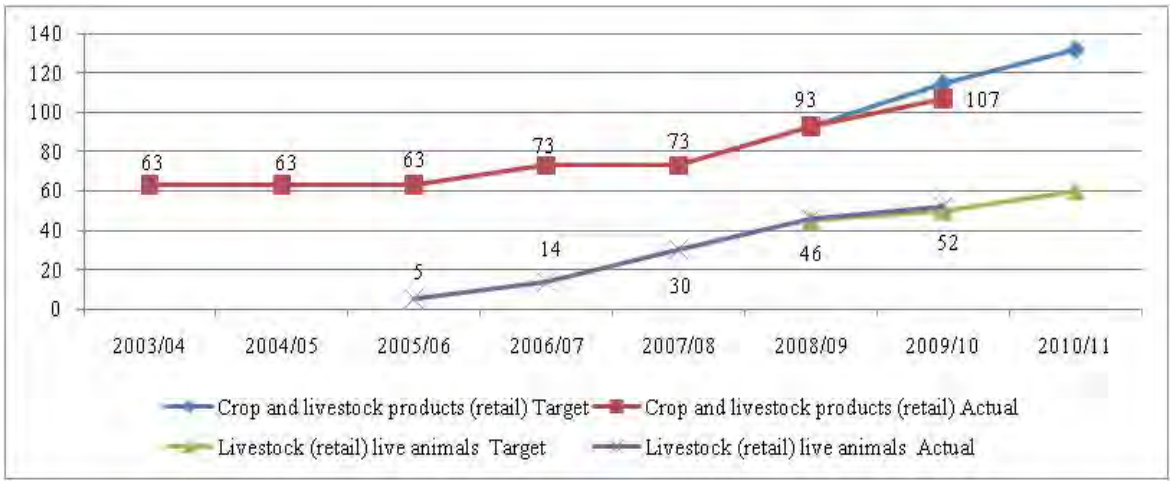


Figure OP6: Number of markets where wholesale or retail prices are collected
Source: MIT, 2010

The number of markets where retail prices of crop and livestock products are collected increased by 20 from 2007/08 to 2008/09. The increase continued in 2009/2010 when the number increased by 14. On the other hand, the number of markets where retail prices of live animals are collected also increased by 16 and 6 in 2008/09 and 2009/10, respectively.

On the other hand, the number of markets where crop wholesale prices are collected has not changed since 2005/06 as it has already reached the target.

Table OP6: Number of markets where crop wholesale prices are collected.

		2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Crop (wholesale)	*Target*						*21*	*21*	*21*
	Actual	20	20	21	21	21	21	21	

Source: MIT., 2010

OP7 Number of ASDP Basket Fund Steering Committee meetings held

Definition	Number of ASDP Basket Fund Steering Committee meetings organized and held during the year under ASDP
Rationale	This indicator shows the extent to which the ASLMs are brought together through ASDP Basket Fund Steering Committee meetings during the implementation of ASDP.

The ASDP Basket Fund Steering Committee (BFSC) meetings have been held four times a year as planned since the beginning of ASDP in 2006/07.

Table OP7: Number of BFSC meetings

		2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/11**	**2011/12**
Number of meetings	*Target*	*4*	*4*	*4*	*4*	*4*	*4*
	Actual	4	4	4	4		

Source: ASDP Secretariat, 2010

OP8 Proportion of regions submitted DADP quarterly progress reports on time

Definition	Proportion of regions which submitted DADP physical and financial quarterly progress reports on time
Rationale	The indicator indicates the effectiveness of reporting flows from LGAs to ASLMs, which is a part of institutional strengthening.

This indicator was originally to examine the number of LGAs which submitted quarterly and annual reports to respective region on time, but it has been difficult to collect such information from each Regional Secretariat. Thus, the number of regions which have submitted DADP quarterly progress reports to PMO-RALG is examined here.

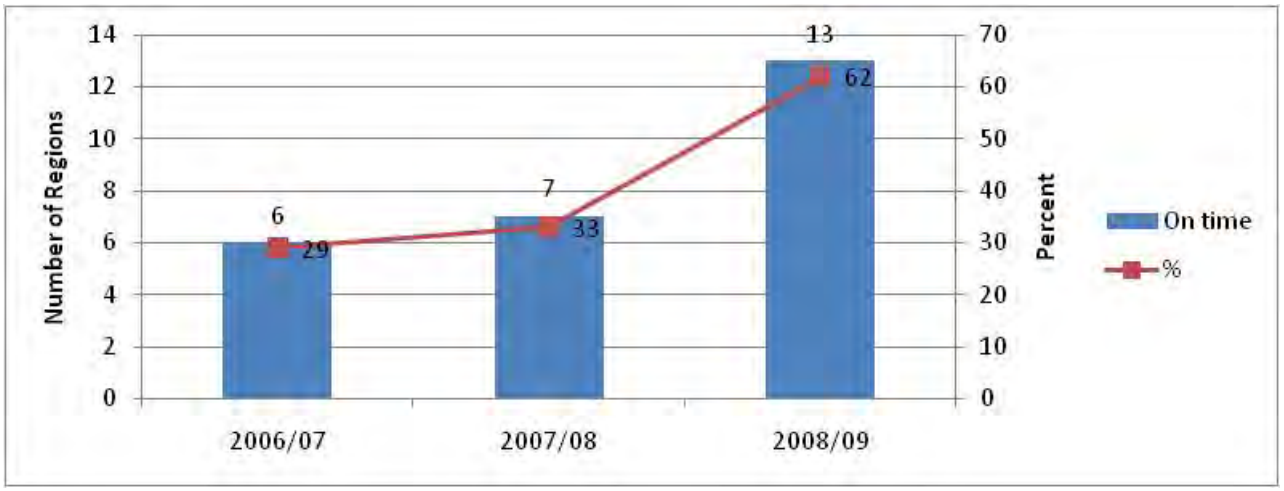


Figure OP8: The number of regions which submitted quarterly progress reports on time

Source: PMO-RALG, 2010

In 2006/07, the proportion of regions submitted the reports on time was less than 30%, but there has been improvement since then, and in 2008/09 over 60% of the regions have submitted them.

It has been reported (on 'National Synthesis' report) during the LGDG Assessments of Minimum Conditions and Performance Measures for Council 2009 that all LGAs (except 6 LGAs) were found to have prepared financial and physical progress report in accordance with formats and submitted by 15th day of the month following the quarter as required.

OP9 Proportion of female members of Planning and Finance Committee

Definition	Proportion of female members of Planning and Finance Committee in each district.
Rationale	It indicates the level of involvement of women in planning, implementation and decision making processes.

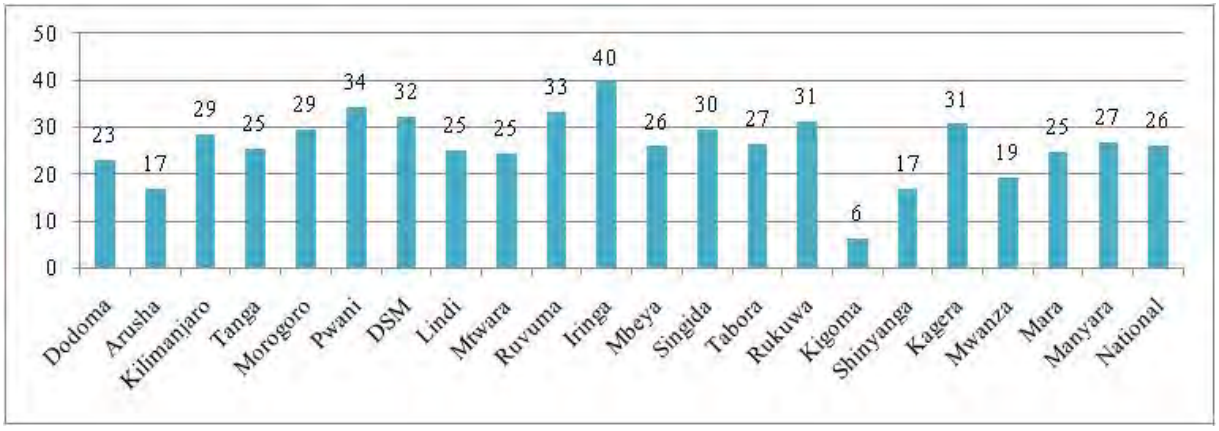


Figure OP9: The proportion of female members of Planning and Finance Committee in 2008/09

Source: LGAs, 2010

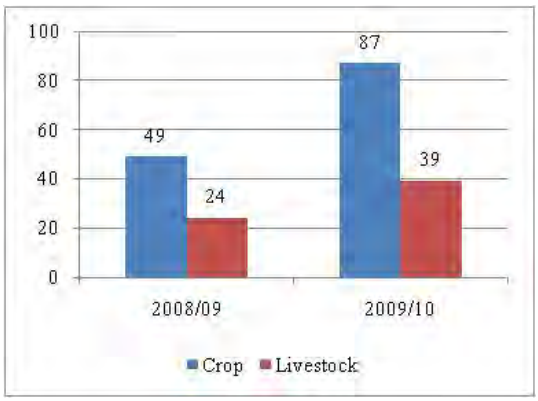
Note: The number of LGAs that responded to this question is 111.

Generally the participation of women in Planning and Finance Committee is low for most regions. It is the highest in Iringa Region at 40 percent, followed by Pwani (34 percent) and Ruvuma (33 percent)

regions, according to the questionnaire submitted by LGAs, although the information is not complete. Of the LGAs that answered the questionnaire, 14 LGAs met minimum required proportion (i.e. 40%) of female members of Planning and Finance Committee in 2008/09. These LGAs include Misenyi (67%), Ulanga and Kibaha T.C (57%), Iramba (56%) and Lindi T.C (50%). Improvement in the proportion is observed in 29 LGAs. This indicates that the level of involvement of women in planning, implementing and decision making process is still a problem for most regions in Tanzania.

OP10 Number of research projects conducted (on-going and completed) through ZARDEF relating to crop, livestock, and marketing/ processing

The number of ZARDEF research projects has increased to 126 in 2009/10 from 73 in 2008/09 when ZARDEF started (excluding the projects in Southern Highland for which the data are not available as of November 2010). There are more projects concerning crops than livestock. The number of research projects is evenly distributed across the zones except for Eastern zone where there are only 14 projects. The distribution between crop and livestock is different across the zones. Livestock projects are relatively many in Northern (40 %) and Central (38 %) zones.



Zone	Number of project		Average budget
	Crop	Livestock	(Tsh)
Central	16	10	26,153,846
Eastern	11	3	28,665,107
Lake	14	7	26,170,795
Northern	12	8	20,332,244
Western	17	4	28,095,238
Southern	8	6	N/A
Southern Highland	N/A	N/A	N/A
Total	78	38	25,760,226

Figure / Table OP10: Number of ZARDEF project and average budget by zone (2008/09, 2009/10 combined)

Source: MAFC, 2010

Note: The figure shows the number of ZARDEF projects implemented in each year. Thus, one project may be found in both 2008/09 and 2009/10 if it is conducted in more than one year.
Number of ZARDEF projects in Southern Highland Zone is not included as the data are not available.
Projects concerning marketing and processing are categorized as either crop or livestock.

The budget for each project is relatively small at Tsh. 25.8 million. The average budget for projects concerning crops (Tsh. 26.6 million) is slightly larger than that of livestock (Tsh. 23.9 million). The average budget for each project in Northern and Eastern zones is relatively greater than the other zones. This is primarily because the ratio of crop projects is larger in these regions.

5. Summary

As seen in chapter 4, positive changes are observed in key outputs such as:

- Dams, charco dams, cattle dips, oxenization centres, veterinary clinics
- Livestock markets, holding grounds, slaughter houses / slabs, hide and skin sheds,
- Tractors and power tillers imported
- Amount of fertilizer distributed
- Number of SACCOS and its members

Improvement can also be seen in institutional capacity. They include,

- Number of extension officers trained,
- Proportion of LGAs qualified to receive top-up grants
- Number of marketing regulations / legislation
- Number of markets where wholesale/retail prices are collected
- ASDP Basket Fund Steering Committee meetings held
- Number of regions which submit DADP quarterly program report on time

As a result of these positive changes in output and institutional capacity, positive changes are seen in outcome and impact like the following.

- Agricultural export
- Production and productivity (yield) of maize, paddy, meat, milk and eggs
- Proportion of farmers using improved seeds / chemical fertilizer, improved dairy,
- Proportion of farmers using mechanization (tractors and power tillers)
- Proportion of farmers received advice from extension staff.

On the other hand, there are indicators that show negative changes. They are

- Agricultural GDP growth rates
- Export of processed agricultural products
- Amount of lending to the agricultural sector by domestic commercial banks.

These negative changes, however, are found in 2009 only; there had been an upward trend until 2008.

In view of these indicators, it can be said that ASDP is on a right track as it is achieving its objectives. It had performed well since it started in 2006 until 2008, but interrupted by drought and global financial and economic crisis in 2009.

There are, however, shortcomings or challenges which ASDP needs to address. Those challenges include

- Inadequate access to agricultural credit. Farmers have inadequate purchasing power to procure inputs.
- Irrigation is still underdeveloped. Even for those developed, water availability is not sufficient particularly during drought seasons.
- Small-scale agro-processing and low skills of agro-processors, and
- Low adoption of improved technologies.

On the other hand, there are challenges for smooth and effective M&E for ASDP. Improvement is needed in the following areas.

- More accurate and reliable data
  - Need to have an annual sample survey at least for key agricultural products
  - Need to improve the quality of data submitted by LGAs
- Resources for M&E
- Analytical capacity for M&E officials.

6 Way Forward

The following are the tasks to be carried out by the ASDP M&E TWG concerning the Performance Report and the short-listed indicators.

(1) *Annual review of the short-listed indicators*

The short-listed indicators will be reviewed annually. This is because the purpose of ASDP M&E is to monitor and evaluate the achievement of ASDP from a wider perspective. In addition, harmonization should be sought for between the indicators for ASDP, MKUKUTA II and other key policy documents. Furthermore, attention needs to be paid to the availability of new data sources (such as the National Panel Survey) because they might enable the TWG to capture wider perspectives of ASDP.

(2) Update of data for each indicator

Performance reports will continue to be prepared annually by compiling the latest data for each indicator. The aim is to prepare the report before the ASDP Joint Implementation Review each year so that the report provides valuable inputs for ASDP assessment. It is important to ensure that data will be obtained from the same sources and processed/analyzed in the same manner.

(3) Improve the quality of data submitted by LGAs

Improvements have been seen in the data which LGAs have submitted through the questionnaire. However, there still are incomplete and inadequate answers, which make the aggregation and analysis very difficult. Further improvement will need to be sought for.

The LGAs are requested to carefully examine the data before submission, and the Regional Secretariats are requested to review the data before sending them to the central level. In the near future, the M&E TWG will also consider conducting a quality assessment of the data submitted by the LGAs.

Annex 2: Questionnaire for Data Collection for the ASDP Short-listed Indicators

Questionnaire for Data Collection for the ASDP Short-listed Indicators

March 2010

Background and Objective

The Agricultural Sector Development Programme (ASDP), started in 2006, is a long-term program to implement the Agricultural Sector Development Strategy (ASDS) which delineates how the agricultural sector contributes to attaining MUKUKUTA goals The progress of the ASDP is assessed using 21 Shortlisted Indicators which were selected by the ASDP Monitoring and Evaluation (M&E) Thematic Working Group (TWG), formed in 2006 jointly by the Agricultural Sector Lead Ministries (ASLMs) and Development Partners The TWG has completed "ASDP M&E Baseline Data Report" and "ASDP M&E Progress Report 2008/09" by collecting and analyzing data for the indicators at both national (ASLMs, NBS, TRA, BOT, etc) and at LGA levels This questionnaire is designed to collect the latest information with which the data are collected from the LGAs

Instructions:

D(M)ALDOs: Please follow the instructions in each question You may either use an electronic file (WORD) or hardcopy If you use the electronic file, once you have answered all the questions, please submit it to M&E unit, Department of Policy and Planning (DPP), Ministry of Agriculture, Food Security and Cooperatives (MAFC) by **Email: maige2001@yahoo.co uk.** If you use the hard copy, please obtain signature of DED and then submit it to M&E unit, DPP, MAFC by **Fax: 022-286-2077 (attn: Mr. Maige, Room No. 119, DPP, MAFC).**

* Please submit **no later than ONE WEEK from the date you received** this questionnaire **The final deadline is 15th of April 2010.**

If you have questions, please contact one of the following members of the ASDP M&E TWG:

Mr John Maige (Mobile: 0784-642024), M&E Officer, DPP, MAFC

Mr Kabuje Furaha (Mobile: 0754-391317), M&E Officer, DPP, Ministry of Livestock Development and Fisheries (MLDF)

Please fill-out this table:

Council and Region	**Council:** **Region:**
Date of Documentation	
Name of Respondent	
Title of Respondent	
Contact (Mobile)	

Indicator 1 (OC2)	Production of livestock and productivity
Definition	Production of livestock in each district: - Beef, Goat meat, Sheep meat, Pig meat: Carcass weight (kg) - Milk (litre)

Instructions:

1 **Target**: please provide target figures for **2008/09 - 2012/13** in a table below

2 **Actual**: please provide actual figures for **2005/06 - 2008/09** in a table below

3 If the product in the table is not produced in your LGA, please write 0

4 If the information is not available, please write N/A

Table OC2: Production of livestock products

		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Beef (kg) (carcass weight)	Target								
	Actual								
Milk (litre)	Target								
	Actual								
Goat Meat (kg) (carcass weight)	Target								
	Actual								
Sheep Meat (Mutton) (kg) (carcass weight)	Target								
	Actual								
Pig Meat (kg) (carcass weight)	Target								

	Actual								

Indicator 2 (OC7)	Number of smallholder households participating in contracting production and out-growers schemes
Definition	Smallholder households who participate in contracting production and out-growers schemes Contract production is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products detailed in formal contracts An out-growers scheme is defined as a partnership between smallholder households and an agribusiness company for the production of commercial products that may not involve formal contracts The company may provide smallholders some services, such as input credits, tillage, spraying and harvesting The smallholder provides land and labour in return for the extension/input package

Instructions

1 **Target**: please provide target figures for **2008/09 - 2012/13** in a table below For 2008/09 – 2011/12, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 33-34) They are the ones you submitted last year If they are OK, please copy them If incorrect, please modify them In addition, please write a target for 2012/13 Please be careful in filling out the format as it has been slightly modified

2 **Actual**: please provide actual figures for **2005/06 - 2008/09** in a table below For 2005/06 – 2007/08, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 33-34) They are the ones you submitted last year If they are OK, please copy them If incorrect, please modify them In addition, please write an actual figure for 2008/09

3 If there is no small holder household who is engaged in contracting production and/or out-growers scheme, please write 0

4 If the information is not available, please write N/A

Table OC7: Number of smallholder households participating in contracting production and out-growers schemes

		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Number of small holder households in contracting production	Target								
	Actual								
Number of small holder households in out-growers schemes	Target								
	Actual								

Note: The following definitions are used in accordance with the National Sample Census of Agriculture 2002/03 (Volume II: Crop Sector - National Report, p 302)

Smallholder household: Should have between 25 square meters and 20 hectares under production, and/or between 1 and 50 head of cattle, and/or between 5 and 100 head of sheep/goats/pigs, and/or between 50 and 1000 chickens/turkeys/ducks/rabbits

Household: A group of people who occupy the whole or part of one or more housing units and makes joint provisions for food and/or other essentials for living

Indicator 3 (OP1)	Number of agricultural production infrastructure
Definition	Number of agricultural production infrastructure working and not working (as of 30th June of each year) – Dams, charcos, dips, oxenization centres, and veterinary clinics

Instructions

1 **Target**: please provide target figures for **2008/09 - 2012/13** in a table below For 2008/09 – 2011/12, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 35-50) They are the ones you submitted last year If they are OK, please copy them If incorrect, please modify them In addition, please write a target for 2012/13 Please be careful in filling out the format as it has been slightly modified

2 **Actual**: please provide actual figures for **2005/06 - 2008/09** in a table below For 2005/06 – 2007/08, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 35-50) They are the ones you submitted last year If they are OK, please copy them If incorrect, please modify them In addition, please write an actual figure for 2008/09

3 Infrastructure owned either by private or public is included

4 If there is no infrastructure mentioned in the table, please write 0

5 If the information is not available, please write N/A

6 Please write a reason if infrastructure in question is not working

Table OP1: Number of agricultural production infrastructure

Infrastructure	Status		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Reasons for not working
Dams* (excluding hydro-power dams) [water available year around]	Working	Target									
		Actual									
	Not working	Actual									
Charcos* (for livestock)	Working	Target									
		Actual									
	Not	Actual									

	working											

*A dam is a barrier that impounds water and bigger in size relative to a charco On the other hand, charcos are usually excavated and are smaller than dams

Infrastructure	Status		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Reasons for not working
Dips	Working	Target									
		Actual									
	Not working	Actual									
Oxenization centres	Working	Target									
		Actual									
	Not working	Actual									
Veterinary clinics	Working	Target									
		Actual									
	Not working	Actual									

Indicator 4 (OP2)	Number of agricultural marketing infrastructure and machinery
Definition	Number of agricultural marketing infrastructure and machinery existing and in operation (as of 30th June of each year)

Instructions

1 **Target**: please provide target figures for **2008/09 - 2012/13** in a table below For 2008/09 – 2011/12, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 51-82) They are the ones you submitted last year If they are OK, please copy them If incorrect, please modify them In addition, please write a target for 2012/13 Please be careful in filling out the format as it has been slightly modified

2 **Actual**: please provide actual figures for **2005/06 - 2008/09** in a table below For 2005/06 – 2007/08, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 51-82) They are the ones you submitted last year If they are OK, please copy them If incorrect, please modify them In addition, please write an actual figure for 2008/09

3 If there is no infrastructure or machinery mentioned in the table, please write 0

4 If the information is not available, please write N/A

5 Please write a reason if infrastructure or machinery in question is not working

Table OP2: Number of agricultural marketing infrastructure and machinery

Machinery	Status		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Reasons for not working
Livestock primary markets [Place where livestock keepers / farmers meet traders]	Working	Target									
		Actual									
	Not working	Actual									
Livestock secondary markets [Place where traders meet butcher men or other traders]	Working	Target									
		Actual									
	Not working	Actual									

Machinery	Status		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Reasons for not working
Livestock holding grounds	Working	Target									
		Actual									
	Not working	Actual									
Feeder road (km) [Roads that connect villages to main roads] *Obtain this data from an officer in charge in your LGA; he/she may not be in DALDO's office	Working	Target									
		Actual									
	Not working	Actual									
Abattoirs [A modern building where animals are slaughtered and meat processed into products, e g sausages, canned meat]	Working	Target									
		Actual									
	Not working	Actual									
Slaughter house [A facility where animals are slaughtered into carcasses (no processing)]	Working	Target									
		Actual									
	Not working	Actual									
Pulperies / ginneries / shelling (coffee, cacao, cotton, cashew nut etc)	Working	Target									
		Actual									
	Not working	Actual									
Hides and skin shed (banda)	Working	Target									
		Actual									
	Not working	Actual									
Milling machines (rice and maize)	Working	Target									
		Actual									
	Not working	Actual									
Oil extracting machines	Working	Target									
		Actual									
	Not working	Actual									

Indicator 5 (OP3)	Number of extension officers trained on improved technological packages
Definition	Number of extension officers who has received training as a mid-career development in the year on improved technological packages on crop, livestock, and marketing and processing

Instructions

1 **Target**: please provide target figures for **2008/09 - 2012/13** in a table in the next page For 2008/09 – 2011/12, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 83-87) They are the ones you submitted last year If they are OK, please copy them, but disaggregate them into male and female If incorrect, please modify them In addition, please write a target for 2012/13 Please be careful in filling out the format as it has been slightly modified

2 **Actual**: please provide actual figures for **2005/06 - 2008/09** in a table in the next page For 2005/06 – 2007/08, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 83-87) They are the ones you submitted last year If they are OK, please copy them If incorrect, please modify them In addition, please write an actual figure for 2008/09, disaggregated in male and female

3 If there is no extension officers trained in specific category, please write 0

4 If the information is not available, please write N/A

Table OP3: Number of extension officers trained in each year on improved technologies (M: male, F: female)

		Example		2005/06		2006/07		2007/08		2008/09		2009/10		2010/11		2011/12		2012/13	
Category		*M*	*F*							*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
(1) Total number of extension officers in the district	Target																		
	Actual	28	22																
(2) Total number of extension officers who attended at least one training	Target																		
	Actual	12	10																
(3) Number of extension officers trained on Crop	Target																		
	Actual	4	6																
(4) Number of extension officers trained on Livestock	Target																		
	Actual	7	3																
(5) Number of extension officers trained on Marketing and processing	Target																		
	Actual	5	5																

Notes: 1) Do not double-count the officers

i) Count him/her separately if he/she attended both crop and livestock courses (i e , one in crop and one in livestock, although he/she is the same person)

ii) Count him/her once if he/she attended more than one courses in crop or livestock or marketing (e g , if one officer attended three different courses on livestock, he/she still counted once)

2) Both short and long courses are included

3) Improved technologies include the following

Crop: Improve seeds, herbicides, pesticides, fungicides, crop storage, fertilizer, spacing, erosion control, irrigation, vermin/rodent control, agro-forestry, etc

Livestock: Improved bulls, pasture establishment, feed and proper feeding, housing, proper milking, disease control dipping/spraying, head/flock size and selection, calf rearing, Artificial Insemination, etc

Marketing and processing: Grading, packing, labelling, contract farming, weight and measure, outreach farming, access to information, etc

Indicator 6 (OP4)	Rural micro finance institutions serving farmers
Definition	Number of SACCOS, members and the amount of their loans for agriculture, livestock and business (e g , marketing and processing)

Instructions

1 **Target**: please provide target figures for **2008/09 - 2012/13** in a table in the next page For 2008/09 – 2011/12, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 88-92) They are the ones you submitted last year If they are OK, please copy them, but disaggregate them into male (M), female (F) and group (G) as for the number of SACCOS members If incorrect, please modify them In addition, please write a target for 2012/13 Please be careful in filling out the format as it has been slightly modified

2 **Actual**: please provide actual figures for **2005/06 - 2008/09** in a table in the next page For 2005/06 – 2007/08, please check the figures of your LGA in the ASDP M&E Progress Report 2008/09 (page 88-92) They are the ones you submitted last year If they are OK, please copy them If incorrect or missing, please write modified figures In addition, please write an actual figure for 2008/09 by disaggregating it into male and female

3 M: Male, F: Female, G: Group

4 If there are no SACCOSs, please write 0 in respective cell

5 If the information is not available, please write N/A

Table OP4: Number of SACCOS and amount of loans for agriculture and livestock in the district (M: male, F: female, G: Group)

		2005/06			2006/07			2007/08			2008/09			2009/10			2010/11			2011/12			2012/13		
Number of SACCOS	Target																								
	Actual																								
Number of SACCOS memberships		*M*	*F*	*G*	*M*	*F*	*G*	*M*	*F*	*G*	*M*	*F*	*G*	*M*	*F*	*G*	*M*	*F*	*G*	*M*	*F*	*G*	*M*	*F*	*G*
	Target																								
	Actual																								
Amount of loans for agriculture (Tsh)	Target																								
	Actual																								
Amount of loans for livestock (Tsh)	Target																								
	Actual																								
Amount of loans for business (e g , marketing and processing) (Tsh)	Target																								
	Actual																								

Indicator 7 (OP9)	Proportion of female members of Planning and Finance Committee
Definition	Proportion of female members of Planning and Finance Committee in each district

Instructions

1 **Target:** Please provide target figures for **2007/08 - 2012/13** in a table below

2 **Actual**: please provide actual figures for **2005/06 - 2008/09** in a table below

3 Please compute "Total" and "Percentage of female members" as instructed in the table

4 Please check that the "Percentage of female members" in 2007/08 – 2011/12 (target) and 2005/06 – 2007/08 (actual) are the same as those shown in the ASDP M&E Progress Report 2008/09 (page 93) If different, please make sure that the figures you have entered in this questionnaire are accurate

5 If the information is not available, please write N/A

Table OP9: Number of Planning and Finance Committee members of the district by gender

		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Male	Target (1)								
	Actual (2)								
Female	Target (3)								
	Actual (4)								
Total (male and female)	Target (5) = (1) +(3)								
	Actual (6) = (2) + (4)								
Percentage of female members	Target [100*(3) / (5)]								
	Actual [100*(4) / (6)]								

This is the end of this questionnaire

Please obtain a signature of DED

DED

Date

Please submit filled-in questionnaire to the M&E Unit, DPP, MAFC.

Fax: 022-286-2077 (attention to Mr. John Maige, Room No.119, DPP)

E mail: maige2001@yahoo.co uk

Thank you very much for your cooperation

Annex 3. List of LGAs that submitted filled-out questionnaires (as of 26/08/2010)

S/No	REGION	Submitted	Not Submitted	S/No	REGION	Submitted	Not Submitted
1	DODOMA	Chamwino		68	IRINGA	Makete	
2		Bahi		69		Mufindi	
3		Dodoma M. C.		70		Njombe D.C.	
4		Kondoa		71		Njombe T.C.	
5		Kongwa		72	MBEYA	Chunya	
6		Mpwapwa		73		Mbarali	
7	ARUSHA	Arusha D.C.		74		Mbeya City. C	
8		Arusha M.C.		75		Mbeya D. C.	
9		Meru		76		Mbozi	
10		Karatu		77		Kyela	
11		Monduli		78		Rungwe	
12		Longido		79		Ileje	
13		Ngorongoro		80	SINGIDA	Singida M. C.	
14	KILIMAN JARO	Hai		81		Singida D. C.	
15		Same		82		Manyoni	
16		Moshi D. C		83		Iramba	
17		Rombo		84	TABORA	Tabora M. C.	
18		Mwanga		85		Igunga	
19		Siha		86		Nzega	
20		Moshi M. C.		87		Sikonge	
21	TANGA	Handeni		88		Uyui	
22		Kilindi		89		Urambo D.C	
23		Korogwe D. C.		90	RUKWA	Sumbawanga D. C.	
24		Lushoto		91		Sumbawanga T. C.	
25		Muheza		92			Nkasi
26		Mkinga DC		93		Mpanda D. C.	
27		Pangani		94	KIGOMA	Kasulu	
29		Korogwe T. C.		95		Kibondo	
30		Tanga C. C.		96		Kigoma D. C.	
31	MOROGORO	Morogoro M. C.		97		Kigoma T. C.	
32		Morogoro D. C.		98	SHINYANGA	Bariadi	
33		Mvomero		99		Bukombe	
34		Kilombero		100		Maswa	
35		Ulanga		101		Kahama	
36		Kilosa		102		Kishapu	
37	PWANI	Kibaha T. C.		103		Shinyanga D. C.	
38		Kibaha D.C		104		Shinyanga M. C.	
39		Bagamoyo		105		Meatu	
40		Mafia		106	KAGERA	Biharamulo	
41		Mkuranga		107		Bukoba D. C.	
42		Kisarawe		108		Bukoba M. C.	
43		Rufiji		109			Chato
44	DAR ES SALAAM	Ilala		110		Karagwe	
45		Kinondoni		111		Misenyi	
46		Temeke		112			Muleba
47	LINDI	Kilwa		113		Ngara	
48		Lindi D. C.		114	MWANZA	Ilemela/ Nyamagana	
49		Lindi T. C.		115		Magu	
50		Liwale		116		Geita	
51		Ruangwa		117		Ukerewe	
52		Nachingwea		118		Missungwi	
53	MTWARA	Mtwara T.C.		119		Sengerema	
54		Mtwara D.C.		120		Kwimba	
55		Masasi		121	MARA	Musoma M. C.	
56		Nanyumbu		122		Musoma D. C.	
57		Tandahimba		123		Serengeti	
58		Newala		124		Bunda	
59	RUVUMA	Songea M.C.		125		Rorya	
60		Songea D.C.		126		Tarime	
61		Namtumbo		127	MANYARA	Babati T. C.	
62		Mbinga		128		Mbulu	
63		Tunduru		129		Hanang	
64	IRINGA	Iringa D.C		130		Kiteto	
65		Iringa M.C.		131		Babati D. C.	
66		Kilolo		132		Simanjiro	
67		Ludewa		**Total**	**129**	**3**	

Annex 4: Commodities included in "agricultural exports" (IM3)

HS Code	Description	HS Code of Commodities included
Section 1: Animal and Animal Products		
01	Live animals	0101-0105
02	Meat and edible meat offal	0201-0207, 0209, 021011-021020
03	Fish and crustaceans, mollusks and other aquatic invertebrates	Not included
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	All: 0401-0410
05	Products of animal origin, not elsewhere specified or included	0502-0506, 051110, 051199
Section 2: Vegetable Products		
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	All: 0601-0604
07	Edible vegetables and certain roots and tubers	All: 0701-0714
08	Edible fruit and nuts; peel of citrus fruit or melons	All: 0801-0814
09	Coffee, tea, maté and spices	All: 0901-0910
10	Cereals	All: 1001-1008
11	Products of the milling industry; malt; starches; inulin; wheat gluten	All: 1101-1109
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	1201-1211, 121291-121299, 1213-1214
13	Lac; gums, resins and other vegetable saps and extracts	All: 1301-1302
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	All: 1401-1404
Section 3: Animal or Vegetable Fats and Oils and their Cleavage Products, Prepared Edible Fats, Animal or Vegetable Waxes		
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	1501-1503, 1505-1522
Section 4: Prepared Foodstuffs, Sprits and Vinegar, Tobacco and Manufactured Tobacco Substitutes		
16	Preparations of meat, of fish or of crustaceans, mollusks or other aquatic invertebrates	1601-1603
17	Sugars and sugar confectionery	All: 1701-1704
18	Cocoa and cocoa preparations	All: 1801-1806
19	Preparations of cereals, flour, starch or milk; pastry cooks' products (bakers wares)	All: 1901-1905
20	Preparations of vegetables, fruit, nuts or other parts of plants	All: 2001-2009
21	Miscellaneous edible preparations	All: 2101-2106
22	Beverages, spirits and vinegar	All: 2201-2209
23	Residues and waste from the food industries; prepared animal fodder	All: 2301-2309
24	Tobacco and manufactured tobacco substitutes	All: 2401-2403
Section 7: Plastics and Articles Thereof; Rubber and Articles Thereof		
39	Plastics and articles thereof	Not included
40	Rubber and articles thereof.	4001
Section 8: Raw Hides and Skins, Leather, Fur skins and Articles Thereof, Saddlery and Harness, Travel Goods, Handbags and Similar Containers, Articles of Animal Gut (Other than Silk-Worm Gut)		
41	Raw hides and skins (other than fur skins) and leather	All: 4101-4115
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	Not included
43	Fur skins and artificial fur; manufactures thereof	4301-4302
Section 11: Textiles and Textile Articles		
50	Silk	5001-5003
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	5101-5105
52	Cotton	5201-5203
53	Other vegetable textile fibers; paper yarn and woven fabrics of paper yarn	5301-5305
Chapters 54-63 of this section are not shown here since they are man-made fibers, textiles and apparels.		

Annex 5: Commodities included in "processed exported agricultural products" (OC6)

HS Code	Description	HS Code of commodities included
Section 1: Animal and Animal Products		
01	Live animals	None
02	Meat and edible meat offal	None
03	Fish and crustaceans, molluscs and other aquatic invertebrates	Not included in agric. exports
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	0401-0406, 04090010
05	Products of animal origin, not elsewhere specified or included	None
Section 2: Vegetable Products		
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	None
07	Edible vegetables and certain roots and tubers	0710-0711
08	Edible fruit and nuts; peel of citrus fruit or melons	0811-0813
09	Coffee, tea, mate and spices	090121-090190, 090230, 090240, 090412, 090420, 090620
10	Cereals	None
11	Products of the milling industry; malt; starches; inulin; wheat gluten	All: 1101-1109
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	None
13	Lac; gums, resins and other vegetable saps and extracts	None
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	None
Section 3: Animal or Vegetable Fats and Oils and their Cleavage Products, Prepared Edible Fats, Animal or Vegetable Waxes		
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	1501-1503, 1505-1522
Section 4: Prepared Foodstuffs, Sprits and Vinegar, Tobacco and Manufactured Tobacco Substitutes		
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	1601-1603
17	Sugars and sugar confectionery	All: 1701-1704
18	Cocoa and cocoa preparations	1803-1806
19	Preparations of cereals, flour, starch or milk; pastry cooks' products (bakers wares)	All: 1901-1905
20	Preparations of vegetables, fruit, nuts or other parts of plants	All: 2001-2009
21	Miscellaneous edible preparations	All: 2101-2106
22	Beverages, spirits and vinegar	All: 2201-2209
23	Residues and waste from the food industries; prepared animal fodder	All: 2301-2309
24	Tobacco and manufactured tobacco substitutes	2402-2403
Section 7: Plastics and Articles Thereof; Rubber and Articles Thereof		
39	Plastics and articles thereof	Not included in agric. exports
40	Rubber and articles thereof	None
Section 8: Raw Hides and Skins, Leather, Fur skins and Articles Thereof, Saddler and Harness, Travel Goods, Handbags and Similar Containers, Articles of Animal Gut (Other than Silk-Worm Gut)		
41	Raw hides and skins (other than fur skins) and leather	4104-4115
2	Articles of leather; saddler and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk worm gut)	Not included in agric. exports
43	Fur skins and artificial fur; manufactures thereof	4302
Section 11: Textiles and Textile Articles		
50	Silk	None
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	5105
52	Cotton	5203
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	None
Chapters 54-63 of this section are not shown here since they are man-made fibres, textiles and apparels.		

Note: A complete set of HS codes can be obtained from World Business Contact Centre, *HS Codes: Harmonization System Codes - Commodity Classification* (http://www hscodes.com/)