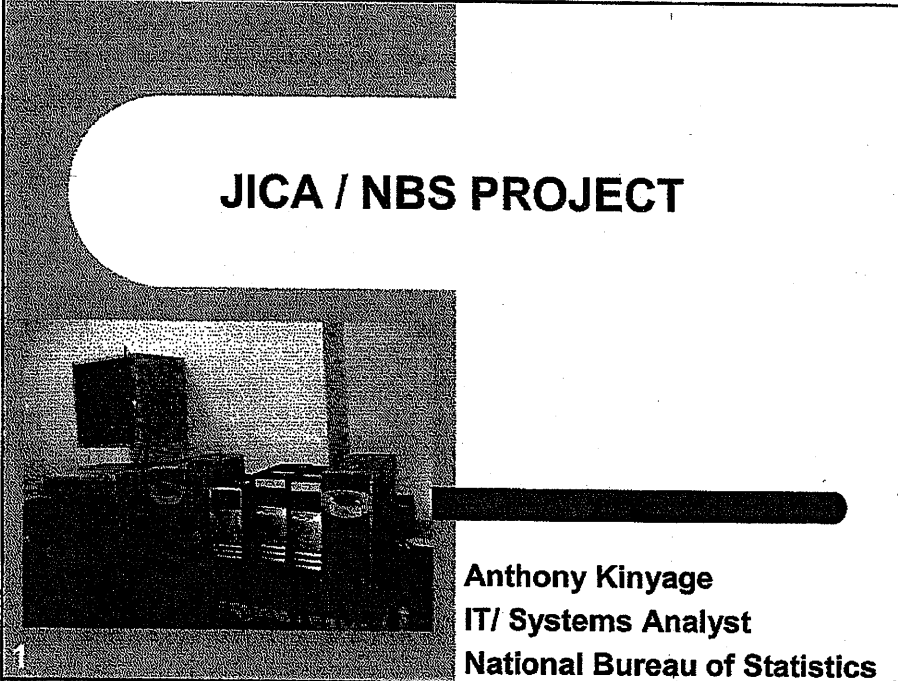


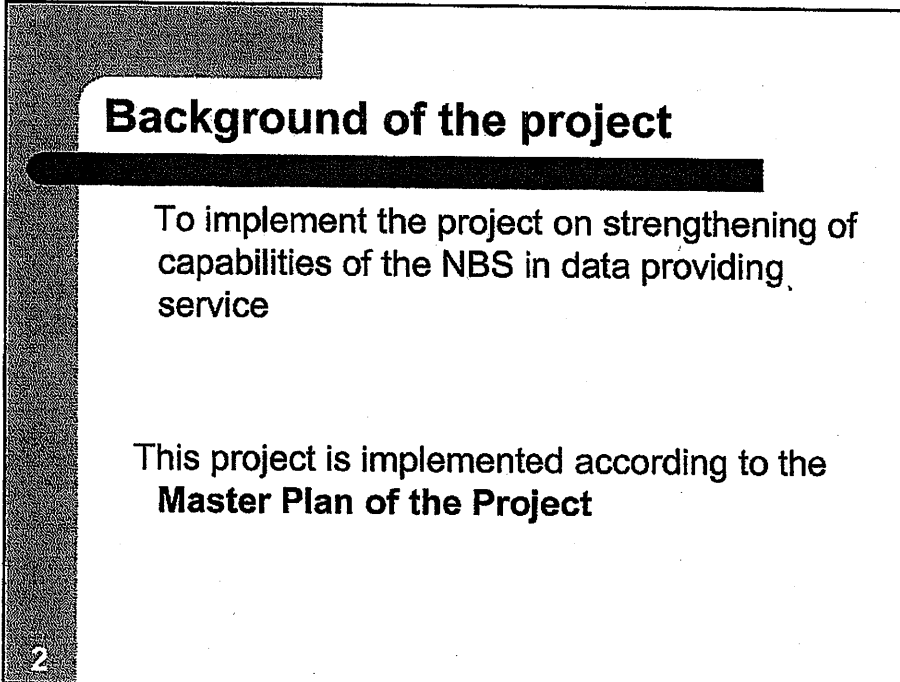
6. JICA/NBS PROJECT (C/Pによるプロジェクトプレゼンテーション資料)



JICA / NBS PROJECT

Anthony Kinyage
IT/ Systems Analyst
National Bureau of Statistics

1



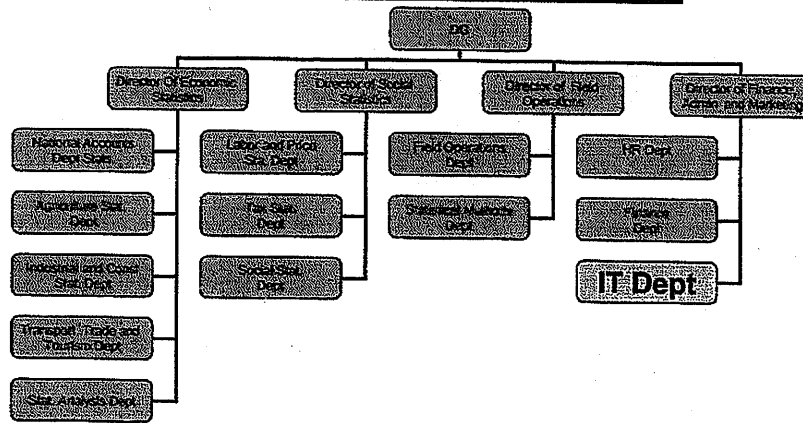
Background of the project

To implement the project on strengthening of capabilities of the NBS in data providing service

This project is implemented according to the **Master Plan of the Project**

2

Background...source of the issue



3

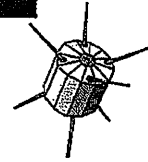
Problems which existed..

- No centralized Database System to archive NBS Products
- The NBS Library was not properly organised
- Dissemination was not possible through the website

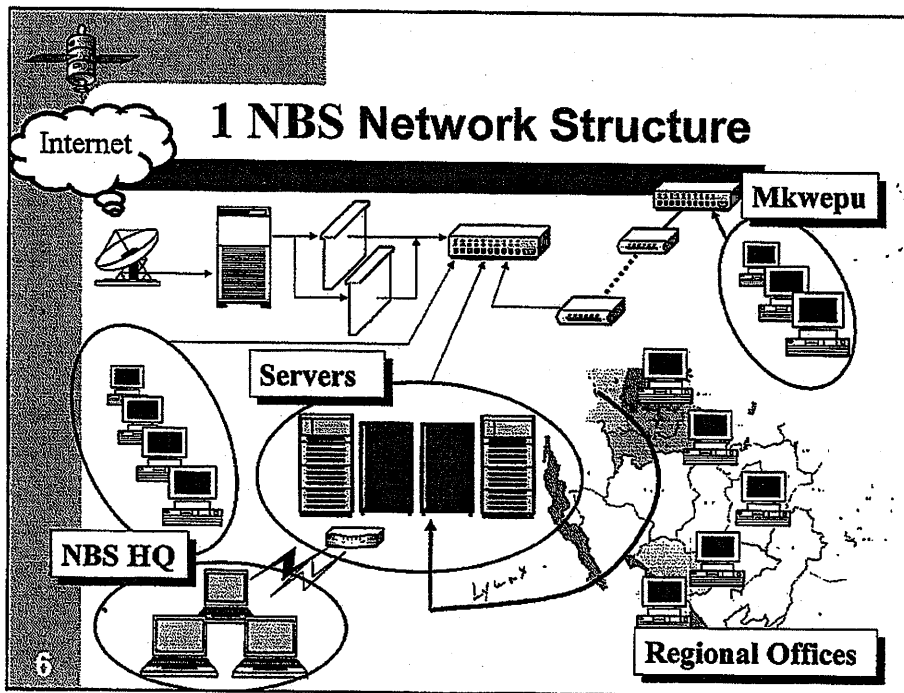
4

Implementation

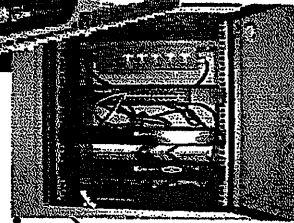
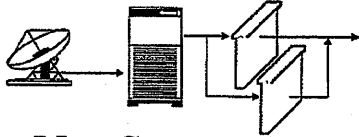
1. NBS Network System
2. NBS Library
3. TISD & Interface Software



5



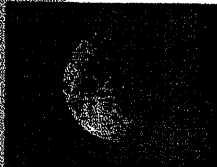
Network Security



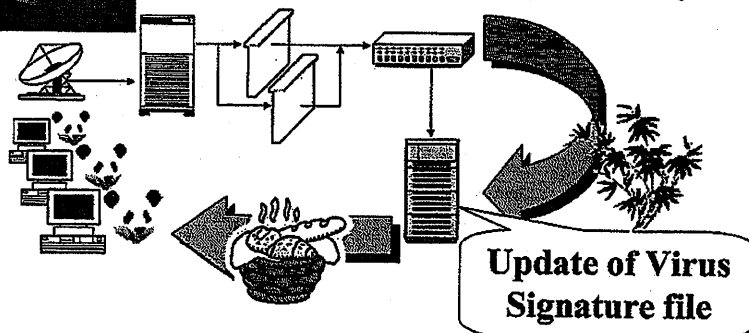
- **Nat Server (Packet Filtering)**
- **SquidGuard (Web-Content Filter)**
Block Websites by Blacklists
- **GateDefender (Anti-Malware)**
Report to Network Administrators

7

Clients Security



Panda Platinum -Internet Security

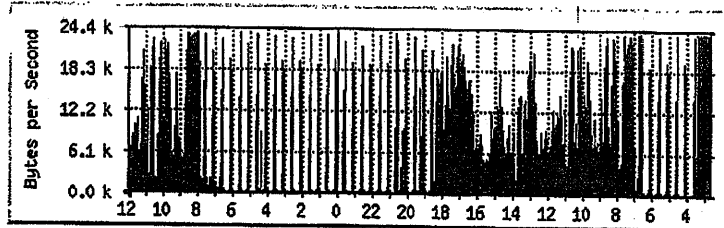


8

Network Monitoring -1-

•MRTG -Traffic Analysis

'Daily' Graph (5 Minute Average)



Max In:24.1 kB/s (1.9%) Average In:10.5 kB/s (0.8%) Current In:11.8 kB/s (0.9%)
Max Out:4982.0 B/s (0.4%) Average Out:768.0 B/s (0.1%) Current Out:1694.0 B/s (0.1%)

9

2 NBS Library

1. Statistical reference services
2. Products inventories
3. Extraction of Statistical Data from TISD
4. Customer Care
5. Available Books for sale
6. Secretarial services for customers

65 person visits per week

10

3. NBS Website

- Global Website

<http://www.nbs.go.tz>



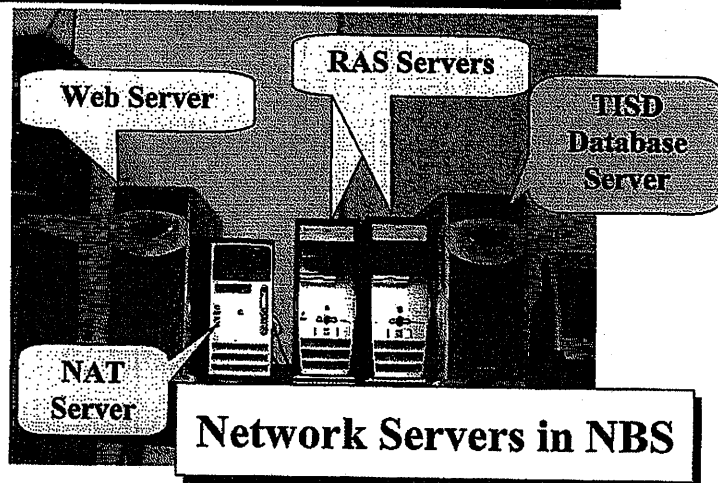
- Local Website

<http://www.nbs/library>



11

3. TISD & Interface Software



12

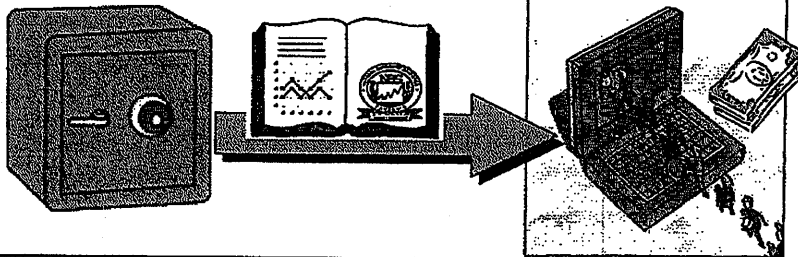
Purpose of The TISD

NBS is able to provide Policy makers, Administrators, Academicians, NGOs, Development partners, and other general public with more reliable statistical data in a timely manner.

13

Roles of TISD

- **Archive of NBS Products**
- **Dissemination / Sale to Customers**
- **Productive Storage of Raw data**



14

Role of TISD Cont....

- Users of statistical data (Officers of NBS Regional Office, line Ministries, etc.) will be able to use the Database appropriately.

15

Structure of Tanzania Integrated Statistical Database (TISD)

TISD is made up of five Layers.

16

Structure of (TISD) cont...

The first layer consists of seven nodes.

- Volumes
- Books
- Statistical Tables
- Other Documents
- Tanzania Social Economic Database (TSED)
- Raw Data
- Scanned Publications

17

Structure of (TISD) cont...

**Second layer consists of the Name
of Census, Survey, or Indicator**

18

Structure of (TISD) cont...

Third Layer gives information about time, when the census or survey was conducted

19

Structure of (TISD) cont...

Fourth Layer gives information about the area where Census or Survey was conducted.

20

Structure of (TISD) cont...

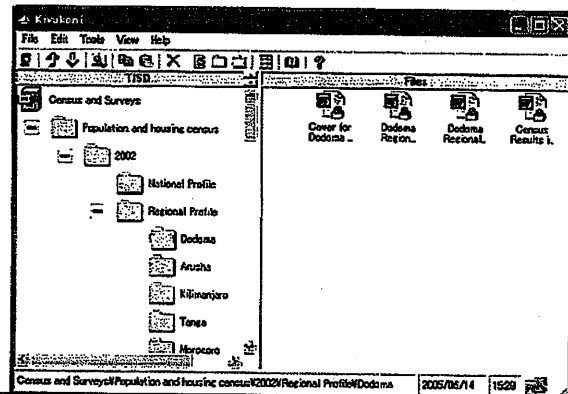
The fifth layer represents the title of the statistical survey or publication

21

Management side Interface



Kivukoni

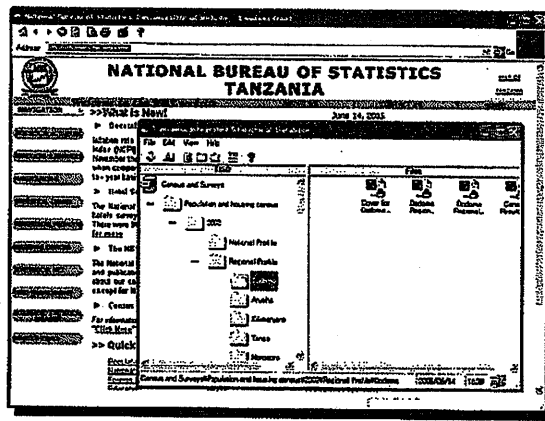


22

Customer side Interface



Kivukoni Front



23

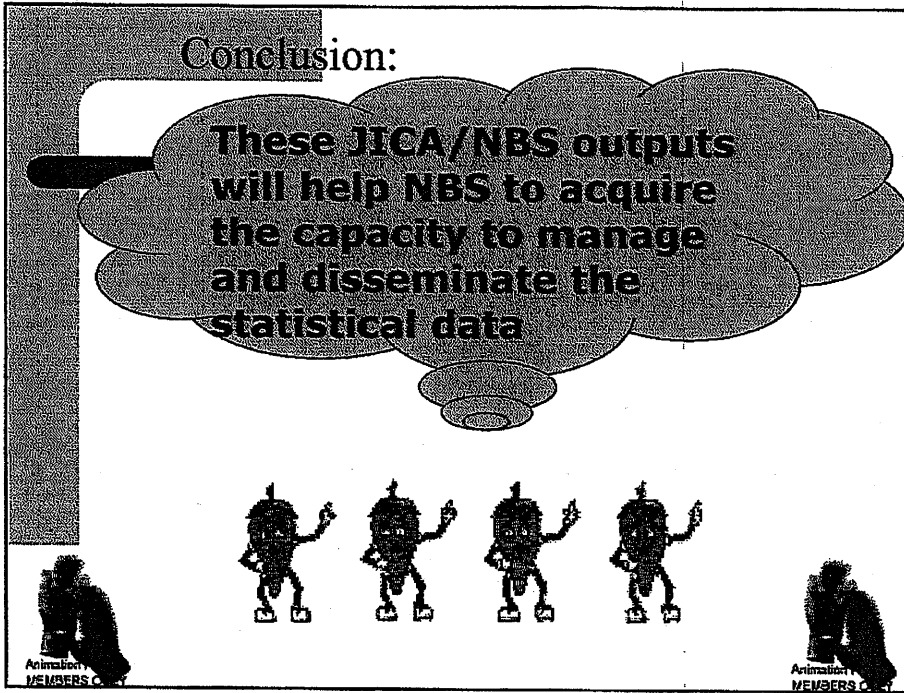
Training

- Statisticians and planners from line Ministries and NBS Staff
 1. Basic Excel by using statistics from the TISD and website
 2. How to apply and use statistics
 3. Database Creation and management by IT staff

24

Conclusion:

**These JICA/NBS outputs
will help NBS to acquire
the capacity to manage
and disseminate the
statistical data**



Tanzanian Integrated Statistical Data Base
(TISD)

Kivukoni Front for Library Reception

User Manual

25.Aug. 2006

H.Suzuki

Related Software

When we want to access the Tanzania Integrated Statistical Database (TISD), we get through the software named 'Kivukoni'.

Kivukoni is built up with three components:

Kivukoni

Database management software

Handling the structure of TISD

Upload to and Download from TISD

Kivukoni Front for Library Reception (for librarian).

Library catalogue management

Add and Delete library catalogue

Export Stored Catalogue for print version

Retrieving stored data from TISD

Kivukoni Front (for end-users)

Search file and browse its properties of Database and Library Catalogue

The relationship between component software and its functions are shown in the following table.

Relationship between Software and Functions

Software \ Function	Database Handling							Library Catalogue Handling			
	Structure Management	User Management	Upload files	File Property Management	Download files	Data Search & Browse Property	Data Browse	Add	delete	export Catalogue	Search
Kivukoni [A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]				
Kivukoni Front [B] for Library Reception					[B]	[B]	[B]	[B]	[B]	[B]	[B]
Kivukoni Front [C] (for End-user)						[C]					[C]

How to Use Kivukoni Front for Library Reception

A. Library Catalogue Management

A-1. Main Screen

Start up "Kivukoni Front for Library Reception".

Then, the main screen appears.

The main screen of "Kivukoni Front for Library Reception" looks like NBS website, however, some specific icons are embedded.

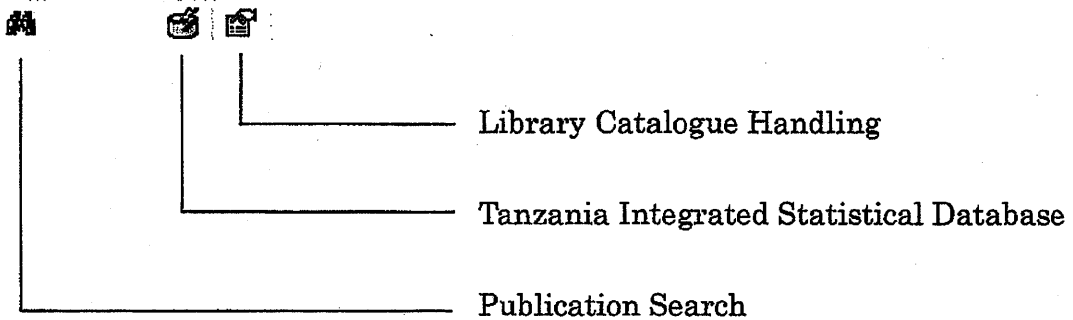
Icons for "Kivukoni Front for Library Reception"

Main Screen

The screenshot shows the main screen of the National Bureau of Statistics Tanzania website. The page layout includes a header with the NBS logo and name, a navigation menu on the left, a central content area with news and statistics, and a right sidebar with 'Check Your Mail' and 'Click here for Currency Exchange Rates'. The main content area is titled 'NATIONAL BUREAU OF STATISTICS TANZANIA' and features a 'Welcome to the NBS website' message. The page also includes a search bar, a 'Go' button, and a footer with contact information and copyright details.

A-2. Icons for "Kivukoni Front for Library Reception"

Each icon means:



A-3. Library Catalogue Handling

Click on the  button to start Library Catalogue handling.

Then, the Library Catalogue Handling screen appears as bellow.

All of the maintenance of Library Catalogue is done through this screen.

This screen consists of three parts:

- a) Basic Code Management
- b) Contents of Document's Record
- c) Catalogue Management

The screenshot shows a window titled "Book Catalogue Input". It contains several input fields and buttons. On the right side, there are three groups of fields and buttons, each indicated by a bracket:

- Basic Code:** Includes fields for Country (Tanzania), Subject (General), and Frequency (Annual). Each field has "Add", "Edit", and "Delete" buttons.
- Contents of Document's Record:** Includes fields for Label (TANZA 0A2), Publisher (Tanzania. Department of Statistics / Ministry of State Planning), Title (Zanzibar Statistical Abstract.), and Sub Title. It also has "Search", "<", ">", and "No." buttons.
- Catalogue Management:** Includes fields for Year (1979, 1981-82, 1984, 1989, 1995, 1997.), Search Key, and Remarks. It has "New Record", "Update", "Delete", and "Export" buttons.

A- 3a. Basic Code Management

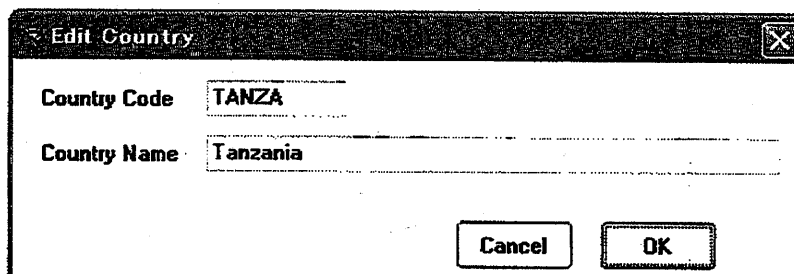
There are pre-installed basic codes in the pull down menu from the printed second edition of "Catalogue of Statistical Publication".

	Name of Code	Pull down menu			
Country	Tanzania	▼	Add	Edit	Delete
Subject	General	▼	Add	Edit	Delete
Frequency	Annual	▼	Add	Edit	Delete

Each Name has a specific Code and that code is used for creating new document's record and accessing to a category consists of these codes in [Search] function.

[Edit] When you need to edit existing Code and/or its Name, select target Name from pull down menu and click on the [Edit] button.

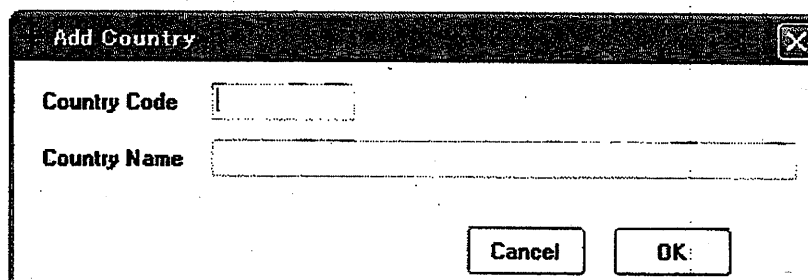
You can see the window for editing Code as bellow.



Edit it and click on the [OK] button.

[Add] When you want to add new Code, click on the [Add] button.

The window for adding new code appears as bellow.



Fill new code and its name then click on the [OK] button.

[Delete] When you need to delete existing Code and its Name, select target Name from pull down menu and click on the [Delete] button.

A- 3b. Contents of Document's Record

Document's Record consists of Label, Publisher, Title, Sub Title, Year, Search Key and Remarks.

Label	TANZA 0A2	Search	<	>	No.
Publisher	Tanzania. Department of Statistics / Ministry of State Planning				
Title	Zanzibar Statistical Abstract.				
Sub Title					
Year	1979, 1981-82, 1984, 1989, 1995, 1997.				
Search Key					
Remarks					

[<] and [>] Click on the [<] button or [>] button to advance or reduce Label number one-by-one. You can see information of selected label.

[Search] This button works with Basic Code described above.
Select Country, Subject and Frequency you want to browse.
Click on the [Search] button.
Then you can get first label of selected category.
After that, use [>] button to see target catalogue.

[No.] This [No.] means 'Accession Number'.
When you want to change the accession number of the current displayed document label, click on the [No.] button. You can see the window as bellow.
Then, key in new accession number and click on the [OK] button.

A- 3c. Catalogue Management

Four buttons for Catalogue Management are at the bottom of the Library Catalogue Handling Screen named 'Book Catalogue Input'.



[New Record]

When you want to add new record of document, the following procedure is recommended.

- i) Select the category fits for new record from Basic Codes (Country, Subject, Frequency).
- ii) Click on the [New Record] button.
- iii) The screen for new record appears as below.

The screenshot shows a window titled 'Book Catalogue Input'. It contains a form with the following fields and controls:

- Country:** A dropdown menu showing 'Japan'. To its right are three buttons: 'Add', 'Edit', and 'Delete'.
- Subject:** A dropdown menu showing 'Banking, Public Finance and National Accounts'. To its right are three buttons: 'Add', 'Edit', and 'Delete'.
- Frequency:** A dropdown menu showing 'Irregular'. To its right are three buttons: 'Add', 'Edit', and 'Delete'.
- Label:** A text input field containing 'JAPAN 812'.
- Publisher:** An empty text input field.
- Title:** An empty text input field.
- Sub Title:** A large empty text area.
- Year:** An empty text input field.
- Search Key:** An empty text input field.
- Remarks:** An empty text input field.
- At the bottom of the form are two buttons: 'Add' and 'Finish'.

In this case, Country is 'Japan', Subject is 'Banking, Public Finance and National Accounts' and Frequency is 'Irregular'. This category, 'JAPAN 81', has already 1 record. So, software set 'JAPAN 812', next to the last record

of that category, for new record label.

- iv) Fill all information you have to put on.
- v) Click on the [Add] button.
- vi) New record is added to the Library Catalogue, and Label in the screen is automatically replaced to next number for readiness adding another new record as below.

The screenshot shows a window titled "Book Catalogue Input". It contains the following fields and controls:

- Country:** A dropdown menu showing "Japan". To its right are buttons for "Add", "Edit", and "Delete".
- Subject:** A dropdown menu showing "Banking, Public Finance and Nati". To its right are buttons for "Add", "Edit", and "Delete".
- Frequency:** A dropdown menu showing "Irregular". To its right are buttons for "Add", "Edit", and "Delete".
- Label:** A text field containing "JAPAN 813".
- Publisher:** An empty text field.
- Title:** An empty text field.
- Sub Title:** An empty text field.
- Year:** An empty text field.
- Search Key:** An empty text field.
- Remarks:** An empty text field.
- Buttons:** At the bottom of the window are two buttons: "Add" and "Finish".

- vii) Confirm Label in the screen, and go to the procedure iv), or re-select category from Basic Codes (Country, Subject, Frequency), then go to the procedure iv).
- viii) Click on the [Finish] button to finish adding new record.

* Note * [Add] button always creates new record even if all of information from Publisher to Remarks is null.

[Update] When you want to update existing record like 'The Economic Survey' that is published annually, select target record and edit it (for example; add year) and click on the [Update] button.

[Delete] Click on the [Delete] button to delete the selected record on the screen.

[Export]


Click on the [Export] button to export full contents of the stored library catalogue in text mode ('.txt' or '.csv').

Output file is useful to check the records stored and to make a manuscript for the print version of the library catalogue.

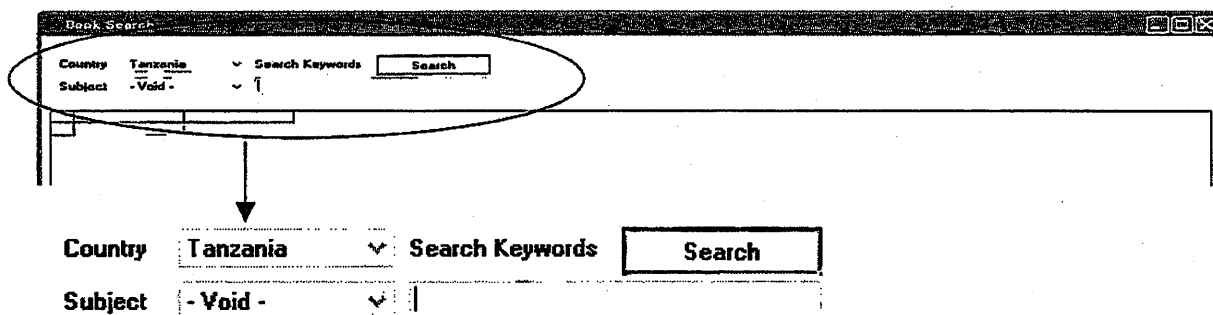
{Export Procedure}

- i) Click on the [Export] button.
- ii) New screen same as Windows [Save as...] command appears.
- iii) Select Output format from '.txt' or '.csv'
' .txt' format file is suitable for Word or Text Editor, and '.csv' format file is easily to be read into Excel book.
Operation for storing output file is same as usual Windows operation.

B. Publication Search

When you want to search some publications from the Library Catalogue, click on the  button on the top of the Main Screen (see page. 3).

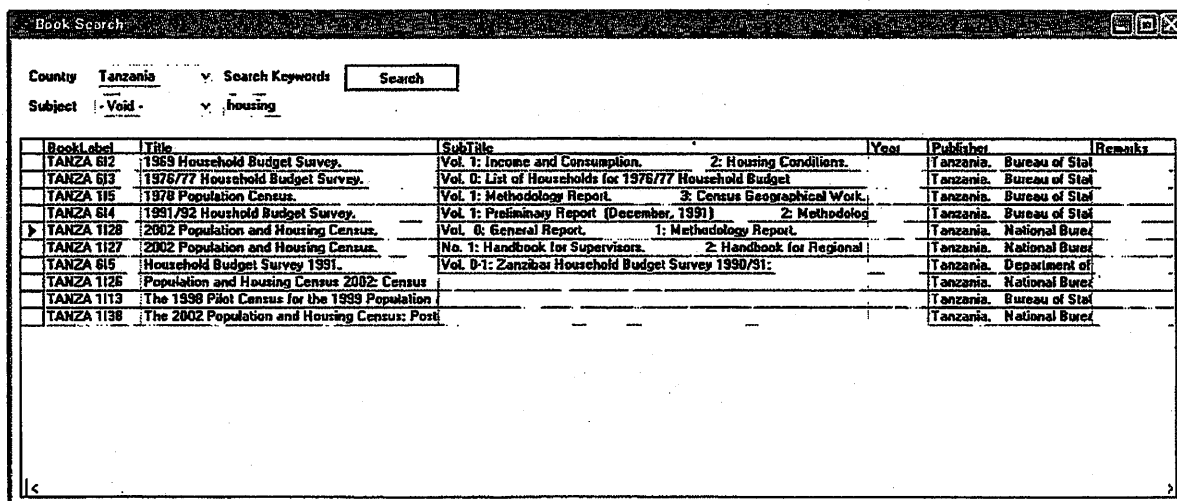
Publication Search screen appears and you can set conditions for search.



The screenshot shows a window titled "Book Search". At the top, there are two dropdown menus: "Country" set to "Tanzania" and "Subject" set to "-Void-". To the right of these is a "Search Keywords" field with a "Search" button. A red oval highlights the "Country" and "Subject" dropdowns. Below this, a larger version of the same search form is shown, with the "Search" button highlighted by a red box.

Select Country and/or Subject and/or input some keywords into the 'Search Keywords' box, and click on the [Search] button.

"Kivukoni Front" checks all of the contents of document's records described in A-3b, then returns search results that meet search conditions as bellow.



The screenshot shows the "Book Search" window with search criteria: Country: Tanzania, Subject: -Void-, and Search Keywords: housing. Below the search criteria is a table of search results.


BookLabel	Title	SubTitle	Year	Publisher	Remarks
TANZA 612	1969 Household Budget Survey.	Vol. 1: Income and Consumption. 2: Housing Conditions.		Tanzania. Bureau of Stat	
TANZA 613	1976/77 Household Budget Survey.	Vol. 0: List of Households for 1976/77 Household Budget		Tanzania. Bureau of Stat	
TANZA 115	1978 Population Census.	Vol. 1: Methodology Report. 3: Census Geographical Work.		Tanzania. Bureau of Stat	
TANZA 614	1981/82 Household Budget Survey.	Vol. 1: Preliminary Report (December, 1991) 2: Methodolog		Tanzania. Bureau of Stat	
TANZA 1128	2002 Population and Housing Census.	Vol. 0: General Report. 1: Methodology Report.		Tanzania. National Burea	
TANZA 1127	2002 Population and Housing Census.	No. 1: Handbook for Supervisors. 2: Handbook for Regional		Tanzania. National Burea	
TANZA 615	Household Budget Survey 1991.	Vol. 0-1: Zanzibar Household Budget Survey 1990/91:		Tanzania. Department of	
TANZA 1126	Population and Housing Census 2002: Census			Tanzania. National Burea	
TANZA 1113	The 1998 Pilot Census for the 1999 Population			Tanzania. Bureau of Stat	
TANZA 1136	The 2002 Population and Housing Census: Post			Tanzania. National Burea	

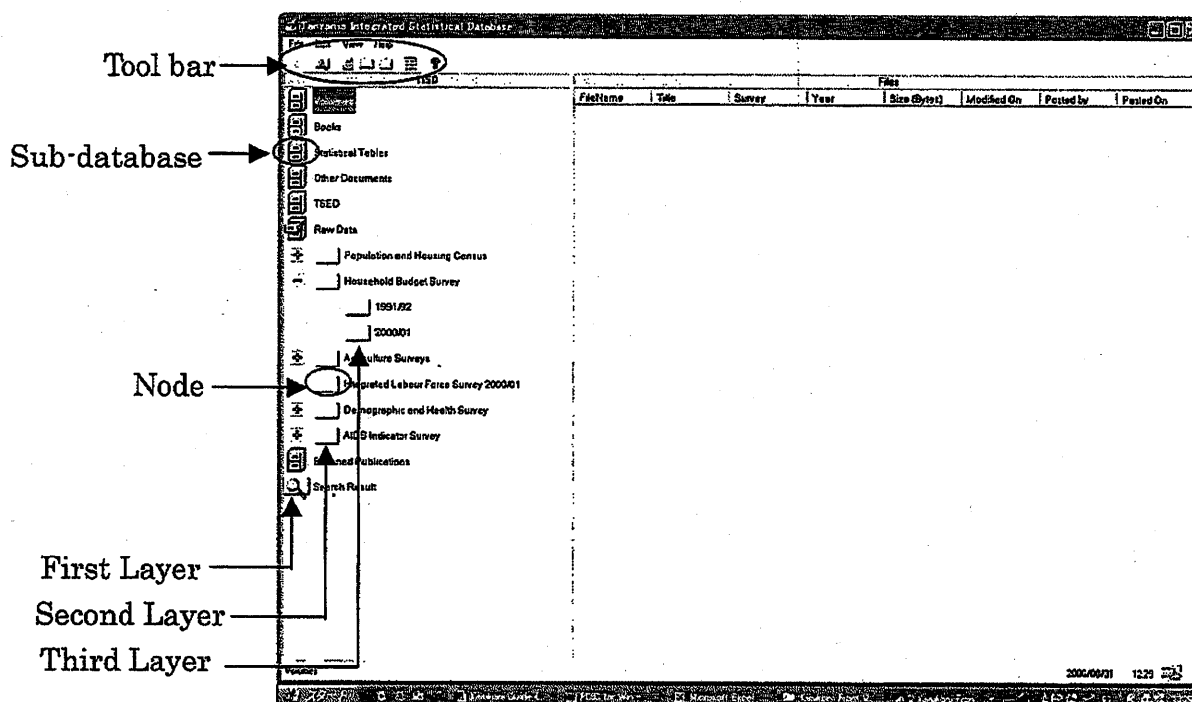
* Note * User can input more than one keyword into the Search Keywords box.

At that time, the sequence of keywords is important. In the case of the sequence of keywords is meaningful, keywords are treated as if it is one keyword. And in the case of it is meaningless, keywords are treated separate in 'OR' condition.

C. Tanzanian Integrated Statistical Database (TISD)

Two functions are assembled in “Kivukoni Front for Library Reception” for handling TISD. Those are [Search] and [Download].

Click on the  button to open TISD on the top of the Main Screen (see page 3). Then, the screen for TISD appears.



TISD has a tree structure like Windows Explore.

In the first layer, there are Sub-databases.

Each Sub-database has several layers called Node.



Every Sub-databases and Nodes have own name like Windows's folders have.

Every data files are stored in appropriate Node and its characteristics are described in its Properties.

C-1. TISD Search

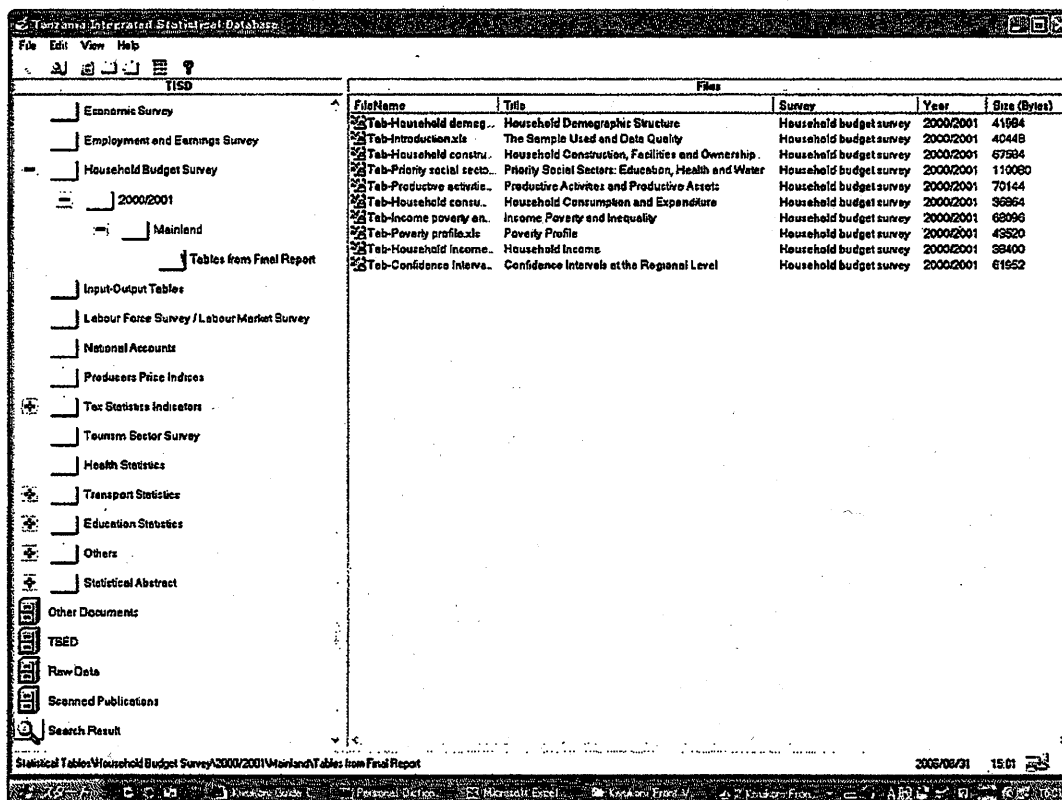
There are two ways searching data files from TISD; (1) open target Sub-database and its node directly or (2) use [Search] command in the tool bar.

[Direct Search]

Double click on the icon of Sub-database  , then appears Node  .

Node can be opened by double click on the icon.

Files are in the node of the bottom Layer and appear with some information as bellow.

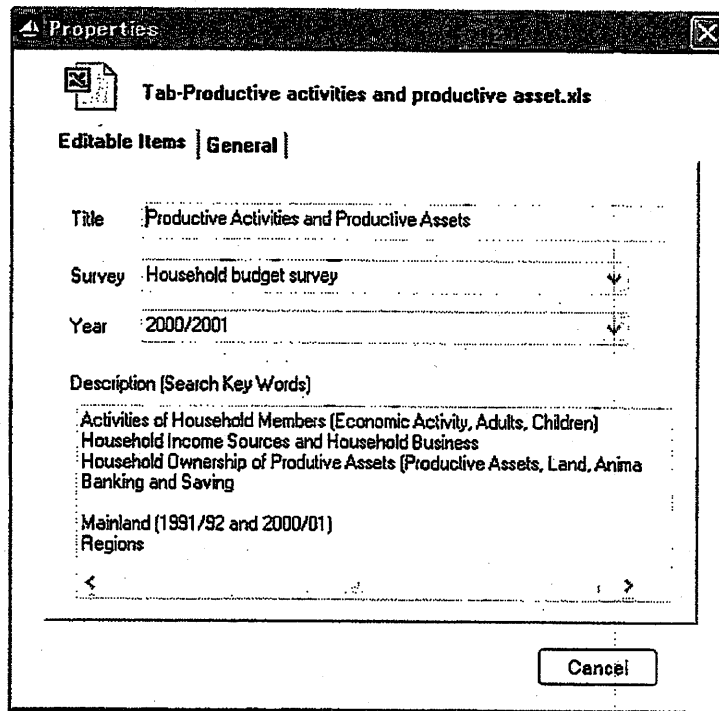


FileName	Title	Survey	Year	Size (Bytes)
Tab-Household demog...	Household Demographic Structure	Household budget survey	2000/2001	41984
Tab-Introduction.xls	The Sample Used and Data Quality	Household budget survey	2000/2001	40448
Tab-Household constru...	Household Construction, Facilities and Ownership	Household budget survey	2000/2001	67584
Tab-Priority social secto...	Priority Social Sectors: Education, Health and Water	Household budget survey	2000/2001	110060
Tab-Productive activitie...	Productive Activities and Productive Assets	Household budget survey	2000/2001	70144
Tab-Household consu...	Household Consumption and Expenditure	Household budget survey	2000/2001	36864
Tab-Income poverty an...	Income Poverty and Inequality	Household budget survey	2000/2001	68096
Tab-Poverty profile.xls	Poverty Profile	Household budget survey	2000/2001	45520
Tab-Household income...	Household Income	Household budget survey	2000/2001	38400
Tab-Confidence Interva...	Confidence Intervals at the Regional Level	Household budget survey	2000/2001	61952

File name, file title, Survey name, Year and File size are listed.

Not only browse these list, but also check its Properties is useful for end-users to decide whether it should be downloaded or not.

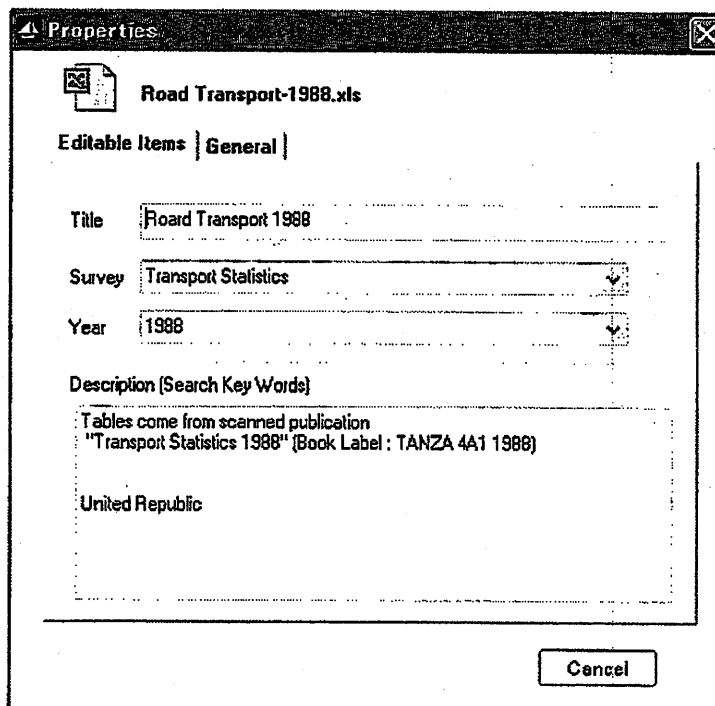
Select a file and click the right mouse button to see Properties.



[Description] in Properties has much additional information of the target file.

There are Some Scanned Table files in TISD.

At that time, the information is given in [Description] as bellow.




[Search] command is also useful to find desired file for users.

When end-user wants to see inside of a target file, double click on its file name. Relative software of the target file starts and opens a target data file.

C-2. TISD Download

When end-user determines to download a specific file, he/she asks for help to librarian.

Select a target file from file list on the screen (page 12) and click on the [Download] button . Then the screen for Download appears. After that, Download procedure is same as Windows [save as...] procedure.

In the case of that a target file is opened to see inside of it, it can be stored in the usual [save as...] procedure of relative software; Excel, Acrobat Reader and so on.

NBS DISSEMINATION AND PRICING POLICY 2005

1. Introduction

NBS as an executive agency is operating on a commercial business. It produces the statistics demanded from the public as well as from private users. The users, including the Government, have to pay for the statistical products. The NBS, as the provider of the publicly funded national statistical service, attaches considerable importance to easy and widespread access by all levels of governments, and the community at large, to the statistics it compiles.

The continued progress of society relies heavily on active and positive participation of its members, be the investors, business executives, employees, NGOs or individuals in the general public, and this in turn relates to how well these parties are informed on all aspects of the socio-economic situation. Increasingly the need to know is becoming so fundamental to the sustained development of society that this need is gradually perceived as a right by itself. NBS as the Statistical authority is aware of the expectation of society on the right of access to statistical information and adopt a well-formulated data dissemination policy. Among the principles proclaimed by the local and international statistical community, maintenance of professionalism and integrity in statistical work are major considerations. For individual economies, greater utilization of data represents a firmer basis for socio-economic development at the macro-level. Apart from general principles, issues considered in this policy include user targeting; user-friendliness and a client-based service culture; pricing policy; and promotion of statistical literacy in the community to ensure proper interpretation and application of statistics.

2. Dissemination

2.1 *Dissemination principles*

2.1.1 *Identifying users and Stakeholder*

Traditionally, main users of official statistics are considered to be different governmental bodies at the central and local levels, large businesses, regional or international agencies and research institutions. But things are changing. The fact that statistics are now being regarded as a public good is partly an outcome of the change in dissemination of statistics. On the other hand the presence of the Internet makes a difference.

Five major user categories stand out by area of activity:

- ?? All levels of government;
- ?? International agencies;
- ?? The private sector;
- ?? Research institutions; and
- ?? The public.

The above categories are then categorized into two broader categories of data users:

?? General Data Users

?? Analysis Users

General data users are, for example, students, teachers, libraries and small businesses who have simple data requirements but from a great range of information. Needs are normally not known in advance.

Analytical data users, on the other hand, are identified from their complex data requirements on detailed variable and regional breakdowns, often based on many datasets. Such users are, for example, governmental departments, local authorities, researchers and VIP clients.

The main clustering characteristics are, then, the level of statistical capability, level of interest, ways of access and partnership willingness.

But in whatever way we choose to describe and classify our beneficiaries, the objective is to meet their needs and expectations in the best possible manner, not only once but repeatedly.

Under this principle NBS will ensure that:

- ?? all users, including the general community, have free access to an easily accessible set of basic official statistics; and
- ?? where it is cost effective to do so, the costs of producing and providing information products and services that are additional to the basic set of official statistics would be recovered from the users of these additional products.

2.1.2 Provide quality data that meet users' expectations

Users expect *quality information*. If this cannot be provided the user will certainly stop asking for your data and try to find it elsewhere. Quality is normally defined in terms of *accuracy, relevance, timeliness, coherence* and *availability* without specific order.

NBS has the duty to disseminate the data that convey a correct and objective portrait of the actual situation, which comply with international standards and recommendations on concepts, definitions, classifications and methodology. Users are normally alerted of major deviations from international practices and where applicable, explanations are given for such deviations.

Government and policymakers are obviously important users of information but certainly not the only ones. At the individual level, people need information to advance their legitimate and rightful interests. Both local and external investors need information in tapping the fullest business potentials available in an economy. Equally, social groups need information in identifying gaps that might be overlooked in public policy programs. Having examined the information available from various sources, people will make informed decisions in the pursuit of their individual interests. At the collective level, they will voice out their views through various channels regarding the present state of affairs and aspirations for future development, aiming to influence the continuous process of policy review and planning for a better future.

Along with the disseminated data, information is given on the quality assurance procedures, both internal and external, that are put in place to check and ensure data accuracy. Similarly, indicators that reflect on data quality, such as coefficients of variation of estimates and response rates of surveys, are also covered in the data dissemination program.

2.1.3 Frequency of data release and Timeliness

It is widely acknowledged that for data to be useful, they must be available with reasonable frequency and in a timely manner. This is particularly taken as a matter of course in the current state of information technology whereby users expect updated information to the latest moment. Such expectation is actually not easy to fulfill. The statistical process is not simply computer processing. Statistics compilers need raw data and they need the cooperation of survey respondents or other raw data suppliers. Very often, how willing these parties can help and wish to help will determine what data can be collected, how often they can be collected and how soon the statistics can be compiled after a certain reference period or reference time-point.

2.2 Data coverage and Degree of data details

In general NBS is faced with increasing pressure from users at all levels for more data categories to be available and at greater details. Demands are almost never-ending for more published data that measure the latest state of affairs in various fields, be they economic, social, demographic, environmental or whatever. While this is an encouraging phenomenon as it indicates the increasing readiness of the community in making greater use of data in the various fields of development, NBS face difficulty to meet all users' needs in data dissemination, given the resource and budget constraints that they are subject to. In overcoming this challenge the NBS will continue to entertain "customized reports or analysis" from all of our partners and customers/stakeholders to meet their needs.

However, NBS is very careful on this in order to make sure that statistical breakdown should not be over-stretched, to the extent that the sample of observations is too small to support excessively detailed tabulations. Also, the process must not be extended to such extent as to lead potentially to any divulgement of individual data, either through direct disclosure or intelligent deduction from exceptionally small cells.

2.3 Integrity

It is well accepted that public confidence in official statistics has a great deal to do with the public's perception of the integrity of statistical authorities. NBS will pay full attention on the following to ensure integrity:

2.3.1 Adoption of scientifically sound methodology in the production and analysis of data

International guidelines and recommendations provide useful references for statistical authorities in the design of statistical systems. Benchmarking against best practices that have been subject to stringent empirical tests can provide safety cushion against accusation of biased selection of design intended to serve the interests of particular groups.

2.3.2 Legal backup for statistical undertaking

Public confidence for a statistical undertaking could be strengthened if the conduct of which is clearly spelt out in laws. Provisions on the protection of confidentiality of data pertaining to individual firms, households or persons demonstrate the authority's commitment to use individual data collected in surveys only for statistical purposes. This would be conducive for obtaining truthful and accurate responses from surveys for statistical compilations.

2.3.3 Equal and impartial access to all types of users

The advance access to information may place some parties concerned in an unjustifiably advantageous position, particularly so if the information are market-sensitive. Advance access by senior government officials may attract suspicion that they are given the opportunity to exercise influence on the statistical authority that is tantamount to administrative intervention into the statistical process.

In avoiding such suspicions, the NBS do release and allow full access by all parties once the statistical processes on particular data set are complete to the best capacity of all applicable statistical processes.

2.4 *Degree of Transparency in NBS activities*

In terms of operational arrangements, NBS take appropriate action in the following aspects:

2.4.1 Provision of metadata

NBS publish metadata along with the published statistics. The purpose of the metadata is to facilitate others, including experts in the field and the public at large, in scrutinizing the quality of the disseminated data. The metadata should include succinct descriptions of the statistical methodology employed, deviations from generally accepted locally and international standards and reasons for such deviations, estimation and imputation procedures, quality assurance checks, methods of data revisions and caveats on data limitations.

2.4.2 Citation of the relevant legal provisions for the data collection, in particular, the provisions for protection of confidentiality on individual data.

2.4.3 Advance notification of data release calendar

Advance announcement of data dissemination schedule to the public conveys a strong message on the independent control of the statistical authority over its data release. It serves to remove any misconception that might otherwise arise on the data release being subject to the will and interests of certain parties outside the statistical authority. NBS observe calendar closely and in the event of unavoidable slippage, prompt explanations are given.

2.4.4 Listing of parties having advance access to the data

There may be genuine need for a limited number of parties to have advance access to the data. For example, heads of Government departments who are dealing with areas, which are the subject of a data release may need some time to prepare their official response to press questions, which will normally

be raised immediately on public release of data. The amount of time to be allowed would of course have to be rather limited. In such cases, the particulars of these parties are made known to the public. At the same time, there needs to be an effective embargo system to avoid leakage to unauthorized parties before the scheduled date (and time) of release.

2.4.5 Identification of commentaries made by parties other than those of the NBS.

For press releases that contain commentaries made by other public agents in addition to materials issued by the NBS, such commentaries are clearly delineated. This is desirable as commentaries of this kind are often associated with certain stance. A clear demarcation of origin would avoid public confusion over the neutral stance of the statistical authority in regard to the subject in question. Any negative association with the integrity of the data itself can then be avoided.

2.5 *Misinterpretation and misuse of statistics*

It is in the interest of NBS to alert the public of any misinterpretation and misapplication of disseminated official statistics. There are occasions when interpretation of data is bent to suit the wishes of vested-interest parties. In exercise of its professional function, NBS will alert the public of such misuse of official statistics.

2.6 *Statistical literacy in the community*

- ?? A high level of statistical literacy among members of the public is essential to ensure that development of the community could truly benefit from the statistical authority's commitment to meet the call for entertaining "the right to know". This is because a statistically literate community would be, on the one hand, more capable of producing high quality analysis and decision-making based on disseminated statistics thus contributing to development. On the other hand, it would be on greater alert of possible pitfalls in misuse and misinterpretation of statistics that may lead to misjudgment and wrong decisions.
- ?? A community well informed of the principles of data dissemination would pose the same demand of standards to data produced by various parties. This will form an effective check on parties that willfully or unintentionally produce sub-standard or wrong information that might be in direct conflict with the counterpart official statistics.
- ?? A high level of statistical literacy provides positive feedback to the statistical authorities in regard to data requirements. They would form useful input in the regular review of data dissemination policy; ensuring what data and how

they should be produced to best serve the information needs of the community.

- ?? Among the various sectors of the community, the mass media emerges as a user group that is of particular importance. The media provides a major channel through which statistical information is disseminated.
- ?? Correct presentation of data on the media is therefore an essential factor in proper interpretation and application of data.
- ?? NBS adopt a journalistic style in official press releases in order to reduce errors of re-transmission. Special workshops and briefing sessions are made for media workers on relevant topics that could strengthen their understanding in official statistics.

2.7 Give your users a choice

Taking all potential customers of statistical information into consideration, we must remember that they constitute a heterogeneous group from, for example, governmental bodies to enterprises, researchers and the public. NBS must be prepared to offer optional ways of retrieving information.

Preferred media

Even if the web already is the major dissemination alternative for many agencies, there are still users who will prefer hard copies, CD-ROM or even floppies. To date national libraries and archives often have had specific requirements on the delivered media.

With no access to the World Wide Web, the user may still benefit from other Internet services, e.g., SMPT for receiving information via electronic mail. In the end this is one of the factors that the NBS must keep in mind when designing, evaluating or changing its dissemination strategy.

Print-on-demand

Many users do not want or need to have all the information that comes with a product. Some just want to receive a summary or a set of basic tables while others have more specific demands. Instead of having to buy or download, e.g., a complete report or statistical yearbook, the user may prefer to specify what he wants and then have it printed either by the agency and then mailed or downloaded and printed by the user himself.

Statistics for further analysis

Researchers or planners are often interested not only in macro data but also in the underlying micro-information. Provided that measures for ensuring integrity are taken, especially when dealing with sensitive data, these data could be disseminated through electronic networks such as the Internet. Additional security may then also be needed—for example, SSL encryption to prevent unauthorized access.

The user should also be given the opportunity to specify preferred data formats at the time of delivery to facilitate further analysis.

2.8 Recognize and adapt to new technologies on the user side

New technologies are emerging all the time. One of the latest trends in disseminating data is by *Instant Messaging* systems based on, e.g., SMS^{1[9]} and WAP². Many statistical organizations are already using these methods to disseminate critical business information to the private sector and the media—for example, price statistics or financial markets indicators. So now if the user community wants these services (which you will know from your focus groups or user contacts) you should be prepared to provide for them.

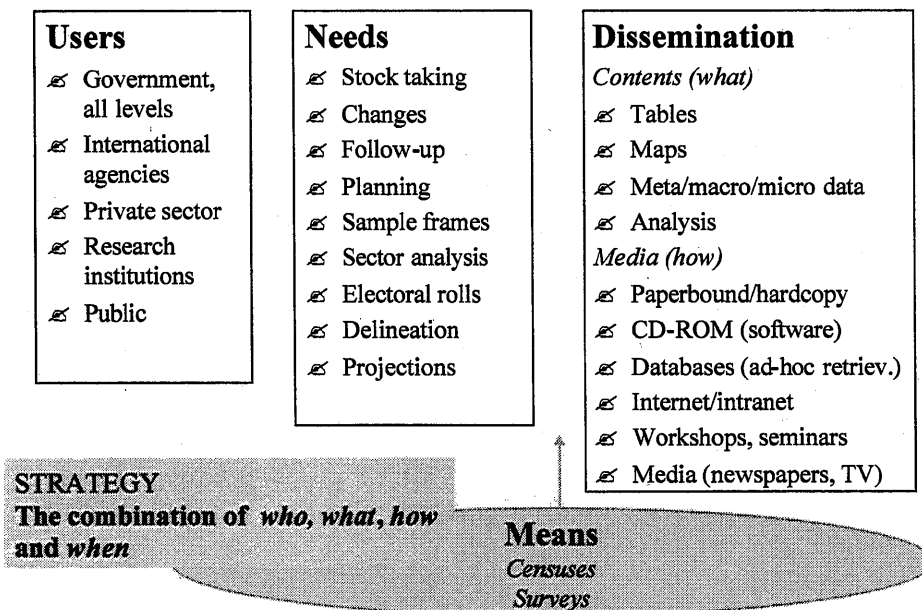
2.9 Outlining a dissemination strategy

On the assumption that current and potential stakeholders and users are identified, in outlining a dissemination strategy for NBS, the following questions must be asked:

- ?? **What type of information should be provided?**
Examples: data, metadata, administrative information, methodology, statistical activities, research results
- ?? **What are the possible means and ways of dissemination?**
Examples: paper, hard copy, diskettes and the like, CD, web pages, traditional mail, electronic mail, discussions, workshops, seminars, conferences, bi- or multilateral projects, networks
- ?? **What will be the interventions and what are the assumptions?**
Examples: web-site creation, equipment and application costs, maintenance, coordination of activities, security and legislation

Based on the reports on census activities the following simplified “translation” of users’ needs into possible dissemination strategies is made:

Outlining dissemination based on reports on census activities



User groups are dimensioned the traditional way, user needs relate to census information, primary data are obtained through censuses and surveys and, finally, contents and media are linked together. Any dissemination strategy could then be considered as a *realization of a subset of users, needs, contents and media, and with the time dimension added.*

2.9.1 Press releases

Press releases inform the public in general and enhance the popularity of the bureau, all major findings from NBS must be presented in a press release.

- ?? A common format for press releases must be developed. Press releases must focus on the news aspect and must contain a limited number of figures and, where applicable, a graph to illustrate the story.
- ?? A working relationship with the press must be established. NBS customer service section is responsible for this task.

2.9.2 Publication

Paper based publications disseminate the general results of surveys. They intended for the general user and must use both text and graph to highlight the findings of the surveys.

- ?? Publications must be tailored to meet the requirements of their intended audience.

- ?? Publications must be timely, relevant and objectives to meet user requirements.
- ?? Publishing must be done without any unnecessary delays.
- ?? Publications from NBS must have a common look and feel.
- ?? Publications must be available to the public.
- ?? Statistical Abstract is the flagship of NBS. It needs major revision in terms of content and layout.
- ?? Reports must be written in a simple and readable form, with enough text and graphs to make them more appealing.
- ?? The number of tables in the reports must be reduced since they will be supplemented by electronic dissemination.
- ?? A summary of major findings must be included at the beginning of the reports.
- ?? Tabulation, analysis and report writing must begin as soon as the observation register has been finished. Those responsible for the task must be identified early enough and must have time allocated.
- ?? Preliminary planning of the reports may take place before the observation register not intended for publication. For large surveys, several reporting teams may be established covering the different topics of the survey.
- ?? Printing and publishing must not be delayed due to lack of funding. Budget lines must be set aside for this purpose.
- ?? To enhance the image of NBS as a semi-autonomous institution a logo must be used on all publications.
- ?? To make publications more available for the users, a number of distribution outlets must be established.
- ?? Staff members dealing directly with the publications must be trained in report writing.

2.9.3 *Electronic Dissemination*

Electronic dissemination offers the ability to deliver more detailed data in both aggregated and non-aggregated data to selected users. It is primarily intended for users within the public administration, organizations and university researchers and students. This group often needs to do further analysis on the data. Electronic dissemination gives them the option to do so directly without the need to re-enter the information into their own systems. Electronic dissemination must be available both offline and online in order to serve different usage patterns and user needs:

Offline Electronic Dissemination: To serve users who frequently need data, at a low cost, a CD-ROM service must be provided.

- ?? The content of CD-ROMs will be tables from CDD-A.
- ?? CD-ROMs containing results of a specific surveys, e.g, the Tanzania Households Budget Survey may also be made.
- ?? To serve the needs of the District Planning units, a series of regularly updated CD-ROMs containing selected tables and time series at district level must be produced and distributed.

Online Electronic Dissemination: To serve users with occasional needs for updated information, an Internet service is already established.

?? The Internet site could also contain publications for downloading, press releases, and other relevant information.

?? The Internet site is constantly updated to reflect the latest available information from NBS. The Information Technology and Marketing Department is responsible for this task.

?? The Internet site must be easy to navigate, i.e. it must contain a structured index to the files that can be downloaded.

Electronic Dissemination of micro-data: To serve selected users needing data at micro-level for their own analyses, a service to distribute these data in electronic format must be established.

The data is copied from the CDD-Observations on to CD-ROMs or diskettes at the users' request. The practice of confidentiality requires that any and all identifiers must be removed from these observation registers. The files will be distributed in Microsoft Access format, to ensure that both data and a data dictionary is provided along with relevant code-lists. The Microsoft Access format is widely used and is regarded as appropriate for all users.

3 Pricing Policy

3.1 Introduction

In carrying out its role of an information provider to meet the needs of users in various sectors, NBS encounters the issue of an equitable pricing policy that rationalizes the allocation of public resources on the one hand and meets the satisfaction of user needs for information on the other. Due to the notion of "the right to know" for each and every member of the community, one common rule adopted is to place basic statistical aggregates that depict the macro performance of the community in the public domain for free access by all. Dissemination in such context may take the form of statistical highlights issued through press releases, free leaflets and placement on the Internet. More detailed analysis will be packaged in standard formats in printed and electronic modes, and made available at a charge to those who need more data details. NBS therefore need to be discreet in their charging pricing such that while users should pay a "fair share" of the costs involved, attempts of enhancing the utility of official data would not be thwarted unnecessarily.

3.2 Objective

NBS Pricing Policy, is intended to serve three main purposes:

- ?? relieve the general taxpayer of those elements of the cost of the statistical service which have a specific and identifiable value to particular users;
- ?? to enable the demand for NBS products and services to be used as one indicator of how NBS resources should be used; and
- ?? encourage users to address their real needs for NBS statistical products

3.3 Pricing Practices

NBS Pricing Policy provides the following bases for setting price:

- ?? Pricing based on marginal costs for the additional dissemination of the basic information set;
- ?? Pricing based on incremental (or avoidable) costs for products beyond the basic information set;
- ?? Commercial pricing, based on competitive neutrality principles, for products and services which could compete with similar products provided by the private sector.
- ?? Pricing based on the type of software and thus level of effort demanded to programmers.

- ?? Pricing based on data storage medium i.e. Floppy, CD ROMs, Magnetic tapes, Internet, etc.
- ?? Pricing based on the extent of data management (manipulation demanded)
- ?? Extent of metadata demanded for inclusion as well as other pertinent details.

Customers intending to add value to a data set for purposes of "re-selling" will have to pay for such a dataset 3 times the Market price.

NBS publications for private use are sold via subscription. Over the counter and internet. Such copies are priced to collectively recover the marginal costs of production.

Similarly, other standard products containing the more detailed statistics of widespread interest are priced to recover their cost of production, distribution and marketing.

Users wanting information more detailed than that published in standard products are required to pay for all incremental (or avoidable) costs, including overheads, incurred beyond the costs of collection and production of clean unit record files from which the information is produced.

The NBS also produces value added products and services sold commercially to satisfy identified needs within the market for statistical information. To satisfy these needs, the NBS invests resources in the development, production and delivery of such products and services, and the prices of such products and services are set at market prices where quantifiable, but at least to recover the full costs involved.

Where an organisation seeks to on-sell NBS statistics and statistical products for profit, the NBS seeks licensing arrangements whereby, in effect, a contribution is obtained from each sale toward the incremental (or avoidable) cost of producing the data provided.

In addition, the NBS conducts surveys funded by users to produce official statistics for public benefit. It also provides other services which are cost recovered such as statistical consultancy, outposts of skilled NBS staff, training courses, seminars and statistical units in specific fields of statistics. Such services are charged according to their incremental or avoidable costs.

3.4 The NBS Pricing policy discount procedures to promote sales as follows:

- ?? All non – Private Institution Customers as well as students enjoy a 20% discount
- ?? Any customer enjoy 20% discount if data set for a whole domain of study is bought. But this will only apply to the data set that is 500Mb or more.
- ?? Any customer who buys five different files on a single transaction enjoy 10% discount.

9. 他ドナーの統計分野への支援の現状

<p><u>ドナー</u></p>	<p>統計分野への支援の現状 (1.活動内容、2.支援額、3.期間、4.裨益対象組織)</p>
<p><u>1. DFID</u></p>	<p>[1] 非プロジェクト型支援 1. 経済統計の整備 (国民経済計算の作成にかかる支援、business survey 実施支援等) 2. 約 £500,000 ポンド 3. 2002 年～ (継続中) 4. NBS (National Bureau of Statistics)</p> <p>[2] 非プロジェクト型支援 1. 統計マスタープラン (Tanzania statistical master plan (TSMP)) の策定支援 (with World Bank) 2. 約 £4,000 ポンド 3. 2005 年～ (継続中) 4. NBS and OCGS (Office of Chief Government Statistician)</p> <p>※DFID は、今後の統計分野の支援は、財政支援を通じたものにシフトする意向。</p>
<p><u>2. USAID</u></p>	<p>[1] プロジェクト型支援 1. 2002 National Census 支援 (Population projection, Fertility and mortality trends analysis, etc.) 2. 約 \$500,000 ドル 3. ～2006 年 4. NBS</p> <p>[2] プロジェクト型支援 (technical assistance (TA) and dissemination) 1. 2004-05 Demographic and Health Survey 実施支援 2. 約 \$ 575,000 ドル 3. ～2006 年 4. NBS</p> <p>[3] プロジェクト型支援 (technical assistance (TA), analysis, and dissemination)</p>

	<p>1. 2006 Service Provision Accessibility Survey 実施支援 2. 約 \$900,000 ドル 3. ~2007 年 4. NBS</p>
<p><u>3. UNDP</u></p>	<p>[1] 非プロジェクト型支援 (technical assistance (TA)) 1. TSED (Tanzania Social Economic Database) 関連 - management - seminars 2. 約 \$250,000 ドル 3. 継続中 4. NBS</p> <p>[2] プロジェクト型支援 (technical assistance (TA)) 1. Zanzibar 統計室 (OCGS) への支援 - Analytical capacity - Management capacity 2. 約 \$1,000,000 ドル 3. 継続中 4. OCGS (Office of Chief Government Statistician)</p>
<p><u>4. UNICEF</u></p>	<p>[1] 非プロジェクト型支援 1. TSED (Tanzania Social Economic Database) 関連 - further development - maintenance - update - user support 2. 約 \$250,000 ドル 3. 継続中 4. NBS</p>

	<p>[2] 非プロジェクト型支援</p> <ol style="list-style-type: none"> 1. Community Based Management Information System (CBMIS) 関連 <ul style="list-style-type: none"> - training for vital registration (use of birth and death registers) - training for village registration (using village level population registers) 2. — 3. 継続中 4. 首相府 地方自治庁
<p><u>5. World Bank</u></p>	<p>[1] 非プロジェクト型支援</p> <ol style="list-style-type: none"> 1. 統計マスタープラン (Tanzania statistical master plan (TSMP)) の策定支援 (with DFID) 2. 約 \$ 150,000 ドル 3. 2005 年～ (継続中) 4. NBS and OCGS (Office of Chief Government Statistician) <p>[2] 非プロジェクト型支援</p> <ol style="list-style-type: none"> 1. National Panel Survey の実施支援 2. 約 \$ 50,000 ドル 3. 2006 年～ 4. TASAF / NBS / University of DSM / EDI <p>[3] 非プロジェクト型支援</p> <ol style="list-style-type: none"> 1. 各種統計調査の実施支援 <ul style="list-style-type: none"> - Rural Investment Climate - Urban Water Supply - Slum Upgrading - Access to Financial Services 2. — 3. 継続中 4. NBS

<p><u>6. IMF / East Africa Regional Technical Assistance Centre</u></p>	<p>[1] 非プロジェクト型支援 1. 国民経済計算 (with DFID) 及び消費者物価指数の作成にかかる支援 2. — 3. 継続中 4. NBS</p> <p>[2] 非プロジェクト型支援 1. 消費者物価指数の作成にかかる支援、Government Finance Statistics (GFS)の編集支援 2. — 3. 継続中 4. OCGS (Office of Chief Government Statistician)</p>
<p><u>7. African Development Bank</u></p>	<p>[1] 非プロジェクト型支援 1. 購買力平価の作成にかかる支援 (under International Comparison Program (ICP[※]) for Africa) 2. — 3. 2005年～ (継続中) 4. NBS</p> <p>※The ICP is a global statistical initiative aimed at generating purchasing power parity (PPP) estimates that facilitate cross-country comparison of price levels and economic aggregates in real terms.</p> <p>[2] 非プロジェクト型支援 1. アフリカのニーズに合わせた統計研修の実施支援 2. — 3. 継続中 4. 東アフリカ統計研修センター (Eastern African Statistical Training Centre (EASTC))</p>

※その他：過去に「EC」による「東アフリカ統計研修センター」への支援実績あり (総額で約\$1,000,000 ドル程度) (但し、詳細は未確認)。