## 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 wellformulated data dissemination policy. Among the principles proclaimed by local and international statistical community, maintenance 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; userfriendliness 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;
- zz? International agencies;
- ZZ? The private sector;
- zz? 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

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<sup>1[9]</sup> and WAP<sup>2</sup> 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:

8

Outlining dissemination based on reports on census activities

#### **Dissemination** Users Needs Contents (what) all levels agencies Planning Private sector Sample frames Research ✓ Sector analysis Media (how) institutions ∠ Paperbound/hardcopy Public ∠ CD-ROM (software) Projections ∠ Databases (ad-hoc retriev.) ✓ Internet/intranet STRATEGY The combination of who, what, how Means and when Censuses Surveys

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 Flectronic 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 thawed 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.