

UNITED NATIONS STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC

**Eighth Management Seminar for  
the Heads of National Statistical Offices in Asia and the Pacific  
3 – 5 November 2009, New Delhi, India**

**Theme: Strategies for Achieving Effective Data Communication**

## **FINAL REPORT**

### ***Background***

Eighth Management Seminar for the Heads of National Statistical Office (NSOs) in Asia and the Pacific, organized by the Statistical Institute for Asia and the Pacific (SIAP) in collaboration with the Government of India through its Central Statistical Organization (CSO), Ministry of Statistics and Programme Implementation (MSPI) and the Statistics Division of the United Nations deliberated on the theme, ‘Strategies for Achieving Effective Data Communication’ during 3 – 5 November 2009 at the conference room of NASC (National Agricultural Science Center) Complex, while the morning session on Day 2 was held at the MSPI premises. The three day Seminar was hosted by CSO, India. In total, 33 participants including 12 Heads of NSOs from 24 countries participated in the Seminar.

### ***Objective of the Seminar***

The main objective of the Seminar was to contribute to the knowledge and skills of participants in achieving effective data communication.. General objectives addressed were:

1. To strengthen capability in the area of leadership and management of data communication with a view to enhancing statistical capacities in support of economic

and social development.

2. To provide an opportunity to exchange views and share experiences in managing the development of data communication by national statistical offices.

The Seminar also served as a forum for the heads of the NSOs in the region to discuss, to exchange views and experiences in dealing with challenges and opportunities arising from national and global goals relating to managing statistical development of data communication for their NSOs.

### ***Structure of the Seminar***

The Seminar consisted of the following sessions:

Session 0: Opening Ceremony

Session 1: Data Communication Standards: principles and components

Session 2: Communication with data suppliers: strategies and tactics

Session 3: Communication with data users: strategies and tactics

Session 4: Enhancing the visibility and image of Statistical Agencies: strategies and tactics

Session 5: Closing

The Seminar discussions were structured in four modules encouraging participants to think and offer views on the above four topics in four well spread out sessions.

After formal inauguration that included an welcome statement by Mr. A.K. Mehra, Additional Director General, CSO, India, welcome remarks by Mr. Paul Cheung, Director of UNSD, an opening speech by Ms. Davaasuren Chultemjamts, Director of SIAP and a keynote speech on “Success and Challenges in Building Better Data Communications” by Dr. Pronab Sen, Chief Statistician, MSPI, India. Mr. Frederick W H Ho, SIAP consultant for the Seminar gave an overview of the Seminar.

This was followed by Session 1: presentation on “Data communication standards: principles and components” by Mr. Olivier Dupriez, Senior Economist-Statistician, World Bank.

In each of the Sessions 2 to 4, key presentation was delivered by SIAP Consultants, Mr. John Cornish and Mr. Frederick W H Ho, followed by presentations on country cases as well as group work. Participants were grouped into four, discussed on the specific topic related to the session theme, and made presentation on the group work at the plenary session.

In the Closing Session, before closing remarks by Mr. Ilpo, ESCAP and Ms. Davaasuren, Director of SIAP, feedback and suggestions for topic of the next Seminar were made by participants.

Some suggestions made for topic of the 9th Management Seminar were ‘Result based planning for developing projects’, ‘Prioritization of the demand in NSOs’ and ‘Curriculum of training programmes’.

No suggestion was made for venue of the next Seminar.

### ***Evaluation of the Seminar***

The Seminar was very well attended. Twenty four (24) ESCAP countries participated and half of them were represented by heads of NSOs.

There were excellent presentations on experiences from the NSOs of Australia, Japan, Indonesia, Philippines, Sri Lanka; Hong Kong, China and India.

The following table shows the summary of seminar evaluation by participants.

### **Summary of Seminar Evaluation by participants**

<b>1) Seminar level</b>	Advanced 7	Just right 24	Elementary
<b>2) Seminar content</b>	Very useful 22	Useful 9	Not useful 1
<b>3) Seminar duration</b>	Very long 1	Just right 27	Very short 3
<b>4) Relevance of seminar to your work</b>	Very useful 25	Useful 6	Not useful
<b>5) Seminar materials/handouts</b>	Very good 17	Good 14	Poor

	Very good	Good	Poor
<b>6) Presentation technique</b>	13	18	
	Adequate		Not adequate
<b>7) Time allocated to questions/discussion</b>	24		7

Overall speaking, the feedback from participants was positive. On every criterion, the Seminar was rated as very good or good (or the equivalents) by the participants. They clearly considered the Seminar met its objectives.

### ***Recommendations***

- i) SIAP to continue capacity building seminars for heads of NSOs.
- ii) Use feedback to plan future training programmes.
- iii) The seminar venue and International Guest House were safe place as they were located in the closed NASC campus. However, many participants complained about the accommodation and facilities, such as inadequate telephone, Internet connections, and unsatisfactory quality of accommodation and related facilities.
- iv) For security reason, late-night flights for ladies should be avoided.

### ***Session-wise Summary***

Summaries of sessions, including presentations by consultants, presentation of country cases, results of group work as well as general discussion are presented below.

## **OPENING SESSION**

### **WELCOMING REMARKS BY DIRECTOR, SIAP (Ms Davaasuren) AND DIRECTOR, UNSD (Dr. Paul Cheung)**

Ms Davaasuren expressed her great thanks to United Nations Statistics Division for its support; the Government of India for hosting the event and the staff concerned for their hard work in making preparations and receiving the participants; Mr. Olivier Dupriez of the World Bank, Mr. Fred Ho and Mr. John Cornish, Consultants, for agreeing to help with the organization of the Seminar and making the key presentations; to various country presenters; and to all who came to participate. She recalled that the series of management seminars had now established itself as a series of much welcomed events whereby participants gained very useful learning experiences and networked counterpart colleagues for future exchanges and collaboration. She expected this seminar would be another one of substantial value.

In his remarks, Dr. Paul Cheung observed that often NSOs tended to be internally focused on operations and technical issues and insufficient attention was paid to boundary issues (i.e. interfaces with users and suppliers). He urged that participants should note the need to focus on strategies, i.e. what to do rather than how to do. He also noted that innovations in hardware had changed the scene and Offices needed to take note of this.

### **KEYNOTE SPEECH BY DR. PRONAB SEN, CHIEF STATISTICIANS, MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION, INDIA**

In his speech, Dr. Sen highlighted the changing environment in which NSOs operated where there was less reliance on authority and more on persuasion (hence need better communication skills). He asked people not to under-estimate the power of the word of mouth, i.e. our deeds, good or not so good, could spread fast and wide and cause substantial impact on our work. He pointed out that IT had helped improve communication with users but less so communication with suppliers (at least in NSOs of developing countries). He also mentioned that data access had become so much easier but it was creating a new problem which he called the 'analytical divide' (i.e., self-help analysis was facilitated with the availability of powerful analytical and presentation tools and permission to access micro-data; but this created the ensuing risk that NSOs would be doing less analysis and those less capable users could be disadvantaged). Thus, he alerted that NSOs should not neglect its job of informing the rest of the population (i.e., those with less analytical capability) of its statistical findings.

### **GETTING TO KNOW EACH OTHER**

Under the direction of Mr. Fred Ho, Consultant of SIAP, each participant introduced himself/herself very briefly. This was meant to help warming-up participants for more active participation subsequently.

## **OVERVIEW OF THE SEMINAR**

Mr. Fred Ho then made an overview of the seminar program, with a view to orientating participants such that they might derive maximum benefit from the Seminar. Participants were briefly guided through the outline of the Program. They were also made aware of the documents available to them through the course of the seminar (participants were provided with hardcopies of the documents during the Seminar and a compact disc at the end of the seminar).

Mr. Ho reminded participants that the objectives of the Seminar were:

1. To strengthen capability in the area of leadership and management of data communication with a view to enhancing statistical capacities in support of economic and social development; and
2. To provide an opportunity to exchange views and to share experiences in managing the development of data communication by National Statistical Offices.

Mr. Ho briefly went over the program schedule to provide participants an initial idea of the scope of contents of the Seminar. He pointed out that in considering “data communication” we should not be restricting ourselves to considering the flow of data from suppliers to the collector/compiler (NSOs or other statistical agencies) and from the latter to data users. We (and other stakeholders) needed to be clear what the data communicated would exactly be, in order that the eventual purposes would be met (hence we needed consultation and communication to establish needs and requirements); we needed to ensure that everyone understand what the data referred to (thus, metadata ( definitions etc.) should also be communicated along with data); we needed to assure the quality of the data (and communicating measures of quality to the parties concerned); and we needed to maximize efficiency in the data flows (hence we needed to secure willing cooperation of relevant parties, through persuasion and other means of communication, and to make sure that those passing on the data did that comfortably and under no threat ).

He stressed that the Seminar was not aimed to go into the technical details of the subject of data communication. Rather, the Seminar was to provide an opportunity for top level managers (where the heads of the NSOs could not attend the Seminar they had been requested to send their deputies or very senior level staff) to obtain a good insight into the key elements of effective data communication.

He also emphasized that the business of top executives was strategic management and in performing that they had to identify what needed to be achieved and how to create favorable external and internal environments to facilitate sub-ordinate staff in carrying out their individual tasks. Thus, participants should try to discuss issues at the strategic level and not dwell on details at the operational level except where such could have implications of strategic significance.

Participants were encouraged to be as participative as possible in order that the sharing of

experiences could be maximized. They were also asked to note that for the group work sessions, they should not be over-concerned with the resultant output but should rather derive benefits from the brain-storming process since the Management Seminar was there to sharpen their skills of knowledge discovery, consultation with peers and problem solving.

### **GROUP PHOTO**

A group photo was taken of all participants. Apart from serving as a memento, it also would assist participants in their future contacts with fellow participants.

**SESSION 1 :**  
**DATA COMMUNICATION STANDARDS : PRINCIPLES AND COMPONENTS**

**Mr. Olivier Dupriez, Senior Economist-Statistician of the World Bank, gave a presentation entitled “Ensuring effective and smooth flow of data throughout the data life cycle: standards, practices and procedures”. The major points covered included:**

1. The data life cycle include: study design; data collection; data processing and analysis; data dissemination; and preservation.
2. On design, “relevance”, “consistency”; “integration” are key elements. Communication and engagement with users are very important to ensure the relevance of statistical products. Fragmented data production would cause redundancies, inefficiencies and disharmonies. To achieve integration, we should use common classifications, geographic referencing standards, definitions, questions and instructions across the statistical system as far as possible. International good practices can be taken advantage of. A corporate inventory of holdings (metadata) should be maintained. It may be noted that integration requires better communication within the system, but makes communication with suppliers and users much easier.
3. On data collection, data subjects’ trust of the collecting agency on the use and the confidentiality treatment of the supplied data are very important. There are good international examples on Codes of practice in regard to this and the control of workload/burden on data subjects.
4. On processing, there need to be good documentation of the exact processes. This is crucial to defending the statistical results, training new staff and so on. Confidentiality of individual data is not just a principle but something that needs to be truly safeguarded and physical security should not be neglected.
5. On dissemination, timeliness, accessibility, quality, clarity, usability and portability are key elements to consider. Statistical data should be disseminated with adequate metadata, to help users understand what the data are measuring and how the data have been created. The metadata also help users assess the quality of the data. Metadata standards and XML technology are convenient ways to ensure completeness and portability of metadata (provide “checklist” of elements): SDMX for time series data and DDI for microdata.
6. Further on the subject of dissemination, IMF has the SDDS (Special Data Dissemination Standard) and GDDS (General Data Dissemination System) for countries to subscribe to. These are good standards for NSOs to follow.
7. Feedback from data users should be facilitated and data usage should be monitored, to enable continual developments in the systems. Statistical compilers should be forthcoming in responding to comments and they should also comment on erroneous interpretation and misuse of statistics.



8. On preservation, it is to be noted that data are for both current and future use. We have to communicate with future generation of users. IT sometimes give a false sense of security against loss; and a preservation policy is needed to ensure that data and metadata are preserved against hardware or software obsolescence, media failure and other physical threats.

Participants were very interested in “Best Practice” documentations on the various subjects introduced and they were advised to make reference to the various Codes of Practice issued by the UK Office of National Statistics and the Report on Statistical Disclosure Limitation Methodology issued by the Federal Committee on Statistical Methodology, Statistical Policy Working Paper 22 (Revised 2005).

Participants were also concerned that various donors might have different needs and preferences leading to different standards (definitions, classifications etc.) and often they took precedence over the national needs. They were assured that there had been great efforts among the international organizations to co-ordinate but, in the end, countries should try their best to insist that national requirements would be the prime consideration.

## **SESSION 2 :**

### **COMMUNICATION WITH DATA SUPPLIERS**

**A. Mr John Cornish, SIAP Consultant, made a presentation on the Strategies for achieving effective communication with data suppliers. The major points made included:**

1. The effectiveness of communication with data suppliers by an NSO can be influenced by a range of strategies implemented in the following broad areas: a) exploitation of new sources of data; b) methods of data collection, processing and estimation; c) contacts with suppliers; d) organizational arrangements for engagement with suppliers and processing of data received; e) legal aspects and policies for data collection; e) staff skills; and f) coordination arrangements across all official statistics producers.

2. To achieve effectiveness, decisions in these areas should be based on current organisational strategic objectives for improving communication with suppliers e.g. reducing respondent load. Furthermore, when considering each of these areas, it will be clear that generally different arrangements will best suit different suppliers and/or an NSO. Some basic segmentation of suppliers into broad types should be made, and arrangements developed for best communicating with each broad type of supplier. Tailoring arrangements to suit each and every supplier, however, is unlikely to be cost effective. Managing too many collection methods increases costs to the NSO and there can be security, support and quality issues with some methods that need special attention.

3. The aspects that are most likely to be developed to suit particular segments are organisational arrangements for communicating with suppliers and the use of particular collection methods/technology. Many NSOs have moved from *subject matter or collection based* organisational arrangements (where each subject area handles communication, collection and processing of data from suppliers for their particular collections) to *functionally based* arrangements through the establishment of one work group which handles all communication and collection from suppliers for say business surveys.

4. One of the benefits obtained from a functionally based organization is the development and maintenance of capability. This comes about from an increased critical mass of staff responsible for communication, collection and processing compared with a number of much smaller cells which are more vulnerable to funding changes and staff turnover. Such benefits would assist NSOs in their efforts to build and sustain capability.

5. Some other matters to be considered for strategically improving communication with suppliers and which are likely to apply across all segments of suppliers relate to legal authority for collection (including from administrative records), mandatory versus voluntary, and responsibilities such as confidentiality, privacy, security and archiving. These matters should not be considered in isolation from other aspects of communication with suppliers because how well an organization applies its legal powers and manages, say, confidentiality and is seen to do so, has a strong influence on the

effectiveness of its operational communication with suppliers.

6. The importance of respondents knowing their rights and responsibilities, and the ready availability of information addressing concerns they may have about, for example, security of information provided and access to confidential information, has been recognised by many NSOs. These NSOs have established call centres and have available as brochures or from their website FAQs answers and Service Charters for businesses and persons asked to participate in surveys.

7. Communication with suppliers can be made more effective through attention to standards, the collection and maintenance of metadata, the use of unique identifiers (such as business register numbers), units defined for collection and communication as opposed to statistical units used for estimation, and form design.

**B. Two country presentations on country experiences were made on communication with data suppliers. The first one was made by the delegate from Australia. The main points made included:**

1. The foundation of relationship with data suppliers are: legislation, parliamentary scrutiny; stakeholder relationship and survey charter.
2. Main strategies to secure supplier cooperation are : high quality survey instruments; good manuals; assistance as when required; convenient arrangements for response; provision of survey results where requested.
3. A business statistics innovation program has been launched, the main points being:
  - (a) Introducing organizational change—functional specialization
  - (b) Introducing technological, communication and methodological developments
  - (c) Securing increased access to administrative data (in particular taxation data)
  - (d) Committing to reduction of respondent burden where possible;
  - (e) Increasing coherence across statistical collections
4. Communication processes with suppliers have been improved :
  - (a) Integrating telephone and computer systems
  - (b) Standardizing correspondence with data suppliers
  - (c) Creating and implementing the Provider Information Management System
  - (d) Using operational research techniques to develop best practice methods of contacting clients based on past experience

**C. The second country experience presentation was made by the delegate from Japan. The main points made included:**

1. More transparency and accountability is needed in statistical work along with the movement towards “evidence-based” policy making
2. Budget and human resources are getting tighter and more streamlined communication is needed.
3. New legal framework enables more solid basis for statistical operation.
4. There is increased difficulty in approaching households: secure apartment buildings, single-person households; more foreigners are around but most cannot communicate in Japanese).
5. Increase of SOHOs (Small Offices Home Offices) and they are difficult to locate.
6. Weakening community ties in urban areas – this increases difficulty in communication with respondents.
7. Development in ICT brings about the need for adjustments in modes of work.
8. Cooperation from suppliers is becoming less forthcoming: decreasing trust in the public sector generally; increasing awareness for privacy protection; weakening sense of social norms and responsibilities and antipathies to response burdens from surveys; fear for possible crimes by strangers visiting homes.
9. To achieve effective communication with suppliers, some strategies adopted are:
  - (a) Get people to understand the useful role of statistics in society
  - (b) Get suppliers to realize that they themselves can benefit from the statistics produced.
  - (c) Let data suppliers hear the voice of the statistics users. Reduce burden on suppliers as far as possible and let the effort be known to them
  - (d) Remove or reduce obstacles and concerns which obstruct smooth and willing response
  - (e) Build trust of the general public in the NSO.
10. With the 2010 Population Census as example, some methods are highlighted:
  - (a) Implement careful survey design and let people know the efforts which have been put into making their response easy and convenient; operate an effective call center
  - (b) Allow multiple methods for returning the questionnaire
  - (c) Make good use of third parties (intermediaries) to facilitate or strengthen communication (e.g. estate management companies, the mass media).
11. With the 2009/2012 Economic Census as example, some methods are highlighted:
  - (a) Reduce respondent burden by integrating existing censuses and surveys and utilizing administrative data (the Commercial/Corporate Register(CCR) )
  - (b) Flexible use of response methods to suit the respondent’s circumstances and let them know the availability of the choices.

12. With Internal Migration Statistics as an example, the need to involve representatives of municipalities and to convey the requests of academic societies to suppliers is illustrated.
13. For the future, more efforts will be devoted to (a) increasing the access to administrative data; (b) impressing on suppliers the value of official statistics and the fact they may be eventual beneficiaries of the data; and (c) using more social networks to create more favourable social conditions for data collection.

**D. Group Work – Participants were split into 4 groups and each was given a theme to discuss. The main points covered in the Group Work sessions included :**

**Group 1- Working with government agencies for access to administrative records**

Points:

1. Socio-political environment affects the cooperation which government agencies are prepared to render to the NSO. This would be easier if the latter is dovetailed with the overall national governance.
2. Coordination mechanisms may help but this depends on the level of centralization/de-centralization of the Administrative framework. The existence of a National Statistics Council will help.
3. We should generate awareness about the usefulness of statistics and its relevance to the country. Agencies may thus be convinced that the National Statistics System is an important thing.
4. Try hard to reduce the inconvenience which may be caused to the administrative agencies concerned when administrative records are used for processing statistics required by the NSO.
5. Try to identify benefits which the agencies may actually derive through cooperation (e.g. some streamlining of the administrative processes is introduced in the meantime when statistics are derived from those processes)
6. Identify other suitable parties which may be brought in to get the agencies to cooperate
7. Staff at lower ranks in the administrative agencies tend to be less sensitive to statistics. Make sure they understand and accept the need to cooperate. Without their cooperation, things do not go smoothly even if their seniors have agreed to cooperate.

**Group 2 - Working with business sector: collecting data from private establishments**

Points:

1. Legislative backing would normally be quite essential in order that firms will cooperate.
2. Publicity measures (in particular through the mass media, professional societies and business associations) may help convincing private enterprises that statistics are useful both for the community (public policy formulation) and for business operations (in terms of helping with daily business decisions and investment considerations) thereby increasing their willingness to cooperate
3. Try the best to minimize the burden on the enterprises(e.g. rationalizing the survey programmes; improving the questionnaire designs)
4. Provide guarantees on safeguarding of confidential information
5. Establish barrier free communication between staff in enterprises and staff in statistical agency at various compatible levels.

### **Group 3 - Working with households: collecting data from households**

Points :

1. With a view to getting their cooperation, convince the households that statistics are useful for the community and appeal to their sense of civic duty. Mass media publicity will be very helpful in this regard.
2. Increase household cooperation through community leaders. This is particularly useful in smaller localities.
3. Try to minimize the burden on households as much as possible. Duplication of surveys should be avoided.
4. Provide convenience to households as much as possible in survey work.
5. Good questionnaire design is essential. In particular be mindful of language issues where applicable (i.e. good translation and be careful with sensitive wordings in different languages).
6. Provide guarantees on safeguarding of privacy
7. Get the cooperation of management companies where contact of households by interviewers need the cooperation of security guards etc.

8. Use suitable, well-trained interviewing staff and get them to appreciate the state of mind of the respondents so that the latter will cooperate willingly and comfortably. This not only raises response rate but also the quality of response.

#### **Group 4 - Working for greater community support for statistical undertaking**

Points:

1. Convince the community at large that statistics are useful for the community and appealing to the sense of civic duty of the general public. Show them actual examples. Get influential people and celebrities to make appeal to the public.
2. Raising the status and credibility of statistical agencies in the eyes of the public
3. Getting the community to become interested in statistics — people are inquisitive by nature and statistics do contain a lot of interesting information. Activities like quiz in schools and games in TV shows may arouse interest. Use appropriate media, such as graphs, maps, cartoon books.
4. Organizing various programs for raising statistical literacy of different sections of the general public.
5. Securing assistance or even partnership of important parties - the mass media, the Education Authorities (e.g. incorporating suitable materials in the school curriculum), teachers (e.g. student activities), event organizers (e.g. stalls in community fairs/celebration events).

#### **E. General discussion: The points made by Participants in echoing and responding to the presentations, over and above those summarized in the previous paragraphs, included:**

1. Willingness for cooperation of data suppliers is most important. Legal provisions will help greatly but at the end of it all, “legitimacy” is most important, in the sense that data suppliers accept that the data collector/compiler is doing a necessary and meaningful task and is able to do it well. It is therefore up to the data collector/complier to manage its activities satisfactorily and demonstrate to the satisfaction of its stakeholders its capabilities and proper behaviour.
2. It is always useful to try role playing in designing systems and working instruments. That is, let yourself attempt to play the role of your data suppliers and try to think as they think, act as they act, in their positions and environments. In statistical agency’s own office, computers are normally more powerful, environment more favourable, knowledge more adequate and staff more efficient. In the role playing mode, you will begin to understand why they may find

the data supplying task so tedious and difficult, and you can then figure out ways to improve things.

3. Many major data suppliers are actually data users concurrently, for example large business firms. Senior staff in the Statistical agency should approach top level management of such firms and tell the latter that their sales executives and business analysts want a lot of data but their senior accountants do not like data provision chore. They will then begin to realize that “nothing in, nothing out”, or “garbage in, garbage out” principles and that they may be persuaded to ask their subordinate staff responsible for supplying data to become more cooperative.

4. Professional societies and business associations are good strategic partners whom we should engage closely in order to secure more data supplier cooperation.



## **SESSION 3 :**

### **COMUNICATION WITH DATA USERS: STRATEGIES AND TACTICS**

**A. Mr John Cornish, SIAP Consultant, made a presentation on the major issues on achieving effective communication with data users. The major points covered included:**

1. Effective communication, and more desirably engagement, with the many users of official statistics is a critical success factor for an NSO to be seen as being relevant and effective in its service provision. Users can provide important input into the development of work programs and decisions on priorities; the design of collections, standards and outputs; and methods of access to statistics. Users can also provide feedback on the effectiveness of services provided, particularly as they are interested in a wide range of quality attributes beyond accuracy and reliability (e.g. relevance, accessibility, coherence and timeliness) as is reflected in many quality management models adopted by NSOs.

2. A challenge for statistical agencies is the wide range of users and of uses made of official statistics. To obtain the desired input from users, an NSO needs to recognise the different types of users and engage with them appropriately. This is done by many agencies by segmenting users into very broad groups for engagement, marketing and service provision.

3. Various methods of engagement with the different types of users have been developed by NSOs, the main methods being:- membership of Advisory Councils, participation in Advisory and User Groups, User Conferences, regular high level meetings at the senior executive level with key clients, participation in program evaluations, outposting of staff, joint ventures & strategic alliances, market research, membership & participation in professional associations, special website sections, newsletters, and information papers.

4. Of particular note are segments which include the most important clients of an NSO and the key target groups of the mass media and schools. Engagement with these groups is considered for different reasons to be strategically important. The media in its many forms is an intermediary for communicating statistical results to large numbers of users, in particular the public and politicians. The media also helps create an image of an NSO in the minds of respondents, users, stakeholders and future employees. This can impact on funding support, respondent cooperation and recruitment.

5. User engagement works in two directions. NSOs should listen to the needs and interests of their key users, and they should try to respond to these needs, particularly the most important needs. But there is also an obligation on NSOs to promote awareness of plans for statistical development and the outputs of statistical work to stimulate user interest and input. As a consequence NSOs have to ensure they have good communication capabilities.

6. Developments in information technology over the past couple of decades have provided many new ways for NSOs to communicate with users and improve access to statistical products and

services. Without doubt the most profound development has been the Internet and the World Wide Web which virtually all statistical offices have exploited through the maintenance of websites providing access to statistics and information about statistics and services. In doing so there has been a shift away from providing statistics in printed form to electronic forms.

7. Increasing sophistication and user-friendliness of software tools for databases, tabulation, graphical presentation and statistical analysis have led to new products, but more importantly they have facilitated a move to more and more self-help by users. While providing benefits to both NSOs and users, self-help can only be effective if there is sound engagement with users about their requirements. Self-help also requires an NSO to invest in hardware and software and ensure its data management including metadata can support the services provided.

**B. Two country presentations we made on making revisions to provisional estimates, correcting errors and communicating them and dealing with misuse and mis-interpretation of data by outside parties. The first one was made by the delegate from Indonesia and the main points made included :**

1. The Statistical Community Forum (FMS) with wide representation from many sectors (especially the mass media) has been very effective.
2. It is observed that quite often criticisms are misplaced due to lack of understanding of the data.
3. Good sampling methods are used to minimize sampling error. Serious efforts are put in to ensure the quality of data generally
4. To cater for timeliness needs, an established system exists whereby provisional data are issued and revised in stages until the final figures are released.
5. Seminars/workshops are conducted to explain statistical methodology and findings together with various issues related to statistical errors and revisions. People's understanding of the data will thus be improved.
6. There are people mis-interpreting or misusing data. Some do so unintentionally and some intentionally ("abuse"). Both preventive measures (in anticipation of problems) and reactive measures are to be taken (of course prevention is more preferred): a) conducting workshop for the mass media; b) conducting various activities (including campaigns) to enhance understanding of NSO's work; and c) publishing articles to rebuke unfounded criticisms, inviting critics for friendly and balanced discussion.

**C. The second presentation was made by the delegate from the Philippines (National Statistical Co-ordinating Bureau). the main points made included:**

1. Revision of statistical series is necessary and desirable, arising from:
  - a) improvement in methodology
  - b) revision of international guidelines
  - c) revisions which are inherent in some statistical tools (e.g. seasonal factors are updated in doing seasonal adjustment of series; change in the base year of a constant price series)
  - d) due to the need of timeliness, provisional estimates are issued and they are to be revised as more data become available
  - e) “mistakes” made in the statistical process ( say, human errors in the computational process)
2. We should keep track of the extent of revision, to see how much have been contributed by change of methodology, by new data availability and by occurrence of error.
3. We should a) have well-deliberated revision policy (and schedule); b) ensure strict adherence to the revision policy; c) make revisions publicly known and have them properly explained; d) have periodic consultation with users, including the mass media, to solicit views about the procedures.
4. For major changes in concepts, definitions, classification and statistical methods, giving of advance notice is desirable
5. Where there is a change in definitions or methods, revisions should be carried back for a reasonable period to give consistent time series.
6. In the Philippines, much work is done in studying the extent of revisions (from provisional estimates to final estimates) and to benchmark such against the situation of other economies. This would be very useful in the data quality assurance process.
7. In dealing with misuse and misinterpretation of data by external parties, “For the Record” clarifications will be issued on the Website.
8. Methodologies will be discussed with mature users of statistics who can become champions/defenders of the NSO/NSS.

**D. The third presentation on country experiences was made by the delegate from Sri Lanka and the subject addressed was micro-data dissemination. The main points covered included:**

1. A system has been instituted in the Department of Census and Statistics (DCS), Sri Lanka, whereby microdata from surveys, with identities of the data subjects removed, are provided to eligible requesters free of charge.

2. “Eligible” requesters are Government Institutions, Universities, students and International Agencies.
3. The processing of requests goes as follows: a) study proposal is submitted to DCS; b) DCS assesses acceptability of request; c) a 25% sample from the full sample is released to the requester for processing and drafting of first report; d) DCS vets report (to confirm that the report does not contradict with facts and figures already published); e) DCS provides full sample to requester; and f) final report of requester is again vetted by DCS before publication of the report by the requester.
4. A project entitled Accelerated Data Program has been sponsored by PARIS21 and the World Bank. It will further enhance and streamline microdata dissemination.

**E. The fourth presentation on experiences, on mass media/marketing was made by the delegate from Hong Kong, China. The main points covered included:**

1. There should be two-way communication with the market: Understand better users’ needs, preferences and concerns AND convey brand image, product characteristics and product benefits
2. There should be direct and proactive communication with many groups of Stakeholders. Note that the mass media is an indispensable business partner
3. Challenges: There is increasing demand for data and varied channels of access, plus tools for self-help tabulations. There is also greater demand for accountability and explanation of statistical findings. We also face increased competitions from, say, private sector data agencies (but note that they may actually be our partners)
4. Meeting the challenges: a) build rapport with key clients; b) develop strategies for effective communication and media relations; c) develop user-focussed messages; d) develop user-centric data dissemination services (including online platform for building tables, charts, maps) ;
5. To enhance branding : a) “Vision, Mission and Values” statement is drawn up and widely publicized, in particular getting staff to understand the true spirit and putting such into daily practice; b) press conferences and specific seminars to explain findings of major statistical projects; c) requiring people to acknowledge the source when they quote our data; d) partnering with prestigious data agencies to extend the reach of official statistics) where appropriate; e) seek legislative backing to enhance the trust of other parties.
6. To promote the image of accountability and user friendliness, a “Performance

Pledge” leaflet (in both hard and soft copy forms) is issued widely, letting people know the products and services that are available and the standard and quality of service that they can expect.

7. “Professionalism” is stressed both in actual work and in branding. International standards are generally applied.
8. Statistical awareness is built up among students ( they are “our leaders of tomorrow” ) through giving talks at schools, distributing teaching kits to teachers; contributing simple articles to newspapers; sponsoring project competitions. Similar things can done for businesses and the wider community.
9. Participation in international statistical events – with the globalization trend, users are now everywhere around the globe. Possession of global view by statistical agencies is important. We need to understand others’ work and product and let others understand ours as well.

**F. The fifth country experience presentation was made by the delegate from the Philippines (National Statistics Office). It was entitled “Using website to increase effectiveness of communication”“. The main points covered included:**

1. Efforts are put into the launching of new data releases and other information campaigns (even prior to the conduct of the censuses and surveys).
2. Different methods are devised to tackle different media of data dissemination - newspaper, radio/TV; website; electronic format; print.
3. Advanced Release Calendar are used to inform users; and press releases/special releases are put up in a very timely fashion.
4. It is well noted that different types of data users (policy makers, analysts, the mass media, business firms) need different kinds of products (key results; detailed results; special tabulations; micro-data).
5. Consideration for a more responsive website requires
  - a) regular policy review : to review user agreements / citizens’ charter; maintain/update a manual on style, for reference by different staff working on different parts of the website; review of the pricing policy;
  - b) capability building: website design, archiving, desktop publishing;
  - c) infrastructure construction; and
  - d) contents management.

6. The Philippines has participated in the ADP (Accelerated Data Program) sponsored by the World Bank, OECD and PARIS21 (whereby selected hardware and methods software are provided, capability building aided and technical assistance rendered). This has been most helpful.
7. The Philippines has established an archive for microdata (although this is not yet on the Web). The features are:
  - a) international standard is adopted
  - b) equitable access is provided
  - c) long-term preservation of microdata is ensured
  - d) corresponding metadata are provided
  - e) Survey microdata, census microdata and administrative-based microdata are already being held
  - f) Microdata are categorized as “public use files”(anonymized); “licensed files” (semi-anonymized); “file accessible only on site” (“data enclave” – sensitive data and which are difficult to anonymize)

**G. Group Work – Participants were split into 4 groups and each was given a theme to discuss. The main points covered in the Group Work sessions included:**

**Group 1 – Preparing integrated databases**

Points :

1. Profiling different categories of data users and establishing their needs.
2. Putting diverse datasets for “single window” delivery of diverse users.
3. Establishing definitions and classifications which meet various needs; implementing standardization or harmonization as appropriate.
4. Establishing an effective system to manage metadata.
5. Enhancing the coherence of the statistical system. Lack of coherence may often bring about inconsistency and also would affect the credibility of the Statistical System among the stakeholders.
6. Getting all staff to realize the importance of integrated databases against a common mentality of caring about only the area which a group of staff is primarily responsible for.

**Group 2 -- Providing information for policy purposes**

Points:

1. Establishing the information needs for policy purposes at different levels (e.g. Manifestos, national development plans, pledges, Sectoral plans).
2. There are statistical analyses for the purpose of formulating policies and action programmes
3. There are also statistical analyses for the purpose of evaluating the effectiveness of policies and action programmes with a view to adjusting those policies and action programmes
4. Committees or consultative bodies often need to be created to perform the functions above effectively
5. The working relationship between NSO and policy makers may differ according to the political and administrative set up and the culture of the country in question. Three models may be observed: a) NSO statisticians will provide data only (or perhaps with some brief analysis); b) Statisticians in NSO assist Administrative Agencies with the analysis, with themselves staying very much in the background; and c) Statisticians in the NSO will analyse the data and come much in the forefront.
6. NSO must display objectivity and impartiality in assisting in the application and analysis of statistics for policy purposes, in particular where Model 3 above is adopted.

### **Group 3 -- Working with the mass media**

Points :

1. The mass media acts as a bridge between the data producers and data users in terms of a) letting data producers know what kind of data which the general data users would want; and b) passing on the released data to the final users.
2. The mass media also acts as some kind of final users as they may write press articles on the data.
3. The mass media's general attitude and inclinations may be quite different in different countries/territories, especially in handling sensitive subjects. But almost invariably they tend to like sensational materials.
4. Good relationship with the mass media is most important and this can be built up by facilitating their work and establishing mutual trust with them.
5. Assist the mass media to understand (a) statistics generally and (b) specific areas of statistics (which may be more complicated). Provide them the education they need (e.g. organizing seminars for them for general appreciation of statistics and on

specific themes)

6. Try to understand the mass media individually – different newspapers, say, have different types of readers, hence the form of the materials that we provide to them may sometimes have to be different to suit their needs.
7. Although we should be helpful to the mass media we must also be firm when needed. That is, if they have done some mis-reporting we must let them know; and if the matter is serious we may have to insist on their issuing erratum to put the record straight. Naturally we have to do so tactfully to avoid damaging a good long-term relationship.

**Group 4 -- Secondary use within the NSS of statistics produced by NSO  
or a Division of it**

Points:

1. Good communication among staff within the NSO should be established about the data needs of different working units.
2. Staff should realize that outside parties look at the NSS/NSO as a whole and they themselves must do the same.
3. Early consultation on statistical developments among different working units should be done — a particularly relevant example is the appreciation of the needs of the national accounts statisticians by other sectoral statisticians (e.g. agricultural statisticians, price statisticians).
4. Establish clear authority lines and good mechanisms for the purpose of close collaboration.
5. Establish technological networks for the efficient flow of relevant data

**H. General discussion: The points made by Participants in echoing and responding to the presentations, over and above those summarized in the previous paragraphs, included:**

1. In this era of widespread and common use of ICT, there are a lot of self-servers out there. This is a broad but least understood segment. More efforts should be put in to gain understanding on them and to obtain feedback from them regarding our data dissemination work as far as possible.
2. Web 2.0 technology is not well exploited as yet and more attention should be paid by statistical agencies on this.



3. Staff in statistical agencies should understand more about the features and functioning of search engines (such as Google) so that more browsers on the web can reach our sites easily and frequently.
4. There are many potential critics out there and let us “speak clearly and loudly” (i.e. let our data be disseminated in a clear and easily understood fashion, together with appropriate notes on points which may easily draw misunderstandings) before people misunderstand our data and make wrong accusations on us. To do this well, we need to learn more about our potential critics’ inclinations and trends of thought.

## SESSION 4 :

### ENHANCING THE VISIBILITY AND IMAGE OF STATISTICAL AGENCIES

#### **A. The session opened with a presentation by Mr. Fred Ho, SIAP Consultant. The major points covered included:**

1. Good visibility means that the Agency comes ready to mind; and hence whatever it does carries weight and exerts influence.

2. We need to gain good impressions from people; and once the good impression exists, a virtuous cycle will operate. Outside parties will become more forthcoming in assisting the Agency's endeavours and staff members will work more conscientiously to maintain the good image of the Agency or try harder to further enhance that.

3. Thus, good visibility and image of the Statistical Agency will greatly facilitate its work in all aspects, including data communication.

4. Some means to gain good impressions from various groups of outside parties are:

(1) Users of statistics take availability, timeliness, quality and relevance of data as most important. We must have good communication with various data user parties to understand their needs. Different stakeholders have different levels of statistical literacy and we have to undertake our work such that those whose literacy level is not high will appreciate our work and in the meantime to introduce sufficient sophistication so that the very knowledgeable ones will not dismiss us as being pedestrian.

(2) The trend of globalisation is moving fast. Through the application of international standards we will let people see our statistical processes and products in a positive light, apart from the fact that the statistical data will indeed be more relevant and useful.

(3) We should combine greater use of statistical techniques (in particular sampling methods) and Information and Communication Technology (ICT) to enhance the timeliness of release of data. Meanwhile, these techniques and facilities can also assist us in reducing burden on data suppliers. (However, we must particularly attend to the quality aspects when self-enumeration methods are used.)

(4) User-friendliness, both in terms of system designs for the access of data and of the general attitude and service mode of the Agency staff, is most important in order for users to gain the impression that the Agency is a helpful organization. Advancement in ICT renders data dissemination multi-faceted apart from greater ease of access. We need to ride on the trend while reserving some efforts to cater for those who still need materials coming out of the traditional approach.

(5) We must show people that we are very mindful of their concerns with safeguards for private and confidential data.

(6) Administrative records are receiving increasing attention as the source of raw data (vis-à-vis surveys) for compiling statistics. We must show people that we use this approach judiciously and that we will have less need to do surveys if we have more administrative records to use.

(7) We should take the mass media as partners and build up good working relationship with them, facilitating their work and commanding their trust on us. When they have a good impression of us, they pass this on to the wider public.

3. Staff at various ranks in the Statistical Agency all have a role in creating positive impressions and avoiding bad impressions, especially the latter. In particular, we should realize that their individual behaviour may also be taken by others as projecting on the behaviour of the Agency as a whole. Even occasional carelessness as seen by others in handling individual data can be very harmful.

4. We should consciously create visibility as appropriate. Apart from letting actual examples of our work to tell the stories, we may need to organize additional activities and engage in certain actions so that people will recognize our existence and our significant role in the community. Senior staff in some Statistical Agencies may prefer a low profile in their work. However, this is a retrogressive attitude in this modern world. Nevertheless, the culture of the community in question should be taken into account. Over-doing and hard-selling can indeed sometimes be counter-productive.

5. Some strategies to enhance visibility and image of Statistical Agencies are:

(1) Apart from staff at the top level, front-line staff and middle managers are all in frequent contact with many people and they are the Agencies' ears and eyes. If they operate effectively, they can tap a lot of useful information from the community in regard to what it would want from us and how good we are doing in the eyes of the public. Thus, we should ask staff to feedback to us what they have seen and heard and encourage them to make suggestions in responding to the community's views.

(2) Staff members also assume the role as the Agency's "mouths". Hence staff should at least be fairly knowledgeable of the basic techniques and approaches of our work and should be kept informed of significant work developments of the Agency.

(3) We have to recruit people of the right description (reliable, dedicated in spirit and enthusiastic in style) and remind them constantly of the need to behave properly since they are all seen as our representatives.

(4) Senior staff should make use of opportunities of public appearances to demonstrate the capabilities of the Agency, how it has a role in policy making and how it may

contribute to economic and social developments

(5) Integrity and impartiality is an important element of our work and explicit declaration of such should be done. Relationship with ministers and legislators should be carefully maintained whereby they realize that we can be very helpful to them for policy purposes while understanding that integrity and impartiality are our underlying values.

(6) The mass media are very important partners. By facilitating their work we also impress on them. We therefore have to train up our statisticians in communication or even some journalistic skills so that we know how to engage the mass media effectively. We can then create a good image of ourselves among the mass media and when this happens they also help us create visibility and good image among the community.

(7) The business sector are our data users but they also often feel bothered by having to respond to surveys. We need to maintain a good relationship with people at different ranks working in enterprises and organizations to facilitate our work.

(8) With the academia, we should on the one hand try to make use of their expertise and on the other hand let them know well what we do. They are an important source of “third party endorsement” when this is needed.

(9) The effective functioning of an Advisory Council, constituted by a wide spectrum of people, contribute very useful views . Its existence also creates the impression that we are not operating in isolation but are doing our work on the foundation of rich knowledge and wide consultation of needs and concerns.

(10) Some people may not appreciate our good work because of lack of knowledge. Then, there may be parties who criticize our work out of whatever reason (biased views, vested interests, etc.), Thus, devoting efforts to the promotion of statistical literacy in the community is most worthwhile in gaining wide support.

(11) Management of crisis is something we have to get prepared for. It is an important aspect in maintaining the image of a Statistical Agency. Keeping a long-term track record of honesty, openness and sincerity in rectifying errors and handling unfavourable situations is the best policy. Coupled with good relationship with various parties, including the mass media, such that we have the trust and confidence of these parties all along, we may get over the crisis.

6. Building up the image is a holistic endeavour. While trying to impress on and gaining good impressions from different parties may better be achieved through appropriate segmentation we should remember that the parties do interact and the issues in question also interact. Hence, a co-ordinated approach should be adopted when we take positive actions to enhance our image or implement measures to avoid the development of a bad image.

**B. A country experience presentation was made by the delegate from India. The main points covered included:**

1. The statistical system is underpinned by firm legislative background and effective administrative systems. Given the vast size of the country, a good co-ordination mechanism within sub-systems of statistics is most important
2. It may be noted that high visibility may not necessarily mean high level of image.
3. Reliable data production and timely dissemination are key success factors.
4. Higher demand on data from various outside parties actually enhances visibility and image of NSO generally.
5. Good relationship with the mass media is most important.
6. Some strategies for enhancing the visibility and image adopted include:
  - (a) Enhancing credibility of products – through a) use of proper sources of data; b) using proper processes and making them transparent (methods and details are reported; data revisions are explained) ; c) timely dissemination of data and providing assistance to users as needed; d) strict safeguarding of confidentiality of data on individual respondents. IMF's SDDS has been subscribed to; and Quality Assessment Framework is a future initiative to be engaged in
  - (b) Effective interaction with users for assessing requirements hence increasing accessibility of statistical products – existence of a wide network of Councils and Committees for consultation;
  - (c) Have an institutional review mechanism whereby feedback is obtained from time to time;
  - (d) Engage the mass media effectively. The media greatly helps in launching of surveys and dissemination of data.; they are given seminars to receive clarifications on various relevant issues and to gain understanding on new products.
  - (e) Human resources development is seen as a core strategy for improving the overall statistical system (both the contents of the system and its image) and this is addressed by the setting up of the National Academy for Statistical Administration.

**C. Group Work – Participants were split into 4 groups and each was given a theme to discuss. The main points covered in the Group Work sessions included:.**

**Group 1 : Creating a good image with a view to securing support from government ministers and other politicians**

Points:

1. Staff of NSO should have the knowledge and skill, through adequate training and briefing, on statistical matters to render help to policy making activities
2. NSO should communicate with government ministers and other politicians to let them know about the capabilities of the NSO and its core values in work (integrity, professionalism etc.).
3. The above efforts should be made continuously, not on one-off basis, so that the image is created. Try to get feedback from time to time to see to what extent the efforts are successful.
4. NSO should be clear about the support that it is looking for—not just moral support but also substantive support, such as financial and other resources support.
5. NSO should make sure it has a **BALANCED IMAGE**. It should be mindful that while being helpful to ministers and other politicians they are not being looked at by others as having too close a relationship with them; that is, it should ensure that others would not develop a suspicion that there is undue political or administrative intervention on NSO's work..

## **Group 2: Fostering a positive image of the statistical agency among the community**

Points:

1. Ensure user friendliness of the products and services of the Statistical Agency.
2. Develop an overall strategy to enhance image and communication to guide activities in this area so as to ensure consistency. The establishment of a public relations unit should be considered.
3. Consistent use of branding on all websites, publications, media releases and presentations.
4. Segment the community into different groups and apply different strategies that suit the group best. For the mass media, use different tactics for different parts of the media—e.g. always ready to provide key points for wired services, stories for feature articles, detailed data for analyst/reporters etc..
5. Hold public vents to enhance visibility. Chief Statistician and senior staff should use appropriate opportunities to gain exposure for NSO and demonstrate the capabilities and ethical attitude of the Statistical Agency.
6. Make use of other Government Agencies appropriately to promote statistics in their respective spheres.

7. With tactfulness, rectify mis-presented information and conception about the Statistical Agency and its products/services/working methods (especially with regard to those mis-reports made by the mass media).
8. When mistakes have unfortunately made, announce quickly and honestly, republish correct information quickly, brief reporters about what has happen and what the fix is. Hold a sincere attitude that actions will be put in place to avoid re-occurrence of the mistake.

### **Group 3: Strengthening communication skills of statisticians**

Points:

1. Let recruits know that statistical staff are not just handlers of numbers or statistical formulae. Stress the importance of communication skills.
2. Let staff realize that for good communication, they must have good subject matter knowledge, good knowledge about their organization and good organization of the materials that they are going to present to others. They should be clear what information they are going to get from other people and how to deal with different kinds of people. Finally, they should possess good language skills.
3. Advocate that communication skills should be included in the curricula of statistical programs in education and training institutions. In-house training or specially sponsored external training should be provided to staff.
4. In communicating with outside parties, staff need to know well the background of the other party. Experienced staff should give on-the-job training to newer staff by way of examples of how to deal with external parties.
5. The attitude and enthusiasm of staff will impress upon others, whether the staff are doing survey interviewing work, disseminating statistics, helping to interpret data or performing other work where they come into contact with others. They should be always mindful of this.

### **Group 4 : Statistical literacy**

Points:

1. Should work with Education authorities, learned societies, universities and schools to promote the development of formal statistical curriculum.
2. Should work with these parties to organize extra-curricular activities so as to promote interest in official statistics and to appreciate their usefulness.

3. Collect good examples of effective and beneficial use of statistics. Make use of suitable opportunities to explain how data can be used in policy making activities and how policies affect daily life.
4. Collect examples of mis-use or abuse of statistics.
5. Mass media is a potentially important partner; but equally they can cause problems if they are not well informed or equipped themselves – thus, statistical literacy of the mass media is an important point to take care.
6. Some survey activities may be undertaken to assess the state of statistical literacy in various sections of the community.

**D. General discussion: The points made by Participants in echoing and responding to the presentations, over and above those summarized in the previous paragraphs, included:**

- 1, The two aspects of this topic – visibility and image – are separate but together they are the key aspects influencing the image of statistical agencies in the minds of various stakeholders. The ideal situation for NSOs to strive for is to be highly visible with a very positive image, as this will assist data collection operations and help create awareness and use of its statistical products and services. It will also lead favourable reponses amongst stakeholders, employees and potential employees in different kinds of activities.
2. The importance is stressed of a NSO visibly and consistently performing well to meet user needs and operating in accordance with the United Nations Fundamental Principles of Official statistics in all of its activities.
3. Visibility is achieved from exploiting situations to raise awareness and the profile of the NSO. In doing so it is important that attention is paid to consistently branding the name and image of the NSO, and getting acknowledgement when statistics are quoted. It is also about engaging with the key users of official statistics and influencing their programs so that they make best use of statistics.
4. Many factors influence image, particularly service performance in the eyes of users; relationships with data suppliers; quality of collection forms; and use of modern ICT for data collection and dissemination. Positively responding to new demands and complaints is also important, balanced by an ability to say ‘no’ when necessary but in a constructive manner.
5. The important role of the Chief Statistician has been discussed in some length. The Chief sets the example for all staff and there is strong external expectation that he is the chief spokesperson. His personal capability, ways of dealing with various parties and style of presenting himself has significant impact on the visibility and image of the Agency. The mass media often likes to have ‘news bites’ from the Chief but this is not always appropriate or possible and so NSOs need to have



more staff well trained and able to engage with the media in ways that generate interest positively. Many NSOs have established a Public Relations Unit to engage with the media and to coordinate publicity events.

6. Since visibility and image are as much about perceptions as reality it is not an easy task to measure and monitor the effectiveness of actions taken to enhance them. Logging media coverage of media on NSO's data reports and other endeavours might throw light on the matter. Advisory Councils and other channels of feedback should also be utilised. Skilled personnel on such matters could help digest such information and recommend strategies for improvement.

*Annex*

Course Programme

Annotated Programme

Participants List