Bangladesh Country Paper Presented at the Fifth Management Seminar For The Heads of National Statistical Offices in Asia and The Pacific

September 18 - 20,2006 Daejeon, Republic of Korea.

Salehuddin M Musa
Joint Secretary
Planning Division
Ministry of Planning
Government of the Peoples' Republic of Bangladesh

Introduction: Bangladesh Bureau of Statistics (BBS) is the centralised national statistical organization of Bangladesh. The BBS is at present under the administrative control of Ministry of Planning. BBS is playing an important and active role in the nations' struggle for progress. By way of publishing compiled statistical data in various sectors BBS has been continuously assisting the decision makers, administrators, planners and researchers in formulating and implementing socio economic and development plans and programmes of the country. BBS data have been utilized not only as the foundations for planning and policy making in the governments development programmes, but also in various activities of the general public. With better understanding about the institution and its activities, it is hoped that a greater parts of the public would be served by the facilities BBS has made available.

At present BBS comprises of 8 wings which are as follows:

- i) Census wing;
- ii) Industry wing;
- iii) National Accounting wing;
- iv) Agriculture wing;
- v) Demographic and Health wing;
- vi) Computer wing;
- vii) Finance Administration and MIS wing; and
- viii) Training and Research wing.

Census Wing: Census wing is one of the important wing of eight wings of Bangladesh Bureau of Statistics (BBS). Previously Census Commission was under Ministry of Home Affairs till 1975. In 1975 during the reorganization of Bangladesh Bureau of Statistics 4 organizations namely a) Census Commission, b) Agriculture Census Commission, c) Bureau of Agriculture Statistics and d) Provincial Bureau of Statistics merged together and named as Bangladesh Bureau of Statistics. For Ministerial support to BBS a separate Division (Statistics Division) under Ministry of Planning was created. Secretary Statistics Division was the Director General of BBS. In the re-organizational process Census Commission became one of the wings of Bangladesh Bureau of Statistics renamed as Census Wing of BBS.

Functions of Census wing:

- i) Plan and Execute census of Population; Census of Agriculture and census of Non-Farm Economic Activity;
- ii) Publish Census Reports;
- iii) Conducts Adhoc Surveys on Agriculture and Non- Farm Economic Activity.

Census wing, the key wing of BBS has three component branches such as: a) Population Census, b) Agriculture Census and c) Economic Census. Each branch is headed by a Project Director (an officer in the rank of Joint Director) and the wing is headed by a Director.

Manpower: The total manpower of Census Wing (Census Branch) is 254 of which 24 are statistical professionals and the rest are support staff.

Population Census: The practice of census taking in the area, now Bangladesh, started in 1872. Thereafter, another census was conducted in 1881 and from then the decennial periodicity of census was maintained with the exception of 1971 cycle which was held up and delayed till the year 1974 because of liberation war. The 1974 census was the first ever census in Bangladesh after her emergence as a new independent nation in 1971. Bangladesh went back to the decennial periodicity and held the second, third, and fourth censuses in the years 1981, 1991 and 2001.

Objectives: The present fourth round of population census was carried out to achieve the following objectives:

- determine population and household numbers of the country;
- obtain data on demographic characteristics by gender and disabled persons by type;
- collect information on housing, household structure, and other selected facilities;
- generate data on gender specific occupation, source of income, and participation in economic activities;
- gather basic information on tribal population, public health, and sanitation; and
- prepare socio-economic data base for use by policy makers, planners, and researchers.

Census Planning: For the 2001 round of population census preparatory work programme was mounted mid-1997. A census work-plan was prepared defining in detail the activities to be performed and completed by specific dates in each calendar year. The work plan was strictly followed by every one involved in the census. A handy booklet was composed for general use. The booklet explained census objectives, legal bindings, methodologies and pre-post-census work imperatives. Field instruction manuals were also produced for use by census workers. These manuals provided precise guidelines regarding: (i) duties and responsibilities to be performed at all levels, (ii) lessons to be given when imparting training to field supervisors and enumerators, (iii) mapping and geo-coding operation to be done, (iv) questionnaire to be filled-up, (v) enumeration and supervision disciplines to be adhered to, (vi) pre-test and pilot census to be co-ordinated, (vii) census workers to be put in place, (viii) census materials to be procured and distributed, (ix) data processing to be done, and (x) publication plan to be implemented.

Census Phasing: The census was completed in three phases:

Phase I - Main Census: The population all over the country was counted at a stretch in five days from 23 to 27 January, 2001 using OCR/OMR formatted questionnaire. The counting began at mid-night or zero hour of 23 January, 2001. All floating people were counted from mid-night till next day-break (the

hours called census night) at the places where they were detected passing the night. In case of households, on the other hand, all members were enumerated in their residences. The de-facto method was followed in counting; that is, every person was counted at the place where he/she stayed in the census night.

For securing management perfection in the massive task of nation-wide enumeration, the whole country was divided into 262,000 enumeration areas (EAs), 47,678 supervision areas, and 2,478 zones. On the average, each EA comprised of about 100 households. In forming EAs, the terrains and habitation patterns of localities were taken into account. For exact identifications of

EAs within mauzas and wards, mauza/ward maps were used; these were base maps for census field work. After identifying and delineating EAs by paying field visits, all of them were marked out on respective base maps. Such maps were given to supervisors for use in their field supervision and control.

Phase II - Post Enumeration Check (PEC): A PEC survey was carried out to measure quality and coverage of the main census count. The survey was done immediately after receiving all census filled-in questionnaires in Dhaka head office.

To assess coverage of the census, an effectively designed post enumeration check (PEC) survey was conducted just a month after completing the census. The PEC survey data were collected between 23 to 27 February, 2001. The net under coverage rates, estimated separately for national level aggregate and also for rural, paurashava, other urban and SMA areas are given below.

Locality	Net error rate (%)
National	4.98
Rural	4.54
Paurashava	5.81
Other Urban	3.73
SMA	7.67

The paurashava and SMA rates are comparatively higher as a result of such peculiar urban features as greater population densities, transient visitors likely non-responses, and occasional respondent response failures.

Phase III - Sample Census: A sample census (large scale sample survey) was carried out at the last phase. For this undertaking, a long manual questionnaire was adopted. It supplemented data of the main census. Being a programme of much wider information coverage, the sample census provided detailed data relating to population and household characteristics including fertility, morbidity, and migration. The survey was carried out in 6000 enumeration areas over the country using a long questionnaire containing 74 questions in 7 modules. This was a non OMR questionnairen format.

Census Questionnaire: A two module questionnaire was used for the main census. As many as 28 questions were included in it. A total of 16 questions relating to housing and household characteristics were covered in Household module. The remaining 12 questions focussing on individual were incorporated in Individual module. The questionnaire items were identifications and addresses of households, number and structure of houses including tenancy, ownership of agricultural land, toilet facility, access to electricity, disability of members, source of income, individual age, sex, religion, marital status, literacy, education and working status. Information were collected through interviewing household heads and in case of their absence from responsible members of households.

Designing and Pre-testing of Questionnaire: Data needs assessed on government current priorities and also recommendations of technical committee experts guided deciding and designing contents of census questionnaire. Several preliminary checks of the questionnaire were made locally. Lastly, the questionnaire was pre-tested in selected areas of Noakhali, Feni, Jamalpur, and Gazipur with participation of some experts of the technical committee. Satisfactory pre-test results resolved finalising a two module questionnaire for adoption in the census.

Mapping: Household counting for EA demarcation and concurrent EA mapping works carried out in two phases began in 1997. The first phase was initiated for only urban coverage in view of the complex task associated with household and EA boundary identifications due to quite dense habitations in urban localities. All old urban ward, mahalla, and control maps were updated and, where unavoidable, new maps were prepared showing current boundaries. Likewise, the second phase, confined to exclusively rural areas, necessitated updating and preparing new maps for union, mauza, and control maps. The updated and new maps were used for demarcating all urban and rural EAs across the country. Also, the EAs were distinctly sketched out on respective maps which the supervisors used for field control and overcoming enumeration errors. The mapping assignment was performed by BBS cartography expert personnel. All maps were finally checked and adjusted during zonal operation. For sample census, the control maps were the basic documents for doing field work.

Zonal Operation : Two zonal operations were executed in both urban and rural areas in April and October, 2000. These operations allowed setting up a system germane to: (I) involving local people in the census, (ii) interacting with local bodies, and (iii) warranting efficient field work arrangements. In April first zonal operation, names and addresses of local enumerators and supervisors were mainly collected. Also, Zonal officers introduced themselves to urban ward commissioners and rural union parishad chairmen and made overtures for eliciting their support to completing mapping operation successfully. The next October zonal operation was mounted just three months prior to conducting the actual census in January, 2001. This schedule ensured keeping current all the components of field management system of the census. The October zonal operation featured completing such works as, (I) instituting primary census committees in zilas, upazilas/thanas, wards/unions, and paurashavas, (ii) interacting with local bodies, (iii) verifying supervisor maps, (iv) confirming finally the lists of supervisors and enumerators, and (v) checking and endorsing locations & available facilities of training centres selected to train enumerators and supervisors. All these works were done by 2,478 zonal officers under supervision of 159 officers including senior officers of BBS.

Pilot Census: After finalization of the census questionnaire a pilot census is done to asses the work load of the enumerators and supervisors, logistics support, quality of the materials uses for the census like OMR related B2 pencil, erreaser etc. and acceptability of the people in general. Administrative control and management is also tested though holding this pilot census. On the basis of pilot census necessary corrections and scheduling is made for the final census.

Publicity: A massive nationwide publicity is done through TV, Radio, news paper, miking, posturing etc. for creating the massive awareness among the people about the importance of census so that necessary cooperation is extended to the census workers.

Training of Census Workers: A three tire training is imparted to the censes workers. At Dhaka headquarters. The Divisional, Regional and Zila Coordinators are imparted massive training for two days. They take part in the training programme as master trainer. At the zila headquarter the second tire training is implemented. All the Zonal Officer take part in this programme. Regional and Zila Census Coordinators are the master trainer of this programme.

They impart 2 days long training detailing on the questionnaire with a practical field trip. The third tire training is given to the Enumerators and supervisors by the Zonal Officers following the same schedule.

Distribution of Census Kits: Census kits are prepared containing necessary census books, pencil, sharpener, erraser, lumber chalk etc. and distributed to the enumerators 2 days ahead of census enumeration after training

Transportation of Census Materials: Census materials like questionnaire books, pencil, sharpener, eraser, control forms, publicity materials are transported to local RSO offices and zila headquarter in due time ahead of holding the census from Dhaka Central Control Room.

Enumeration: Enumeration of population was done within 5 days starting from 23rd through 27th January, 2001 keeping the zero hour of 22nd as **census moment** and the night followed as **census night**. Enumeration was done following the **defacto** method of census. In this method people were counted at the place where they stayed the census night.

Submission of Filled in Schedule and Distribution of Honourarium: After completion of enumeration the enumerators submit their materials to the supervisors. The supervisors then submit it to the zonal officers along with the enumerators. The zonal officers then submit it to central control room under the supervision of zila census coordinators. The distribution of honourarium is done to the enumerators, supervisors, zonal officers and all other related census officers instantly after each step of submission.

Field Management and Operational Control: The census lowest unit was enumeration area (EA). All over the country as many as 262,000 EAs were delineated. Above them were 47,678 supervisors areas (SAs) with every SA having EAs in the range 5-6. For each EA one enumerator and each SA one supervisor were appointed temporarily from amongst local unemployed educated youths. All 262,000 enumerators and 47,678 supervisors mobilised were controlled by 2,478 zonal officers all of whom (excepting a few) were selected from BBS manpower setup. Immediately above zonal officers were 119 zila co-ordinators nominated from Class-II and Junior Class-I officers of the Bureau. Another step higher were 32 regional co-ordinators chosen from BBS senior officers. At the highest level of supervision and management, Bureau's eight senior most officers acted as 8 divisional co-ordinators for eight census divisions. The Director General of Bangladesh Bureau of Statistics was designated the Census

Commissioner who acted as the national co-ordinator overseeing and guiding the whole system of census programming and implementation.

The government local administration chiefs and public representatives participated in the census through census committees formed for city corporations, paurashavas, districts, upazilas, wards, and union parisads. The Mayors of city corporations, Chairmen of paurashavas, Deputy Commissioners, Upazila Nirbahi Officers, Ward Commissioners, and Chairmen of union parishads headed their respective census committees with BBS officials being the member-secretaries.

At Dhaka headquarters a census control room was opened. It functioned 24 hours under a separate adhoc committee with Census Commissioner as its head and Census Project Director as member-secretary. A number of officers and staff members attached to the committee provided logistics during census field activities, monitored constantly the census performance, informed the Census Commissioner about performance status, and obtained his instructions for communicating them at all levels for successful completion of the census.

For the purpose of holding the Population census all the officers and staff members of BBS are engaged with different responsibilities at the field level.

Data Processing: For census data capture the adoption of optical character reading (OCR) and optical mark reading (OMR) strategy was planned. As such, both optical character reader and optical mark reader machines were procured. The Bureau had gained experience in OMR technique data entry from earlier censuses of 1981 and 1991. The OMR machine commissioned in these two censuses ran into malfunctioning for overuse and, therefore, was replaced.

All filled-in questionnaires were manually edited to ensure complete markings before putting them through machine reading processes. For machine readings, geographic area coding (geocode) order was adhered to. The on-line editing routine was built in data processing programme to ensure that all questionnaires of a particular batch (commonly upazila/thana) were recorded in discs with quality having been tested and edited.

All records of households and individuals were subjected to an efficient computer edit and imputation programme. The errors and inconsistencies, if detected, were imputed by applying both 'hot-deck' and "cold-deck' methods of imputation.

For all zilas, separate files were maintained. The census tabulation plan finalised through standing technical committee recommendations admitted of options for comparing all individual cells with 1991 census results. The census tabulation programme was written in Realia COBOL and thoroughly tested before adopting for census tabulation. All tables generated were lastly transferred to MS Excel format for ensuring correct headings and foot notes.

Publication: The census reports to be published will provide population information at the nation, zila and community levels. Also the publication plan will cover reports containing analytical accounts of the census as well as census administration information in detail.

Census Reports:

- Community Series Report : Of 64 zilas, one report for each zila containing data disaggregated down to unions/wards, mauzas/mahallas and villages will be published.
- Zila Series Report : Of 64 zilas one report for each zila containing data by upazila level desegregated will be published.
- National Series Report: This report will consist of the following reports:
 - (a) Union Statistics Report: This report will contain union wise selected census data;
 - (b) Urban Area Report: This report will provide selected data of all city corporations, municipalities and other urban localities;
 - (c) Analytical Report: This report will present detail analysis of population information including housing characteristics.
 - (d) Administrative Report: This report will contain detail information about census management system and its costs.
 - (e) PEC Report: This report will indicate magnitude of coverage errors of census variables by locality.
 - (f) Socio-economic & Demographic Report (based on sample census): This report will present detailed analysis of data related to population, housing and demographic characteristics.

All the community Series and Zila Series Reports of 2001 census have already been sent to the press for publication. At present works on national Reports is going on . Hopefully this work will be completed by December, 2006

The functions and responsibilities of Bangladesh Bureau of Statistics is performed by eight separate wings and two-tires field offices located at Regions every upazilas and thanas.

Planning for 2011 Round of Population Census: The 2011 round of Population Census will be held in the first quarter of 2011. For better management, operation and administrative control steps have been taken to streangthen the capability of BBS field offices. At present there are 23 Regional Offices at the field level. It is very difficult to control and administer the Upazila and Thana offices from regional headquarters. Under each region there are more than two Zilas and 25 to 50 Upazilas and Thanas. Government have taken decission to establish 64 District Statistical Offices (41 more) so that operational control, management and suppervision become more effective.

Technical and Equipment Support: For holding every census foreign donations aids and equipment support were made available from UNDP, UNFPA, World Bank etc. From equipment point of view OMR/OCR machine, Micro Computer, Photo Copier, Printers etc. are essential for Data Processing. BBS having its own printing press from where Census and Survey Reports, Statistical Pocket Book, Statistical Year Book, Monthly Statistical Bulletin are printed regularly. To enrich and build up the capability of printing press necessery printing machines will have to be replaced and installed.

Transport: To hold National Censuses and Surveyes officers of BBS are deputed to field for suppervision. The transports in the Headquarters made available to senior officers. At present there is no transport facility at the Regional and Upazila/ Thana offices. For conducting the

forthcoming 2011 round of Population Census transport facility for zila and upazila level offices will be required .For each zila office one micro bus or a jeep and for each upazila and thana office one motor cycle and two bycycle will have to be supplied.

Training and Study Tour: Personnel engaged in Census and Survey works will have to be trained in the field of statistics, demography, national accounting, sample survey, data processing, census planning etc.. So necessary long term and sort term training at home and abroad will have to be arranged. In edition Study Tours in SARC countries and other developed countries will have to be made available.