a. Census history

It is only in the past 200 years or so that periodic censuses were taken and the results factually recorded. But it was not until the 20th century that censuses in Mongolia were conducted in a regular and systematic way. The first census in the 20th century was conducted in 1918. Further censuses being conducted in 1935, 1944, 1956, 1963, 1969, 1979, 1989 and 2000. In 1918, the population of the Empire of Bogd was estimated at 647.5 thousand persons.

In its day the 1956 census was considered as technically advanced conducted by an established and dedicated census organization. New advances were introduced for the census of 1963, particularly the first use of a computer, which was expected to speed processing and generally improve census methodology. The basic design of the census was developed by the former COMECON (Commission for Mutual Economic Assistance) to assure conformity with other censuses in the region. 1017.1 thousand persons were enumerated in the 1963 census.

The censuses of 1969, 1979 and 1989 also followed the methodological guidelines developed by the Commission. Moreover, in accordance with UN recommendations these three censuses were conducted once in 10 years and included questions on housing. From 1979 the population and housing censuses were conducted jointly with population surveys using broad-based questionnaires. For instance, the survey of industrial and agricultural workers, “Workers” and “Herdsmen”, were conducted together with the 1979 census. The survey of unemployed population, and the survey among
women on reproductive issues were conducted in 1989. The 2000 census differed from earlier censuses in many ways. As the first to be conducted during the transitional period to a market economy, it was expected to reflect a changing emphasis in the demand for economic and social data. The 2000 census was based largely on United Nations principles and recommendations for conducting censuses and thus, in meeting global standards, could be thought of as the first truly modern census to be conducted in the country.

A national population and housing census is by far the largest statistical operation carried out by the National Statistical Office. According to the “Law on statistics” of Mongolia the census should be conducted once in every ten years. However, for various reasons there was an interval of eleven years before the 2000 census of Mongolia. In view of both the scale of the operation and the lack of sufficient numbers of skilled staff, radical approaches were needed in meeting the challenges in preparing an appropriate and realizable census plan, in creating a sound management team, and in building an appropriate census organization.

b. Census planning

As in any major enterprise, the proper planning for a population census is an essential prerequisite for success. Census planning is core process in linking the different phases of the census cycle. The each phases of the census cycle is dependent on a preceding phase. The quality of the output from each phase has a direct effect on the success of the next phase and other phases downstream. The aim of the planning process is to ensure not only that each phase is properly resourced and organized but also that the output of each phase is of sufficient quality for all subsequent phases and that all dependencies between the different phases are identified. Because of the long duration of the census cycle, planning should not remain static but be flexible to take into account changes that occur. There are a
number of issues that require careful consideration when planning a census. These are:
(a) Specifying the role of the census;
(b) The role of Government;
(c) Setting goals;
(d) Developing project plans;
(e) Monitoring project plans;
(f) Developing a budget.

Figure 1. The Population and housing census cycle

The planning stage thus played a crucial part in the overall census operation. The planning process involved the development of a carefully crafted and integrated schedule of activities, providing realistic estimates of timing, costs and outputs, census preparatory work, organization, training, enumeration activity, data processing, analysis, evaluation and dissemination of results to users. As part of the planning approach, the entire census operation was sub-divided into three key stages, pre-census, census enumeration and post-enumeration activities.

The pre-census stage focused on census preparation that included the following activities:
• Creation of a legal basis for census-taking
• Estimation of costs and preparation of budget
• Fund raising and advocacy
• Development of a census work plan and timetable
• Establishment of a dedicated census organization
• Preparation of census maps
• Preliminary listing of households and houses
• Design of questionnaire
• Conduct of census pretests
• Planning for enumeration
• Design of output tables
• Design and testing of processing system
• Recruitment and training of staff
• Design of census communications and publicity strategies

The census enumeration stage covered the actual process of collecting census information from the entire population through interviews and the completion of census questionnaires. Finally, planning for the post-enumeration stage included design of census evaluation, data processing, analysis, dissemination, publication of results and support to users of census data.

c. Creation of a legal basis

Creation of a legal basis for census-taking is a basic requirement for carrying out a population census. Without appropriate legal provision it is impossible to provide proper authority to conduct the census. In 1998 a separate Law on ‘‘Population and Housing Census-taking’’ was drafted. But it was not presented to the Parliament of Mongolia due to a belief that the existing legal provisions were sufficient to enable a census to be carried out. In the event, the 2000 census went smoothly without challenge to the legal provisions. The willingness of the various participating agencies and ministries at all geographic and political levels to assume responsibilities defined in the various orders and regulations played an important part in ensuring the success of the census.

Although no special law was enacted in Mongolia, the existing Law on Statistics, enacted in 1994 and revised in 1997, was in the event felt to be adequate to provide legal support to the 2000
census. This Law stipulates that: “The National Statistical Office organizes the population and housing census at the national level every 10 years”. In accordance with the provisions of the Law, the Government will declare the date of the census. Whenever there is a need to carry out a census, the date should be set up by the Government upon the agreement of the Parliament. The following laws, Government orders and decisions were passed to create a legal basis for the 2000 census:

- The Mongolian “Law on Statistics”: 1994, revised in 1997 article N.7, provision N.1,3 and article 23, provision N. 1,2;
- The Mongolian “Law on Administrative Responsibilities”: dated November 27, 1992 article N. 43, part N.1;
- The Parliament Resolution N. 06 dated January 8, 1998 concerning “Approval of date to conduct the Population and Housing Census-2000”;
- The Parliament Resolution N. 39 dated June 3, 1999 concerning “Establishing the Committee”;
- The NSO Chairman’s Order N. 125 dated July 21, 1999 concerning “Approval of the Population and Housing Census-2000 Questionnaire”; 
- The NSO Chairman’s Order N. 171 dated October 28, 1999 concerning “Approval of regulation to carry out the Population and Housing Census-2000 and instructions for filling up the questionnaire”.

These legal documents and decisions together were considered to provide a sufficient legal framework to conduct the 2000 census. On this basis it was possible to commence census operations and assign responsibilities to the participating agencies and staff.

d. The organization and administration of census 2000

To create a more dedicated unit, following the issuance of Government Order, the NSO management passed an order to split the Population and Social Statistics Department into the Population and Research Department and Social Statistics Division. In
February 1999 the Department was re-organized into the Population Census and Survey Bureau (PCSB). The staff ceiling was raised to 15 persons. The Vice-Chairman of the NSO was nominated as director of PCSB. In actual fact, preparatory work for the 2000 census had started at the NSO as early as 1996. The Bureau was charged with overseeing all stages of the population census, including design, preparatory work, development of forms and instructions, enumeration, data processing, and technical control over of all census activities carried out at the aimag and lower geographic levels.

An important consideration for the successful conduct of the census was that it should have the very highest level of political and administrative support. Following recommendations from the various United Nations advisers who visited Mongolia, NSO presented a proposal to Parliament to establish a high level National Census Committee. This proposal was approved by Parliament Resolution N. 39 in 1999. Under this resolution the Committee was set up under the Chairmanship of the Prime-Minister of Mongolia. The Chairman of the NSO, and Vice-Chairman of the NSO, were appointed as Vice-Chairman and Secretary to the Committee respectively. Other Committee members included the Foreign Affairs Minister, the Defence Minister, the Infrastructure Development Minister, the Finance Minister, the Justice Minister, and the Health and Social Welfare Minister. Responsibilities for special enumeration groups such as the military, diplomatic missions abroad and their families, and prisoners would be assigned to the relevant Ministers, namely Defence, Foreign Affairs, and Justice Ministers; the Finance Minister would be in a position to authorize the allocation and timely release of funds for census-taking; the Infrastructure Development Minister would assume responsibility for the provision of transportation and communications; and the Health and Social Welfare Minister, as a main user of a census results, could advocate the need to utilize census results fully in policy making.
Chart 1. 2000 Census organizational structure

Parallel to the establishment of the National Census Committee, was the need to create a national census structure
throughout the entire country. In essence it was necessary to create two parallel structures: the Census Commissions representing the political/administrative hierarchy with responsibility to the National Census Committee, and the temporary bureaus representing the operational hierarchy with responsibility to the NSO (Chart 1). All the levels of the census commissions were responsible for overall monitoring of the quality of all census operations, and for ensuring adequate human and financial resources, including the provision of transportation, were allocated to the census.

e. Census budget

Funding is clearly an important contributing factor and greater efforts will be required to stress the priority of the fieldwork and seek adequate funds. Other factors are also important, although these are to some extent linked to the problems of funding. There is no question that difficulties in raising finance for the 2000 census affected all census phases and forced the NSO to propose a number of shortcuts. At the time of the 2000 census, the Government of Mongolia faced severe financial difficulties in its transition towards a market economy.

The broad 2000 census strategy was to reduce costs as far as practicable without at the same time jeopardizing the quality or utility of the census results. During 1990s the estimated average global cost for a population census was in the order of five US dollars per person. In the budget proposals, Mongolia planned to spend an average 1.3 US dollars per person, in local currency about three billion tugrigs in total. Three possible sources were available for census funding, the state government, local government and international organizations. The financial plan envisaged that about one half of the budget would be obtained from national sources and one half from international donor sources. Of the amount sought nationally, it was hoped that one billion tugrigs would be provided by the State Government and about 500 million tugrigs would be funded from local budgets.
Of the total direct budget about 50 percent was contributed by international organizations, principally UNFPA and Australian Agency for International Development (AusAID). Without this assistance, it is likely that the census project would have been further delayed or abandoned altogether. The recognition that national funding would not be sufficient to conduct a high quality and modern census led to early negotiations with UNFPA to assist with the more important census activities.

f. Data dissemination and utilization

Population data, which derives from population and housing census in most countries, plays a vital role in assessing the economic and social development and updating development policies. A national population and housing census is by far the largest statistical operation carried out by the National Statistical office. Let us outline principles needed to prepare and implement census operation as universal characteristics; 10 year periodicity; individual registration; conducting the census across the whole territory of the country simultaneously (at the same time and period) and confidentiality of individual data.

The main objectives of the NSO in the post-enumeration stage were data processing, dissemination, publication of the census results and support to users of census data, and conduct in-depth studies and analysis. The NSO conducted meeting and training widely represented by users, exchanged views with them and considered their suggestions during the design of a census questionnaire. Based on findings of these meetings and training a Plan for Dissemination of the Results of Population and Housing Census was developed and pursued. Under this plan, the results of the census have been publishing and made available in a larger quantity than ever before. The results of 2000 Population and Housing Census were disseminated to users in the following ways:

- Publications/booklets, reports, results, monographs
- CD Rom
- WEB

{PAGE }
• On special order

By the way, the results of 1989 Population and Housing census were disseminated to users in considered to the following ways: Briefing and introduction on the results of 1989 Population and Housing Census were made and presented to state and government organizations for official use. In addition, two volumes containing a list of tables, which were, developed drawing on the census results and 44 volumes containing tables of aimag and the Capital results were publishing in Mongolian and disseminated to ministries, departments, research and academic institutes and local organizations. In the meantime, the NSO and its local branch offices provided free-of-charge the necessary materials upon the request of users. Drawing on the results of census 1989, was making a population projection until the year of 2025 and along with its estimation disseminated to state and government organizations as well as other users. It is due to note that the financial and organizational opportunities and resources were limited to disseminate the results of 1989 census in a wider framework than mentioned earlier. This was due to limited financial and organizational resources and opportunities resulting from commencement of a shift to a democratic system and market economy not long after the conduct of the 1989 census.

The following materials were prepared and published and user workshops were organized for the purpose of providing an opportunity among all national and international users to extensively utilize the Mongolia’s 2000 Population and Housing Census for their policymaking and analysis as well as making comparisons with other countries. They are:

• Publications/booklets, reports, results, monographs
• Fact sheets
• Folds
• Documentary
• CDs
NSO published administrative report which consists of the preliminary results and factual the overall experience and lessons learnt of organizational arrangement of 2000 census and further concerns and “Report on Main Results of 2000 Population and Housing Census” publication. It made the documentary (32 minutes), which demonstrates how the preparation for the census was making and how it was conducting. In the same time, it narrates the explanation of some concepts and definitions. NSO published special booklets “National Results”, “Housing Drawn”, reports and booklets for the aimags and the capital based on census results.

In addition, we published and disseminated wallpapers, folds and fact sheets in Mongolian and English. NSO published monographs in Mongolian, English based on census results as “Housing”, “Economic activity”, “Gender in Mongolia”, “Internal migration and urbanization”, “Population projection”, “Elderly population”, “Education and literacy”, “Nuptiality” and “Youth”. CD that had been prepared about the main results and monographs were disseminating.

The Main Results of the census and other materials based on the census results were placing on the NSO website: { HYPERLINK "http://www.nso.mn" }. NSO created database on primary data of 2000 census for the users and had been prepared CD-ROM. In the same time, held database utilization trainings for central and local staff of NSO, officials of related ministries and agencies and other users, it was an approach to extensively use of the census data.

The importance for the results of the Population and housing census, 2000 was that it provided a basic statistics required to develop, plan, implement and evaluate process of the policy and
research and academic. Another one of the importance of census results was it provided detailed information for summarize and evaluate states of population growth, migration, settlement, education, employment, housing condition and behavior of the population groups between the two centuries, gradually it became base of reviewed for national documentary such as “Population Policy of Mongolia” and “National Program on Reproductive Health”. Moreover, those detailed data is important to evaluate, plan and implement in the lowest administrative units too.

NSO published statistical booklet “Mongolian Population in XX century” based on 9 censuses which conducted in XX century such as 1918, 1935, 1944, 1956, 1963, 1969, 1979, 1989 and 2000 and users very appreciated it. This publication was providing an opportunity to make comparison results of all censuses not only last one 2000 and giving a lot of contribution to the research work. For the objective for widely use census data and improving interlinks between sectors, NSO held dissemination workshops on census results and monographs, widely covered by policy makers, planners and directorates of the government in all level, government officials, staff of NGOs, researchers and representatives of the international organizations which work in Mongolia and disseminated publications and other related materials.

NSO estimated population projection to 2025 based on population and housing census 2000 and uses for develop sectors’ policies, programs, and strategic plan. Three variants as high, medium and low of the projections were prepared, varying only by the level of fertility assumed by regions. As well, in the three variants of the projection estimated not vary by mortality and migration assumptions. This projection prepared by age group and sex of the population at the aimag level and it is necessary information for policy making and planning.

There is necessary to be conduct sample surveys for provide increasingly demand of data between last census 2000 and next
census 2010. Hence, one objective of NSO was developing the master sampling based on the census data and to use it for relieve and support to conduct those surveys. Thus, NSO uses master sampling it does not need to review all stages of process for the surveys such as define to sampling unit, mapping and sampling frame and it has strengthens that reduce time, cost and define sampling for short time according to the survey objectives and methodology. Especially it is necessary to our country which there has been started widely conducted sample surveys since 1990s and could not able to build capacity for sample survey completely. We have developed master sampling of census units 2000 through the support of advisor for international organization and recently use it. NSO developed master sampling based on census mapping and lists. At the time of the census data processing, we did not code lowest administrative units and it to be correct in the next census.

j. Lessons learned from the 2000 population and housing census

It would address some of the census issues raised in the 2000 census including:

- establishing the census as a national level activity;
- defining clear responsibilities for providing financial and human resources and setting out clear responsibilities among all participating bodies (ministries, agencies, departments and individuals);
- providing for compulsory participation of all citizens and the need to give accurate answers to all questions in the census form;
- permitting census officers to enter private premises for the purposes of carrying out responsibilities under the law;
- setting out the legal requirement for all persons involved in data collection and processing to ensure that the responses to the census provided by any individual remained confidential;
• defining the responsibilities of the NSO in areas such as access to computer records and files, storage of census records and archiving.

h. Challenges, which are addressing to prepare a next census 2010

Following challenges are in the preparation of population and housing census 2010, Mongolia:

• To study that evaluate level of utilization of population census data, define its approaches and introduce best experiences
• To improve capacity building for evaluation of administrative data on population and use census data to revise it
• To get technical and financial support of donor countries and organizations for conducting next census in the current developing and transition country situation
• To decide approaches and search opportunities to how to include some indicators of MDG especially poverty indicators; study and introduce opportunity to make poverty mapping
• To get consultant and advice for conform principles, methodology, concepts and definition of the census issued by UN to Mongolian nature and explain to conform international standards, translate and publish this manual in native language before the conducting census.