

Managing Population census 2011 of Nepal (Draft)

Uttam Narayan Malla
DDG, CBS NEPAL

1. Introduction:

Head counts were conducted in Nepal for different purposes since centuries. But the census counts (at least head count data) as statistics are available since census 1911 A.D. It is admiring to have population count for so long in a country where physical features are so extreme, population is ethnically so heterogeneous and the country is, in fact deprived of resources and technology since long. The first modern census was conducted in 1952/54 using internationally standard concepts and definitions and the first computerized census was the one conducted in 1971.

Latest census, the one conducted in 2001 carries features from management point of view. Sampling technique was introduced through two sets of questions asked to individuals. Outsourcing of data processing (coding, data entry, data verification, and part of the tabulation) was experienced in last census. Unpredicted events affected the field work. The enumeration or the field work was affected by the conflicting situation.

The census 2001 counted 23.2 million which is growing at 2.25 percent per annum. The projected population of the year 2011 would reach 28.6 million and 5.5 million households spread over 36,000 wards of 3914 Village Development Committees (VDCs) and 58 municipalities of 75 districts. Sixteen districts out of 75 are situated in Northern High Mountain, 39 district lies in the mid hill and 20 in Southern Terai belt. Districts of mountain and hill have difficult terrain and very few have access to motorable roads. Time and cost of field work definitely differs from the districts of Terai. In many of the hilly and mountain districts, logistics supply from district head quarter (DHQ) to VDCs depends solely upon porters.

2. Experiences of census 2001

Decision on census topics and management of logistics, human resources and financial resource were among the issues tackled carefully during the census operation. Issues raised in conjunction with the conflict and the social inclusion, were also not unexpected. There were demand to include questions related to gender, ethnicity, extended activities etc. which were attempted to accommodate to a great extent and there were mixed experiences/responses of the issues addressed in the census. However, the unexpected and unpredicted event of the palace massacre happened just before the fieldwork and the instability happened thereafter had tempted census management committee of the CBS put on dilemma for some time. Some of the major experiences and lessons learnt from the census 2001 are as follows.

2.1. Gender mainstreaming: Questions related to women's status and empowerment such as female ownership of land, house, and livestock were asked. UNIFEM and other gender groups were consulted in formulating the questions and required output tables. Substantial involvement of female enumerators in the field work is in fact remarkable feature of the census 2001. More than 20 percent enumerators were females. However, missing part of the female involvement is the evaluation of the female enumerators work as compare to the male's. That could have provided assessment of the quality of works.

2.2 Introduction of sampling in census questionnaire

Major deviation from the tradition in the history of census taking of Nepal is the use of sampling technique in the census 2001. Information was grouped into two, one group of questions to be asked to all individuals and other to the members of the sampled household only. Accordingly two forms, Form1, a short form to be administered to all households and Form 2, a long form to be administered to sample households of the 20 percent of the housing units were designed in the census 2001. Form 1 contained part of the household information such as housing type, agricultural holding, female ownership of land, house, and livestock, and basic questions such as name, sex, age, caste/ethnicity, relationship to household head, religion, language, citizenship, and types of disability. Form 2 contained some household information such as main source of drinking water, fuel used for cooking, source of light, toilet facility and other household conveniences under household information panel also individual information such as name age sex question on migration,

education, marital status, children ever born, live birth, usual activity, occupation and industry, employment status, reasons for usually not working, and living arrangement of children below 16 years of age.

2.3. Outsourcing for data processing

Traditionally, data processing (editing, coding and key entry) were done by the CBS itself employing temporary staff. Outsourcing of the data processing works to the private sector is a new experience in the census 2001. There was no alternate of outsourcing available to CBS for data processing works due to the limited time duration, lack of staff, office space and computers. So, virtually all data processing works (such as checking completeness of coverage, editing, coding of open questions to answers such as occupation, industry, key entry and verification) were contracted out to the private sector. An advantage of outsourcing is the completion of the data processing in time. However, demographers and other data users have put a view that the time saving in data processing has been achieved at the cost of the quality. Questions have been raised about the quality particularly on information collected on sample basis due to matching problem of Form 1 and Form 2.

2.4. Inclusion of questions of living standard

Questions on standard of living (house type, tenure in Form 1 and source of drinking water, main fuel used for cooking, main source of light, toilet facility, household conveniences such as vehicle, radio, TV, telephone, refrigerator etc. in Form 2) were included in census questionnaires under household information.

2.5. Census Mapping

A separate component was arranged for census mapping as National Geographic Information Infrastructure Programme (NGIIP) which was supported extensively by European Union (EU). Virtually, the component was conducted as a separate subproject and executed by the Department of Survey (DoS) with a purpose of providing updated maps at local level in order to facilitate enumeration works. However, only VDC level maps were made available to the CBS before census operation and enumeration blocks of the urban areas (municipality) had to be created by the bureau itself. However, the DoS has prepared Census Atlas with socio economic maps both in hard copy and electronic form which were first of its kind in census operation. Also, GIS capacity of the CBS to some extent has been enhanced by training manpower of CBS and by building physical infrastructure and providing computers to CBS and 33 Branch Statistics Offices (BSOs).

2.6. Dissemination of census results

Altogether, census results were published in 26 volumes. Besides, other divisions of the CBS did process census data and has been publishing specific publications. For example, four volumes of "Women in Nepal: some statistical facts" were published. Dissemination programme were conducted in some selected districts with a purpose of making acquainted with the census results and publications. However, CBS has been awakened with the fact that there were no any publications on census 2001 in Nepalese language.

Also, twelve percent the raw data of the census are made available to users after suppressing individual identities.

2.7. Quality control

The reference date of the individual enumeration was the sunrise of 22nd June 2001. But the individual enumeration was conducted during June 10-26, 2001. The homeless persons were counted on the day before the census day.

Quality control during enumeration

Altogether, 19370 enumerators and 4926 supervisors were employed for the enumeration work beside trainers, administrative staff and district census officers. Of the total field force more than 80 percent were teachers temporarily seconded from government schools. On an average, 220 households or 1200 individuals were enumerated by one enumerator. The workload in fact varies in mountain, hill and terai. The supervisor enumerator ratio was one to four on the average. Control forms were introduced which were filled in by supervisor while checking the forms filled by enumerators. Senior officers from the centre traveled through out the country to monitor the census taking process from recruitment of supervisors and enumerators, training, field work and transportation of forms as well.

Quality control in key entry

Coders, editors and key entry operators were provided training by CBS officials though the key entry operation was contracted out to the private sector. Nearly two percent of the forms were reentered and verified which as suggested by experts could have been raised to ensure the quality of data entry. Also, the estimation of the sample information at district level were evaluated

2.8. Analysis done by national experts

Analysis of census results were done by Nepalese demographers and social scientists without external assistance. Professors from Tribhuvan University/Nepal and other professionals from various organizations were also involved along with senior officers of CBS. The analysis covered wide range of topics from demographic to economic, social and gender related areas. Two publications, population Monograph vol. I and II contain analysis done on the basis of the census 2001.

2.9. Effect of political conflict in the enumeration

Political conflict that were there since 1996 also had affected census taking altogether in 957 wards. Eighty three VDCs of 12 districts were completely affected and 747 wards were partially affected. Number of households and population of those affected wards of 957 are estimated to be 78, 846 and 414, 489 respectively or less than two percent of the total.

2.10. Unpredicted event of Royal palace massacre

An unexpected and unpredicted event of the palace massacre happened just before the fieldwork and the instability plagued through out thereafter had tempted census management committee of the CBS and put on the management on dilemma for some time. The event happened on 1 June 2001. The household listing was supposed to begin from 10 June 2001. But, the country was mourning officially for 10 days. So, the operation was halted 10 days after the training of enumerators and supervisors were completed, supplies of questionnaires and other essentials materials completed. The patience of the committee and careful, wise and immediate directions to District Census Offices (DCOs) to halt the operation till next direction is issued has put the situation under control. In fact, the district census committee formed under the chairmanship of the Chief District Officer (chief of the district administration) has been instrumental in keeping things under control.

2.11. Financial resources used in 2001

Census operation costed around 400million rupees or more than 5 million USD in 2001. One fourth of the total cost was provided by the government. UNFPA, UNDP, EU, UNIFEM provided support to meet the requirement.

3. Expectations from the census 2011 in Nepal

3.1 Meet the demand for information

Generically, census is meant to provide benchmark population with certain socio economic characteristics by administrative and physical divisions possibly at lowest level which is used as a frame for various sample surveys too. Naturally, it provides basic socio economic information necessary for the government, researchers, and other different users.

Sociologists (representatives of caste and ethnicity) have raised the issue of the proper coverage of the ethnic groups and mother tongues in previous census. Census 2001 had captured 102 castes and ethnic groups but social scientists think that some minor groups are still missed or not properly recorded. Information on gender and ethnicity are no more new as they were collected in 2001 census too. UNESCO and educationists of Nepal as well have been asking to collect information on functional literacy which should be thought whether feasible from the point of view of cost and volume of question.

Demographers and Health specialists have been demanding for more demographic information. A topic of migration both internal and international has always been urged to be given priority. Nevertheless, these are burning topics in the context of having many (Internally Displaced Peoples) IDPs due to conflict. Likewise, government and other agencies are interested in the info on out-migrants or the absent population as the volume of remittance and transfer is increasing in recent years.

CBS itself is interested in listing agricultural households which would be a good frame for the agricultural census to be conducted in the year followed (2012). Similarly, non-agricultural activities of households are

equally important for economic surveys conducted frequently by CBS. Many poverty monitoring groups are interested in housing characteristics and other information related to poverty indicators.

It is noteworthy that census 2001 provided basic small area data on population and other characteristics to prepare small area estimation of poverty calorie intake and malnutrition prepared at sub district level. Nonetheless, many poverty and living standard indicators were derived from NLSS-II and NDHS-2001.

Homenet South Asia puts up information on home based workers as a priority topic to be addressed by the coming census.

Political importance of census is also growing as number of constituencies are determined on the basis of population. Voices regarding census have been raised from different corners particularly at present transitional period in the context of interim constitution and the formation of constituencies for the election of constitution assembly.

Naturally demand for information surpasses and the possibility of accommodation in the census questionnaire from the cost, time and capacity point of view. CBS would, though it would be challenging try to accommodate regular questions for inter census comparability and additional questions in order to meet new demands.

3.2 Census as an opportunity to enhance capability of CBS

CBS's capability can be enhanced by providing domestic and international training to its staff. Every census operation contain training program as well. In order to sustain its capability and upgrade it according to the need of the time, training program is as important as its census taking operation. In fact, being involved in various stages of the census operation, CBS officials gain practical experiences and knowledge in the country's context. As a regular process, some experienced senior staff have been retired since last census. Project chief, experienced demographers, have retired while some have been transferred in last five years. Also, some four senior officers of CBS will be retired before next census. So, CBS needs to build manpower in order to fill up the lack of Census experienced staff.

3.3 Timely delivery of census results

3.4 Quality control

Quality in terms of coverage

Quality in terms of accuracy

Post enumeration survey

4. Planning census 2001 and preparatory works initiated

Census planning has been initiated from the current fiscal year (2006/07) with the approval of the programme under the programme of the Government of Nepal (GoN). Consultation is underway with UNFPA on the modality of assistance. The country office of UNFPA, Nepal has included Population Census 2011 in its cooperation strategy with a view to coordinate donors to integrate donor's assistance to the census 2011. CBS has started interactions with national stakeholders in view of identifying user's needs. In stead of limiting interactions with the intellectuals in the capital as were done mostly in previous censuses, CBS this time has begun consultations from districts. Interactions with the planners of the local government, local government officials and intellectuals has been started.

Estimates of population for the year 2011 for all VDCs, lowest administrative divisions is underway as there has been remarkable shift of population due to conflict and other social problems. Building enumeration blocks for Kathmandu and other municipalities have been planned for the current year to be conducted on its own resources. however, resources are being explored.

Tentatively, preliminary estimate of the cost of the census 2011 stands at around 15 million USD.

Present political transition may demand for significant changes in census management as the new constitution is expected to change the political structure which is still unpredictable.

