

Government of the People's Republic of Bangladesh
Ministry of Local Government, Rural Development &
Cooperatives
Local Government Division
Urban Primary Health Care Services Delivery Project
Project Management Unit

Consulting Services for

Primary Health Care Services Delivery Project (Urban
Health and Demographic Surveillance System); Service
Package No. S-4.1 (Operations Research)

Inception Report

Submitted by:

International Centre for Diarrhoeal Disease Research,
Bangladesh (icddr,b)

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1. Key project information

Title:	Primary Health Care Services Delivery Project (Urban Health and Demographic Surveillance System); Service Package No. S-4.1 (Operations Research).
Duration:	July 2015 to 31 March 2017 (21 months).
The ceiling in local currency:	Taka 1,94,45,644 (one crore ninety four lac forty five thousand six hundred forty four) excluding local direct and indirect taxes.
Purpose:	To establish Health & Demographic Surveillance System in slums of Dhaka and Gazipur City Corporations.
Geographical coverage:	Slums of Dhaka and Gazipur City Corporations.
Recipients of consultancy service:	PMU, LGD Division and Development Partners (ADB, Embassy of Sweden and UNFPA).
Authorized representative of icddr,b:	Dr. Abbas Bhuiya, Deputy Executive Director.

2. Background

This report is prepared in fulfilment of the requirement of Section 7 of the ToR of the project “Operation Research Component of Urban Primary Health Care Services Delivery Project”. According to the ToR, “Inception report must be submitted within 4 weeks after commencement of assignment which will outline the program activities to be implemented by the firm”.

The objective of the project is to set up a Health & Demographic Surveillance System (HDSS) in selected areas of Dhaka North and Dhaka South and Gazipur City Corporations, covering 30,000 households. More specifically, the project will establish a data collection system to assess the level of fertility, mortality, migration, marriage and divorce, family planning, violence against women, morbidity, sickness care, health expenditure, knowledge of health problems and phenomenon as outlined in the ToR.

This report is organized in the following four sections. The approach of the research project and its methodology is detailed in the first section. The second section includes the detailed activities to be completed, the third section reports the progress of work, and the fourth section reports the team composition.

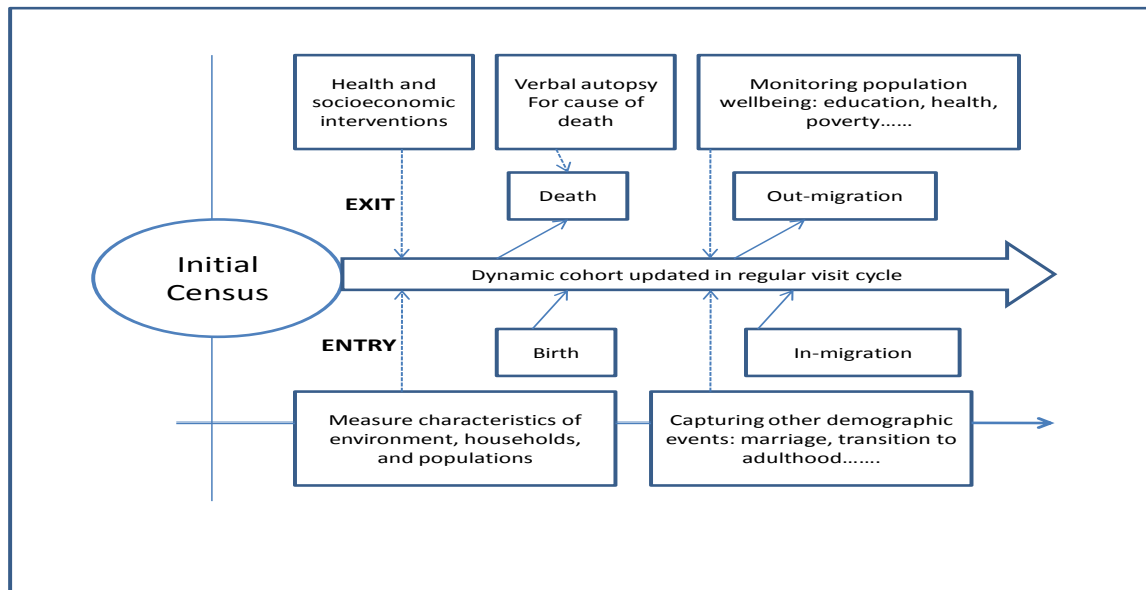
List of activities with timeframe is shown in Appendix A.

3. Approach and methodology

The Health & Demographic Surveillance System (HDSS) is a methodological approach to monitoring demographic and health outcomes in a registered and defined population living in a confined geographical area. The information collected, at a minimum, include vital events (births and deaths) and in- and out-migration. The HDSS starts with an initial census of the population living in the defined geographical areas, followed by regular visits to update information on births, deaths, and migrations.

After the initial census, one can only become an HDSS member through birth to a registered member or through in-migration, and one can cease being a member either through death or through out-migration as shown in Figure 1. Socioeconomic information is usually collected during the baseline census linked with the census/database; such socioeconomic information is also collected at certain interval. Special surveys can also be designed in the HDSS area by linking with the master database.

Figure 1: Concept of the Health & Demographic Surveillance System



Source: INDEPTH Network (www.indepth-network.org)

4. Project activities

Eleven broad activities will be carried out during the project period. These activities are: obtaining approval of RRC and ERC of icddr,b, selection of slums, formation of Technical Review Committee, mapping/listing/community meetings, recruitment/training/pre-testing questionnaire, baseline/socioeconomic census, beginning of demographic surveillance, introducing survey modules, data management/quality/security, report/manuscript and dissemination of findings. These activities are discussed below (Appendix A, for timing of activities):

4.1 Preparing protocol for obtaining approval of Research Review and Ethical Review Committees of icddr,b.

According to icddr,b regulations, any research protocol housed at icddr,b requires reviewing and approving by its Research Review Committee and Ethical Review Committees. The Research Review Committee (RRC) ensures technical quality of research and the Ethical Review Committee (ERC) ensures adherence to international best practice ethical conduct of research involving human and animal participants.

4.2 Selection of slums

After extensive field visits by the icddr,b team, slums have been identified (Appendix B, for slums location) and have been proposed to Project Director of UPHCSDP for final approval, however, slums are identified based on number of households in each slum (relatively big slums are selected). In fact, most of the slums in Dhaka South City Corporation are small in size and located in between two non-slum houses (Slum census document- 2015, Bangladesh Bureau of Statistics).

In Dhaka North City Corporation, slums have been identified from Bannani (10,000 households from one location- Korail slum) and from Mirpur (6,000 households from three locations- Bhola, Molla and Duaripara slum). In Dhaka South City Corporation, slums have been identified from Dhalpur (2,000 households from six locations- Pura, Driver, Nubur, City Palli, Power House, and Mannan slum) and from Shampur (2,000 households from two locations- Dhaka Mach Colony and Dhaka Mach Rail Colony slum). In Gazipur City Corporation, slums have been identified from Tongi (2,000 households from two locations- Bank Field and Hazi Mazar slums and 8,000 households from one location- Ershad Nagar slum).

4.3 Formation of Technical Review Committee:

icddr,b will request the client to form a Technical Review Committee in order to review reports and manuscripts. The Technical Review Committee members will be selected based on the following criteria and terms of references:

Expertise: The Technical Review Committee members would be selected from those who have strong interest in research/program. These committee members (4-6 members) could be selected from donor community, NGOs, and research/academic institutions.

Terms of reference: The Technical Review Committee members will be responsible to review various reports and manuscripts to be submitted by the consultant to the client. These reports are: a) baseline/socioeconomic census, b) migration and mobility determinant of health, c) health seeking behaviour, family planning, adolescent health, violence against women, d) knowledge and practices in relation to non-communicable disease, e) morbidity, health expenditure and financial coping mechanisms, and f) health and demographic surveillance system.

Based on the survey reports, four manuscripts will be prepared for journal publication. To review the manuscripts, the review committee members should address the following issues: a) whether cited adequate literature (up to date), whether knowledge gaps have been identified and issues to be addressed, b) appropriate methodology and statistical techniques been adopted, c) is there proper interpretation of the findings, and d) is there discussion based on findings and policy recommendation.

4.4 Mapping/listing/community meeting

First, we will collect existing area maps from various sources for our study areas. We will also update these maps as well as do the household listings; GIS coordinates will be taken to define the study area. Each slum will be divided into blocks based on communities, and demarcated by existing physical landmarks. This will help in assigning unique household identification number by the field worker during the baseline census as well as in locating the household during the follow-up visits.

Initially, community meetings will be organized by icddr,b once a month, and then, every three months. These meetings will be organized in the study area (three locations in Mirpur, three locations in Korail, one location in Dhalpur, two locations in Shampur, five locations in Tongi) where representatives of the community, and local NGOs/their volunteers will be invited. In these meetings, objectives of the surveillance will be shared and discussed; this is to get community support to run the project smoothly.

4.5 Recruitment/training/pre-testing questionnaire

First, Field Research Coordinator and Field Research Assistant will be recruited and trained by the project team of icddr,b. Subsequently, the Female Field Workers will be recruited and trained by the Field Research Coordinator and Field Research Assistant (for baseline/socioeconomic census, one week training both in office and field); GIS person will train the field worker on how to do the mapping/listing exercise. During training, field workers will be trained on data collection instrument, data collection device, and on interviewing skills. The interviewer will also be trained on how to administer the consent form.

All the questionnaires (baseline/socioeconomic, HDSS events, and four surveys) were prepared before submitting the RRC/ERC application for approval, however these questionnaires will be pre-tested and be finalized before the data collection starts of each survey.

4.6 Baseline/socioeconomic census

After updating the area maps/listing, Female Field Worker will visit each household to assign unique identification number (consist of location of household, household number and individual number) in a systematic manner as well as for collecting baseline/socioeconomic data. For collecting baseline/socioeconomic data, interviewer will interview head of the household or other informed adult member (age 18 years or more). Informed consent (written) will be taken from the respondent before data collection starts.

During the baseline census, data will be collected on age, sex, date of birth, etc while socioeconomic data includes ownership of dwelling and household assets. Moreover, detail socioeconomic data (individual and household level) will also be collected from 2,000 randomly selected households.

In each day, a Female Field Worker will complete 25-30 households and will submit her completed work to her supervisor every week. The supervisor will transfer the data from the memory card to his/her laptop and perform the basic checking. The supervisor will deliver these data to the Field Research Coordinator/Computer programmer at the central office of icddr,b for further editing and updating the master database.

4.7 Beginning of demographic surveillance

After completion of baseline/socioeconomic census, Female Field Worker will start making quarterly visits to collect HDSS data. Field Research Assistant in consultation with the Field Research Coordinator will prepare the daily schedule and monthly work plans for Female Field Worker. Each Female Field Worker will visit 35-40 households per day and will cover her assigned area in three months.

Every day, the Female Field Workers will visit their assigned household and will perform roll call with the help of database information earlier loaded in the portable device. This is to detect event, if any event had occurred for any household member during the last three months. The database will be updated through the following events:

Birth form: The birth form will be used to collect relevant information on birth.

Death form: The death form will be used to collect relevant information on death.

Marriage/Divorce form: The marriage/divorce form will be used to collect relevant information on marriage/divorce.

Out-migration form: When a person/family exits from the surveillance area is labelled as out-migration.

In-migration form: When a person/family enters in the surveillance area from another location is labelled as in-migration.

Internal movement form: When a person/family moves from one place to another place within the study area is levelled as internal movement.

Head change/household split form: In case a household head dies/out-migrates or the family splits, a new household head to be created.

Every 7 days, the Female Field Workers will meet with their respective supervisors (Field Research Assistant) to deliver the collected data. They will also discuss issues related to data collection and any problem they had faced since their last visit. The supervisors will receive these data (memory card) and will load the data

in his/her laptop and will perform the basic data checking; subsequently, data will be submitted to the central server.

4.8 Introducing survey modules

After establishing HDSS in these locations (baseline/socioeconomic census and first round HDSS data collection), four surveys will be conducted, one after another. Each Female Field Worker will collect data for 2-3 households/individuals each day, in addition to their HDSS work.

The survey instruments will be pre-tested rigorously and feedback will be incorporated in finalizing the instruments. These four surveys are discussed below:

Migration and mobility determinants of health: The study will collect data on duration of migration as well as on circular migration. For this survey, currently married men and women (20-59 years) will randomly be selected for interview. The health information included is self-rated health, and health care use.

Health seeking behaviour: A sample of household will randomly be selected that would include currently married women (12-49 years) and will collect data on ANC, delivery and PNC (last child of under-three), contraceptive use, and violence-against-women. Mothers will be interviewed for collecting data on immunization and on morbidity (ARI and diarrhoea) of under-five child. Randomly selected male and female adolescents (unmarried) will be interviewed to collect data on knowledge of STD/AIDS and source of health care use, whether they suffered from illnesses.

Knowledge, and practice study on non-communicable diseases: The knowledge and practise information on non-communicable diseases will be collected from randomly selected adult population (25-44 years). The KAP data includes smoking, and alcohol use, and knowledge and prevalence of blood pressure, diabetes, and stroke; breast and cervical cancer for females.

Health expenditure, payment, and financial coping mechanisms: Data on health expenditure, payment and coping mechanism will be collected from randomly selected households covering all the members; household head or his/her spouse will be interviewed for collecting such data. The information will be collected on in-patient admitted to health facility during the last 6 months and out-patient (those received health care during the last 4 weeks).

4.9 Data management/quality control/security

Data management: All the data will be collected by using portable devices. The master database will be a relational one and it will be managed in MySQL server. In the portable device Sqlite database will be installed in back-end and Java in front-end. In fact, logical checks will be in-built within the data capturing program and will be performed during the data collection. Some of these checks will also be performed at the central office where longitudinal records (master database) will be

maintained. Errors detected in the data will be sent to the field for correction, if not possible to correct it by consulting the existing records. After cleaning, data will be exported from MySQL server to SPSS/STATA for analysis.

Baseline/socioeconomic census: All the basic information (name, age, sex, date of birth, etc) of the household member will be collected along with socioeconomic information. After every 7 days, baseline/socioeconomic data will be down loaded from Tabs and will be saved in the laptops and then uploaded to MySQL database. Subsequently, edit program will be run for logical and consistency checks of the data.

Surveillance data: First, baseline/socioeconomic data will be loaded in the Tabs of the respective area. This baseline/socioeconomic census information will help quick capturing of the surveillance data (some basic information will be copied from database), checks for consistency at the time data collection. Error flags from wrong data that will not be allowed to be saved.

Survey modules: The baseline census will be updated regularly through HDSS data and the updated database will be used for selecting households for the survey modules. Each Female Field Worker will be given a list of randomly selected households to interview during her routine household visits for HDSS data collection (in addition to HDSS work). This will help quick data capturing (some basic information will be copied from the database), and checks for consistency at the time of data collection. Error flags from wrong data will not be allowed to save.

Quality control: Two types of quality control bodies will be formed (before data collection starts), one will be local and the other one will be central. The local quality control body will be formed by the Field Research Assistant and Field Research Coordinator to maintain the quality of the data. For example, a) Field Research Assistant will arrange meeting with the Female Field Worker every two weeks at the field office; b) Under the guidance of the Field Research Assistant, the field worker will cross check their colleagues' collected data; c) Check the households covered as scheduled per day; and d) Re-interview 2-3% households by Field Research Assistant per day and to compare these data with the collected data by the Field Worker.

The central quality control body will be formed by the researcher involved with the project (PI and Co-PIs). This body will be responsible for developing strategies and guidelines to maintain quality of data. Tabulation will be done on the collected data fortnightly to examine the data pattern.

Data security: To maintain security and confidentiality of the data set, the data server will be restricted by a security password and access will be given only to a selected person. Data will be stored in two data servers. For further security, a backup of the data set will be kept in different location, to protect from fire and other hazards, and these data will be updated periodically.

4.10 Report/manuscript

During the study period several reports will be prepared. These reports are: inception report, quarterly, mid-term, and yearly reports. In addition, reports on baseline/socioeconomic census and four surveys will also be prepared after completion of each of these activities. Moreover, data collection manual for baseline/socioeconomic census, HDSS data collection, and four surveys modules will also be prepared. Finally, four manuscripts will be prepared for publication, based on the survey data.

4.11 Dissemination of findings

Findings of these studies will be disseminated through conference presentations, newsletters, webpages, dissemination seminars and publication. Care will be taken to ensure that they are shared in a manner appropriate for different audiences, such as academicians, policy makers, and other stakeholders.

5. Progress of work till date

5.1 Preparation of protocols and obtaining approval of Research Review and Ethical Review Committees.

Research protocol as per icddr,b format has been prepared and approvals from Research Review Committee and Ethical Review Committee have been obtained.

5.2 Questionnaires

We have prepared the questionnaires (baseline/socioeconomic census, HDSS events, and four surveys) and these questionnaires have already been approved by the RRC/ERC of icddr,b. However, questionnaires will be finalized after pre-testing.

6. Team composition

A core team and two functional teams have been formed to run the project smoothly and to achieve the goal. The core team, particularly the PI is responsible to keep close contact with the senior management of the Project Management Unit of UPHCSDP to update them on the progress of activities as well as get guidance from them. The composition and responsibilities of the core as well as functional teams are noted below:

Core team:

Personnel	Expertise	Responsibilities
Abdur Razzaque, PhD (Ph: 01911392083, Email: razzaque@icddrb.org)	Demographer	Principal Investigator and will provide overall leadership to the team. He will also take lead in preparing the HDSS report and analysing the survey data on knowledge and practice of non-communicable diseases.
Abbas Bhuiya, PhD (Ph: 01713333012, Email: abbas@icddrb.org)	Social Scientist/ Demographer	Co-PI and will assist PI in various way to achieve the desired goal and to give future direction.
Dr. Mohammad Iqbal (Ph: 01819447361, Email: miqbal@icddrb.org)	Public Health Physician	Co-PI and will take lead (report/manuscript) of the survey data on morbidity and health seeking behaviour along with family planning and adolescent health component.
SMA Hanifi (Ph:01720356052, Email: hanifi@icddrb.org)	Statistician	Co-PI and will provide statistical support to the project and will also be responsible to maintain HDSS data quality. He will also take lead (report/manuscript) of the survey data on migration and mobility determinants of health.
Shehrin Shaila Mahmood (Ph: 01711043682, Email: shaila@icddrb.org)	Health Economist	Co-PI and will take lead (report/manuscript) of the survey data on health expenditure and coping mechanism along with violence against women component.

Data management/quality control team:

Personnel	Expertise	Responsibilities
Md. Razib Chowdhury (Ph: 01755509390, Email: Razib@icddrb.org)	Field management/ data collection and quality control	Planning and management of day to day field data collection.
AHM Golam Mustafa (Ph: 01711670692, Email: gmustafa@icddrb.org)	Computer programmer	Developing data capturing program, as well as data management, cleaning, and security of data.
Nazul Islam (Ph: 01817546770)	Field supervision/ quality control	Supervise 5 Female Field Workers.
Shanzida Taslin (Ph: 01756165863)	Field supervision/ quality control	Supervise 5 Female Field Workers.
Nargis Akhter (Ph: 01718265073)	Field supervision/ quality control	Supervise 5 Female Field Workers.

Administration and finance team:

Personnel	Expertise	Responsibilities
Md. Kashem Iqbal (Ph: 01713093873, Email: kashem@icddrb.org)	Coordination and managerial	Provide day to day support to the project.
Md. Amzad Hossain (Ph: 9827001-10, Ex- 3717, Email: amzad@icddrb.org)	Financial management	Look after budget.
Mohammed Mahbub Alam (Ph: 9827001-10, Ex- 3640, Email: mahabubul@icddrb.org)	Human resource	Look after staff recruitment.
Sohel Rana (Ph: 9827001-10, Ex- 2241)	Administrative assistant	Administrative support.
Bulbul Miah (Ph: 9827001-10, Ex- 2241)	Messenger	Messenger/photocopy.

Appendix A: Detail activities by month of the project (baseline/socioeconomic, HDSS, surveys, reports and manuscripts)

Activities/events	2015						2016												2017		
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Approval- RRC/ERC of icddr,b	■																				
Inception workshop/report submission		■																			
Selection of slums		■																			
Formation of Technical Review Committee		■																			
Listing/mapping of area		■																			
Community meetings		■																			
Designing database	■																				
Recruitment/training		■																			
Pre-testing/finalizing questionnaire		■																			
Conducting baseline/socioeconomic census			■	■	■																
First quarter report				■																	
Draft report-baseline/socioeconomic census						■															
Second quarter report							■														
Demographic Surveillance System- begins							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mid-term report								■													
First cross section survey begins									■	■	■										
Third quarter report									■												

Appendix A (cont): Detail activities by month of the project (baseline/socioeconomic, HDSS, surveys, reports and manuscripts)

Activities/events	2015						2016												2017			
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Fourth quarter report																						
Draft report- first cross section survey																						
Second cross section survey begins																						
Fifth quarter report																						
Draft report-second cross section survey																						
Third cross section survey begins																						
Draft report of third cross section survey																						
Fourth cross section survey begins																						
Sixth quarter report																						
Seventh quarter report																						
Draft report- fourth cross section survey																						
Four research manuscripts(draft)																						
Document-capacity building/promoting HDSS																						
Dissemination of findings																						
Draft final report																						
Refined report																						
Summary report																						
Seminar presentation-national level																						
Other report																						
Financial report																						

Appendix B: Location of slums of Dhaka and Gazipur city corporations

