TERMS OF REFERENCE
TO DEVELOP THE MANAGEMENT INFORMATION SYSTEM AND
PROVIDE TECHNICAL SUPPORT FOR THE CONDITIONAL CASH
TRANSFER PROGRAM IN BANGLADESH

International Firm

I. INTRODUCTION

Bangladesh spent about 425 million US$ in 2005 on safety nets roughly one percent of GDP. Results from the Social Safety Net Study for Bangladesh (SSNA) show that many cash-for-work as well as conditional cash transfer programs have performed reasonably well in Bangladesh, of course with different objectives and through a variety of implementation mechanisms.

Current programs reach approximately 4-5 million people, the combined coverage rate of all safety net programs is 15 percent in rural and 5 percent in urban areas. Programs provide (often very small) benefits in the form of food/in-kind, cash, or a combination of the two. But they lack coverage, clear targeting criteria and efficient administration. There is also considerable overlap and duplication in program delivery. Several ministries are involved in the provision of social assistance programs, many of which have overlapping objectives and are targeted to similar beneficiaries, with limited coordination.

The Government is committed to developing a new Social Protection policy to address traditional as well as newly emerging risks and vulnerabilities. The Government’s commitment to social protection is evident in the recent increase of social safety net expenditures. For FY08, the caretaker government has announced its intention to further increase in safety net spending. Indeed, the government sees the need to streamline implementation of safety net programs to ensure that the resources reach the poorest households and are implemented in a more coordinated way.

So, as part of this effort, the World Bank has approved a loan of US$ 90 million to the People’s Republic of Bangladesh for a National Social Protection Project (NSPP) with the objective to ensure that targeted beneficiaries in selected rural and urban areas will utilize social safety net programs delivered through an efficient and accountable decentralized mechanism.

The implementing agency for the component would be the Local Government Engineering Department (LGED) under the Ministry of Local Government. The LGED is a very experienced and well known agency which implements many donor financed projects, including the World Bank’s Municipal Services Project, the monitoring of the ROSC project, and others. The component would be coordinated by the Local Government Division of the Ministry of Local Government, Rural Development and Cooperatives which would be responsible for setting the policies to be followed under the project and for the coordination with relevant government agencies, donors, and other implementing partners.

The NSPP is comprised of three components that will help the Government of Bangladesh consolidate and strengthen its social protection system. The first component
involves the establishment and implementation of a conditional cash transfer (CCT) program in selected urban and rural areas of the country to smooth income of extreme poor families and encourage investment in their children’s education, health and nutrition. This demand side intervention will be complemented in urban areas by a supply side intervention - the second component - that will provide essential early childhood development services for urban slum communities. The third component includes the monitoring, supervision and evaluation of Project outcomes, including activities to advance the social protection policy dialogue and policy formulation in the country.

This CCT component would provide cash transfers to approximately 200,000 poor households, or about 1,000,000 individuals. The project would establish administrative systems in municipalities to (i) select and target the poorest households based on geographical criteria, community identification and a proxy means test (PMT), (ii) make cash payments through the local banking sector, (iii) forge links with the education sector to monitor school attendance of beneficiary children (compliance monitoring), and (iv) monitor and evaluate the program’s performance and impact.

Municipalities’ primary responsibility would be implementing the cash transfer program through a Management Information System (MIS) placed in their offices. The MIS would maintain the database of all persons surveyed for possible inclusion in the CT program, as well actual beneficiary information. Compliance data would be processed at this level and payment lists generated on the basis of this data would initiate the cash benefit transfer. A dedicated team of municipal personnel would be trained in the operation of this software and look after other day to day issues related to the program.

The following Terms of Reference describe the expertise needed to assist in the design and implementation of the MIS for the project.

II. OBJECTIVES OF THE CONSULTANCY

In the CCT implementation pilot, an international firm was hired to develop an automated simplified tool to support the work of the operational area to perform the different processes: identifying the beneficiary households, compliance monitoring, payment cyclical generation, and other support for the overall administration of the program, updating the families, register complaints, and management indicators.

Upon this exercise, a full fledge MIS needs to be developed to support the operation of the cash transfer program in each of the 20 cities. Additionally, to support the payment process, LGED has decided to include the development of an automated payment system to be installed at payment points of the various payment service providers (e.g. Post Offices and Banks). Finally, this firm will provide technical support and maintenance of the software application in all points where the system will be installed, at PMU and participating cities.

This consultancy has the following objectives:

- Based on the definitions generated by the operative consultant firm, and with the required approval from LGED the hired firm must develop the modules for targeting, enrolment, payments, compliance monitoring, household information...
updates, appeals and complaints and the managerial information; working in parallel with the operational consultant firm.

- To install an automatic tool in entities associated with the LGED in the processes of the family payments, providing a transparent and efficient way to perform these payments. This Payment MIS must give a general control to handle the payments in the headquarters of payment entities, receiving from PMU and each city PIU a magnetic file with the family payments and retuning the magnetic file to each PIU with the made payments.

- Train and transfer the required knowledge to PMU engineers in the source code programming language to allow them to make further improvements or changes to the system.

- Carry out corrective and adaptive maintenance in order to improve the software application when necessary.

III. METODOLOGY

The firm should include the description of the general methodology used in the development of the project, with the following items:

- A definition of a precise tool to report all the developments required in the CASH TRANSFER MIS in accordance with the necessities defined by the operative consultant firm, approved by the LGED’s operative area.

- A definition of a precise tool to report all the specifications and requirements for the payment MIS, including a clear description of the modules, options and general inputs and outputs of the system.

- Specification and requirement’s analysis, generating the respective documents with the recommendations of the firm according with it experience.

- Design or adjustments of the data base, application architecture, and source code, generating the descriptive documents including the chronogram of the development.

- General development of the Payment MIS.

- Installation of the solution in LGED’s Servers or/and participating Purashavas and payment agencies, for the system test.

- Preparation of the technical and user and source code manuals.

- Corrective maintenance when is required and is the process oriented toward repairing defects that may arise with the software; such us: (i) whenever the programme fails or aborts; (ii) the programme renders an outcome that is not in agreement with requirements; (iii) designs and requirements do not agree
with the supporting software; (iv) user documentation leads to erroneous conclusions—both concerning users and activities—that render incorrect results or system failures.

 Adaptive maintenance when is needed to improve software, hardware and documentation operability. This mode will be applied upon the user’s request, to be implemented during the execution of the program and will involve: (i) definition of requirements; (ii) system design; (iii) programme design; (iv) module design; and, (v) software development.

 IV. ACTIVITIES TO BE PERFORMED AS PART OF THE CONSULTANCY

The CCT MIS will use a Web oriented designed which should utilize the latest technological tools on the market like Microsoft windows visual studio and Microsoft SQL server Database.

The CCT MIS will provide support to at least 8 general operative processes of the programme: (i) Targeting, (ii) Enrolment, (iii) verification and control of education, and compliance awareness, (iv) Payments, (v) Claims and grievances, (vi) Household updates, and (vii) managerial information (indicators); and, (viii) payment module.

In the following section a general description of these options are offered. The 8 general processes described in the previous paragraph are scattered throughout the various MIS options outlined below.

 1. Administration

This software module must allow for the general administration of the basic components of the programme. This module must allow the access to the software through the use of previously assigned key codes, the date until which the user will be active in the system, the geographic code, and e-mail allowing for automated communications and the profile of the particular associate.

PROFILES, allows for the creation and administration of the profiles related to the various functions that have been defined for the operations of the system as well as any other necessity required for the handling of the MIS. Profiles must be created for the various users providing different options for MIS to monitor and erase any unwanted modifications to the system user profiles.

The access to the software and the modifications made to the database must be automatically registered in the system and a record is kept of the users which made the modification, the date and the place it was made. This allows the administration to provide the families in the system with the transparency required for the management of personal data.

 2. Targeting.
The MIS must provide the option of selecting specific geographic areas, and displays the predetermined eligibility conditions which the beneficiaries must meet during the Targeting process. The selection of beneficiaries can be performed using the different variables which will be selected according to the various needs of the programme. All of the selection requirements may be ranked automatically prior to the process.

3. **Enrolment**

This module must provide the opportunity to select the families who meet the requirements defined by the programme. Requirements correspond to the level of poverty, the number of families to be invited to the Enrolment process, and the application of conditions for the ranking and selection of families. The respective forms must be generated then.

Once the field work is completed and the packages of organized forms are returned, the organization then uses the MIS for the respective data entry and verification procedures. With the information registered in the database the module must allow for the generation of projections of payments and indications of the co-responsibilities that the families that are defined as beneficiaries of the programme will have throughout the project time period.

4. **Conditions**

The functions of this component must define the general characteristics of the co-responsibilities or conditions by regularly gathering information, assures the regularity of their application, define grace periods, the levels of payment for the individual or household by member, the value of penalties, the maximum accumulated value of penalties, the maximum accumulated value of payments, the age requirements to fulfil the condition, and any other projects with which the beneficiary is associated.

5. **Reports / Queries**

This module must allow for the generation of the hard copy reports that are required for the consultations. The forms are displayed on the screen as automatically generated by the combination of variables that were selected by the user and then printed in that order so that the reports can be presented.

6. **Documents**

The programme must verify the documentation that must be presented by the families as a requirement to be beneficiaries of the programme as well as the grace period that they are given to fulfil the requirements, the module allows for the administration and control of the fulfilment of requirements.

7. **Education**

This module must manage the education conditions, beginning with the generation of attendance reports, the form used to capture the attendance information. The module offers several different options for data entry, the loading of archives or transfer of them over the Internet. Similarly the module also controls which organizations have not
reported attendance and the closing of the capture cycle for those organizations that did not report the fulfilment of the attendance condition in time

8. Updates

This module must allow the possibility of registering all the information updates that are required from the beneficiary families enrolled in the programme. The updates module also controls the documents that must be presented in order to update of the family's information.

9. Claims

This module must allow the user to register, control, pursue, and respond to the claims and complaints made by families in regards to the programme. In the case that the claim involves the reimbursement of money to the family, the module calculates the respective period of time associated with the complaint process and determines, under the appropriate supervision, if the demanded money and claim is to be acknowledged.

10. Information Management

The module must allow the dynamic definition of statistical variables required to analyze in the historical behaviour of families with respect to geographic areas, fulfilment of conditions, payments, complaints and claims. Thus the fundamental bases for the information management of the programme are satisfied and have the potential for a high level of management, decision making capacity of the programme. The system has the ability to satisfy the needs for basic information on behalf of the general public as well as any other organization related to the program, like an international bank and controlling departments of the government. The permanent presentation of the indicators on the Internet provides the foundation for transparency in the processes of the programme.

11. Payments

This module must allow for the general administration of the processes related to the payments by the user and the management of the periodic benefits distributed to the families, as well as the requirements for the government and the donors. The module also provides the information necessary for the organizations in charge of making payments to the families do so as required. Information on the control of these payments, the banking conciliation of each payment organization, late delivery of the payments as demanded by the families in the programme database, and processes needed in order to successfully complete the transfer of the payment to the families.

12. Pay agency module

The solution must include the different forms of payments with and without connection to the headquarters data centre, and a totally manual operation in the branch.

The operational process will describe the tasks that have to be done in LGED to generate the files to be send to the headquarters of the payment entities, the tasks to be done in the headquarters of the payments entities to generate the central payment data
base, the magnetic files with the source code of application and payment data base for branches that have pc computers, and the printable PDFs with the payment information for branches without any computational equipments..

The Payment MIS must be able to generate all sort of reports, Headquarter and Branch level to facilitate payments monitoring and control. The system must have the features of sending this information to the Headquarter offices without internet connection at the Branch level.

V. IMPLEMENTATION OF MIS CCT

The implementation of the MIS should at least include three specific steps:

① Development of CCT tool with all the required parametric levels, and which matches the initial design of the programme.
② Adjustment of the tool according to the needs discovered during the operational implementation of the programme.
③ Delivery of the tool with all its functionalities adapted to the operational implementation of the programme.

The process of developing the software tool must have the following steps:

Analysis: based on the design, and is constructed from a model of that original system.

Design: Based on the analysis model, a design model is constructed, that contains the architecture of the software system and its detailed design.

Implementation: This is like a point of departure for the model from the previous phase, to realize the programme or to implement the designs specified in the design model.

Test: In this phase the analysis mechanisms that were designed are compared to the results observed in practice after the system has been implemented in corresponding test groups and with real participants of the pilot project.

VI. CONSULTANCY DELIVERABLES

The consultant firm engaged to carry out this process must deliver to the program the following documents:

1. MIS ready production: fully adapted to the programme’s operational needs as herein envisaged with the respective code source
2. End user and source code manuals
3. Report of training process
4. Corrective and adaptive regular maintenance reports
VII. IMPLEMENTATION MODE AND TIMEFRAME FOR THE CONSULTANCY.

The period is divided into two parts, the first year for development and from the second to the forth year for corrective measure and maintenance.

VIII. EXPERTISE AND MINIMUM TEAM OF CONSULTANTS

For carrying out this consultancy, a firm, with expertise in the implementation of information systems for CCT programs during the last 5 years, is required.

The minimum team of consultants needed comprises:

**MIS engineer**

A systems’ graduate professional with experience exceeding 5 years in similar programs. His/her main objectives will be to train the local members of staff in the program’s operation and to ensure that the system works to suit the operational requirements identified by the operational consultants.

**Data base designer**

A systems’ graduate professional with experience exceeding 3 years, who has worked or participated in data base design in at least three different projects.

**System Architect**

A systems’ graduate professional with experience exceeding 3 years, who has worked or participated in the system architecture design in at least three different projects.

**MIS programmers**

A group of 3 professionals will make adjustments to the source program to the degree the design and program implementation progress requires, during a period of 6 months.