Hariyo Ban Program
Terms of Reference (ToR)
for
Designing Software for Data Management

1. Background and Introduction

Funded by United States Agency for International Development (USAID), the Hariyo Ban Program-II (hereafter referred as Hariyo Ban II or the Program), is a continuation of previous phase of Hariyo Ban Program (hereafter referred as Hariyo Ban first phase or first phase) and is being implemented by a consortium of four partners: World Wildlife Fund (WWF) (prime recipient), Cooperative for Assistance and Relief Everywhere (CARE), National Trust for Nature Conservation (NTNC), and the Federation of Community Forestry Users in Nepal (FECOFUN). The program works on two core, interwoven thematic components: (1) biodiversity conservation and (2) climate change adaptation. Market based livelihood opportunities, gender equality and social inclusion (GESI), and governance are important crosscutting themes.

Hariyo Ban II has highly emphasized the role of Monitoring and Evaluation (M&E) in achieving its intended results and data driven decision making. From the experience of Hariyo Ban I, the need of a systematic, time efficient and comprehensive system of data management is realized. The Program implements its activities through four different consortium partners in 14 districts of two huge landscapes viz. the Terai Arc Landscape (TAL) and the Chitwan Annapurna Landscape (CHAL) under different thematic components and cross cutting themes (as mentioned above). Hence the data collected will be huge in quantity and complicated also. Therefore, we require a user friendly and efficient database management system that can be easily used by our staff from field to center level. This involves designing a user friendly software where the data entered from field level will be compiled, centralized and stored; accompanied with features to analyze the data and report/information generation which can be used by concerned people for reporting and management purposes.

2. Objective

The objective of this consultancy is to develop online information collection platform for Hariyo Ban Program activity data that will be organized in web based data storage system so that concerned people can have access, enter/upload, analyze and generate information from any geographic location with having internet access.

3. Methodology/Activities in detail

The consultant/software designer will provide the following services:

3.1 Design and Construct web based database system

3.1.1. Develop database system for tentatively 25-30 data collection formats in web based form in simple user interface and user friendly Graphical User Interface (GUI) using MYSQL, PHP 5 or higher, or AJAX.

3.1.2. Design a user-friendly and appealing dashboard for the different components and cross cutting themes of Hariyo Ban II and embed data within each component.

3.1.3. Only designated persons will have user rights on limited formats according to organizations (data entry and edit) and the central M&E Unit of the Hariyo Ban Program have the full admin rights (central monitoring system of database of all consortium partners). Secure password login system to users.

3.1.4. There should be three types of users;
> a. **Administrator** with all the rights to access, approve or disapprove the data and generate report
> b. **Partner admin** with limited rights for approval and make necessary changes and generate report
> c. **Users** with rights to upload data and generate report

3.1.5. There should be two options for inserting/uploading new data;
> a. Online (real-time, direct entry in software) and;
> b. Offline (importing MS Excel, entering the data in excel and then uploading it when there is internet access)

3.1.6. The web application should be made on open source platform allowing the application to be used on a smart phone, tablet and from a normal computer.

3.1.7. A confirmation message should be displayed to the user prior to any kind of deletion of data. The delete/editing action will be carried out only if the user confirms the delete action. All delete/editing variable actions will only limit the field data to be hidden.

3.1.8. Only The Administrator should have the right to delete data. All the data approved by the administrator will be the final data and there should be no provision to change data afterwards, except through the complete chain of disapproval process.

3.1.9. All the participants data should be disaggregated by gender (male, female), caste/ethnicity (BCT-Brahmin/ Chhetri/Thakuri, Janajati, Dalit, Newar, Muslim and Others), age group (15-19, 20-24, 25-29, 30-34 and above 34), well-being status (Ka, Kha, Ga and Gha) etc. as provided in the data collection format.

3.1.10. The developed database web-based software must be able to analyze database, filter database, generate report, in terms of mentioned disaggregation and other parameters which will be decided together with Hariyo Ban central M&E unit.

3.1.11. GIS reference (coordinates in degree decimal) component/free map services like Google map/Bing map/MapQuest should be embedded in the database. Proper mechanism for assuring that the coordinates will not go beyond the country boundary should be in place.

All the process of design and constructing the software will be done in close coordination with Hariyo Ban II M&E Unit.

3.2 Data analysis and report

The developed database software must be able to analyze the stored database, filter database and generate summary report using simple statistical tools (sum, average, table, charts etc.), at different level (district, corridor/bottleneck, working unit and working site, partners, landscapes, etc.). This report must be generated considering the following points:

3.2.1. Report will be generated from only those data sets that are approved by the partner admin.
3.2.2. The reports should be exported in user friendly formats (MS Word, MS Excel, PDF etc.).
3.2.3. The data should also feed into the Performance indicator tracking table, calculated as instructed.

3.3 Training for using software:

3.3.1. Develop and provide manual for using software.
3.3.2. Train Hariyo Ban Program staffs on using software, data entry/upload and its different functions.

3.4 Maintenance Service

- The consultant will provide free-of-cost after support service for any software related problems, such as bugs and provide free repairing within 4 hour for routine maintenance, and 2 hours for an urgent maintenance.
- Consultant will be responsible for the regular back up of the application and data and provide free repairing if the application gets crashed.
- There will be provision for the annual maintenance of contract to get the regular service.

Support should be provided on working days through Sunday to Friday from 9:00 am to 6:00 pm. However, the Consultant will provide urgent maintenance support throughout 365 days.

4. Deliverables

a) Custom designed software for data entry and processing with specific report generating facilities after test and refinement
b) Two events of training in TAL and CHAL on the use of software
c) Develop and provide detail manual for using software both hard and softcopy in Nepali and English language.

Copyright: The copyright of the output will belong to WWF Nepal, Hariyo Ban Program and any violation of copyright law will be pursued accordingly.

5. Time line:

All activities under this assignment should be completed by end of July 2017 in close coordination with Hariyo Ban M&E unit.

- The software design work should be completed by end of May 2017.

- The implementation/training on the use of the software should be completed by end of June 2017.
- The consultant will have to provide support services for software operation as required for the rest of the Hariyo Ban period after the completion and handover of the software design to Hariyo Ban Program.

6. Proposal Submission Details

A hard copy of the technical proposal to be submitted in a sealed envelope, along with an application letter. A hard copy of the financial proposal should be submitted in a separately sealed envelope. Both envelopes should indicate the consultancy applied for, and be submitted together to the following address:

<div align="center">

M&E Specialist
Hariyo Ban Program – WWF Nepal
PO Box: 7660
Baluwatar, Kathmandu, Nepal

</div>

The technical proposal should include a list of equipment that will be used. The financial cost proposal should include a detailed breakdown of the total budget proposal including: fee, food and accommodation; travel cost, communication costs, and reproduction of documents, and should be in local currency. The payment is subject to tax deduction as per prevailing government rules. Please refer to Annex 1 for preparing the financial proposal.

7. Hariyo Ban Program Branding

Hariyo Ban Program branding and marking is to be ensured in all communication materials produced to mark the Hariyo Ban Program, as per the Hariyo Ban branding and marking strategy. The consultant should make sure that the Hariyo Ban logo is mentioned along with the disclaimer language:

<div align="center">

Hariyo Ban Program

</div>

In English:
"This report/manual is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents in this report/manual are the responsibility of the author and do not necessarily reflect the views of USAID or the United States Government."

8. Coordination

The overall coordination for this assignment will be done by Rajendra Lamichhane (rajendra.lamichhane@wwfnepal.org), M&E Specialist and Radhika K.C. (radhika.kc@wwfnepal.org), M&E Associate, Hariyo Ban Program, WWF Nepal.