

Terms of Reference for the National Consultant

Title:

Qualitative-Based Survey (QBS) of awareness, preparedness and response capacities related to climate change induced risks and vulnerabilities and the documentation of lessons and experiences.

A. Background:

The Royal Government of Bhutan has initiated the first National Adaptation Program of Action on climate change project on - **Reducing Climate Change-induced Risks and Vulnerabilities from Glacial Lake Outburst Floods in the Punakha-Wangdi and Chamkhar Valleys** – funded by an LDCF /GEF through UNDP and co-funded by the Austrian Government, the WWF and RGoB. The project duration is for five years (2008 – 2013) and was conceived and implemented to support the RGoB in reducing climate-change induced Glacial Lake Outburst Flood (GLOF) risks and vulnerabilities. Under the project, three main Components/activities are implemented to reduce the risk of GLOF, viz;

- I. Reducing the level of *Thorthormi* lake implemented by the Department of Geology and Mines (DGM),
- II. Installation of the automatic Early Warning System (EWS) implemented by the Department of Hydro-met Services (DHMS)and
- III. Raising awareness on GLOF risks and building capacities in the vulnerable areas implemented by the Department of Disaster Management.

The important activities of DDM are to build capacities at National, Dzongkhag (District), Gewog(Block)and Community-levels to enhance awareness, preparedness and response levels to deal with climate change-induced risks and vulnerabilities.DDM activities in the pilot Dzongkhags included:

- The drafting and consultation process for the enactment of the Disaster Management Act 2013;
- Training of Dzongkhag and Gewog Officials, Local Functionaries and Vulnerable Communities in the Community Based Disaster Risk Management approach to formulate preparedness plans and prioritize and implement mitigation and preparedness measures through community based interventions;
- Sensitization workshop and training on mainstreaming DRR for Dzongkhag/Gewog officials and local functionaries to initiate integration of climate risk reduction into plan, policy and development activities;
- Capacity building program for school teachers and students on disaster preparedness and response;
- End to end awareness campaigns in communities on risk of GLOF and hazard zonation maps through posters, pamphlets and documentary clip, animation and through various media;
- Development and testing of Community Based Early Warning System through appointment of community focal points in each vulnerable community and designing of systematic Information flow mechanisms for GLOF event;
- Demarcation of GLOF hazard zonation by installation of iron pillars and wooden pegs based on GLOF hazard maps in Punakha-Wangdue and Chamkhar Valley;

- Identification of safe GLOF evacuation sites/routes in vulnerable communities and conducting evacuation drills following test activation of the Automatic Early warning System;
- Capacity development program for DDM, MoHCA, Dzongkhag and Gewog officials and local functionaries through ex-country training, workshop and institutional visit.

B. Objectives of the Assignment

The objectives of this contract are:-

1. To carry out a comprehensive gender-sensitive QBS in pilot areas to assess the level of disaster awareness, preparedness and response capacities in vulnerable communities, in particular, to climate change-induced risks and vulnerabilities, such as GLOF.
2. To document lessons learned and experiences, particularly for activities undertaken to raise awareness and strengthen community preparedness.

C. Comprehensive gender-sensitive Qualitative Based Survey (QBS):

The project results especially those related to capacity development and strengthening of disaster management are required to be assessed through Qualitative Based Survey (QBS). Although there was no baseline established at the beginning of the project in 2008, a baseline QBS was carried out in 2011 to establish the base line data on the level of awareness, preparedness and response capacities related to climate change risks and vulnerabilities at various levels in the project areas.

The study was conducted at three levels – at the National level through consultations with the DDM and administering in-depth interviews to national sector focal persons; at Dzongkhag and Gewog level through in-depth interviews with disaster management committee and team members and focus group discussions and; at the community level through a community based qualitative survey. At all times, and all levels, efforts were made to gather gender-disaggregated data.

Similarly, the final comprehensive gender-sensitive QBS will be conducted to assess the level of awareness and capacity at various levels in the three pilot Dzongkhags of Punakha, Wangdue Phodrang and Bumthang and to find out how and whether vulnerable communities have benefited from this project.

D. Results/Expected outcomes:

1. Review and update the survey questionnaires based on the attached data requirements and additional information from the project manager, as required. Survey methodology (including sample size) and questionnaires must be approved by DDM before launching the survey.
2. Conduct the survey according to acceptable research and statistical protocols and analyze results accordingly.
3. Conduct data cleaning, data entry and analysis of all items listed in Annex 1: Data requirements
4. Submit draft report and present survey findings and recommendations to DDM and key stakeholders

5. Incorporate comments and feedback into final report for submission in soft copy together with the filled-in questionnaires and dataset.

E. Methodology:

Data collection should be based on the questionnaires prepared by the consultant according to the data requirements specified in Annex 1. Both, Quantitative and Qualitative methods will be used. Interviews will be carried out with individuals at the national level and at various levels under Punakha, Wangdue and Bumthang Dzongkhags:

1. Interview with National Disaster Management Focal points (at least 70% of national focal points)
2. Interview with Dzongkhag Disaster Management Focal points, Dzongkhag Disaster Management Committee and Dzongkhag Disaster Management Awareness and Planning Teams/ CBDRM ToTs (at least 70% of members)
3. Interview with Gewog Disaster Management Committee and CBDRM ToTs (at least 70% of members)
4. Interview with community members, from households, school teachers, students, other agencies/institutions existing in identified communities (statistically representative sample size from each identified target area)

F. Scope of work for QBS

1. Sample area and size

At the district level, the targets Dzongkhags to be surveyed are Punakha, Wangdue and Bumthang districts. Interviews and survey sample size shall be as per requirements in E. Methodology above.

Under Punakha and Wangdue Phodrang Dzongkhags, the following 14 communities shall be targeted:

1. Wolathang
2. Samdingkha
3. Jara
4. Tsekha
5. Changjukha
6. Shedra area near Punakhadzong
7. Old Punakha town
8. Khuruthang
9. Samthang
10. Bajo Thangu
11. Bajothang
12. Tsokona
13. Chichilum area near Rinchengang village
14. Hesothangkha
15. Basachhu
16. Kamichhu

Under Bumthang Dzongkhag, the following communities shall be targeted:

- Wangdi Chooling
- Dekiling
- Jilikhar
- Gongkhar
- Chamkhar
- Tamzhing
- Dorjibee
- Gooling

The Department has conducted the survey using same questionnaires in Lunana Gewog under Gasar Dzongkha, which is one of the vulnerable communities from the GLOF. The Department will be sharing completed survey questionnaires with consultant for Data Analysis, Validation and inclusion in the final Report.

2. Review and Update of survey questionnaires

The Department will be providing a set of questionnaires used at various levels during the initial QBS conducted in 2011. Consultant would be responsible for reviewing and updating the questionnaires and sharing it with the Department of Disaster Management for finalization before launching the survey.

3. Selecting, training, fielding and supervising the enumerators

The Consultant will be responsible for providing experienced and competent enumerators. Training of the enumerators is needed to ensure competent and uniform administration of the survey questionnaire. Any cost related to the enumerators shall be borne by the Consultant firm.

4. Data collection

After the training and final selection of the enumerators, the Consultant will be responsible for conducting the survey as per the agreed methodology and sample size. Any problems encountered during the fieldwork shall be managed by the Consultant's firm.

5. Quality control of data collected

DDM will coordinate with the Consultant on a regular basis to monitor the progress of the enumeration and completion of the survey. To ensure quality control, a random selection of communities will be contacted by the DDM to confirm that the enumerator did conduct the interview and a small number of answers will be validated.

6. Data Analysis, Validation and Report Writing

The Consultant will be responsible for data cleaning, data entry, data analysis, validation and report writing.

The data analysis should include all aspects listed in the data requirements (Annex 1) and suggest recommendations to improve the level of awareness and preparedness/response capacities of the respondents. The data should be gender disaggregated and include an analysis of gender-related aspects, i.e. special needs of men/women in relation to climate change induced risks and vulnerabilities, early warning systems, etc.

The draft report and final report should be prepared by the Consultant and presented and submitted to the Director General, Department of Disaster Management, Ministry of Home & Cultural Affairs. The survey firm is not allowed to share data with any third party, and no identifying information should be released, used for other projects/purposes or sold to any third party.

7. Documentation of all the lessons and experiences derived from the project:-

The Department under this project has carried out various Disaster Risk Management program in the form of Trainings, Workshops, door to door Awareness campaign, public consultation meetings, mock drills, evacuation drills, etc. Under this task, the Consultant is expected to synthesize the lessons learned and identify and document best practices from the activities implemented. The Consultant is expected to:

7.1. Review the various workshop/training/meeting reports

7.2. Prepare comprehensive report on achievements made under the project including lessons learned and experiences gained from this project

G. Qualifications of National Consultant

1. Academic and professional background (minimum of Bachelor's Degree) in Sociology, Social Work/Social Sciences, Rural Development, Business or Public Administration, Environment or fields related to Climate Change/Disaster Management;
2. A minimum of 5 years of working experience in the development sector in Bhutan is required. Experience in conducting research related to disaster management and climate change would be an advantage;
3. Understanding of disaster management and climate change adaptation in Bhutan;
4. Proficiency in field research and statistical protocols, preferably in the area of disaster management/ climate change;
5. Excellent communication and interviewing skills and ability to interact with grass root level respondents;
6. Proficiency in writing and communicating both in English and in Dzongkha;
7. Proficiency with statistical packages/software used in analyzing survey results;
8. Should hold a valid Bhutanese consultancy license; and
9. Excellent in human relations, coordination, planning and team work.

(Please enclose any supporting documents)

H. Timeframe and work plan:

Please submit your proposed work plan/ timeframe, including statistically representative sample size under the target areas, for implementing the above activities within 30 days from the date of signing of the contract. As a guideline, the tentative timeframe includes:

1. 10 days for consultations with DDM, desk review of training/meeting/workshop reports and review and finalization of questionnaires, and training of e-numerators;
2. 21 days for data collection and field work in Thimphu, Punakha, Wangdue and Bumthang;
3. 7 days for data entry and analysis;
4. 15 days for report writing, presentation and finalization incorporating comments/feedback from DDM and relevant stakeholders

I. Earnest Money Deposit:

Sealed quotation must be submitted with an earnest money of 2 % of the quoted amount (quotation without EMD will not be entertained).

J. Payment Terms:

The complete cost of the above study will be paid in the following manner:

10% of the total cost will be paid on the award of the work contract against the submission of bank guarantee of the same.

25% of the total cost will be paid upon submission of the finalized survey questionnaires and completion of desk review of training/meeting/workshop reports.

25% of total cost will be paid upon submission and presentation of the draft final report.

40% of the cost will be made on submission of the final report (both QBS and documentation of lesson learned) in soft copy along with entire raw data and the soft copy of the report.

Annex 1: Data requirements

The survey should respond to, but is not limited to, the following data requirements.

- All aspects marked with °should be analyzed from a gender-perspective (additional information to be given by DDM)

Background:

- °All data should be gender disaggregated (i.e. number of men/women interviewed/represented in DM focal points/ committees/team, number of women headed households interviewed)
- Identification of statistically representative sample survey size for households in the identified target areas
- °Total population of each Dzongkhag/Gewog/Chiwog surveyed
- No. of households (Hh) in each Dzongkhag/Gewog/Chiwog surveyed

National level (Interviews with at least 70% of National Disaster Management focal points, Thimphu)

- °Percentage of national DRM focal points able to prioritize, plan, and implement measures to reduce human and material losses from potential GLOFs
- Number of government departments actively accessing and utilizing climate risk information
- °Percentage of respondents trained or participated in sensitization workshops organized by DDM
- Measures to improve awareness/capacity of national DRM focal points

District and Gewog level (Interviews with at least 70% of Dzongkhag Disaster Management Focal points, Dzongkhag Disaster Management Committee and Dzongkhag Disaster Management Teams and with Gewog Disaster Management Committee and Teams in each of the three districts)

- °Percentage/number of respondents interviewed trained in CBDRM/Mainstreaming DRR/School Disaster Preparedness and Response/ Dzong Fire Safety Training etc.. by DDM
- °Percentage/number of respondents interviewed participated in awareness activities (i.e. meetings, workshop, mockdrill)
- °Percentage of district DRM focal points and DRM committees members able to prioritize, plan, and implement measures to reduce human and material losses from potential GLOFs
- °Percentage of DRM focal points at Dzongkhag, Gewog and community level reporting that Disaster Management frameworks and guidelines support climate change adaptation efforts*
- °Number of Dzongkhag and Gewog Disaster Management Committees in project areas incorporating long-term climate risk planning into their ongoing DRM responsibilities
- Number/percentage of Disaster Management Plans in place at the Dzong/Gewog level
- °Awareness of roles and responsibilities in a disaster situation
- ° Assessment of whether different needs of men/women/boys/girls in a disaster situation are addressed
- Number and awareness level of Vulnerability and Risk assessments conducted at the Dzong/Gewog level
- Level of awareness and enforcement of Circular on land use based on GLOF hazard zonation mapping issued by MoHCA
- °Measures to improve awareness/capacity of Dzongkhag and Gewog DRM focal points, committees and teams

Community level (Interviews with household member, school teachers, students and persons in identified communities (statistically representative sample size from identified target areas in the three districts))

- °Percentage /number of respondents interviewed trained in CBDRM/School Disaster Preparedness and Response/ Dzong Fire Safety Training etc.. by DDM
- ° Percentage/number of respondents interviewed participated in awareness activities (i.e. meetings, workshop, mockdrill)
- *°Percentage of communities able to prioritize, plan, and implement measures to reduce human and material losses from potential GLOFs*
- *°Percentage of households in target communities who are able to take precautionary measures and react to potential GLOFs in a way to minimize human and material losses*
- Number/percentage of Disaster Management Plans in place at the community-level
- Number/percentage of Gewog/Chiwog/Community reviewed their CBDRM plan
- °Awareness level on role/what to do in a disaster situation
- °Assessment of the different needs of men/women/boys/girls in a disaster situation and how these are addressed
- °Measures to improve awareness/capacity of communities

- * Number of vulnerable target communities in Punakha-Wangdi Valley reached by early warning system (specify whether manual or automatic system) *For Punakha-Wangdue Dzongkhag only*
- *°Percentage of households in vulnerable communities in Punakha-Wangdue able to receive and respond to warnings in time to avoid human losses *-For Punakha-Wangdue Dzongkhag only*
- *°Percentage of households in vulnerable communities in Punakha-Wangdue aware of the new automatic GLOF early warning system- *For Punakha-Wangdue Dzongkhag only*
- *°Number of communities in vulnerable communities in Punakha-Wangdue aware of location and access routes to safe GLOF evacuation areas (even for Bumthang Dzongkhag)- *For Punakha-Wangdue Dzongkhag only*
- *°Number of communities in vulnerable communities in Punakha-Wangdue and Chamkhar valley aware of GLOF hazard zonation (level of risk from GLOF)- *For Punakha-Wangdue Dzongkhag only*