



## Reducing Climate Change-induced Risks and Vulnerabilities of GLOF



UNDP monitoring field visit to Damji project store and Early Warning Systems siren towers, Punakha, Wangdue and Gasa Dzongkhags, Bhutan

15 – 16 July 2011

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## Introduction

A field monitoring trip was conducted from 15-16 July under the project "Reducing Climate Change-induced Risks and Vulnerabilities of GLOF in Punakha-Wangdue and Chamkar valleys". Monitoring included the project transit store and briefing of workers for the artificial lowering of Thorthomi lake under outcome 2, as well as visit to GLOF Early Warning System siren towers under outcome 3.

### Damji Project transit store

Following a Health and Safety assessment conducted by a UNDP-fielded consultant from August-November 2010, a number of recommendations were implemented to strengthen the safety for the mitigation workers. Due to the remoteness of the project site in Lunana, the monitoring visit went to the project transit store in Damji from where rations and equipments are distributed and workers briefed before departure to the project site.

In 2011, workers were medically screened by the project doctor in Thimphu. Following the medical screening, workers were requested to register at the transit store between 16-18 July. Several days were given in order to avoid mass registration and chaotic situations experienced in previous years. On the 16 July, approximately 30 workers registered before lunch, out of which more than 10 were experienced from both the 2009 and 2010 field work.

For the first group of 22 workers, the Department of Geology and Mines gave a group briefing about the project, rations and equipment, insurance, payment modalities, recommended trekking route, symptoms of and how to respond to high altitude sickness. The establishment of medical camps in Rodophu (1 day acclimatization halt) and Tarina and recommendation to travel in groups were highlighted. A number of questions were raised and answered by the project team. Following the briefing, handouts were distributed containing relevant information on the above mentioned aspects in English and Dzongkha.

After the briefing, the workers signed their contract upon verification of their ID card and positive medical screening results. Equipment (jacket, rainjacket, blanket, gumboots, gloves) was distributed to each worker and rations for groups of 3 workers. Book-keeping of the items distributed was duly ensured. Workers were recommended to travel in groups of at least 3 people, and were asked to wait if they had no companions. The project team made efforts to group people for the journey. In total 132 workers (all men) registered at Damji, and all arrived safely at the project site. The project management expects more workers from the local high-altitude areas, including women, to join directly at the project site.

As per the above descriptions, the endorsed recommendations to improve safety were followed.

### Siren towers, GLOF Early-Warning System

A number of siren tower sites and the Flood Warning Control station in Wangdue was visited during a field monitoring visit in July 2010. The installation of the GLOF-EWS water sensors and siren towers started in the end of 2010 and was completed in Punakha and Wangdue districts in February-March 2011, whereas the installation of the system in high-altitude areas is expected to be completed between June-August 2011. The EWS is expected to be operational by the end of 2011.

On the way to and from the project transit store, a number of the siren towers were visited. The siren towers are located in strategic locations above vulnerable settlements and infrastructure. A damage on the siren tower due to strong wind (see photo page 5) near Wangdue Vocational Training Institute was discovered and reported to the Department of Energy for reparation by the contractor.

1. Damji project transit store, Gasa district  
Project transit store, Damji:



Briefing of the first group of workers:



Briefing by the Project manager.



Distribution of detailed information regarding rations, trekking route, camps and safety in English and Dzongkha.

Contract signing and accounting:



Workers sign contract upon check of validity of medical screening and ID card.



Worker account for the receipt of equipment and rations for the book-keeping.

Distribution of rations and equipment:





Rations are distributed in groups of 3 workers.



Equipment (blanket, gum boots, jacket, rain jacket, gloves) are distributed to each worker.

Getting ready for the journey:



Rations and equipments are packed.



The first group of workers is ready to leave.

Departure:



Workers are leaving in groups of minimum 3.



Discussion between the project manager and UNDP about procedures and finalization of annual Project Implementation Report.



2. GLOF-Early Warning System Siren towers, Punakha and Wangdue districts  
Khuruthang town:



Siren tower above Khuruthang town.



The area below the road (including Non-Formal Education Center and hotel) are in the GLOF red zone area.

Punakha Dzong:



Siren tower above Punakha Dzong.



Near Vocational Training Institute:



Siren tower above the road between Khuruthang and Wangdue, near Vocational Training Center



Damage to siren tower reported to the Department of Energy for reparation by contractor

Programme		
Friday 15/7		
9.30 am	Departure Thimphu	
12 pm	Inspection of GLOF-EWS siren towers in Khuruthang and Punakha	Disaster Management focal points in Punakha and Wangdue districts were out of station and therefore not available for meetings to discuss progress of CBDRM trainings and awareness activities, and reporting.
1 pm	Lunch	
4 pm	Arrival Damji	Project store
	Discussions with DGM	Preparations, PIR
Saturday 16/7		
8:00	Damji transit store: Briefing of workers, distribution of equipment and rations, sending off groups of workers	
1 pm	Lunch	
2 - 3 pm	Inspection of GLOF-EWS siren sites Wangdue	
3 - 6 pm	Return to Thimphu	