

Ministry of Population and Environment (MoPE)
Department of Hydrology and Meteorology (DHM)
Community Based Flood and Glacial Lake Outburst Risk Reduction Project (CFGORRP)
Field Visit Reporting Template

Team Members:

Pravin Raj Maskey, Senior Technical Advisor.

Overall objective of the field visit/ mission:

- *To supervise the ongoing construction work, construction work mangement, camp and workforce management, waste management at work site.*
- *To monitor progress of milestone activities.*
- *To supervise installation of hydro-met and GLOF sensors at Imja Lake.*

1. Key activities carried out based on the travel itinerary :

Date / Day	Travel destinations.	Persons/ Groups interacted with	Description of Field visit Program/Activities
Day 1: 30 May 2016	Kathmandu – Phaplu by aeroplane.	On the way to Imja.	Supervision of construction materials collected at Phaplu airport through road head from Kathmandu to Phaplu to be airlifted to Imja construction site by Nepal Army MI- 17 helicopters.
Day 2: 31 May 2016	<ul style="list-style-type: none"> • Stranded at Phaplu airport due to bad weather and MI – 17 helicopter could not fly to Imja due to bad weather. 	On the way to Imja.	Supervision of construction materials collected at Phaplu airport (cement, air fuel, geo-textile, gabion boxes, etc.).
Day 3: 1 June 2016	<ul style="list-style-type: none"> • Phaplu to Syangboche by NA MI – 17 helicopter. • Syangboche to Debuche by trekking. 	On the way to Imja.	Stop over at Debuche on the way to Trekking to Imja.
Day 4: 2 June 2016	<ul style="list-style-type: none"> • Trekking to Dingboche. 	On the way to Imja.	Stop over at Dingboche on the way to Trekking to Imja.

Day 5: 3 June 2016	• <i>Trekking to Imja.</i>	Site engineers, workforce, Nepal Army personnels. Site engineers, workforce, Nepal Army personnels.	Field visit of construction site at Imja, physical verification of ongoing construction work milestone 1 (transportation of construction equipment and materials, construction of helipad, cofferdam, diversion channel, office building (at lake and campsite), diversion channel, collection of sand, aggregates, transportaion of construction materials, pumping of seepage water, storage of cements, fabrication of reinforcements etc. Supervision of installation of Hydro-met and GLO detection sensors.
Day 6: 4 June 2016	<i>Imja and back to Kathmandu on Helicopter.</i>		

2. Major observations/findings made from the field visit/ mission:

(Listing in order of Priorities, point out the key findings from the field visit in bullet form.)

The status of milestones as per the Letter of Agreement (LoA) are as follows:

LoA Milestone 1 targets are:

- *Procurement of construction materials and equipmnet and airlifting of construction material & equipment to Imja Lake,*
- *recuitment of workforce, Nepal Army personnel;*
- *settingup camp, warehouse, workshops,*
- *construction of cofferdam and diversion channels.*

Hydro-met and GLOF sensor installations:

- *Hydro-met and GLOF detection sensors installation.*
- *VSAT installation for real time communication of data.*

Achievements of Milestone 1 are:

- *Procurement and transportation of equipmet to Imja is already completed, major part of the construction materials has been procured and transported to Imja site, partly cement and gibbon boxes are left that are being planned to be completed by end of June by airlifting. In case of bad weather transportation by porter and animals are arranged as contingency plan.*
- *Recuitment of workforce of about 60 workers and about 30 Nepal Army personnel has been completed and are in camp site with camping facility, food and personal gears to work at extreme weather conditions.*
- *Seperate camp is set up for workfoce and Nepal Army personnel with adequate camping, cooking*

and dining facilities. Adequate number of toilets are setup at campsite. Warehouse and workshop is established at worksite for repair maintenance, carpenter work, welding etc.

- *The construction of diversion channel and cofferdam is complete and the diversion channel is operated at full capacity. Now, the excavation of open channel (milestone 2) has also begun. The progress on construction of warehouse, store and office (milestone 3) has been significant and will be completed soon.*

Achievements of Hydro-met and GLOF sensor installations:

- *Hydro-met and GLOF detection sensors installed successfully.*
- *VSAT installed but azimuth and orientation could not be set up to get full signal strength for real time data communication.*
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3. Key Recommendations and conclusions:

(What strategic recommendations would you propose to the Project Management regarding implementation and future course of action?)

The progress of work of milestone 1, which is targetted to be completed at end of June has been completed by 1st week of June. Other milestone 2 (excavation of open channel) and milestone 3 (office building, store, warehouse etc.) has begun an milestone 3 is expected be completed within end of June.

The monitoring of construction work needs to be undertaken frequently by DHM, CFGORRP, SNP and local communities.

For quality assurances, regular monitoring of construction work is required.

For record keepin of construction activities, log of visitors, waste management, work force recruited needs to be well kept. Aslo no of airlifts for carrying of construction equipment and materials needs to be kept.

Hydro-met and GLOF sensor installations:

- *VSAT needs to be installed by getting expert services of NTC technical support for real time data communication.*
- *The GLOF sensors that are installed are easily accessed by yak and other animals as well as porters, whose orientation may be disturbed as well as the solar panels are very small that could be stolen and taken away easily.*
- *There is need for fencing and protection of GLOFD sensors from yak, animals and porters, visitors.*

4. Outputs from the Field Visit/ Mission:

(List the main achievements and outputs that were accomplished during the mission in bullet form.)

Monitoring of progress of Imja construction of work at site and recommend remedial actions if any in construction related work.

Monitoring of installation of hydro-met and GLOF sensors and recommendation for fencing and safeguarding of edquipment and sensors from animals and theft and vadalism.

5. Likely Follow-ups that might be necessary after the visit (What Next?):

(Pin-point the probability of follow-ups that might likely be necessary to validate and contribute towards information and knowledge that you collected during the field visit).

Reglar progress monitoring is required for other milestones 2, 3, 4 and 5 related works for Imja lake loweing construction work.

Similarly, hydro-met and GLOF sensors needs to be regularly be monitored for performance as well as safeguarding the equipment and sensors. Regular visits has to be performed for retrieving the data of hydro-met equipment, if data could not be uploaded through internet facilities of NTC.

6. Major changes observed, if any, since the last field visit made:

The end moraine complex area has significant changes due to construction of helipad, diversion channel, warehouses, store and open channel excavations. These areas would be properly landscaped after completion of construction work and can be used as view points for the tourist visiting the areas.