## Users Satisfaction Baseline on Hydro-Met Services in Nepal

## Summary

Growing climate risks for sustainable livelihoods among the people, in general, including farmers and climate vulnerable communities due to impending manifestations of climate change is evident in the country. The Department of Hydrology and Meteorology (DHM) has been providing Hydro-Met services since 1968. Use of Hydro-Met services by general people including farmers and climate vulnerable communities as well as professional users are ever growing. DHM is the one and only mandated organization to provide Hydro-Met services in Nepal. Institutional and technical challenges have been realized by DHM to cope with emerging climate hazards across the country in recent past years. In order to enhance DHM services, in terms of quality, reliability and timeliness, a World Bank administered project - Building Resilience to Climate Related Hazards (BRCH), one of the projects of Pilot Program for Climate Resilience (PPCR), is being implemented by DHM.

At this juncture, it is desired to establish the *Baseline* satisfaction levels of key Hydro-Met service users namely: i) the people, in general, including farmers and climate vulnerable communities and ii) sectoral stakeholders or related professional users. In America, ACSI (American Customer Satisfaction Index) and in United Kingdom, the National Customer Satisfaction Index (NCSI) are popularly used (<a href="www.ncsiuk.com">www.ncsiuk.com</a>) to measure level of satisfaction. By analogy, the term Users Satisfaction Index (USI) is adopted here using Likert scale with 5 levels in the scale of 0-1, which is the key tool to measure the level of satisfaction in the Baseline survey. A multi-stage Probability Proportional to Size (PPS) with equal probability was adopted here in Nepal for the selection of sampling units. Random sampling of 2203 households (85%) and 320 other (professional) users (15%) which include informal group (IGD), key informant (KI) and professional users group (UG) were conducted encompassing 16 selected districts representing three major ecological belts over five development regions of Nepal.

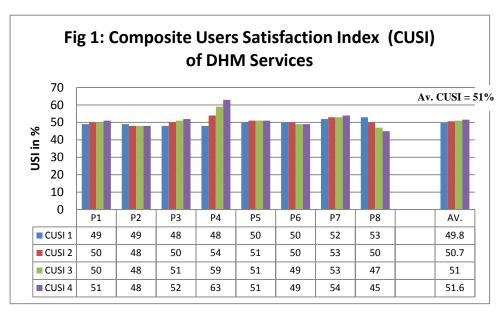
This technical note intends to describe how a design framework for Users Satisfaction Baseline survey on Hydro-Met services in Nepal was conceptualized and used. The survey design framework seek to: i) understand the degree of awareness on Hydro-Met services among users ii) estimate extent to which the users are satisfied with the DHM services and iii) identify new products on demand among users.

Series of consultation meetings were held with the *independent third party - Consultants* before finalization of the proposed design framework for Users Satisfaction Baseline survey on Hydro-Met services in Nepal. Questionnaire survey guided by the design framework was the key instrument of the Baseline survey.

## **Qualitative evaluation parameters (Indicators) for Hydro-Met Services:**

Eight indicators used to measure USI of Hydro-Met services in the country are:

- **P1:** Provide *early warnings* on *hazardous weather events* early enough
- **P2:** Provide adequate Hydro- Met time series data
- **P3:** Provide accurate and reliable Hydro- Met information
- **P4:** Provide users friendly Hydro- Met services
- **P5:** Provide modern and innovative Hydro- Met services
- **P6:** DHM is *capable of meeting future needs/* requirements
- **P7:** DHM is easily accessible to all for desired Hydro- Met services
- **P8:** Hydro- Met services have sufficient lead time for preparedness



## Result

The average Composite Users Satisfaction Index (CUSI) was estimated by combining average USI values in four different weightage scenario namely: i) CUSI 1: equal weights to all 4 categories ii) CUSI 2: 50% weight to HH and 50% (each 16.7%) to other 3 categories, iii) CUSI 3: 70% to HH and 30% (each 10%) to other categories and iv) CUSI 4: 81% HH, 11% IGD, 4% each KI and UG, in order to check sensitivity, if there is any. The average Composite Users Satisfaction Index (CUSI $_{\rm avg}$ ) value was found to be 0.51 or 51% without any sensitivity (Fig 1) towards any users category.