Roles of Regional Cooperation in bridging the Information and Knowledge gaps: Experience from Nepal

Keynote Presentation
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- Asia-Pacific is the world's most disaster-prone region. The region has lost more than 2 million lives with economic damage of approximately \$1.3 trillion since 1970. The region is exposed to destructive earthquakes and tsunamis and disasters that in one way or another involve water like; floods, cyclones and drought.
- Nepal was severely hit by the high intensity earthquakes in 2015. This EQ also known as Ghorka earthquake, killed more than 9,000 people and affected one-third of the total country population. The total recovery cost estimated by PDNA exceeded 9 billion USD, thanks to many donors and DPs who are generously supporting this process till date. This post-disaster recovery process is very new experience for Nepali government, their bureaucrats and local professionals of this field. In the absence of appropriate background and contextual perspective and knowledge, we are still struggling to achieve the desired momentum and speedy recovery in the field. Many people on the ground are still in their temporary shelters and therefore their suffering from the impacts of earthquakes is still prevalent.
- Flooding in lower part of Nepal (terai) is a common phenomenon, however the UN termed the recent flooding as the worst flooding of the decade. Monsoon floods often affect Nepal as well as neighboring states of India and Bangladesh. The same happened in the case of recent flooding. While many people have suffered in Nepal, bordering states of India (Bihar and Uttar Pradesh) and Bangladesh have also undergone through huge losses of human lives as well as significant damages of shelter, agriculture and physical infrastructures. Around 160 people have been killed in Nepal while approximately 200,000 houses were damaged. In contrary, 514 people died and 17.1 million people were affected in India. The total recovery cost estimated by the Post Flood Recovery Needs Assessment (PRFNA), released recently by the GoN is close to 705 million USD spread over the nine sectors and the period of three years.
- With new constitution, political stability and strong local government in the country (we have recently completed LG election almost after 20 years while the provincial and national elections are ongoing) the pace of development will rise in Nepal. We understand, we cannot ignore disaster risks in this development process. The progress made will be undermined if the risks are not well internalized and managed. Nepal's flooded areas are the most underdeveloped and poorest parts of the country, where majority of families live in the bare mud houses and rely on subsistence farming. The proposed recovery programme will therefore try to reduce the impacts from disasters and empower vulnerable communities and build their resilience. This will prove as a concrete step towards achieving the 2030 Agenda for Sustainable Development.
- Regional cooperation is critical for achieving cross-border resilience and sustainable development. In particular, regional cooperation should bridge the information and knowledge gaps in high-risk low-capacity countries like Nepal. Many disasters are transboundary, and thus management and reduction of risk is a task beyond the remit of

¹ https://www.nytimes.com/2017/08/29/world/asia/floods-south-asia-india-bangladesh-nepal-houston.html

individual countries. High-risk and low-capacity countries need to learn from experiences of other countries and assistance in building resilience to natural disasters. Our struggle with the ongoing post-Gorkha Recovery and Reconstruction Programme and opportunity to make the Post Flood Recovery Programme safer and resilient (we are again comparatively less experienced in this process) is an ideal case where regional cooperation backed by suitable information and knowledge would not only be helpful but almost indispensable to ensure longer term solutions.

- Though limited, but Nepal already has some good examples in view of regional cooperation. In case of Post Gorkha Earthquake, we managed to mobile large number of professionals and experts from different parts of the region particularly in the areas of SAR, Humanitarian Response and Coordination, Medical emergency support, use of satellite images and more importantly in the development of PDNA which is one of the best PDNA of the region today. Similarly, in view of dealing with our frequent flood in terai and therefore, establishment of EWS, we have closely collaborated with neighbouring States of India. For example; Flood EWS placed at Ratu and Gagan River in Nepal provides six hours lead time to the local population of Sitamarhi District in Bihar States of India. Similarly, out of 25 incidents of Glacier Lake Outburst Flood (GOLF) so far in Nepal, 11 were originated from Tibet. The best we managed to do in this case is an installation of Radar Sensor at China-Nepal Boarder. This gives lead time of only 30 mins to the nearby settlements in Nepal. Following the negotiation between the two countries in the spirit of regional cooperation, the lead time can be increased to 3-4 hours (by putting the same system inside China) and hence both human lives and economic losses could be minimized.
- Nepal has recently received a new DRM Act 2017, which has also envisioned a permanent institution responsible to lead and manage all cycles of disaster risk reduction and management. This opens several new avenues under institution development where we need to quickly build ourselves and close the knowledge and information gap prevalent in different cycles of DRM. In this process, we are expecting to benefit from the regional knowledge and experience and thus establish a smart DRM institution in Nepal.
- We accept that our need and opportunity to learn and gain from regional cooperation is profound while our knowledge and experience in this regard is still limited and largely adhoc. The proposed PFRR Programme in Nepal provides great opportunity to deal with some long standing trans-boundary issues which are essential elements of frequent floods in terai districts. In addition, post flood reconstruction experience from the region will not only enrich our work in Nepal but will also allow us to benefit from the knowledge of best practices of this field.
- We are yet to institutionalize the process of regional cooperation in Nepal. I understand, this should be facilitated by the leading regional organization like UN-ESCAP. The establishment of the Asia and Pacific Centre for the Development of Disaster Information Management (APDIM) as a regional institution of UN-ESCAP is a landmark achievement in this regard. The APDIM is already in close contact with NRA in Nepal whereby the relevant authorities are being exposed to some of the best practices of post-earthquake conservation of cultural monuments and heritage sites. I sincerely hope that APDIM can play a much bigger role and support in bridging the information and knowledge gaps in high-risk low-capacity countries through regional support and cooperation.