Kosi Flood 2008: A Call for Cooperation in South Asia

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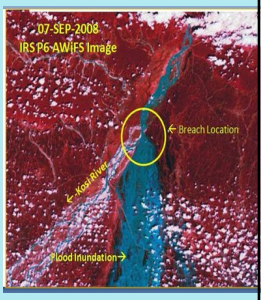
Taking lessons from Kosi Floods 2008,
the paper presents a view point on regional cooperation, which could lead to flood risk reduction

Introduction

- Kosi embankment near Kusaha in the upstream of Nepal got breached on Aug 18, 2008
- It is remembered as a precursor of one of the worst flood disasters South Asia has experienced in the recent times
- About 3.5 million People in India and Nepal had lost their homes, livelihoods and assets and now uprooted and virtually orphanized.



Breach of Embankment – Sources: www.nesac-gov.in and Down to Earth, Sept 2008

Kosi - Shifting Course and Geo-political Dimensions

- Kosi is known as "Sorrow of Bihar".
- Kosi originates from the glacier located at the height of 5,500 feet on Himalayas and after flowing through nearly 70,000 sq kilometres confluences into Ganga near Kursaila in Katihar district of Bihar.
- The river had shifted 120 kilometres from east to west in over 250 years has suddenly again reversed its course.
- Some of the most devastating floods caused were experienced in 1954 to those in 1963, 1971, 1984, 1987, 1991, 1995 and the present flood in 2008.

Environmental Cost of Engineering Solutions

- While engineering solutions to Kosi floods has helped in controlling floods to certain extent, however, there are several environmental questions left unanswered.
- The Kosi, in particular, was known to bring coarse sediments, which would add to the rate of siltation. Wherever embankments were built, silt got deposited in the river. With silt in its bed, the flow was reduced and floods increased.
- Engineering solutions adversely affected the drainage system of the region.

Lessons from Kosi Flood 2008 – Regional Cooperation Perspectives

- The bilateral mechanisms between India and Nepal gained momentum with the formation Ministerial and Higher Official level committees to evolve trans-boundary solutions to problems of Kosi floods in the future.
- There are many issues for regional cooperation:-
  - To increase understanding among key stakeholders and decision makers about the role and impacts of the Himalayan rivers on the flood risk reduction
  - To work out the current scenario on climatic variability in the region and potential impacts on incidence, severity and unpredictability of floods in perennially flood-prone South Asian river basins.
  - To create opportunity for SAARC Member Countries to have the access of knowledge and data on the trans-boundary river basins and addressing the existing knowledge gap.
  - To enhance the potential economic and social benefits through cooperation on management of trans-boundary rivers.
  - To provide a platform for the dialogues on regional cooperation in South Asia, and to subsequently network to enrich and share knowledge & practices.

SDMC - Looking Ahead

SAARC Disaster Management Centre, has taken up the following steps in support of regional cooperation towards flood risk reduction.

- Prepared a roadmap for applications of Science & Technology for Disaster Risk Reduction (DRR)
- Efforts have been initiated towards sharing of data products from Earth Observation Satellites for Disaster Risk Reduction (DRR) especially those related to floods in South Asia.
- Incorporating Disaster Risk Reduction into Climate Change Adaptation (CCA) has been adopted as a part of implementing SAARC Action Plan on Climate Change.
- Specific focus has been placed on development of guidelines integrating for DRR with CCA with regards to river-basin floods.

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Efforts to organize a workshop 2008(with South Asia Water Forum (SAWF) and the Regional Council of South Asia Water Partnership)

- Emerging lessons for regional cooperation,
- Enhancing the effectiveness of flood Early Warning System,
- River-basin flood mitigation in changing climate scenario
- Regional networking for enhancing institutional capacity in South Asia.

Lessons learnt from Kosi 2008 flood

THE FOLLOWING ACTIVITIES HAVE BEEN ENVISAGED

- Development of tool kits for Community Based Disaster Risk Management (CBDRM) and Documentation of Best Practices on CBDRM with specific focus on floods, which are also a part of roadmap adopted during regional workshop at Dhaka in Dec 2007.
- Organizing a Regional Workshop on regional cooperation for flood risk reduction in South Asia involving the key stakeholders to develop the roadmap.
- experiences and the lessons learnt from Kosi flood 2008 would form the central theme for expert deliberations to evolve the roadmap following an inclusive and participatory approach.

Thanks