



Framework for integrated flood risk management in West Rapti Basin, Nepal.

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People in the West Rapti Basin of Nepal have been living with floods for generations. They have coped with floods of different origins and nature which can be explained with the study of dynamics of anthropogenic and natural systems in the river basin. The swollen West Rapti River in the rainy seasons induces massive bank-erosion encroaching huge amount of agriculture and residential areas, causes overland flows towards the low lying areas, and inundates many human settlements severely affecting the livelihood of the people every year. The poor accessibility of the area and lack of proper institutional and effective legislative frameworks to cope with disasters, inadequate engineering practices, politically inspired domestic violence and, the socio-economic settings among many other factors have increased the vulnerability of communities in the area. The present study has found that the increasing trend of flood devastation is caused by increasing vulnerability that has been much influenced from anthropogenic factors. Construction of embankments blocking the natural passage of small rivers, construction of hydraulic structures, poor practice of farming on erosion prone land, deforestation in the catchment, and poor engineering design and construction are some of the examples of human intervention to the natural condition. Study has come up with an idea that flood management activities should not be considered in isolation and skewed towards the post-disaster situation. Rather, it should be managed in a holistic framework linking 'upstream' with 'downstream', 'upland'

with 'lowland', together with fusion of social and technical perspectives in dealing with several other issues.