Environmental Risk Assessment for a Developing Country like India

Shamsuzzaman Ahmed and Indranil Saha
Department of Chemistry, Sripat Singh College, P.O. Jiaganj, District Murshidabad, West Bengal, PIN-742123 (2) Department of Chemistry, Sripat Singh College, P.O. Jiaganj, District Murshidabad, West Bengal, PIN-742123

The developing world is facing an increased risk of accelerating disaster losses. A concrete risk assessment along with subsequent management program involving identification, mitigation and preparedness will assist in rehabilitation and reconstruction once the disaster has struck is critical to subvert the magnitude of the loss incurred. A developing country like India has been taken as an example to highlight the elements mentioned. Most countries like India in the developing world is facing a mounting challenge to promote economic growth and bring down poverty. In this scenario, significant climatic changes will not only impact key economic sectors but also add to the existing conundrum. Sudden onset of natural calamities pose an increasing problem to the developing countries for which risk management strategies need to be forged in order to deal with such hazards. If this is not the case, then a substantial diversion of financial resources to reconstruction in the post disaster phase severely messes up the budget planning process. This compromises economic growth in the long run. Envisaging cost effective mitigation measures to minimize environmental and socio economic toll from natural disasters is the immediate requirement. Often it has been found that an apparent lack of historical data on catastrophic events makes hazard assessment an extremely difficult process. For this it is useful to establish preliminary maps to identify high risk zones and justify the utilization of funds. Vulnerability studies assess the physical, social and economic consequences that result from the occurrence of a severe natural phenomenon. Also they take into account public awareness of risk and the consequent ability to cope with such risks. Risk analysis collates information from hazard assessment and vulnerability studies in the form of an estimation of probable future losses in the face of similar hazards. Promoting different governmental schemes to catastrophe risk absorption can be of great assistance for individuals in this context. Reconstruction and rehabilitation measures provide long term assistance for people having suffered major disaster losses. This will involve cooperation and participation of the local communities and stakeholders. In India the government is actively assisting the states in their response to catastrophes. India lacks an integrated system for disaster risk management, instead it is developing a loosely networked system. Here, the NGOs play a significant role in risk reduction programs. The National Natural Disaster Knowledge Network has been set up to promote a simultaneous interactive platform for all the stakeholders dealing with natural disasters. An Indian NGO like Disaster Mitigation Institute is closely working with the government to design means to address disaster loss. The apparent deficit in India is the dominance of the unorganized sector and there is an active focus in increasing the government’s contribution by creating various national programs. Involvement of the private sector will also play a key role in addressing such losses in the future. There is an increasing emergence of various initiatives that can provide a meaningful platform to tackle the staggering losses incurred from severe natural hazard events.