

Improving Societal living standard

Some of the works that were taken up by Prof. A.K.Sarma and his team to improve living standard of our society are listed below:

Description of the work

Some Photograph

Ecofriendly measures for protecting villages located on river bank:

Loss of land and properties due to devastating bank erosion by Brahmaputra and its tributaries is a chronic problem of the Northeast region. IIT Guwahati in association with Polygon Foundation, an NGO of Assam, has successfully protected an erosion affected reach of Dikrong River by applying bio material and plastic net through financial support of NEDFI.

Developing Himalayan Habitats through **Ecological Management Practice(EMP):**

Unplanned habitation associated with large scale deforestation witnessed in Himalayan Habitats has led to increased soil erosion from the hills and its subsequent deposition in the water ways has aggravated the problem of flash floods in the downstream area. The city of Guwahati is also experiencing multiple hazards because of unplanned development in its surrounding hills. Garbhanga village covering about 0.17km2 is one such degraded hilly area, for which IIT Guwahati has developed a pilot project of applying the concept of Ecological Management Practice (EMP), which aims at developing hazard free, sustainable ecologically economically and balanced habitat area. Pending committed implementation by GMDA, some of the residents have initiated implementing the concept of their own.

Prioritizing drainage planning for hazard free India:

Lack of long term drainage planning with due consideration to social need, climate change and future development is the prime cause of urban flooding. Therefore, we are emphasizing proper drainage in semi-urban area, as implementation of an adequate drainage in a later stage become much difficult. With support of local people from Bamundi and with a formal request from their Gaon Panchayat detail drainage planning was made. The plan is yet to be implemented due to fund constraints.



Area with no drainage



Layers of plastic net

Stable bank



Proposed EMPs



Drainage Plan