**State Level Workshop on Promotion Of Climate Resilient Livelihood**

Assam State Disaster Management Authority (ASDMA) organized a one day workshop on promotion of Climate Resilient livelihood under the GoI-UNDP DRR-CCA Programme on 12th May 2015 at the Conference Hall of the Circuit House, Guwahati**. Over 60 participants** attended the workshop. IN the workshop the report on the study ‘Scoping analysis on climate change impact on livelihood in Assam ’ done under the aegis of GoI UNDP programme was shared with the participants.

The workshop concluded with decision on the road-ahead for the future course of action in regard to the promotion of climate resilient livelihood.

**Climate Change and Occurrence of high intensity Floods**

Experts predict that with global warming, the Himalayan river basins like that of the Brahmaputra river may experience increased summer flows and more flooding for a few decades initially, due to rapid melting of Himalayan and Trans-Himalayan snow and glaciers. While such melting of glaciers leads to increased dry season runoff in the short term, in the long-term there could be a decline of dry season river runoff from glaciers, **turning perennial rivers like the Brahmaputra into seasonal river systems**.

**Impacts on livelihoods**

The impact of water stresses and hazards on all aspects of people’s lives and livelihoods is remarkable and profound at individual, family, and community levels (Barua et al.2003; Barthakur 2000). It is, in general, true that villagers have become poor, marginalized, and more vulnerable to environmental as well as socioeconomic changes because of the impacts of floods and associated hazards over the years. Each year, floods leave them more susceptible to the next year’s flood, creating a vicious cycle of impacts and vulnerability. Within a community or a site, however, communities or families are impacted in different ways depending on the environmental, socioeconomic, and cultural characteristics of the groups or families. There are a few households and individuals who do better than others in spite of the fact that they share the same experiences of water stress and hazards. Moreover, the state of the community in terms of education, job holders, social security network etc. also makes a difference in the impacts on the community.

The already visible Climate Change impacts, signal the need for mitigation measures that minimises current vulnerabilities of the people. These measures should be based on livelihoods for the poor and vulnerable communities. In order to make these communities resilient it is imperative to understand the dynamics of livelihood of the poor and vulnerable people because it is only then, one can learn how these marginalized group will be affected by climate change and how the mite respond with the resources they have, and how these conditions can be reflected and built upon for successful adaptation strategies. By protecting and enhancing the natural services that support livelihoods, vulnerable communities can maintain local safety nets and expand the range of options for coping with disruptive shocks and trends

A number of studies have been conducted on Climate change impacts in Assam and some of the key findings are:

* One of the major implications of climate change is its effects in Forest and Agriculture. Assam being in the 7 biodiversity hotspots in India with huge species diversity is going to lose its resources with the direct impact of climate change in its forests. This necessitates the development and promotion of effective mitigation and adaptation strategies for a **climate-resilient agriculture production system in north-east India**. Promotion of alternative livelihood, stress resistant crop varieties; proper dissemination of agriculture technology can help to **maintain the productivity**.
* With flood is associated a much greater problem of erosion which is leading to loss of agriculture lands and also habitat loss. To sustain this proper **Integrated Flood and Riverbank Erosion Risk Management** system with the use of new technologies like improved embankments and river guidance systems is required. Promoting **alternative livelihoods for the peoples living near the riverbanks** can be suitable adaptation mechanism.
* The **impact of climate change is more prominent** among those marginalized people who are economically and socially deprived. A means of mitigation in the form of **risk reduction or risk sharing tool needs to be developed** to help those marginalized to sustain their livelihood. Micro insurance can be good option along with financial incentives with proper identification of target groups.
* Strengthening the knowledge and data base of the effected regions along with developing socially and economically **feasible adaptation measures would immensely help** in enhancing the adaptation capacity of the communities
* Identification of most vulnerable groups from the society for the climate change related disaster impacts and **developing measures to protect** their livelihood means should be a priority. Improved agricultural infrastructure, health care infrastructure, communication and coordination among various stakeholder groups, line departments of Government, proper risk sharing tools like insurance etc. can help to enhance adaptation capacity.