

**Workshop on**  
**Application of Bio-Engineering Techniques for Mitigating River Bank Erosion**  
**22<sup>nd</sup> & 23<sup>rd</sup> November 2016**

River bank erosion is a global problem where hectares of land are swallowed by rivers causing loss to life, property, economy and social as well as cultural values of that region. To undergo the challenge of implementing sustainable techniques for controlling River Bank Erosion, Assam State Disaster Management Authority (ASDMA) organized a 2 day international workshop on 22<sup>nd</sup> and 23<sup>rd</sup> November 2016 to explore the Best Practices on river bank erosion control measures using Bio-engineering techniques so as to enable ASDMA to adapt & adopt sustainable measures for mitigation of River Bank Erosion in Brahmaputra.

The workshop has been organized with the objective of understanding the causes, factors, situations responsible for Brahmaputra river bank erosion hazard, to analyze the success/ limitation of present erosion control mechanism implemented by Water Resources Department/ Brahmaputra Board and other organizations and to analyze the Best practices on river bank erosion control using Bio-Engineering techniques through case studies/field experiences. This workshop is the outcome of the interest shown by Shri Sarbananda Sonowal, Chief Minister of Assam who directed ASDMA to explore low cost eco-friendly measures for erosion control so that the same can be implemented by the State Government for mitigating the river bank erosion problem of Brahmaputra and its tributaries.

The workshop was graced by Shri. V.K. Pipersenia, Chief Secretary, Government of Assam and other high officials of the Government of Assam. ASDMA explored the possibility of roping in institutions of national and international repute who have demonstrated effective intervention in addressing river bank erosion problem.

This had culminated in holding this workshop with experts from USA, Japan & Bangladesh who shared their bioengineering interventions in mitigating river bank erosion problem. Prof. Shariful Islam, BUET, Bangladesh spoke on Bio-engineering techniques using Vetiver system for slope stabilization and Shri. Geerge Koshy, Principal Consultant, Earth and Water, Chennai and Shri. Shantanoo Bhattacharya highlighted the application of Bio-mimic systems to control bank erosion. A critical review on Prevention River bank Erosion by Using Plant and vegetation was given by Prof. Arup Kumar Sarma, IIT, Guwahati. Mr. Hidetoshi Yokota, General manager, Bridgetone Corporation, Japan and Dr. Shigeti Endo, Bridgetone Corporation, Japan also gave a Presentation on Disaster Prevention Challenge with cascading Recycle application of Tire Derived Geo-Materials.

A presentation on Indigenous Technology and recycle materials aided cost effective erosion protection measures was given by Prof. Hemanta Hazarika, Kyushu University, Fukuoka, Japan. Prof. Arvind Phukan, Former Professor, Alaska University, USA and Consulting Engineer, gave a presentation on River Bank Erosion and restoration using Bio engineering or Non-structural Techniques in the Brahmaputra river.

The participants from various line departments like Water Resource, Soil Conservation, PWD, Environment and Forest, Brahmaputra Board, Geological Survey of India, FREMMA, North East Space Application Center and NGOs attended the workshop. Padmashri Jadav Molai Payeng, The eminent environmental activist who is popularly known as the “Forest Man of India” was also present to share his opinion and knowledge on River bank erosion and Mitigation strategies.

The learning from the workshop is expected to help Government of Assam in understanding the feasibility and applicability of adopting bioengineering measures in mitigating the river bank erosion problem of Brahmaputra and its tributaries and also to take up pilot projects at erosion prone sites for demonstration of its effects.