

Submissions from Pakistan

Item No. 8:

Research and systematic observation (SBST A): Views from Parties on specific themes to be addressed at the research dialogue meeting to be held in conjunction with the thirty-sixth session of the SBSTA
Response:

Government of Pakistan, in technical collaboration with WWF is implementing Pakistan Wetlands Programme (PWP). The PWP is dealing with various aspects of wetlands management including community-based planning, capacity building, and research in all categories of wetlands from temperate (alpine) regions through Indus basin and down to coastal and marine wetlands. The PWP field teams deployed in four ecological regions have identified enormous potential for carbon sequestration and climate change mitigation. Particularly, in tropical freshwater wetlands of central Indus Basin and deltaic regions and coastal wetlands along 900 km coastline of Pakistan.

The PWP and Ministry of national Disaster Management organized a national consultation workshop on 24 February 2012 with the prime objective of consolidating the response to SBSTA on L.25. The Working Group on SBSTA identified following specific themes that may be included in the research dialogue which is planned to be held in conjunction with SBSTA-36:

- (i) **Development of remote sensing based wetlands indicators:** For periodic monitoring of health of remote wetlands, where physical and field based assessment and monitoring is very time-consuming and cost intensive. Separate sets of monitoring indicators for water quantity/quality, aquatic ecosystem composition, growth rate, upstream and downstream impact assessment are required;
- (ii) **Development of vegetation indices:** Assessment of vegetation quantity and growth by using vegetation indices is a common practice for terrestrial ecosystems. For aquatic and riparian ecosystems, such reflectance indices need to be developed and tested. Regional R&D organizations may undertake such initiatives for development of uniform indices for countries having similar or trans boundary wetlands;
- (iii) **Development of methodologies for quantifying carbon fluxes:** Keeping in view the phenological and physiological characteristics of wetlands species and ecosystems, simple guidelines and methodologies for estimation of carbon stock, seasonal changes and annual trends need to be developed.