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Need for Carrying Out National Forest Inventory in Nepal

National Forest Inventory (NFI) is carried out for assessing and updating the forest resource status to plan and support the sustainable management of the forest resources of the country. It generates information on national forestry characteristics such as volume, biomass, diameter distribution, growth, yield, and quality of forest resources. Other parameters included in NFI are land use structure and forest ownership, forest types and categories, forest health, biodiversity status, social, economical and environmental values of the forests.

In particular, forest information generated through NFI is widely used for strategic and high level planning of forestry sector. Being a signatory of multi-lateral environmental agreements, organizations and processes, the country is obliged to provide forestry related statistics and information periodically. For example, Food and Agriculture Organization of the United Nations (FAO) conducts Global Forest Resource Assessment every five years and also to other organizations to which Nepal needs to report forestry related statistics.

The Department of Forest Research and Survey (DFRS), under the Ministry of Forests and Soil Conservation, is a responsible government agency for conducting Forest Resource Assessment (FRA) at district and national level. In this context, DFRS has been carrying NFI for planning forest resource management. The first NFI was accomplished in the 1960s mainly focusing on merchantable and non merchantable timber volume whereas the second NFI, conducted after 30 years in the 1990s, covered volume, biomass, diameter distribution of the tree species and presence of NTFPs.

Efforts have been made to carry out next NFI covering environmental dimensions of the forestry sector using Airborne Laser Scanning technology for measuring the forestry characteristics. These efforts on NFI are in line with the Three Year Interim Plan (2007/08 - 09/10),

government's policy and programmes of the Fiscal Year 2008/09 and the Master Plan for Forestry Sector of Nepal (1989). The Proposed NFI should support the national efforts to access the environmental benefits of forestry sector in monetary terms from the international mechanism such as Reducing Emissions through Deforestation and Forest Degradation.

The NFI program needs adequate expertise in the concerned field to accomplish the work with high efficiency and accuracy. This could be possible only by strengthening capacity of the concerned staff members of the department. NFI programme also needs to include parameters like soil, under-storey vegetation, tree crown conditions, coarse woody debris, and lichen community of the forest composite. As some countries have already initiated efforts to include such parameters in their NFI, we could also work in connection with the global standards so that there will be consistencies in information sharing and update.