

**Track 2: GEO Community Activities**  
Work Programme During 2020-22  
**Programme Leader: Dr. K. D. Singh**

## 1. Executive Summary

- Full Title of the Community Activities: Country Capacity Building for Planning and Implementation of National Forest Inventories in Asia and the Pacific Region
- Short Title: CCB NFI
- Programme Category: Community Activity
- Overview: The key objective of this GEO initiative is to enhance capacities of the countries in the Asia Pacific Region to plan and implement NFIs on a sound basis in order to collect reliable data and make problem oriented analysis at the national and international levels.
- Planned Activities: Enhance Country Capacity building to produce comprehensive and regular NFI Reports at the state, country and international levels; take effective part in international negotiations and developing appropriate policies for conservation and development of national forest resources.
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## 2. Purpose

National forest inventories (NFIs) serve very useful purpose for forestry sector planning and international reporting of country action towards mitigation of global climate change, biodiversity loss and other global issues. Countries, therefore, are interested to launch NFIs to obtain reliable baseline data and make estimation of changes at national level on a continuing basis.

Presently, only the industrialized countries have well planned and well executed NFIs, and established close network among them for exchanging technical know-how on a regular basis in order to harmonize and improve the reporting system further. In contrast to above, there is almost complete lack of documentation and reporting on NFI in the case of developing countries. The key objective of this GEO initiative is to enhance capacities of the countries in the Asia Pacific Region to plan and implement NFIs on a technically sound basis in order to collect compatible data to enable problem oriented analysis at the national and international levels.

## 3. Background and Previous Achievements

A comprehensive capacity building strategy paper from Tropical Countries perspective was submitted to GEO by the Programme Leader in 2015 on the occasion of GEO Country Capacity Building Review Meeting. Subsequently, a project was approved by FAO for funding under Technical Cooperation Programme (TCP) with the title: “Strengthening of National Forest Inventory and Monitoring Protocols and Capacities in India” for a two year period. An Inception Workshop was organized at Dehradun on 29 **August 2016** for formally launching the TCP Programme. A number of studies were conducted and reported during the project life cycle. TCP concluded in **September 2018** with enhanced capacity of FSI to launch National Forest Monitoring System in India on a pilot basis. The aim is to conclude pilot studies by end 2019 and then launch NFI on an operational basis. It is worthwhile to note that two South-South exchange visits took place during the years 2018-2019 with Shri Lanka and Myanmar, and India.

#### 4. Key Activities

The following activities are proposed during 2020-2022:

- Establish South-South and South-North Cooperation network in the Asia-Pacific Region under regional cooperation treaties (like EU) for technical exchange on NFI.
- Publish a short report on the on-going NFIs in the Region, existing country capacity and manuals on field procedures, statistical design, data processing, etc.
- Secure international funds for organizing Regional Training Courses at existing UN Regional Training Centre at IIRS Dehradun in various thematic areas of NFI such as statistical techniques, use of remote sensing, sample plot procedures and analysis of NFI data.
- Secure funds for participation of International Faculty at the Regional Training Courses and making country visits.
- Assist countries to producing model NFI Reports at the state, country and international levels; take effective part in international negotiations and developing appropriate policies for conservation and development of national forest resources.

#### 5. Relationship to GEO Engagement Priorities and to Other Programme Activities

GEO, in the framework of GEOSS, aims to achieve comprehensive, coordinated and sustained observations of the Earth system, to improve monitoring of the state of the Earth, increase understanding of Earth processes, and enhance prediction of the behavior of the Earth system. This proposal takes “Forest ecosystems” as an example, which are amongst the Earth’s greatest natural resources and closely linked to all the nine Societal Benefit Area included in GEOSS mandate and fast depleting.

A major problem in the above context is the current lack of country capacity for globally consistent national forest inventory planning and implementation. This significantly limits the efforts to evaluate the effectiveness of world’s forests conservation and management strategies and programmes. Filling this gap and advancing our knowledge of the status of and trends in the world’s forest ability to support multiple societal benefit areas will require the coordinated development of Earth observation systems. The project is conceived in this broad background, and has special focus on **Asia and the Pacific Region**, where forests are most endangered due to high demographic pressure compared to any other regions in the world.

The proposed community activity addresses the main NFI planning concerns and proposes to develop appropriate methodology of NFI, enhance capacity of the countries of the Region to undertake regular forest assessments for the purpose, and use the information to develop policy, strategies and programmes for the sector.

## 6. Governance

The institutions associated in planning and implementing Training activities are given in the following Table:

<b>Name of contact persons in Implementing AGENCIES</b>	<b>Implementing Agencies</b>	<b>Main Roles of Cooperating Institutions</b>
Dean	Indian Institute of Remote Sensing (IIRS), 4 Kalidas Road, Dehradun, India	Provide core Faculty through- out the Programme Period.
<b>Director CSSTEAP (Affiliated to UN)</b>	UN Centres for Space Science And Technology Education for Asia and the Pacific at IIRS, Dehradun, India	Assist in Organizing Regional Training Courses and assist in effective programme implementation.
Dr. K. D. Singh	Academy of Forests and Environmental Sciences	Provide effective leadership in programme planning and implementation

## 7. Data Policy

The programme outputs, including methodology and database will be open for national and international usage and available on web-site. The model for NFI reporting will be the UN-ECE/FAO Group, which is involved in producing Forest Sector Reports for European Countries since 1948, the beginning of FAO Global Report.

### Brief CV of the Programme Leader

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### RECENT ASSIGNMENTS

#### *President*

*Academy of Forest and Environmental Sciences*

*DFE Office, FRI Complex, Dehradun 248001 -----2011-2016*

#### *Principal Investigator*

*Techniques of Survey and Planning for Rehabilitation and Sustainable*

*Use of Biological Diversity in Mizoram, NE, MoEF Funded Project-----2007-2016*

#### *UNDP GEF Research Project*

*Principal Investigator: Research on promoting sustainable livelihood*

*opportunities in forest fringe areas of Mayurbhanj District, Orissa. -----2004-2007*

**Fellow, International Tropical Timber organization (ITTO)**

“Forest Biological Diversity Assessment and Conservation Planning -----2002-2003

### **INTERNATIONAL ASSIGNMENTS**

**Forest Resources Management Planning, Latvia**

**TCP/Lat/2001:** Formulation of strategic Targets for the Forest Sector ----- October-2003

**Assistance to Vulnerable Groups in the construction**

**of Community Assets in Albania (WFP/WB)**-----Nov-Dec 2002

**Adjunct Professor, University of Massachusetts Boston, USA**

Research on forest based development of the Indigenous People ----- Nov 2001-Nov 2002

**Visiting Scholar, Center for International Development at Harvard University**

Member of a multidisciplinary team GEF Project "Conservation of Biological Diversity through Sustainable Forest Management Practices in Malaysia"-----Nov 1998- Nov 2001

**Director, Country Capacity Building Project, FAO, Rome**

Forest Resources assessment Programme -----1995-1998

**Coordinator**

Global Forest Resources Assessment 1990 Project FAO, Rome.-----1989-1995

**Senior Forestry Office**

Forest Resources Assessment and Monitoring-----1982-1989