



NEWSLETTER

SUSTAINABLE CATCHMENT FOREST MANAGEMENT (SCATFORM) PROJECT



MESSAGE FROM CEO & PD

Continuing with our efforts to share about the various components of SCATFORM Project through our newsletter, we are sharing the activities done towards GIS-MIS component of the project in this issue. This issue of the newsletter is going to present to the readers about GIS-MIS or simply put together Geospatial component of the project. Spatial information pertaining to the project activities is critical for successful implementation of the projects considering that all the activities and components of SCATFORM project has inherent spatial component in-built into it. GIS-MIS together known as geospatial technology provides regular information about the project activities and forms the basis for scientific planning, monitoring and management of all the components of the project.

The integrated framework provided by geospatial technology weave together all the project components and support the project with scientific decision making during all the project phases. I hope you will like this issue and appreciate the work that project is undertaking. Your feedback and suggestions on things related to projects and about this newsletter. Do write to us.

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Chief Executive Officer & Project Director

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GIS-MIS (Geospatial) component in the project

In the earlier newsletters, different components of SCATFORM project were described briefly. These four components were, 1) Sustainable Forest Management, 2) Soil

and Moisture Conservation, 3) Livelihood Development, and 4) Institutional Strengthening. In this newsletter, GIS-MIS or Geospatial component under Institutional Strengthening will be described in detail and the progress made by the project till now in SMC component will be shared.

The various activities and components of SCATFORM project

invariably has spatial component associated with it. Further all the activities conducted in various components of the projects such as sustainable forest management, soil moisture conservation and livelihood development are inherently linked with each other. Geospatial technology (GIS-MIS) provides an integrated framework to not just provides scientific basis to all the decision making from planning to suitable site selection to survey, monitoring and management of assets created under project and their influence and impact on livelihood development. It also provides the interlinkages between the various components of the project for example impact of SMC works on forest regrowth, changes in biodiversity due to project interventions, resource assessment of endemic vegetation for conservation as well as its sustainable harvest and linkages to livelihood activities and their impact.

During earlier phase of SCATFORM project (Tripura Forest Improvement and Poverty Alleviation Project), GIS and MIS were used for various activities such as survey and demarcation of project interventions, monitoring and management of various project components. The use of GIS-MIS in TFIPAP gave the initial insights on the value these technological interventions provide and therefore in SCATFORM GIS-MIS integrated framework for scientific planning, monitoring, management, and decision making was considered fundamental to the successful implementation of the project. GIS-MIS component is a major activity under Institutional Strengthening Component of the project

Within GIS-MIS or Geospatial component of SCATFORM, various activities are planned to be carried out. These activities are:

1. Setting up of state-of-the art geospatial cell for the department
 - a. Provide geospatial information and maps for scientific planning, monitoring, management, and decision making
 - b. Spatial inputs to BFBP and JFMC right from planning to selection of sites for various interventions, survey and demarcation of project interventions, their regular monitoring and management.
 - c. Develop Forestry Integrated Geospatial Solutions
2. Training and Capacity Building
 - a. Train the project staff to use and adopt geospatial technologies like survey, GPS, satellite imaging for carrying out their activities in project.
 - b. Introduce the concept of spatial thinking and decision making
3. Development of Manual and Guidelines for Survey, GPS, GIS, Satellite Imaging activities

The geospatial cell will be developed at PMU, while strengthening and capacity building at DMU and RMU for

GIS-MIS component will include providing GPS, IT tools for GIS and MIS activities. Web and mobile based integrated geospatial platform will be developed as Forestry Integrated Geospatial Solutions (FIGS).⁴

Maps and spatial inputs to BFBP and JFMC are also being prepared to imbibe spatial planning and decision making in selection of project intervention sites. Regular monitoring and management of project assets and overall monitoring and evaluation of impact of project interventions.

Geospatial Activities Update

In last two years several activities have been conducted under GIS-MIS (Geospatial) component. These are:

1. Forestry Integrated Geospatial Solution (FIGS) – RFP created, floated and now evaluation of the agencies is underway.
2. Scientific Planning and Decision-Making inputs for BFBP
 - a. Preparation of maps PMU-GIS lab for draft BFBP preparation by project staff.
3. Development of project specific methodologies
 - a. Canopy Density Maps, Forest Type Maps, Biophysical Parameters Assessment
4. Preparation of Guidelines
 - a. JFMC Survey and Demarcation of project interventions
 - b. RoFR Survey
5. Training and Capacity Building
 - a. Survey and Demarcation Activities
 - b. Project specific geospatial methodologies such as watershed delineation, catchment area calculation, canopy density mapping, forest type mapping

(1) Forestry Integrated Geospatial Solution (FIGS)

FIGS is an integrated end-to-end geospatial solutions and applications framework developed specifically for the SCATFORM project where all the project activities and interventions are spatially integrated to provide scientific inputs for planning, site selection, monitoring, management, report generation and decision making. Within this framework BFBP will be prepared along with the maps at 1:25,000 for BFBP and 1:12500 for JFMC as spatial information inputs for various applications and solutions required for planning, site selection, monitoring, management, and smart decision making. FIGS will also upgrade the capacity and capability of the project with development of web and mobile geospatial platform supported by necessary hardware, software, applications, and solutions.

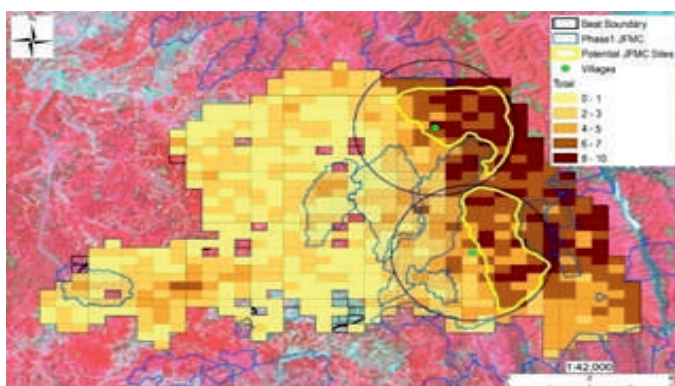
(2) Scientific Planning and Decision-Making inputs for BFBP

Beat Forest Basic Plan preparation is one of the key activities of SCATFORM Project. The purpose of BFBP preparation is to

be obtain information as per socio-economic and topographical conditions for the selected beats. BFBP preparation will lead to identification of the potential areas of treatment and formation of JFMCs at Beat level under the Project.

BFBP is the first document once the beat is selected to identify potential project sites and accordingly initiate suitable project activities. It therefore requires active map inputs to identify the potential project sites as well as locate the suitable places for any of the project interventions such as SMC, AR or ANR based on the topographical as well as socio-economic and forest degradation status of the place.

BFBP preparation includes 1) socio-economic assessment, 2) forest land assessment, and 3) JFMC assessments. JFMC assessment include: 1) new JFMC formed by SCATFORM, 2) existing JFMC formed by FDA under NAP, and 3) existing JFMC formed by TFIPAP (Phase I). All the above information captured is plotted on maps to provide better insights and obtain precise analysis of the existing conditions thereby leading to scientific decision making.



Candidate villages with potential JFMC project area with 10 ha grid

(3) Development of project specific methodologies

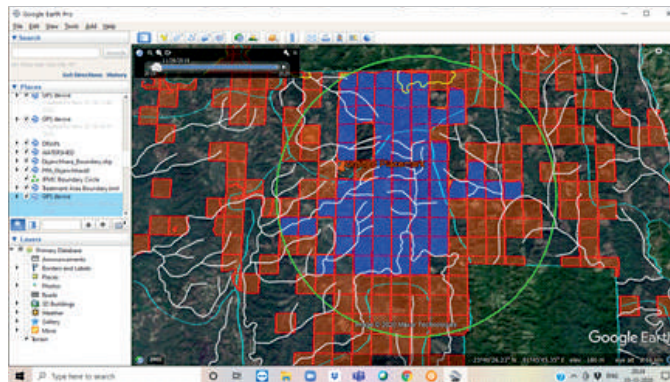
Project specific geospatial inputs were identified and methodologies for preparation of these maps were developed during the last 2 years of project implementation. Methodologies to prepare canopy density maps and forest type maps were developed using Sentinel satellite data. Preliminary concept and methodology for development of biophysical parameters assessment using geospatial technologies were also developed for various biophysical indicators.

(4) Preparation of Guidelines

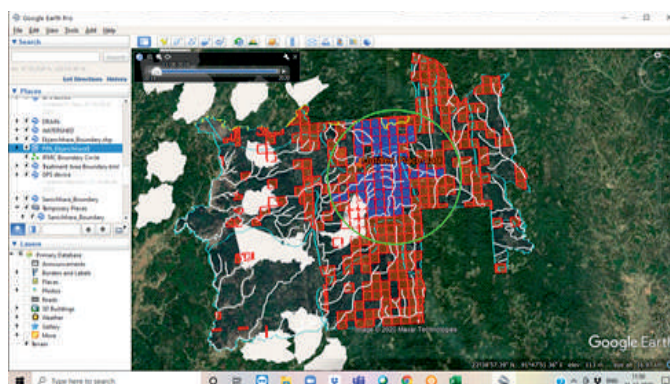
Demarcation of JFM boundary area including survey and demarcation of treatment area boundaries is one of the key activities for formalization of JFMCs as functional units of forest management. Detailed guidelines manual was prepared for the field staff on how to properly demarcate and survey

project interventions with the use of GPS.

Demarcation of RoFR land in each FRC, JFMC is necessary for streamlining the agro-forestry and other plantation activities of the FRC, JFMC. By clearly identifying and recording the boundaries of the functional area of RoFR sites thereby eliminating any future disputes between the various stakeholders, will result in better planning and management of agroforestry interventions. Detailed guidelines manual was prepared for the field staff on how to properly demarcate and survey RoFR land with the use of DGPS integrated with GIS mobile application.



JFMC Treatment Area Boundary from selected PPAs



Treatment Areas marked on PPAs overlaid on different layers

(5) Training and Capacity Building

Training sessions were conducted for Survey and Demarcation of Project Sites for all the 7 DMUs and Gomati WLS. In the two-day training one day was focused on providing the methods and techniques of survey and demarcation. Field exposure and hands on training on use of GPS equipment was given on the second day. The training was mandatory for Beat Officer (BO), Livelihood Coordinator (LC), Community Organiser (CO) as well as the office staff that includes Data Assistants at range (RDA), sub-division (SDA) and district headquarters (DACA). The training was kept optional for Range Officers (RO), Sub-divisional Forest Officer (SDFO) and District Forest Officer (DFO). The total number of participants registered for the training were 236 on first day and 206 for the second day.



Department, Govt of Tripura, undertook his sudden visit to PMU on 9th June 2021, and met with all of the project officials at PMU and reviewed the project activities.



Governing Body Meeting of SACTFORM Society

The second Governing Body meeting of the Tripura SCATFORM society was held on dated 20th June 2021. The meeting was chaired by Principal Secretary Forest Shri B K Sahu. The PCCF and HoFF Dr D K Mishra and all other GB members have participated in the meeting. The governing body has reviewed all the project activities in the meeting.



Training on Mushroom

A day long training has been conducted among the JFMC members of Biresh Para JFMC of Panisagar RMU. The training was organised with the help of Krishi Vigyan Kendra Panisagar, After completion of the training the participates ware given mushroom spawn. The trainers found very enthusiastic after getting the training on mushroom.

Regular training sessions for the PMU GIS Lab were also conducted on satellite image processing, forest canopy density map preparation and digital image processing for generation of thematic maps of forest types.

Visit of Forest Minister in PMU

Shri Mevar kumar Jamatia, Hon'ble Minister Forest



YOUR CONTRIBUTION TO THE NEWSLETTER

We request and encourage you to share your experiences under the Project. You can highlight activities and achievements of the Joint Forest Management Committee. We can also consider inspiring stories of individuals who are doing good work which needs to be shared with other people in the state. This will provide recognition to individuals and provide opportunities for other people to learn from the experiences. You can share your experiences with our field personnel / JFMC.

You can also write to us at : tripurajica@gmail.com

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