

National Mission for a Green India

Ecosystem Services Improvement Project

World Bank Mission Team: 2nd Implementation Support Mission



Date- 11-12 March 2019





World Bank Mission Team

- | | |
|-----------------------------------|----------------------|
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National Mission for a Green India

1. A component of National Action Plan on Climate Change
2. To safeguard our biological resources and livelihoods against the dangers of climate change
3. Acknowledges the influences of forestry sector on environmental amelioration
4. To take up activities for biodiversity enhancement, ecosystem restoration, economic security of local people at landscape level

5. Objectives

- (1) Increase forest/tree cover 5 million ha
- (2) Improve quality of forest cover of another 5 million ha
- (3) Improve ecosystem services including biodiversity, hydrological services and C-sequestration over 10 M ha
- (4) Increase forest based livelihood income of 3 million forest dependent households
- (5) Create an additional carbon sink of 2.5 to 3 billion tons of CO₂ equivalent by adding additional forest and tree cover by 2030



GLM in Madhya Pradesh

1. Geographical area of the State divided into 8 landscapes based broadly on 11 agro-climatic zones
2. The operational landscapes have been identified based on the watershed covering 122 mili watersheds (L2 level) and 735 micro watersheds(L3 level).
3. The 5 year perspective plan (2017-18 to 2022-23) for Rs. 3,157.36 Crore and APO for 2017-18 for of 396.7528 crores have been approved by the National Executive Council of the National Mission for a Green India on its 4th meeting on 3rd January 2018.
4. There has been a downward revision by Ministry of Environment Forest and Climate Change Rs. 41.8026 Crore for 2018-2019 APO.
5. 30 mili watersheds (11,371 ha) is being for treatement against total 122 mili watersheds (735,479 ha) approved by the National Executive Council

18 Forest Divisions : Selected For GIM

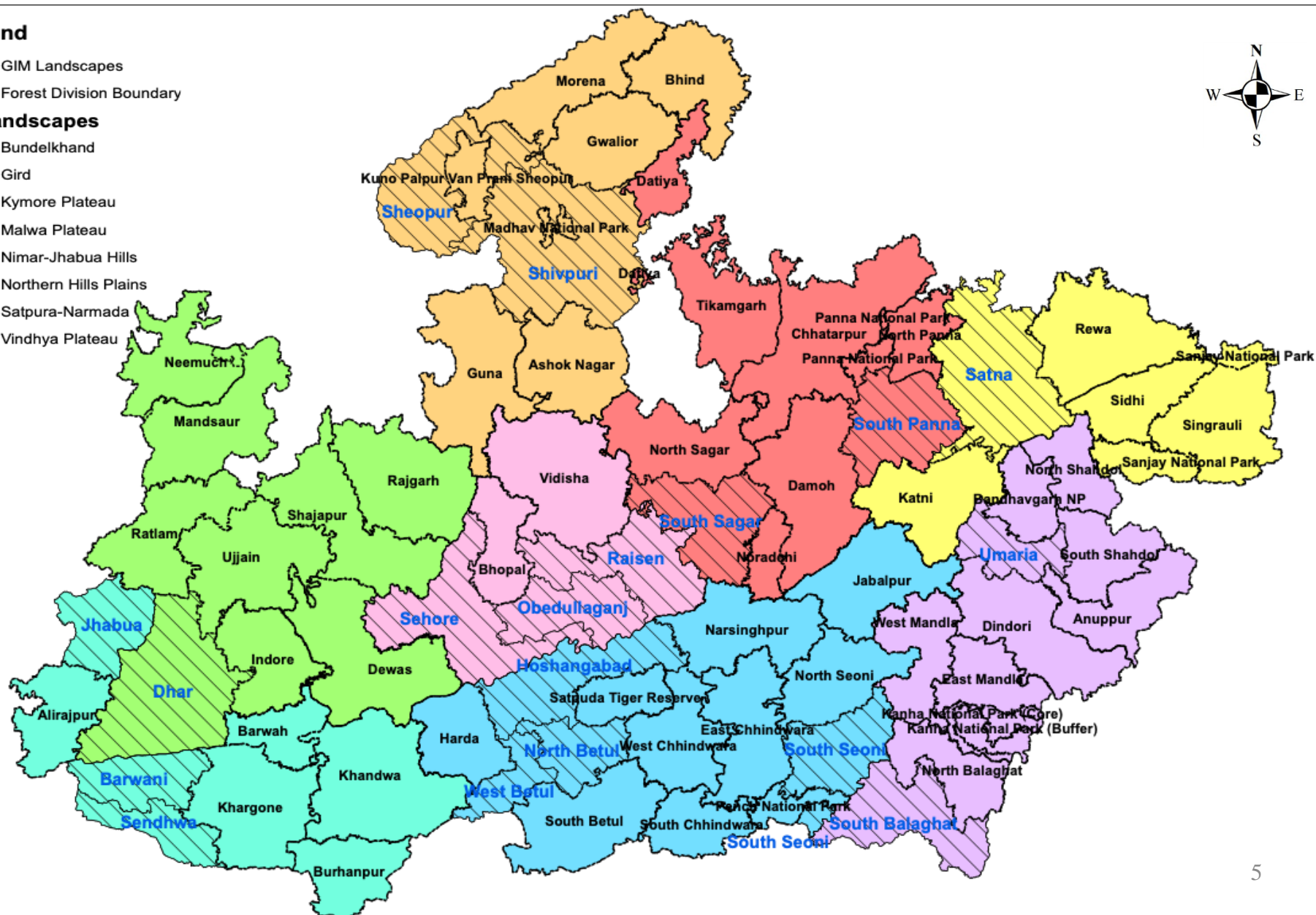


Legend

- GIM Landscapes
- Forest Division Boundary

L1 Landscapes

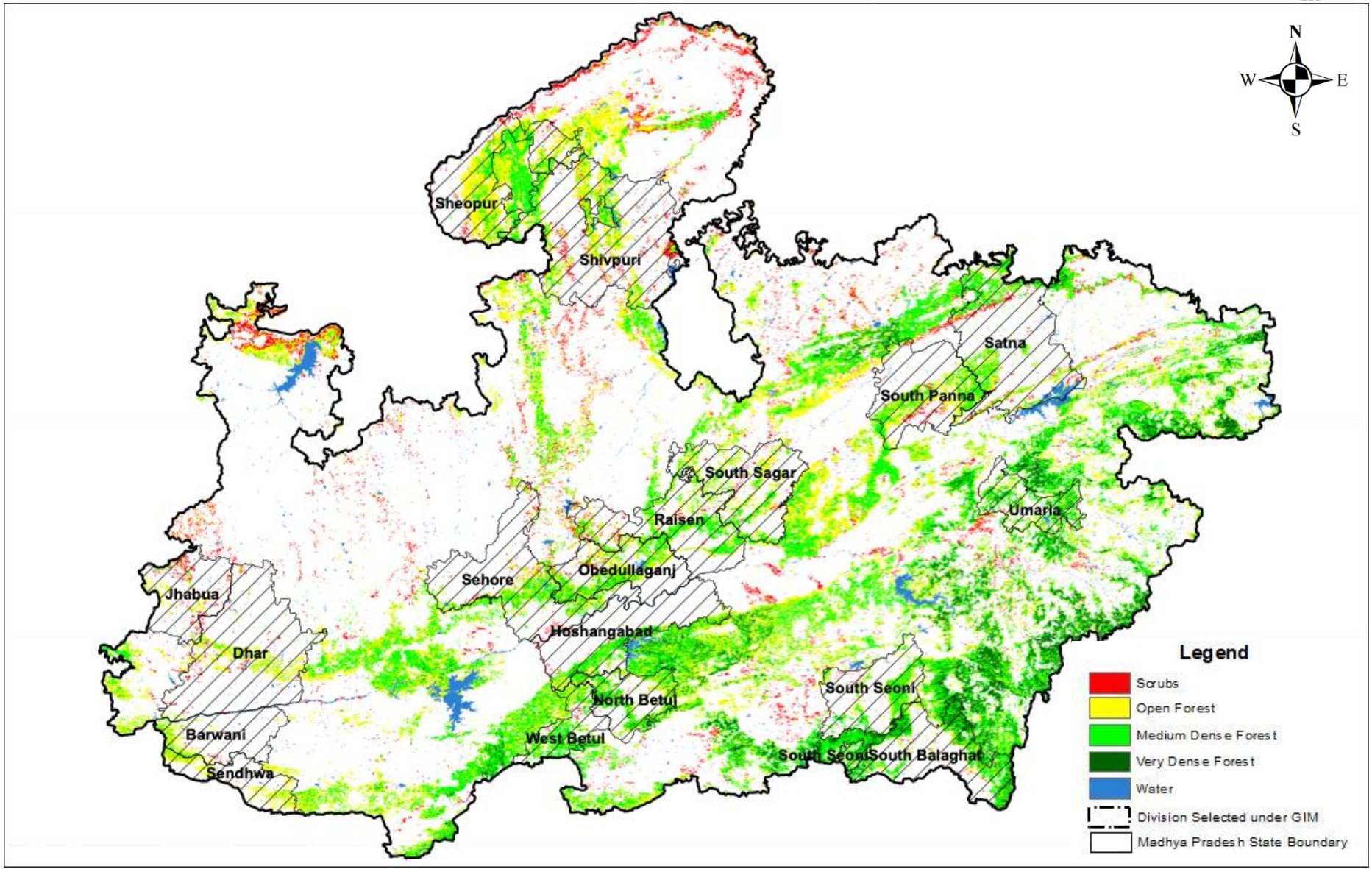
- Bundelkhand
- Gird
- Kymore Plateau
- Malwa Plateau
- Nimar-Jhabua Hills
- Northern Hills Plains
- Satpura-Narmada
- Vindhya Plateau



Divisions Selected For Treatment Green India Mission

FOREST COVER MAP OF MADHYA
PRADESH

Source: Forest Cover Map, FSI, 2013



The map displays the administrative divisions of Madhya Pradesh, India, with district boundaries and names. Key features include:

- Forest Division Boundary:** Indicated by a solid black line.
- GIM Landscapes:** Indicated by a green dashed line.
- Milli Watersheds for Treatment:** Indicated by blue hatched areas.
- National Parks and Reserves:** Panna National Park, Kanha National Park (Core and Buffer), Sanjay National Park, Bandhavgarh NP, Satpuda Tiger Reserve, and Madhav National Park.
- Districts:** Morena, Bhind, Gwalior, Datia, Shivpuri, Tikamgarh, Panna, Chhatarpur, North Panna, Rewa, Sidhi, Singrauli, Satna, South Panna, North Sagar, Damoh, Katni, North Shahdol, South Shahdol, Jabalpur, West Mandla, Dindori, Anuppur, Narsinghpur, Noradahi, Raichur, South Sagar, Vidisha, Rajgarh, Shajapur, Ratlam, Ujjain, Jhabua, Alirajpur, Dhar, Barwah, Indore, Dewas, Sehore, Bhopal, Obedullaganj, Hoshangabad, Satpuda, Harda, North Betul, West Chhindwara, East Chhindwara, North Seoni, East Mandla, West Mandla, South Seoni, South Balaghat, North Balaghat, South Chhindwara, South Betul, Khandwa, Khargone, Barwani, Sendhwa, and Burhanpur.
- Legend:**
 - Milli Watersheds for Treatment (Blue hatched area)
 - Forest Division Boundary (Solid black line)
 - GIM Landscapes (Green dashed line)
- Scale:** 0 to 200 Kilometers.
- Compass:** North arrow pointing towards the top right.

Description of different level Landscapes

L1 Landscape	Name	L2 Divisions	No. of Milli watersheds as L2 Landscape	No. of micro watersheds as L3 Landscape	Area (Ha)
Landscape (i)	Kymore plateau	Satna	4	28	33,343.09
Landscape (ii)	Northern Hills Plains	Umaria	4	24	31,919.78
		S. Balaghat	12	71	74,703.37
Landscape (iii)	Satpura- Narmada	Hoshangabad	5	30	33,355.73
		South Seoni	11	67	75,028.40
		North Betul	4	20	27,860.36
		W. Betul	8	24	29,083.20
Landscape (iv)	Vindhya Plateau	Raisen	10	67	51,000.26
		Obedullaganj	10	57	51,350.07
		Sehore	5	28	27,224.82
Landscape (v)	Malwa Plateau	Dhar	3	18	10,794.95
Landscape (vi)	Nimar- Jhabua Hills	Jhabua	3	20	20,596.94
		Badwani	3	21	18,218.11
		Sendhwa	2	11	11,708.77
Landscape (vii)	Bundelkhand	South Sagar	13	79	71,378.77
		S. Panna	9	64	68,068.78
Landscape (viii)	Gird	Sheopur	8	48	50,343.13
		Shivpuri	8	58	49,501.00
Total			122	735	735,479.53



Approach of Identification of landscapes

1. Selection of L1 landscape : on the basis of agro climatic zone
3. Vulnerability of different regions of MP to Climate Change :main factor for identifying L2 landscapes
 - (1) Impact of climate change on forests of Madhya Pradesh:- a dynamic vegetation modeling approach” was published by IISC, Bangalore.
 - (i) During the short-term period of 2030s, out of the 4426 forested grids in Madhya Pradesh, 1000 (23%) will be impacted by climate change.
 - (ii) Percentage of the forested grids projected to be impacted by 2080s is higher to the tune of 48% (2131 grids).
 - (2) Vulnerability profile for the districts of Madhya Pradesh as determined by EPCO Bhopal

Vulnerability of Landscapes

(as per EPCO and IISC)

Forest Division	Landscape (Vulnerability Class)
Satna	Vulnerability to forest change for short and long scenario(as per IISC) and showing high composite vulnerability (as per EPCO)
South Balaghat	
West Betul	
Dhar	
Jhabua	
Badwani	
Sendhwa	
South Panna	
Sheopure	
Shivpuri	
Umaria	Showing Very High Composite Vulnerability (as per EPCO)

Cont.

Forest Division	Landscape (Vulnerability Class)
Hoshangabad	Vulnerability to forest change for long scenario(as per IISC) and showing low composite vulnerability scenarios of baseline, mid-century and end century (as per EPCO)
South Seoni	Vulnerability to forest change for long term scenario (as per IISC) and showing High composite vulnerability scenarios of mid-century, end century and moderate in baseline (as per EPCO)
North Betul	Vulnerability to forest change for short and long term scenario (as per IISC) and showing High composite vulnerability scenarios of mid-century, end century and moderate in baseline (as per EPCO)
Raisen	showing moderate composite vulnerability scenarios of mid-century, end century and baseline (as per EPCO)
Sehore	showing high composite vulnerability scenarios of mid-century, end century and baseline (as per EPCO)
South Sagar	
Obaidullaganj	showing moderate composite vulnerability scenarios of mid-century, end century and baseline (as per EPCO)

Sub-missions of Green India Mission

S. No.	Sub-Mission	
1	Enhance quality of forest cover and improve ecosystem services	
1a	Moderately dense forest cover but showing degradation	
1b	Eco-restoration of degraded open forest	
	Type A	With plenty of root stock
	Type B	With Limited root stock - and open blanks
	Type C	Of largely open areas with sparse growth
1c	Restoration of grasslands	
2	Ecosystem restoration and increase in forest cover	
	2a	Rehabilitation of shifting cultivation
	2b	Restoring scrublands
	2c	Restoring/planting sea-buckthorn
	2d	Restoration of Mangroves
	2e	Ravine Reclamation
	2f	Restoration of abandoned mining areas

Cont.

Submissions of Green India Mission

3	Enhancing tree cover in urban and peri-urban areas (including institutional lands)
4	Agro-forestry and social forestry
5	Restoration of wetlands
	Cross-cutting interventions
A	Improved fuel-use efficiency and promoting alternative energy sources
B	Community livelihood enhancement
C	Corridors for connectivity
D	Community conserved areas and sacred groves
E	standing, identifying and protecting areas/ catchments of hydrological importance

Knowledge Partnership- IIFM, Bhopal

Title of Study : Developing a framework for Identification and Estimation for Hydrological Services of Forest Landscape

1. Study Objectives;

- (1) To identify the attributes and parameters that affect watershed hydrology from the forest and their measurements/documentation
- (2) To Develop MRV indicators (Monitoring Reporting and Verification) to assess quality of water from the forest catchment/watershed
- (3) To Develop a framework for payment for Hydrological Services of Forest Landscape

2. Proposed study period is 18 (eighteen) months and total budget 20.00 lakhs

3. The study will be carried out by Centre for Forest Hydrology, IIFM-Bhopal



Ecosystem Services Improvement Project- MoEF&CC and GEF,World Bank supported

- Global Environment Facility Trust Fund : Grant of US \$ 24.64 million
- A pilot project in the state of MP and CG to showcase the ESIP
- Results of the project to be up scaled.
- Project duration 16-08-2017 to 31-07-2022
- Project outlay for MP : 9 million US \$: approx 56 crores
- To act as additionality over GIM project
- Dindori division has been added due to very high composite vulnerability
- As per advice of the World bank, new budget head 10-2406-01101-0801-0664 for ESIP
- It is a reimbursement based project. The Interim Unaudited Financial report (IUFR) has to be submitted to the world bank and the CAAA.



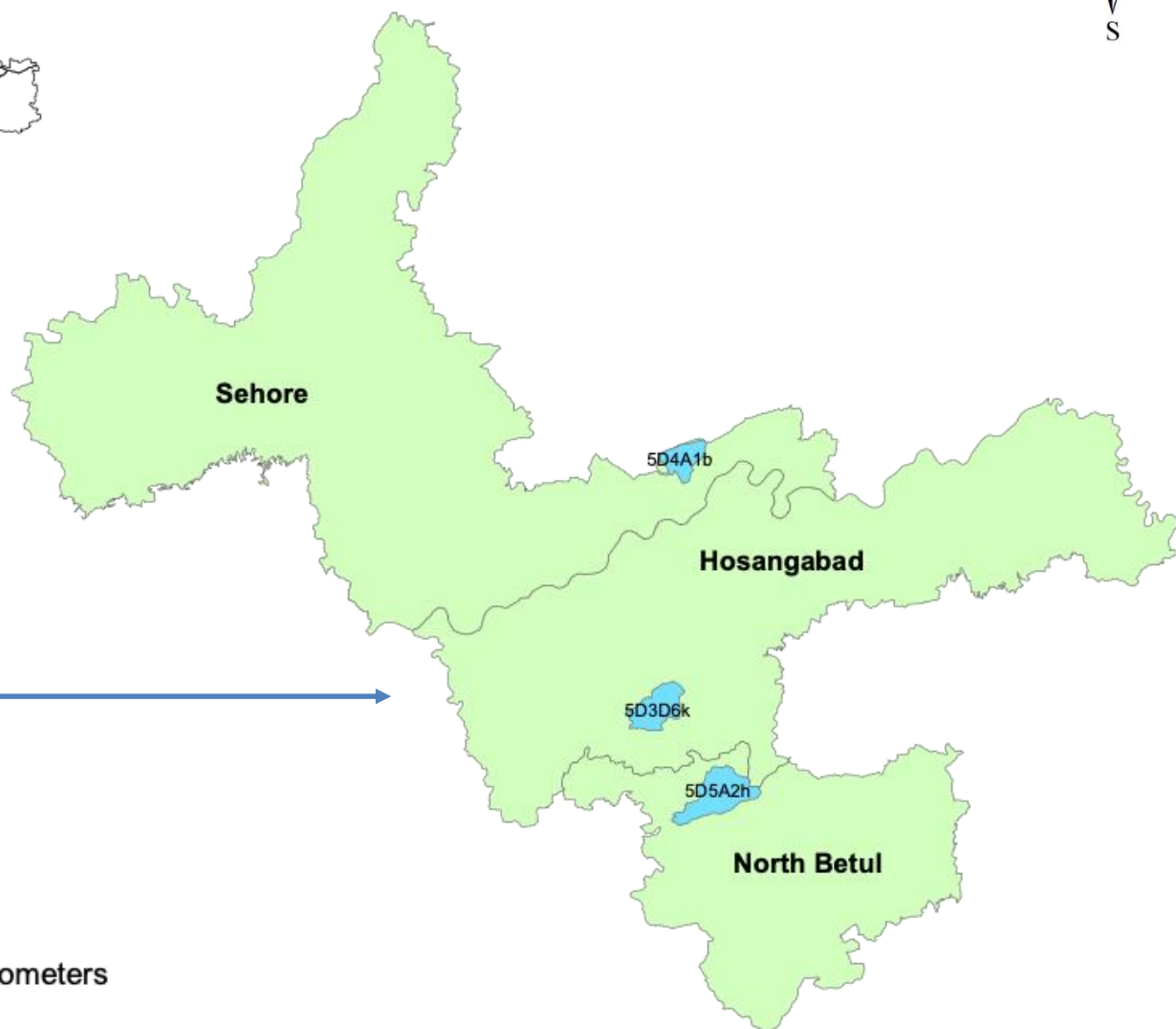
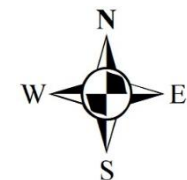
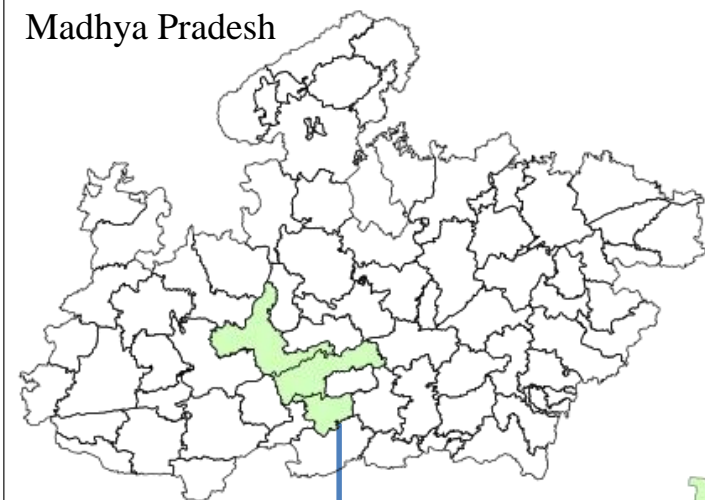
Additionality of ESIP over GIM

	GIM Activities	ESIP GEF Additionality
Planning	<ul style="list-style-type: none"> • Selection of landscapes • Development of plantation packages 	<ul style="list-style-type: none"> • Additional filter of connectivity and livelihood dependance of area selection within GIM landscapes • Community involvement in planning and works • Use of Geographic Information System (GIS) technology for plantation plans • Introduction of Ecosystem services concept/measurement
Funding	<ul style="list-style-type: none"> • Financial resources for plantation works in GIM landscapes 	<ul style="list-style-type: none"> • Additional grant funding to link plantation with livelihoods, ecosystem services and forest quality
interventions	<ul style="list-style-type: none"> • Plantation support 	<ul style="list-style-type: none"> • Capacity building of forest staff • Demonstrative investments showcasing full cycle (from planning to plantation and monitoring) • New approaches for Non-Timber Forest (NTFP) value addition and marketing
Outcomes	<ul style="list-style-type: none"> • Increased forest cover • Improved forest quality 	<ul style="list-style-type: none"> • Enhanced carbon sequestration • Carbon monitoring system installed • Livelihood co-benefits • National system for monitoring land degradation and desertification



FOREST DEPARTMENT, GOVT. OF MADHYA PRADESH
MISSION FOR GREEN INDIA
Selected Landscape for Treatment under ESIP



Madhya Pradesh



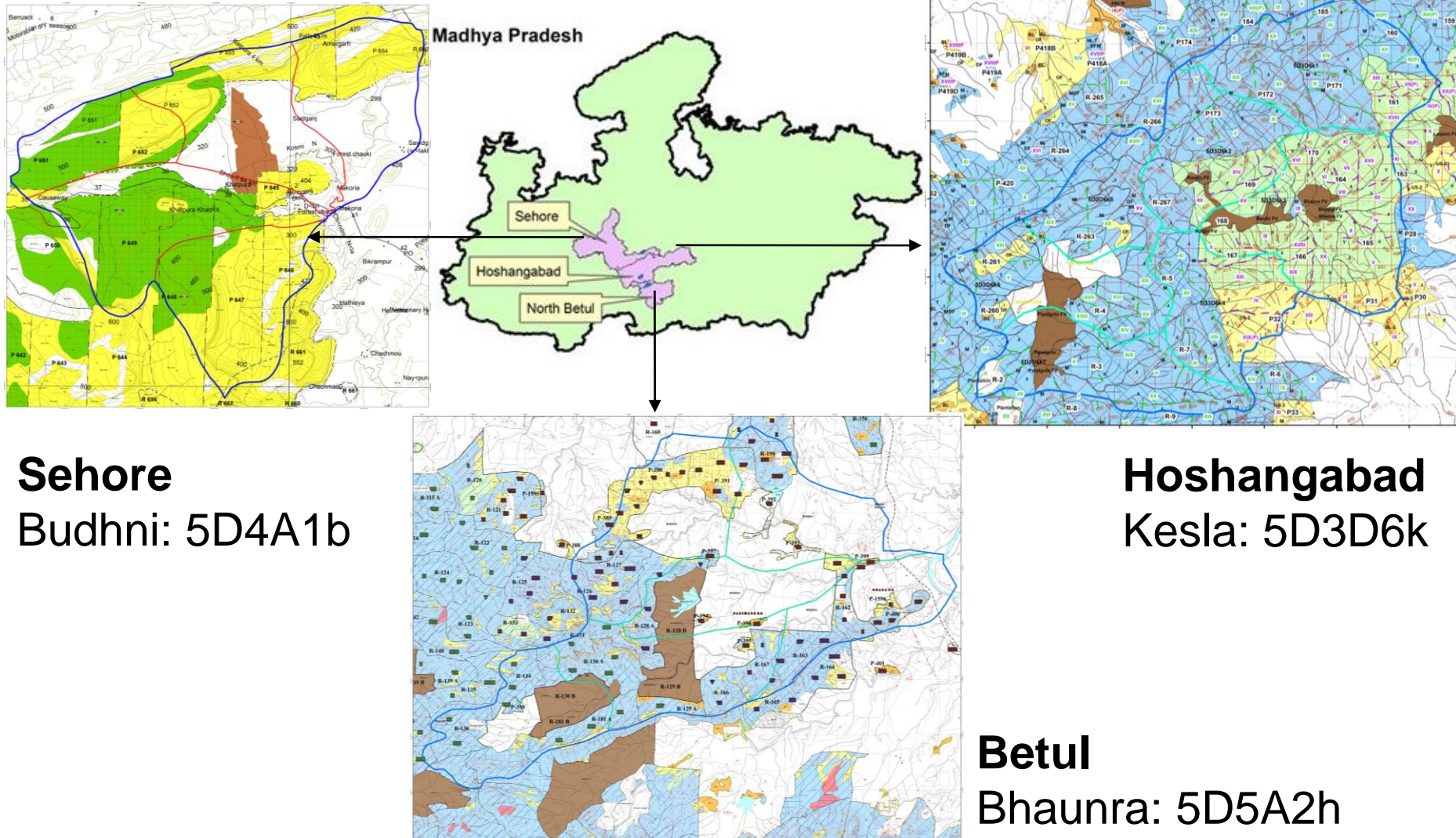
Legend

-  Selected Miliwatershed for ESIP
-  Division Boundary

 Kilometers
0 12.5 25 50 75 100



LOCATION MAP OF SELECTED LANDSCAPE UNDER ESIP

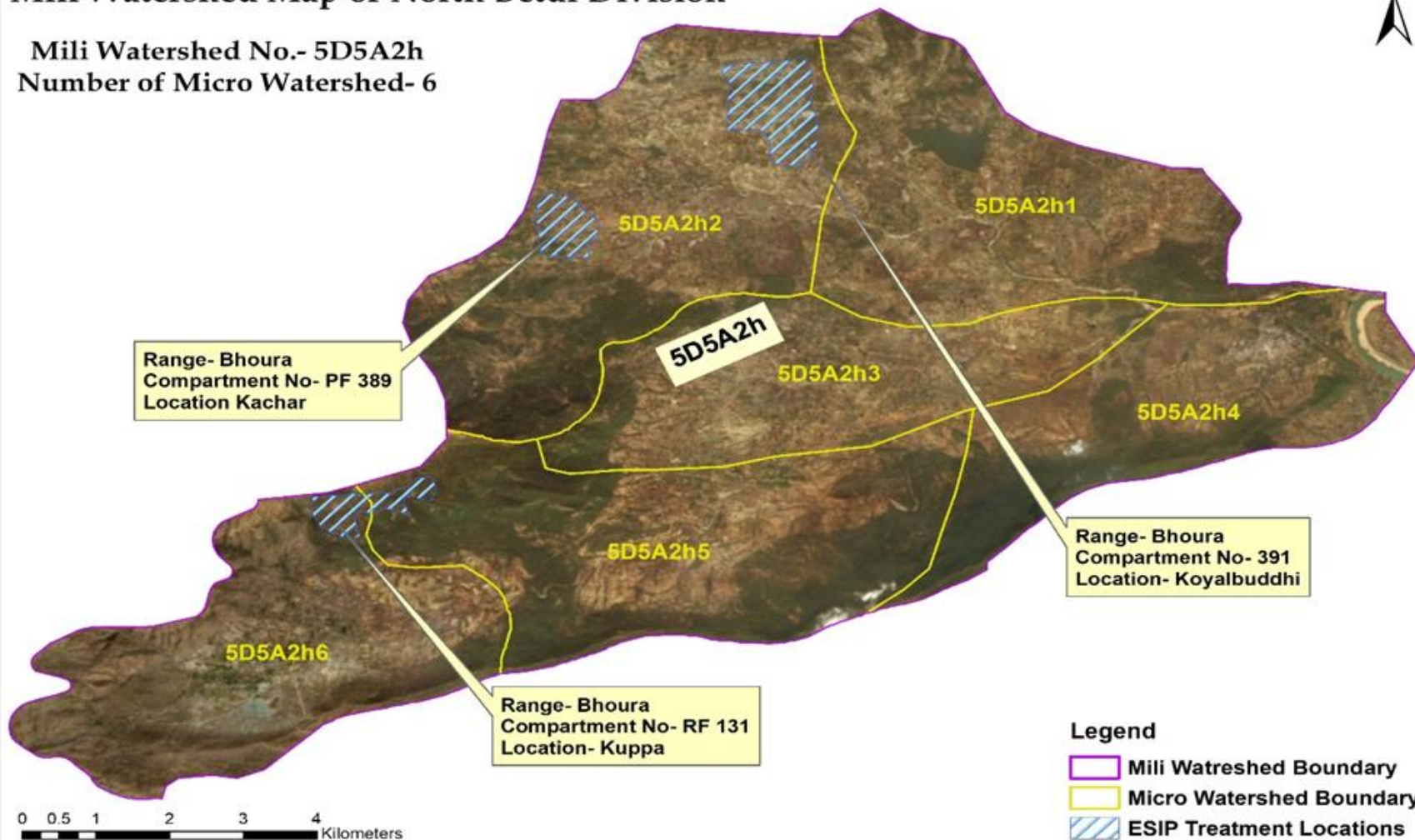




kml file of mili watershed 5D5A2h North Betul ESIP plantation site details

Mili Watershed Map of North Betul Division

Mili Watershed No.- 5D5A2h
Number of Micro Watershed- 6

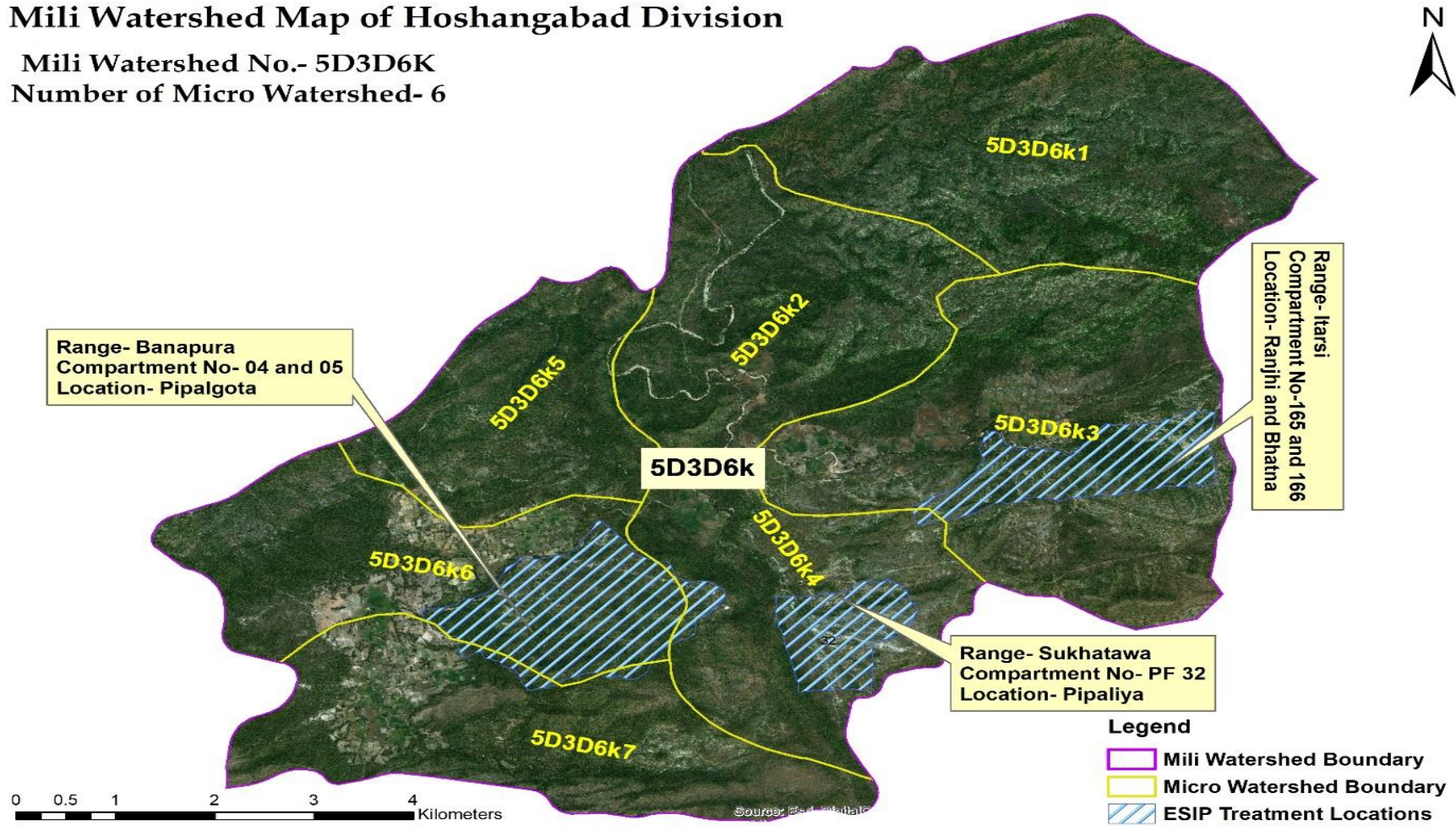




kml file of mili watershed 5D3D6k Hoshangabad ESIP plantation site details

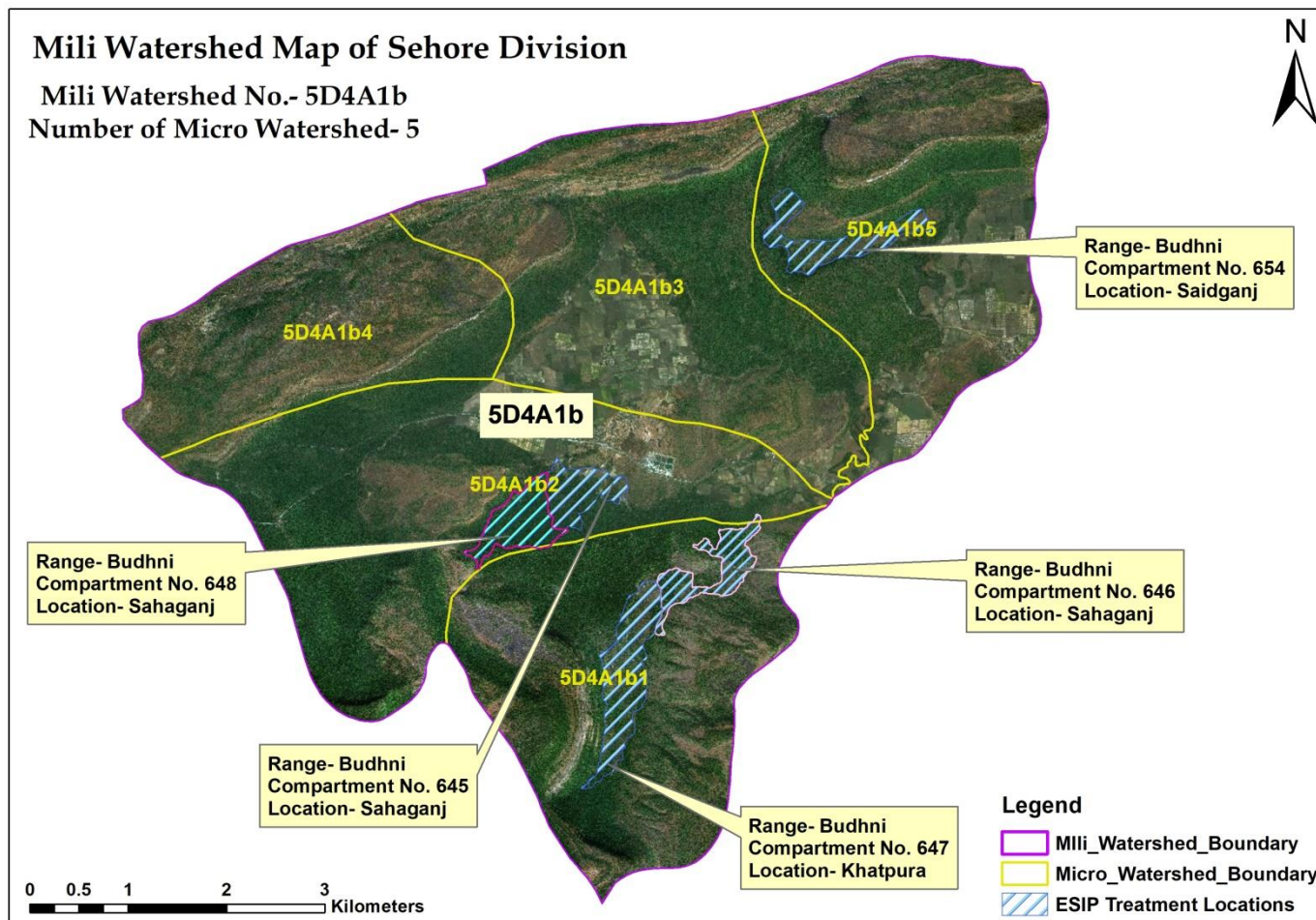
Mili Watershed Map of Hoshangabad Division

Mili Watershed No.- 5D3D6K
Number of Micro Watershed- 6





kml file of mili watershed 5D4AD1b Sehore ESIP plantation site details





demographic details of project areas

Division	villages	male	female	total	HH	Sex ratio	sc	st	sc %	ST %	literacy %
Hoshangabad	20	5616	5233	10849	2135	932	586	7630	5.40	70.33	47.92
Sehore	8	2381	2059	4440	921	865	921	1540	20.74	34.68	55.58
Betul	8	2819	2710	5529	1162	961	424	4241	7.67	76.70	50.12
total of project	36	10816	10002	20818	4218	925	1931	13411	9.28	64.42	51.20

S.No.	L1 Level Landscapes	L2 Level Landscapes		L3 Level Landscapes	Forest Area (ha)				Non Forest Area (ha)	Total Area (ha)
		Division	Milli-watershed	Micro Watershed	Dense Forest	Open Forest	Blank	Total Forest		
1	Satpura-Narmada	Hoshangabad	5D3D6k	7(5D3D6k1-7)	5,947.25	128.93	491.61	6,567.80	63.85	6,631.64
2		North Betul	5D5A2h	6(5D5A2h1-6)	3,622.99	1,063.96	754.28	5,441.23	4,139.34	9,580.58
	Satpura-Narmada Total				9,570.24	1,192.89	1,245.89	12,009.03	4,203.19	16,212.22
3	Vindhya Plateau	Sehore	5D4A1b	5(5D4A1b1-5)	1,187.83	1,443.48	98.19	2,729.50	1,676.75	4,406.25
Total	2	3	3	18	10,758.08	2,636.37	1,344.08	14,738.53	5,879.94	20,618.47



Components of ESIP

Project Components	Project Cost US\$ M
Component 1: Strengthen capacity of government institutions in forestry and land management programs in Madhya Pradesh and Chhattisgarh	4.0
Component 2: Investments for improving forest quality in selected landscapes	14.5
Component 3: Scaling-up sustainable land and ecosystem management in selected landscapes	3.74
Component 4: Project Management	2.4
Total Baseline Costs	24.64
Total Financing Required	24.64



Betul team:Exposure visit



Betul Workshop



Hoshangabad Workshop





Hoshangabad :Range level, JFMC level workshops



Latitude: 22.435362
Longitude: 77.710655
Elevation: 444.1m
Accuracy: 3.8m
Time: 02-27-2018 11:06
Note: Green India bhatna





Awareness campaign



"ग्रीन इंडिया मिशन"
(प्रोजेक्ट का उद्देश्य)

- वनों का सघनीकरण।
- वनों/प्रायद्वीपों को आजीविका से जोड़ना।
- भूजल संरक्षण एवं कृदा की उत्पादकता बढ़ाना।
- बिगड़े एवं खुले वनों का पुनः वनीकरण।
- वन एवं वन्यप्राणि संरक्षण।
- स्थानीय समुदायों की आजीविका सुनिश्चित करना।
- वनों के बाहर वृक्षारोपण।
- जल सुरक्षा।
- जलवायु परिवर्तन के दुष्प्रभावों से कमी।
- जैव विविधता संरक्षण।

नयागांव
6x7

**मिट्टी परीक्षण करावे,
भूमि की उर्वर शक्ति जाने।**
(ग्रीन इंडिया मिशन)

**जितने ज्यादा पेड़ लगाना,
उतना बेहतर जीवन बनाना।**
(ग्रीन इंडिया मिशन)

**पौधे रोपण कर
लाभ कमाएँ।**
(ग्रीन इंडिया मिशन)

कदम कदम स्वच्छता की ओर

स्वच्छ शौचालय
स्वच्छ विद्यालय

**जहां हरियाली
वहां सशक्तता।**
(ग्रीन इंडिया मिशन होशंगाबाद)

**जैविक खाद एवं जैविक
कीटनाशक का ही उपयोग करें**
(ग्रीन इंडिया मिशन होशंगाबाद)

**स्थानिय एवं फलदार प्रजाति
के पौधे का रोपण करें।**
(ग्रीन इंडिया मिशन)

**वन एवं
वन्यप्राणियों
की सुरक्षा करें।**
(ग्रीन इंडिया मिशन)

**पेड़-पौधों के रहते
भगवान,
पर्यावरण रक्षक
करे योगदान।**
(ग्रीन इंडिया मिशन)





71 KALA BAI\कलाबाई F 61 SC
 मोहन लाल\मल्लो 4 D1,--,D3,--,D5,D6,-- 3
 Khatpura, Budhni, Sehore with Mahua Laddoo in
 Palash Dona Pattal,

D1: Households with one or less room, kuccha walls and kuccha roof

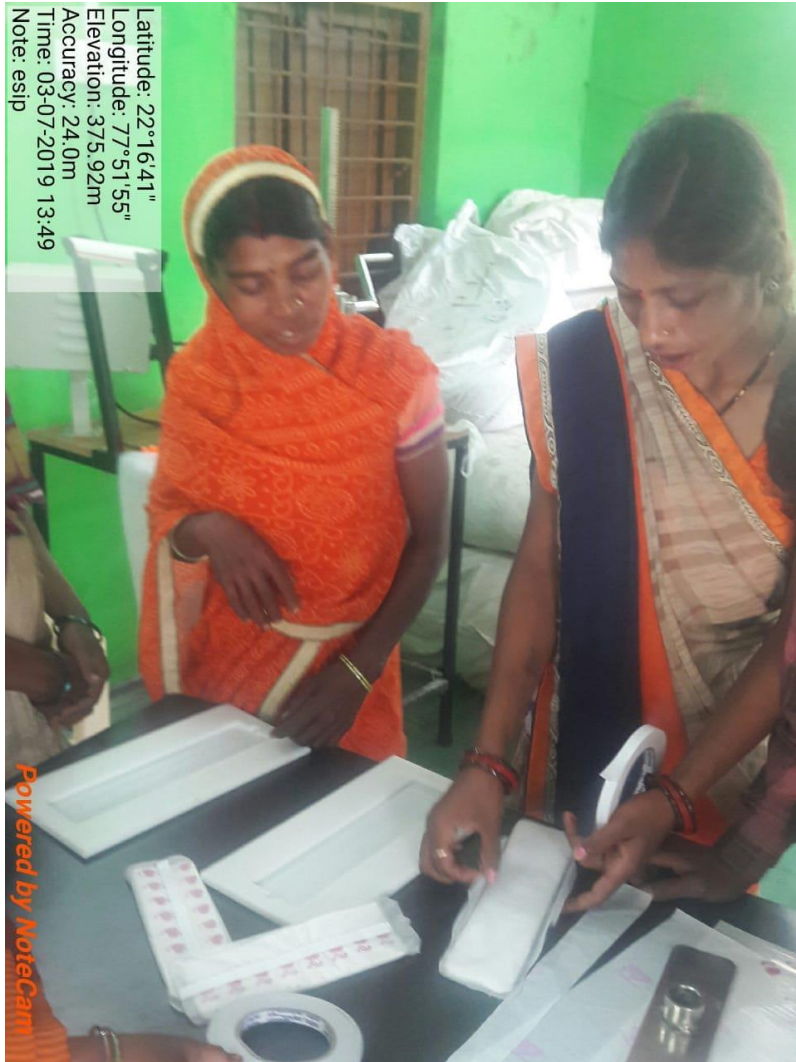
D3: Female headed household with no adult male member between 16 and 59

D5: SC/ST Households

D6: Landless households deriving a major part of their income from manual labour



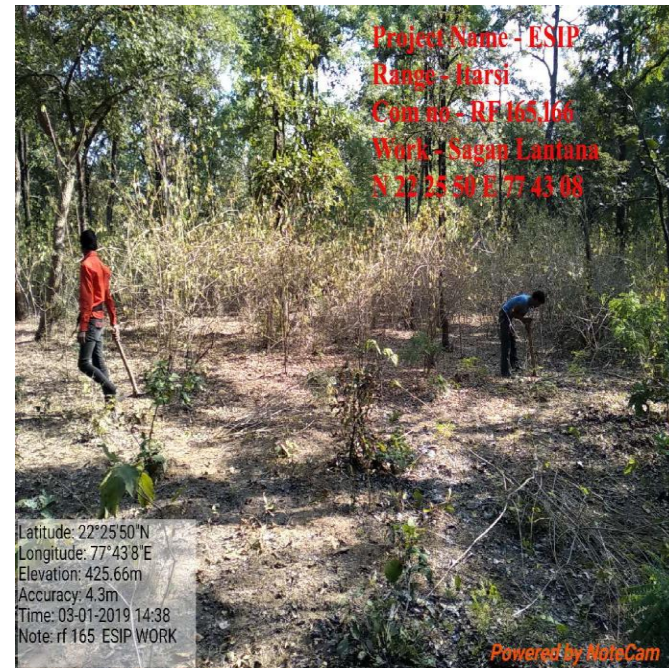
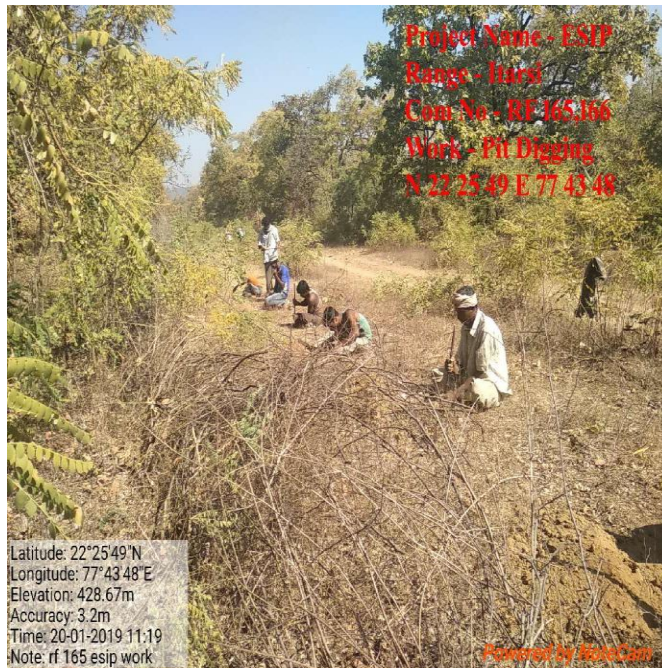
Sanitary Napkin Unit: BhauraDhana Betul







Pictorial Depictions of works being carried out





Component 1: Strengthen capacity of government institutions in forestry and land management programs in Madhya Pradesh and Chhattisgarh

- i. Staff training in use of GIS systems and training of JFMC (and others) in preparing sustainable NTFP use plans
- ii. Support for identifying and mapping biodiversity corridors and
- iii. Training and protocol development for biodiversity measurements in select locations for preparing biodiversity management plans, especially in corridors
- iv. Support for revising management plans and new local level management plans for non-forest areas (integration in district level planning)
- v. Support for strengthening Biodiversity Management Committees (as per the NBA)
- vi. Support for exposure visits for frontline staff/JFMCs for improving management practices
- vii. Technical support (by ICFRE) for developing carbon measurement and monitoring system
- viii. Support for hardware and software procurement and its deployment in the field
- ix. Staff training in carbon measurements and support for additional contractual staff
- x. Networking with national (FSI) and international institutions for carbon measurements
- xi. Support for developing M&E frameworks and biological indicators
- xii. Support for awareness in local communities on invasive species
- xiii. Support for contracting local NGOs for developing sustainable use frameworks
- xiv. Training of local frontline staff and JFMCs in applying NTFP frameworks
- xv. Training for strengthening local self-governance institutions, including JFMCs, to establish community reserves for co-management, monitoring, and sustainable and equitable access to NTFP resources
- xvi. Strengthening of FDAs and *Van Vigyan Kendras* (VVKs)



Component 2: Investments for improving forest quality in selected landscapes

1.Sub-Component2.1 Enhancing and restoring carbon stocks in forestlands

- i. Upgrading/modernization of select forest nurseries to raise high-quality native species planting material
- ii. Building institutional capacity on new processes for taking soil preparation, forest enrichment planting and protection work in degraded production forests, as well as on non- forestlands, and implementation of these processes at the community level
- iii. Investments in restoration work on degraded forestlands
- iv. Establishment of a forest carbon monitoring system
- v. Technical support for mapping and monitoring RET species

2.Sub-component 2.2: Developing community-based models for sustainable utilization of NTFP:

- i. Generation of community level baseline assessments of livelihood dependency on NTFPs for developing local plans for sustainable and equitable use of NTFP in 10 communities
- ii. Value addition investments to traditional NTFP resources
- iii. Support for creating at least two community reserves
- iv. Capacity building support for NTFP user groups, women's self-help groups (SHG)
1. Support for GIS based management plans for community reserves incorporating participatory monitoring of biodiversity



Component 3: Scaling-up sustainable land and ecosystem management in selected landscapes

- i. Application and scaling up of the existing and tested SLEM best practices such as participatory watershed management, approaches to improve soil fertility and land productivity, restoration of overgrazed pastures and other common lands, and improvement of habitat quality in micro- watersheds.
- ii. Training support to beneficiaries and extension workers for applying identified SLEM best practices
- iii. Obtaining input for applying identified SLEM best practices (seeds/seedlings/organic inputs, and so forth)
- iv. Financing of small works for improving common property resources (construction of check dams/gully plugs/soil-moisture conservation works/drainage line improvement, and so forth)
- v. Support for agro-forestry based activities through stakeholder awareness, capacity building and technological support (improved seeds/saplings/ techniques), value addition and market linkages with technological institutes such as ICAR, the Agriculture Science Center *Krishi Vigyan Kendra* (KVK), state agriculture departments, and CBOs
- vi. Capacity building of VVKs for promoting restoration of degraded common property resources, sensitizing workshops, creation of new extension material, and so forth
- vii. Community capacity building and technical support for afforestation in degraded forests and establishing linkages with other afforestation programs
- viii. Development of an online national reporting database/MIS for capturing trends and status of key impact and performance indicators on land degradation and desertification, and provide training (national/sub-national/agency) on the use of the national online portal
- ix. Development of a national database on SLEM practitioners for the development of institutional and individual network
- x. Development of an interactive web-based platform with direct access and use at the farm level with help from extension services
- xi. Development of a community of practice by connecting stakeholders with common interests in adopting and expanding SLEM approaches
- xii. Organization and implementation of learning events at the interface of the community, farm, and common lands, and provision of technical support for the preparation and dissemination of SLEM knowledge products
- xiii. Development of software and hardware infrastructure for dissemination of best practices to end users .



Component 4 : Project management

1. Project Implementing Units (PIUs) will be established within the State Forest Departments of Madhya Pradesh and Chhattisgarh and within ICFRE. Other than the core Government staff, this component will support hiring of specialized staff within the PMU and PIUs for project management, technical advice, and communications.
2. A list of indicative activities that this component will finance includes:
 - i. Contractual staff for project management and fiduciary obligations, computer operators, steno, orderlies, drivers etc
 - ii. Professional staff (forestry/land management/restoration ecologist, GIS database expert, procurement and financial management specialist and so forth)
 - iii. Provisions for taking special studies
 - iv. Support for office equipment



Approval process of ESIP

1. A national level Project Steering Committee (PSC) has been constituted
2. The PSC will be the final approving authority for all matters concerning ESIP
3. **ICFRE:** The Indian Council of Forestry Research and Education (ICFRE) will implement Component 3 of the project because of the council's demonstrated ability to implement World Bank projects, and thus, the institutional arrangements for SLEM utilized at ICFRE will be replicated for ESIP.
4. The State Forest Departments at Madhya Pradesh and Chhattisgarh and ICFRE will develop costed, time-bound Annual Action Plans for project implementation, which will be reviewed and approved by the PSC at the National Level.



Project Development Objective (PDO) & PDO Level Results

Indicators

- The project development objective (PDO) is to improve forest quality, land management and non- timber forest produce (NTFP) benefits for forest dependent communities in selected landscapes in Madhya Pradesh and Chhattisgarh.
- The project development objective will be measured through six key results framework (RF) indicators, complemented by a range of intermediary outcome indicators described in the results framework The PDO indicators reflect outcomes attributable to the combined capacity building and investment activities proposed the project.
 - i.People in targeted forest and adjacent communities with increased monetary or non- monetary benefits from forests (disaggregated by: female; ethnic minority/indigenous people)
 - ii.Land area where sustainable land management practices were adopted as a result of the project
 - iii.Average cumulative carbon sequestered per hectare in areas supported by the project
 - iv.Targeted beneficiary groups engaged in participatory planning the project
 - v.Direct project beneficiaries, of which female



Progress of ESIP - MP

Preparatory Works:

- » For FY 18-19, a budget for Rs 1270.67 lakhs allocated in Sept. 2018.
- » Finalization/approval of Milli & Micro Watersheds and Site Selection
- » Technical Sanctions (T.S.) of works completed from the concerned Circle CCFs. For APO 2018-19: North Betul an area of 150 Ha., Hoshangabad 600 Ha. and Sehore an area of 300 Ha., sanctions were given.
- » Site preparations for plantation works being carried out in the three Forest Divisions.
- » Demand of saplings submitted to the concerned R&E units by the ESIP Forest Divisions. R&E Bhopal Circle has a demand request of 2,25,000 plants (300 Ha.) by Sehore Forest Division in 2019-20. R&E Betul Circle has a demand request of 1,38,960 plants (150 Ha.) by North Betul Forest Division and 1,75,600 plants (150 Ha.) by Hoshangabad Forest Division in 2019-20. Hence in FY 2019-20 planting works for 5,39,560 plants shall be carried out covering an area of 600 Ha. in the ESIP Forest Divisions.
- » Liasoning with line departments for convergence being carried out by respective Forest Divisions.



Progress of ESIP - MP

- » Identification of livelihood interventions and beneficiaries screening with support of local support organizations, district units of SRLM in each division being carried out.
- » Cross Cutting Interventions, the Divisions have identified activities for promoting alternative fuel energy, farming, agro-forestry and screening of beneficiaries.
- » Divisions preparing Micro plans of villages covered under ESIP. Support of local civil society organizations to prepare plans and also for local livelihood interventions being worked out.
- » Forest Divisions are taking activities like training, workshops, exposure visits, soil testing of plantation sites, awareness campaigns etc.
- » Gender based initiatives for forming SHGs and carrying out training & exposure visits for livelihood activities like tailoring etc.



Progress of ESIP - MP

» Selection of consultants:

In SPIU M.P., for smooth operation of the project the procurement of the following consultants has been completed.

- » i) GIS and Database expert: Process completed and Award of Contract given. (Annexure II)
- » ii) Forestry/Ecosystems Service and Knowledge Management specialist: Process completed and Award of Contract given in October 2018. (Annexure III)
- » iii) Procurement & Financial Management Consultant: Process completed and Award of Contract given in September 2018. (Annexure IV)



Progress of ESIP - MP

- » **Socio-economic profiles** of the three selected landscapes have been documented with the help from MP State Planning Board. Hoshangabad (5D3D6k): Annexure V, Sehore (5D4A1b): Annexure VI and Betul (5D5A2h): Annexure VII.
- » **7) Capacity Building:** The agencies for strengthening capacity of government institutions identified and detailed plan for training chalked out.
- » i. I.T. wing of the department prepared a training program for “Staff training in the use of GIS system” (Annexure VIII). The calendar of training has been finalized. SPIU MP is expecting the delivery of GPS Handsets from the selected firm in March 2019. The arrangement of procurement has been made through Sehore Forest Division. After the delivery of the handsets, the training shall be held by the I.T. Wing.



Progress of ESIP - MP

- » MP State Biodiversity Board prepared a detailed program for-
 - » a. Training and protocol development for biodiversity measurements in select location for preparing biodiversity management plans, especially in corridors
 - » b. Support for strengthening BMCs/ JFMCs on Biodiversity Management as per NBA
- » iii. State Forest Research Institute, Jabalpur, prepared detailed program in three focus areas for
 - » a. Development of sustainable use framework for NTFP and train of local frontline staff, JFMCs etc in applying NTFP framework
 - » b. Capacity building of forest officials on new processes for undertaking soil preparation, forest enrichment planting and protection works in degraded forest
 - » c. Development of community level baseline assessment dependency selected information for of livelihood on NTFPs in Forest Division
- » **World Bank Task Team Leader, ESIP, vide the email dated 7.8.2018 informed SPIU MP that MP State Biodiversity Board being part of the GoMP, is not eligible to receive a contract for providing consulting services in the project. Since SFRI, Jabalpur also falls under the similar criteria, hence the proposed activities were cancelled on STEP. New activity created on STEP on 1st March 2019 and submitted for bank's for approval.**



Progress of ESIP - MP

- » **Exposure Visits:** Exposure visits organized for 894 members of 55 JFMC committees and frontline staff from the selected landscapes of Hoshangabad, Sehore and Betul districts. The purpose of the visits were to sensitize the committee members towards skill, livelihoods, SHG based initiatives covering wide ranging issues like stitching, plate/carry bag making, industrial skill development, agriculture/horticulture etc.
- » Sehore Forest Forest Division organized an exposure visit of about 30 village beneficiaries to Trident Mills, Budhni, Sehore.
- » North Betul Forest Division has identified about 50 village level beneficiaries for an exposure visit to Raleygaon Sidhi in Maharashtra. The purpose of the visit is to understand the local community good practices for watershed management.
- » The division has also planned to take about 30 Mahua collecting forest dwellers from Kyolari Village, Range Bhaura under ESIP to Chhindwara.



Progress of ESIP - MP

- » An organization, Madhya Pradesh Vigyan Sabha has its operational campus in Tamia, Chhindwara where they have established units for biscuit making from Mahua with support from NABARD. It is one of the successful activities of the organization providing livelihoods to the local communities/villagers. It will showcase and provide factual exposure of the ESIP villagers as Mahua is in abundance and may provide a micro enterprise initiative under the project to the poor families.
- » An exposure visit is also to be planned for taking about 50 small and marginal farmers from the ESIP villages to Akola, Maharashtra. The visit is to provide an opportunity to the project stakeholders for an interactive learning and knowledge on Bio-dynamic farming which promotes organic cultivation practices benefitting poor farmers.
- » Hoshangabad Forest Division: Identified poor women beneficiaries in the ESIP villages. Procurement of sewing machines and training planned for about 40 women. Skill Development works like training for Mahua value addition/processing, honey collection, MFP collection & value addition is in process and expected to be completed in March 2019.



ESIP Progress-NTFP based livelihoods activities

Bee keeping –

Bee keeping training for honey production was given to beneficiaries of Ranjhi and Pipalgota villages. Total 28 beneficiaries were provided the training by MPCOn on 10-2-2019 to 12-2-2019. In the three days training program beneficiaries were trained on location selection for bee keeping, harvesting techniques, honey collection and packaging and precautions to be taken care in all the processes.



Mahua harvesting training

The beneficiaries in the villages were given orientation and training on Mahua harvesting practices. It is planned to distribute them nets for collecting Mahua.



ESIP Progress- Exposure visits

North Betul	Hoshangabad	Sehore
<ul style="list-style-type: none"> - Exposure visit of 59 candidates to Chhindwara circle and BCRLIP project on 15-3-2018 to 16-3-2018 <ul style="list-style-type: none"> - Exposure visit to City Forest Sagar - Exposure visit to High Density Plantation and City Forest Ujjain 	Planned to visit watershed sites	organized an exposure visit of about 30 village beneficiaries to Trident Mills, Budhni, Sehore.



Progress of ESIP - MP

- » **Annual Plan Orientation (APO):** The APOs were prepared for the year 2017-18 and 2018-19 for implementation as per the provisions of Project Implementation Plan (PIP) and the cost table. The APO has the following components
 - » i) Component 1: Strengthen capacity of government institutions in forestry and land management programs in Madhya Pradesh
 - » ii) Component 2: Investments for improving forest quality in selected landscapes
- » The APOs were duly submitted to Ministry of Environment, Forest & Climate Change. State made the presentation on 26th March 2018 to the National Project Committee. The APOs were approved in two steps
- » iii) Conditionally approval was communicated on 9th April 2018 with a provision to review by the Chairman of the Project Steering Committee.



Progress of ESIP - MP

- » iv) And, finally on 20th June 2018 the approval of APO was communicated with a provision of Rs. 1270.67 Lakh.
- » The SPIU MP has made a disbursement of INR 1260 Lakhs as on date. (Annexure XI)
- » As per the APO budget, the three Territorial Forest Divisions of North Betul, Hoshangabad and Sehore has been allotted budget for achieving the objectives of **Component 1**(Strengthening capacity and skills of government institutions for effective delivery of forestry and land management programs) & **Component 2** (Increasing forest quality and productivity).
- » SPIU also released funds to the 15 Forest Divisions falling under the GIM. They have been allotted Rs. 03.00 Lakhs each for capacity building activities.



Progress of ESIP - MP

- » **Project Progress made in FY 2018-19:** Activity Progress in the ESIP Units in the state- (Brief profile of works/activities/achievements carried out under each component/sub component by each unit)
- » i) Component 1: Strengthen capacity of government institutions in forestry and land management programs in Madhya Pradesh and Chhattisgarh-
 - » a) Staff training in use of GIS systems: I.T. Wing, M.P. Forest Department shall provide training. As explained in Point 7 (i) above.
 - » b) Support for hardware and software procurement and its deployment in the field:
- » GPS handsets procurement process has been completed by Sehore Forest Division in January 2019. Order placed by the firm selected through the least cost method of RFQ. The handsets shall be delivered by the firm by second week of March 2019 as they are procured from USA. Consequent to the procurement of the handsets, I.T. Wing, shall conduct a training for the ESIP & GIM Forest Division officials and staff. The training is expected to be held in March 2019.
- » As hardware support, a workstation has been procured for the GIS Specialist, M.P. SPIU in February 2019. Also, new activities created and submitted on STEP on 1st March 2019 to procure GIS & Remote Sensing software's for the GIS Specialist. Each software estimated cost is about Rs. 20.00 Lakh.



Progress of ESIP - MP

- » Technical support (by ICFRE) for developing carbon measurement and monitoring system: ICFRE team in November 2018 carried out the training of the field officials/staff for the carbon sequestration & measurement exercise. The exercise was carried out in the three Divisions of North Betul, Sehore and Hoshangabad. The forest department officials and staff participate in the collaborative exercise held by ICFRE. The scientists from ICFRE carried out field based data collection orienting the participants for carrying out such studies. The data is yet to be shared by ICFRE. A request has been made to ICFRE for sharing the data and further course of action to be taken up for carbon measurement.
- » d) Networking with national (FSI) and international institutions for carbon measurements: A training was held in FSI, Dehradun from 30th January to 1st February 2019 on techniques of carbon measurement. SPIU MP coordinated with PCCF, Working Plan for sending officers along with officials of ESIP units for the training. 30 officials from the state forest department participated in the three day programme in Dehradun. (Annexure XII)



Progress of ESIP - MP

- » ii) Component 2: Investments for improving forest quality in selected landscapes-
- » a) **Sub-Component 2.1 Enhancing and restoring carbon stocks in forestlands-**
- » -Upgrading/modernization of select forest nurseries to raise high-quality native species planting material.
- » **Research & Extension Bhopal Circle** has taken its Basapur Nursery, Sehore for upgradation activities. Upgradation plan: The upgradation of the nursery involves the increase in productivity from 5.00 lakh saplings to 8.00 lakh saplings/year of high quality. Species of plants to be raised, Native/MFP Species - Amla, Harra, Baheda, Mahua, Neem, Bel, Sagon, Bamboo, karanj, Sissoo, Chirol etc. RET Species- Achar, Bija, Tinsa, Kala shisham, Kullu, Anjan etc. Ficus Species- Pipal, Bargad, Gular, Pakar. Fruit bearing Species - Aam, Sitafal, Amrud, Nimbu, Munga etc.



Progress of ESIP - MP

- » The following works are proposed:- Root Trainer, Mist Chamber, Poly House, Green net Shed, Bore well Pump, Micro Sprinkler, Vermi Compost Unit, Seed Store, Solar Pump, CC Bed, Over head Tank, Fencing Seed Treatment Platform, Inner Road, Labour hut & Toilet, Drinking Water Ro, Customer visitor facility center. (Annexure XIII)
- » **Research & Extension Betul Circle** has taken its Khakrapura & Dhar Nursery, Betul for upgradation activities. In the similar line of activities as mentioned above, the nurseries in Betul Circle in 2019-20 shall prepare and implement upgradation plan for its nurseries.



Progress of ESIP - MP

2.1.3 Investments in restoration works on degraded forestlands-

APO 2018-19

2.1.3	Investments in restoration works on degraded forestlands	North Betul		Hoshangabad		Shore		Total	
		Phy. (in ha.)	Fin. (Rs. In Lakh)	Phy. (in ha.)	Fin. (Rs. in lakh)	Phy. (in ha.)	Fin. (Rs. in lakh)	Phy. (in Ha.)	Fin. (Rs. In Lakh)
	Site Preparation	150	256.90	600	276.40	300	290.34	1050	823.64

Proposed APO 2019-20

2.1.3	Investments in restoration works on degraded forestlands	North Betul		Hoshangabad		Shore		Total	
		Phy. (in ha.)	Fin. (Rs. In Lakh)	Phy. (in ha.)	Fin. (Rs. in lakh)	Phy. (in ha.)	Fin. (Rs. in lakh)	Phy. (in Ha.)	Fin. (Rs. In Lakh)
	Site Preparation	429	225	600	428.60	50	339.10	1079	992.70
	Planting Area/Work	150		150		300		600	



Progress of ESIP - MP

Sub-component 2.2: Developing community-based models for sustainable utilization of NTFP:

- » -Generate community level baseline assessments of livelihood dependency on NTFPs, for developing local plans for sustainable and equitable use of NTFP in communities
- » **-Value addition investments to traditional NTFP resources**
- » The activity earlier proposed by SPIU MP was cancelled as explained in Point 7(iii) of Capacity Building. Based on the objectives of the sub-component, SPIU MP has now generated and submitted a new activity for bank's approval to hire a consultant agency/organization. A draft ToR has been prepared. The consultancy shall be of 30 months.



Progress of ESIP - MP

- » **Reimbursement claim:** Expenditure of Rs 4416291/- was done during the financial year 2017-18 against the sanctioned APO of Rs 52.19 lakh. Reimbursement claim for year has been prepared in the prescribed IUFR formats and submitted to the world bank, MOEFCC and also mailed to CAAA for reimbursement (Annexure XIV).
- » The web portal of CAAA advises that the reimbursement claim should be first approved by the task team leader and then submitted to the CAAA.
- » In furtherance to that, after the approval of World Bank, the reimbursement of Rs. 44.16 Lakh has been released by CAAA. In 2018-19, for the quarter ending September 2018, a reimbursement claim of Rs. 11.75 Lakh has also been released on 6.12.18 by CAAA with prior approval of World Bank on request of SPIU MP.
- » The IUFR for the quarter ending December 2018 has also been submitted to CAAA in February 2019. A request has been made to World Bank for its approval towards release of an amount of Rs. 16.27 Lakh. Approval of World Bank is awaited. (Annexure XV)



Table :- FY 2018-2019: Forest Division Wise Budget Allotment & Expenditure (in Rs. Lakhs) as on 12.3.19

Note: The status of expenditure will considerably increase by end of March 2019. As many of the procurement activities in the 03 Forest Divisions will be accomplished, utilizing the budget.

S.No	NAME of Forest Divisions	Allotment To Forest Divisions	Expenditure By Forest Divisions	Remark
1	South Balaghat	300000	300000	
2	Barwani	300000	300000	
3	Sendhwa	300000	300000	
4	North Betul	25580000	5580000	Expected 1.5 Crore expected by end March 19
5	West Betul	300000	300000	
6	R&E Betul Circle	4000000	0	For Nursery Upgradation.
7	Development	2080333	1522223	
8	R&E Bhopal Circle	11870000	3453367	For Nursery Upgradation
9	Dhar	300000	0	
10	Dindori	300000	0	
11	Hoshangabad	43868000	9033199	Expected 3.00 Crore by end March 19
12	Jhabua	300000	0	
13	South Panna	300000	300000	
14	Raisen	300000	300000	
15	South Sagar	300000	300000	
16	Satna	300000	296667	
17	Sehore	34672000	3799928	Expected 1.5 Crore by end March 19
18	South Seoni	300000	300000	
19	Shivpuri	300000	300000	
20	Sheopur	300000	300000	
21	Umaria	300000	33640	
	Grand Total	126570333	26719024	About 7 Crore by end March 19



Revised APO 2018-19

[illegible]



» Proposed APO 2019-20 Forest Division Details

No.	Component / Activities	Organization	Units	Quantities	Unit cost (RsLakh)	Proposed amount (Rs Lakh)	Remark
1	Strengthening Capacity and Skills of Government Institutions for Effective Delivery of Forestry and Land Management Programs Staff & JFMC Capacity-Building						
1.1	Staff training in use of GIS systems	APCCF IT of MP Forest department	Numbers	18	2.08	37.50	
1.1.1	Training and protocol development for biodiversity measurements in select locations for preparing biodiversity management plans, especially in corridors (Remote Sensing & GIS Software)	SPIU				40.00	
1.3	Training and protocol development for biodiversity measurements in select locations for preparing biodiversity management plans, especially in corridors	SPIU Consultancy				37.50	
1.5	Support for strengthening JFMCs on Biodiversity Management as per NBA	JFM	JFMCs/BMCs				
1.6	Support for exposure visits for frontline staff/JFMCs for improving management practices	JFM	JFMCs/BMCs			105.10	
1.6	Support for exposure visits for frontline staff/JFMCs for improving management practices	Raisen, Dhar, Jhabua, Badwani, Sendwa, Sheopur, Shivpuri, S.Balaghat, S. Seoni, S.Sagar, S. Panna, Dindori, Umariya, Satna, W. Betul	Division	15	3.00	45.00	
	NTPF Capacity-Building						
1.11A	Developing sustainable use frameworks for NTFP and train local frontline staff, JFMCs etc in applying NTFP framework	SPIU Consultancy		1	40	40.00	
1.11B	Training of local frontline staff, JFMCs, user groups and SHGs in applying NTFP frameworks						
2	Improving Forest Quality and Productivity						
2.1	Enhancing and restoring carbon stocks in forestlands And Restoring 600 ha of forest land in the three mili-watersheds and upgrading 3 nurseries						
2.1.1	Upgrading/modernization of select forest nurseries to raise high-quality native species planting material.	R&E Bhopal	Numbers			115.00	
2.1.1	Upgrading/modernization of select forest nurseries to raise high-quality native species planting material.	R&E Betul	Numbers	0			
2.1.3	Investments in restoration works on degraded forestlands	North Betul	ha	579		225.40	
2.1.3		Hoshangabad	ha	600		428.60	
2.1.3		Sehore	ha	350		339.10	
2.1.3.9	INNOVATIVE PLANTATION PILOTS	North Betul	Ha				
2.2	DEVELOPING COMMUNITY-BASED MODELS FOR SUSTAINABLE UTILIZATION OF NTFP	North Betul	Numbers	80		15.52	
	01 Vehicle on rent/ Offie Expenses	Hoshangabad	Numbers			7.00	
	01 Vehicle on rent/ Office management/Renovation of community Hall at khatpura, Budni	Sehore	Numbers	1		6.80	
2.3.1	Generate community level baseline assessments of livelihood dependency on NTFPs for developing local plans for sustainable & equitable use of NTFP in communities	SPIU Hiring Consultancy	Numbers	1	24	24.00	
2.3.2	Value addition investments to traditional NTFP resources	SPIU Hiring Consultancy	Numbers	1	1.98	1.98	
2.3.3	Support for creating at least two community reserves	JFM	Numbers	3	2	6.00	
4.3	SPIU - Madhya Pradesh			81		149.80	
Grand Total						1624.30	



Progress of ESIP - MP

Awareness and information dissemination

- » i) Awareness campaign through workshops, village level meetings, slogan writing on wall JFMC level, Range Level, Division level preparatory trainings/ workshops and
- » awareness campaigns organized in the selected landscapes. Attempt is being made to bring all the line departments on one plat-form for implementation of ESIP.
- » Till now most of the line departments have shown inclination to collaborate.
- » ii) Brochure in English and Hindi have been prepared for wide spreading the program (Annexure XVI).



Progress of ESIP - MP

Procurement based progress:

- » SPIU is preparing ToRs for hiring agencies for consultancies in NTFP based livelihoods, Biodiversity Assessment, and IEC strategy under ESIP.
- » Territorial Forest Divisions of Sehore, Hoshangabad and North Betul, R&E Bhopal and Betul Circle has began procurement through STEP for project activities.
- » World Bank provided training to officers/staff for use of STEP in submission, clearance by bank for procurement activities. STEP User's right for respective officers created and updated procurement plan submitted.
- » Procurement process covers the requirements of the ESIP units under Component 1: Strengthen capacity and for Component 2: Investments for improving forest quality.
- » By the Forest Divisions and R&E Bhopal and Betul units. It covers items for plantation site protections like Chain link, Barbed Wire, RCC Poles, Nursery development- Poly/Green House, Mist Chambers, Solar irrigation pumps etc.
- » At present 53 activities are cleared through submissions on STEP and under implementation. 13 new activities submitted on 1st March for clearance from World Bank (Annexure XVII)



Procurement based progress

Category	Amount Financed by bank	% Financed	Total Amount	Committed Amount	Related Activities	Remark
Consultant Services	417,000	100.0	417,000	19,154.03	10	
Goods	665,470	100.0	665,470	52,382	41	
Non- consulting Services	30,000	100.0	30,000	11,500.41	1	
Works	292,820	100.0	292,820	??	20	Not showing committed cost
Total (US\$)	1,405,290		1,405,290	83,036	72	
Total (INR)	98,370,300		98,370,300	58,12,550.8		

Source: World Bank STEP portal



Procurement based progress

1. The World Bank has approved engagement of Information Technology wing, but the bank has not approved engagement of MP State Biodiversity Board, State Planning Commission and State Forest Research Institute.
2. SPIU is awaiting activity approval by World Bank for hiring agencies for consultancies in Biodiversity Assessment, NTFP based livelihoods.
3. Territorial Divisions of Sehore, Hoshangabad and North Betul, R&E Bhopal and Betul Circle has began procurement in the project.
4. WB provided training to officers/staff for use of STEP in submission, clearance by bank for procurement activities.
5. STEP User's right for respective officers created and updated procurement plan submitted.



6. Procurement for Component 1: Strengthen capacity of government institutions in forestry and land management programs, GPS handsets are procured for all GIM Forest Divisions for training by IT Wing.

7. A capacity building plan for staff training in use of GIS systems has been prepared by the IT wing. Following WB Procurement norms, the purchase of GPS handsets is in progress through Sehore (T) Division. 72 units of handsets for an amount of Rs. 33.04 Lakhs (inclusive of 18% GST) has been approved on 19th January 2018.

8. Procurement for Component 2: Investments for improving forest quality in selected landscapes has been initiated by the Divisions and R&E Bhopal and Betul units. It covers items for site protections like Chain link, Barbed Wire, RCC Poles, Nursery development- Poly/Green House, Mist Chambers, Solar irrigation pumps etc.



Progress of ESIP - MP

ESIP Reach out Workshop- 22-24 August 2018, Pachmarhi, Madhya Pradesh

The objectives of the workshop was to

1. Bring the various actors/stakeholders of the landscapes on one platform to facilitate understanding of the concepts of ecosystem services, the Green India Mission, the landscape approach, the selected landscapes, the rationale of the selection, the people, the forests, the ecosystems.
2. Identification and prioritization of the activities to be undertaken during the project period, Role clarity amongst the various stakeholders, and Identification of the probable field sites for project implementation.



Progress of ESIP MP- Reach Out Workshop

- » **Panel Discussion I:**
- » Possibilities of convergence of line departments with objectives of ESIP
- » **Topics of deliberation:**
- » Identification of key players in governmental and non-governmental sectors who have a role to play in the landscapes selected for showcasing ESIP
- » Modalities for leveraging various programs by aligning them with the objectives of the ESIP landscapes
- » Identification of the bottlenecks and proposed actions for overcoming them
- » Creation of sustainable livelihood opportunities for the forest-dependent communities for reducing their dependence on forests
- » Process of executing the challenge of creating a showcase for a landscape-based approach for development



Progress of ESIP MP- Reach Out Workshop

- » **Recommendations of the panel:**
- » Degraded areas even outside forests should be included in the planning
- » A consolidated plan should be prepared through intensive coordination and inter-sectoral meetings.
- » The execution of the activities should be parallel and should coincide with the periodicity of activities of all the line departments.
- » Environmental ambassadors may be created for disseminating the knowledge about ecosystem services.
- » A system for periodic monitoring of plans and activities of line department should be established for ensuring convergence.
- » Buy-back guarantees should be made a part of the NTFP projects.
- » Training and Capacity Building of the communities is essential to harness the community's traditional knowledge.



Progress of ESIP MP- Reach Out Workshop

- » Integrated farming technologies should be promoted to drive the communities towards self-sufficiency.
- » Major activities should be community oriented with provision of training and technical support either at the cluster block and/or the district level.
- » Integrated Farming Technology can be best bet to obtain effective results. Villages should be made self-sufficient with production, processing and marketing facilities to be made available at the village level.
- » Sericulture and apiculture are examples of such activities. Specific schemes like sericulture. In the forest areas, where *Terminalia arjuna* and *Terminalia tomentosa* (Sajha) are present in abundance may be selected for tussar cultivation. Mulberry can be used for indoor cultivation and can give an income of about Rs 50000 to Rs 1, 00,000 per acre per year. As compared to Rs 15000 to Rs 20000 acre.



Progress of ESIP MP- Reach Out Workshop

» **Panel Discussion II:**

- » Experiences in measuring carbon stock, established techniques and methodologies best suited for ESIP landscapes and preparation of baseline
- » **Topics of deliberation:**
 - » Techniques of carbon measurement
 - » Best-suited methodologies for carbon measurement in ESIP landscapes and baseline preparation
 - » Finalization of baseline estimate of carbon stocks
 - » Delineation of spatial and temporal frequencies of execution of methodology to get the optimum results.



Progress of ESIP MP- Reach Out Workshop

- » **Recommendations of the panel:**
- » The methodology adopted should be that is internationally accepted.
- » All five pools of carbon should be measured.
- » ICFRE and FSI will coordinate with the state forest department for baseline estimation.
- » There should be a focus on capacity building and training of staff.
- » The World Bank shall leave the methodology of carbon estimation to the discretion of the state forest department. The state forest department may even choose to develop a new technique / methodology as it feels to be best suited.
- » Satellite data and imagery may be utilized during carbon measurement exercises.
- » The figures and values incorporated in the project document were based on the data available during the preparation of the document, and may not be correct. The World Bank shall correct the values, figures and targets on the recommendations of the state forest department.



Progress of ESIP MP- Reach Out Workshop

- » The results framework and monitoring as outlined in project appraisal document of ESIP indicator 3 requires that “Average cumulative carbon sequestered per ha. in area supported by the project should grow from the baseline value of 2.3 tons/ha./yr to 2.78 tons/ha./yr.”
- » The project appraisal document avers that the baseline and the projected value estimates are based on study of central indian landscapes per Sheikh et al: Forest Carbon stocks and flux in physiographic zones of India. Carbon Balance and Management 2011 6:15 and Ravindranath, N.H and Murthy, I.K. Greening India Mission Current Science, Vol. 99, No 4, 25 August 2010. However on perusal of the referred document the stated values are not found matching.



Progress of ESIP MP- Reach Out Workshop

» **Panel Discussion III:**

- » Techniques for enhancing and restoring carbon stocks in forestlands through nursery upgradation and investments in forest of moderate density showing degradation and degraded open forests
- » **Topics of deliberation:**
 - » Recommendation of plantation techniques in the landscapes selected for ESIP in moderately dense forests showing degradation and degraded open forests
 - » Possible choice of species
 - » Methods of increasing carbon stocks in forests as well as non forest community lands through bamboo under planting
 - » Ensuring sustained availability of planting material
 - » Nursery upgradation and modern nursery techniques including advanced soil working



Progress of ESIP MP- Reach Out Workshop

- » **Recommendations of the panel:**
- » *Dendrocalamus strictus* may be selected and projected as a species of choice for carbon sequestration due to its fast rate of growth.
- » Special protection needs to be given following gregarious flowering in bamboo.
- » Mixed teak forests may also be preferred.
- » The mili water shed should be treated holistically, while the micro water sheds may be treated sequentially.
- » There should be emphasis on planting of MAP and RET species.
- » Protection from fire, weeds and biotic pressure should be taken as key components of the project to protect the forests.



Progress of ESIP MP- Reach Out Workshop

» **Panel Discussion IV:**

» Participatory planning tools for landscape development Planning, up-scaling SLEM best practices, and addressing livelihood issues of the project area vis-a-vis sustainable management of NTFP

» **Topics of deliberation:**

- » Explanation of the landscape approach of development
- » Identification of SLEM best practices suitable for upscaling in the ESIP landscapes
- » NTFP management framework including harvesting practices, value addition and market linkages for the NTFPs available in the landscape
- » Possible sustainable livelihood opportunities for the forest dependent communities from the ESIP interventions



Progress of ESIP MP- Reach Out Workshop

» **Recommendations of the panel:**

- » Leadership should be developed for working with all the actors in the landscape.
- » Decentralized planning may be utilized together with consultative approach with local communities for planning. Participatory plan of all stakeholders should be in such a manner that environmental conservation became central theme of planning process.
- » Eco-restoration of forests should be done to sustain the supply of ecosystem services.
- » Convergence at vision, program and project levels is required.
- » Capacity building of the beneficiaries should be done before up-scaling the SLEM best practices.



Issues for discussion and resolution

- » Some issues need to be resolved at the earliest to ensure the smooth roll out and execution of the project.
- » Problems in STEP: Difficulty in uploading documents, lack of clarity in STEP procedures, Need intensive training to understand STEP procedures.
- » *State forest departments are required to maintain accounts in customized accounting software? **SPIU MP has identified TALLY Service Provider for procurement of TALLY software and training of Forest Department staff.***
- » *Specialized agencies for focused M&E needs to be clarified*
- » *State wise project fund allocation details not provided in PAD, PIP or the cost table for the components 1 and 2 of the project*
- » *Conflict in the provision of PIP and cost table 1. The PIP point 10.5 provides, “Specialized staff for technical matters will support the State Project Director. These will include Forestry / Ecosystems Service Specialist, Knowledge Management & Training Specialist, Database & GIS Expert and Social Development / Community Mobilization Specialist. Further specialist staff for project management matters will also form an integral part of the State PIU.” (page 36)*



Issues for discussion and resolution

- » *The cost table provides no resource in the point 4.3.1 to 4.3.4 for above.*
- » *Upscaling of SLEM activities and the measurement of carbon sequestration, its methodology, interval and frequency and capacity buildings the heart of the project. However the state units are totally in the dark.*
- » *ICFRE has started the carbon estimation. In reach out workshop, Pachmarhi, it was decided that the ICFRE will proceed in consultation with FSI. But it appears that the methodology being followed by ICFRE is in variance with FSI's guidelines.*
- » *The updated status of each issue available at (Annexure XIX)*



Capacity Building- Training on Carbon Measurement Techniques, FSI, Dehradun

Total number of participants from M.P. Forest Dept.

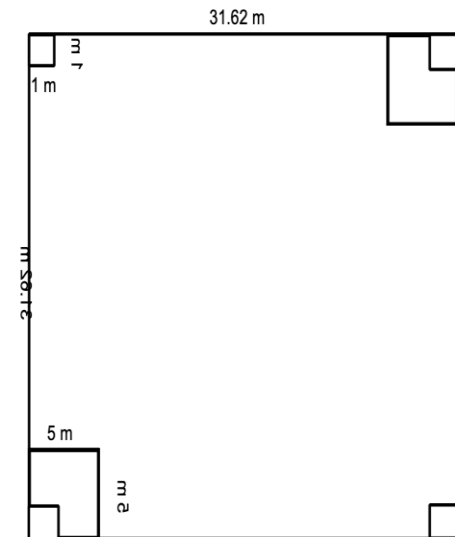
Sr. No.	Designation	Number of participants
1.	APCCF	3
2.	CCF	3
3.	DFO's	2
4.	SDO's	7
5.	RO's	14





Issues discussed in Carbon measurement training program

1. The methodology adopted by ICFRE is in variance for collection of herbs (1m x 1m) and shrubs(5m x 5m) for carbon and biodiversity assessment was different than that adopted by FSI and MP forest department. It was proposed that the methodology should be uniform, as it would be confusing for the front line staff.
1. The sample size for all the three ESIP divisions was too low with respect to the total area to be treated. The sample size by stratified random sampling for Hoshangabad, North Betul and Sehore selected by ICFRE was 36, 34, 24.





Pond : Koyalbuddi, North Betul





ESIP Funds for Capacity Building- Satna Forest Division: 7 JFMCs 45 members visit to Sidhi District Kusuki Village for- Bio Pesticide /Organic Fertilizer/watershed management





ESIP Funds for Capacity Building- South Panna Forest Division: 02 JFMCs 30 members visit to West Chhindwara Forest Div. Tamia for- Community Based SLEM Best Practices



Thanks

Operataion of Ecosystem Services Improvement Project Under GIM

APO For Year 2018 - 19

Site - Bhansapura Nursery

Research & Extension Circle Bhopal

No.	Component/Activities	Agency	Project Cost Estimate		MP share estimate of Project Cost		Year 1 2018-19	Units	Quantities	Unit Cost	Expenditure
			US\$ Mill	Rs. Crore	US\$ Mill	Rs. Crore	Rs. Crore			Rs. Lakh	Rs. Lakh
2.1.1	Upgrading/Modernization of select forest nurseries to raise high quality native species planting material.	R&E									
2.1.1.a	Procurement and establishment of green house 700 Sq. mt.							Number	1	7	5.13
2.1.1.b	Procurement and establishment of poly houses 700 Sq. mt.							Number	1	10	10.55
2.1.1.c	Procurement of root trainers							Number	100000	0.0002	20.00
2.1.1.d	Sprinkler set for							Number of Bed	200	0.025	5.00
2.1.1.e	Vermi Compost Unit							Number	2	4	8.00
2.1.1.f	Solar Plant for irrigation 7.5 KW							Number	1	9	9.00
2.1.1.g	C.C. Bed							Number	200	0.15	26.97
2.1.1.h	Seed treatment platform							Number	1	5	4.98
2.1.1.i	Labour hut							Number	1	4	4.00
2.1.1.j	Toilet for labour							Number	1	2	2.00
2.1.1.k	Drinking Water with RO							Number	1	1	1.00
2.1.1.l	Plant Preparation							Number	227000	0.0001	22.70
								Total			119.33

Operataion of Ecosystem Services Improvement Project Under GIM

APO For Year 2019 - 20 Works

Site - Bhansapura
Nursery

Research & Extension Circle Bhopal

No.	Component/Activities	Agency				Carry over activities of 2018-19				Activities of 2019-20			
			Project Cost Estimate		MP share estimate of Project Cost		Year II 2019-20	Units	Quantities	Unit Cost	Expenditure	Unit Cost	Expenditure
			US\$ Mill	Rs. Crore	US\$ Mill	Rs. Crore	Rs. Crore			Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh
1	Irrigation facility bore well pump, pipe etc.	R&E						number	2	2	4.00	-	-
2	Mist Chamber							number	1	10	10.00	-	-
3	Seed Store							number	1	10	10.00	-	-
4	Customer/Visitor facilities center							number	1	10	10.00	-	-
5	Overhead Tank							number	1	5	5.00	-	-
6	Fencing							rmtr	500	0.01	5.00	-	-
7	Inner Road of Nursery							mtr	500	0.005	2.50	-	-
8	Sprinkler set for 200 bed							number	800	-	-	0.025	5.00
9	C.C. Bed							number	200	-	-	0.15	30.00
10	Inner Road of Nursery							Mtr	500	-	-	0.005	2.50
11	Solar light							number	8 nos	-	-	0.25	2.00
12	Cocopit Plant							number	1 nos	-	-	1	1.00
13	C C TV Computer Labtop Camera							number	1 nos	-	-	2.5	2.50
14	Signage for nursery work and extension work, documentation							number	-	-	-	-	5.00
15	Furniture for customer visitor facility Center							number	-			1	1.00
16	Strengthen capacity of government institution in forestry and land management												
16 a	Soil Testing Machine with installation						number	4 nos			1	4.00	
16 b	Soil Testing Kits						number	4 nos			0.25	1.00	
16 c	Shade for Soil Testing machine						number	4 nos			1	4.00	
16 d	Training Programe for staff						number	20 nos			0.25	5.00	
							Total			46.50		63.00	
Site - Satpura Bhawan Bhopal													
17	Commercial office maintence						number	1 nos			-	52.50	
							Grand Total			46.50		115.50	

Chief Conservator of Forests
Resarch & Extension Circle Bhopal

Research & Extension Circle Bhopal- Basapur Nursery, Sehore

Nursery Upgradation Progress 2018-19

