

**File No. NA-5/1/2020-NA**  
Government of India  
Ministry of Environment, Forest and Climate Change  
National Compensatory Afforestation Fund Management and Planning Authority  
E-mail: [adhoc-campa-mef@nic.in](mailto:adhoc-campa-mef@nic.in)

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Hall No.1, 4<sup>th</sup> Floor,  
Block No. 3, CGO Complex,  
Lodhi Road, New Delhi-110003  
Dated the 24<sup>th</sup> March 2023

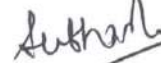
**Meeting Notice**

In continuation to the meeting notice dated 20.03.2023 for the **22<sup>nd</sup> Meeting** of the **Executive Committee of the National Authority** to be held in Krishna Conference Hall, 4<sup>th</sup> Floor, Jal Wing, MoEF&CC, New Delhi on **31.03.2023 (Friday) at 10.00 AM** under the chairmanship of the Director General of Forests & Special Secretary, please find enclosed the Agenda Notes pertaining to APOs of Chandigarh, Meghalaya, Rajasthan, Kerala, Odisha, Maharashtra, Karnataka, Madhya Pradesh, West Bengal, Himachal Pradesh, Uttar Pradesh and Goa. The schemes received from Programme Divisions of Ministry will also be taken up for discussion and consideration as per list enclosed.

2. You are requested to kindly make it convenient to attend the meeting.

*Encl. Agenda Notes*

Yours faithfully



(Subhash Chandra)  
Chief Executive Officer  
National Authority

**Distribution:**

1. The Director General of Forests and Special Secretary, MoEF&CC, GoI
2. Additional Secretary and Financial Advisor, MoEF&CC, GoI
3. ADGF (Forest Conservation), MoEF&CC, GoI
4. ADGF (Wildlife), MoEF&CC, GoI
5. ADGF, NTCA, MoEF&CC, GoI
6. Mission Director, National Mission for a Green India, MoEF&CC, GoI
7. The IG (FC), IGF, NTCA, MoEF&CC, GoI
8. Shri Girish Kuber (Expert Member)
9. Shri Anil Kumar Ganeriwala (Expert Member)
10. Shri Ashwani Kumar (Expert Member)
11. Shri Kailash Chandra Sharma (Expert Member)
12. All Head of Integrated Regional Office, MoEF&CC, GoI
13. DG, ICFRE
14. Director, IIFM
15. CCF, Chandigarh
16. CEO, PCCF & HoFFs, State CAMPA, Meghalaya, Rajasthan, Kerala, Odisha, Maharashtra, Karnataka, Madhya Pradesh & West Bengal

**Copy to information:**

1. The PCCFs & HoFFs, All States/UTs
2. The CEOs, State CAMPA, All States/UTs
3. The IGF (Survey & Utilization/Forest Protection/Forest Policy/Wildlife/National Afforestation & Eco-development), MoEF&CC, GoI
4. The DIG (RT/ROHQ), MoEF&CC, GoI
5. Sr. Technical Director, NIC, MoEF&CC with a request to arrange for video conferencing at the stipulated date and time for IROs.



## **AGENDA NOTES**

**22<sup>nd</sup> Meeting  
of  
Executive Committee of  
National Compensatory Afforestation Fund  
Management & Planning Authority  
(National CAMPA)**

**on  
31.03 .2023**



**Government of India**

**Ministry of Environment, Forest and Climate Change**

**AGENDA ITEMS FOR 22<sup>ND</sup> MEETING OF THE EXECUTIVE COMMITTEE OF  
THE NATIONAL AUTHORITY**

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## AGENDA ITEM NO. 1.

### AGENDA ITEM NO. 1: CONFIRMATION OF MINUTES OF 21<sup>ST</sup> MEETING OF EXECUTIVE COMMITTEE OF NATIONAL AUTHORITY

Minutes of the 21<sup>st</sup> Meeting of Executive Committee of National Authority circulated vide OM of even No. dated 15.02.2023 is placed before Executive Committee for Confirmation. The Minutes of meeting of 21<sup>st</sup> Executive Committee is placed at **Annexure-I**.

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## AGENDA ITEM NO. 2.

### AGENDA ITEM NO. 2: ACTION TAKEN ON 21<sup>ST</sup> MEETING OF THE EXECUTIVE COMMITTEE OF THE NATIONAL AUTHORITY.

Sl.No	DECISIONS	ACTION TAKEN
1	The 21 <sup>st</sup> meeting of the Executive Committee (EC) of the National Authority was held on the 2 <sup>nd</sup> and 13 <sup>th</sup> February 2023 under the chairmanship of the Director General of Forests & Special Secretary (DGF&SS), MoEF&CC, and Chairperson, Executive Committee of the National Authority.	Directions/Minutes of meetings were communicated to all States/UTs vide OM dated 15.02.2023. Sanction orders to respective States/UTs and Institutions issued.
2	Reconciliation of data of compensatory afforestation against each project wise Forest Land diversion proposals by 31.03.2023.	All the States/UTs were asked to submit the desired information on Compensatory Afforestation against each FC Proposal since 1980 vide letters dated 21.07.2022 and 24.03.2023 ( <b>Annexure II</b> ). Information received from West Bengal.
3.	Non/ delayed release of CAMPA funds by State Governments to State Forest Departments for carrying out CAMPA activities as per the approved Annual Plan of Operations.	The matter was brought to the notice of Governing Body and it has been decided that the amount of State share collected by National Authority shall be transferred only if the State Government is releasing CAMPA funds to forest department as per approved Annual Plans.
4.	Submission of Integrated APOs by States/UTs including activity wise physical and financial targets under CSS, State Plan Funds, CAMPA and any other schemes to clearly indicate as to	The format of Integrated APO was circulated ( <b>Annexure III</b> ).The States/UTs have been asked to send the APOs for FY 2023-24 accordingly.

	how much funds the Departments are getting from CAMPA, CSS and other sources.	
5.	The EC noted and approved the Annual Accounts of National Authority conducted by the C&AG audit team during August, 2022. Audit certificate has been issued by C&AG vide letter dated 4.11.2022	The matter was placed before the GB and GB decided for special audit. C&AG office has informed that there will be no special audit. After the audit of accounts of National Authority for the FY 2022-23, Annual Accounts will be placed for approval.
6.	The EC approved the draft annual reports laid by the National Authority highlighting the major CAMPA activities and the annual progress of various States/UTs along with the schemes as per the Compensatory Afforestation Fund Act, 2016 and Rules, 2018.	The Annual Reports (2018-19 to 2021-22) will be placed with the Annual Accounts and audit reports for ratification in the next Governing Body meeting of National Authority.
<b>PART A. APPROVAL ANNUAL PLANS OF OPERATIONS 2023-2024</b>		
7.	Chhattisgarh	Sanction order dated 20.02.2023 has been communicated to concerned States/UTs.
	Jammu & Kashmir	
	Punjab	
<b>PART B: APPROVAL/ DECISION ON SCHEMES AND OTHER ITEMS SEEKING FINANCIAL SUPPORT FROM THE NATIONAL FUND OF CAMPA</b>		
8.	<p><b>1. Project Proposal on “Project Management Consultancy Unit (PMC) and National CAMPA Monitoring and Evaluation Cell (NMEC)”</b></p> <p><b>Decision:</b> The proposal was not approved. It was decided that minimum number of required professionals in desired fields should be recruited by National Authority on contract basis through open advertisement on the lines of NITI Aayog or similar scientific/ technical organisations/Ministries.</p>	The proposal is placed as Agenda Item 20: “Strengthening National CAMPA for monitoring of CAMPA activities and appraisal of APOs and Schemes/Projects” of 22 <sup>nd</sup> EC meeting of National Authority for approval.
	<p><b>2. Project Proposal submitted by IIFM on Training and Capacity Building Infrastructure Development of Sustainable Forest Management and Biodiversity Conservation.</b></p> <p><b>Decision:</b> As suggested by Shri Girish Kuber, Expert Member of the Executive Committee; IIFM should also explore training course designed for Van Vigyan Kendra and Krishi Vigyan Kendra for community forest resource management. The committee deliberated the induction of in-house training during the capacity building programme on sustainable forest and biodiversity conservation management. AS &amp;FA suggested that it should be examined by concerned Programme Division of the Ministry whether the</p>	The GB has approved the proposed scheme. The comments of RT Division received on 24.02.2023- All the papers (noting & correspondence) have been retained in the file of RT-Division (F. No:- 12-1/2023-RT) and matters will be processed further in the RT file.

	proposal is covered under the scheme as per Section 5 (b) (iii) of the CAF Act, 2016. The EC deferred the proposal for the comments of the Programme (RT) Division.	
	<p><b>3. Project Proposal by IIFM on Centre of Excellence for Urban Green Management at IIFM, Bhopal</b></p> <p><b>Decision:</b> The EC deferred the proposal and directed IIFM, Bhopal to devise a self-sustaining revenue model and submit to the National Authority an action plan for the proposal.</p>	<p>Directions/Minutes of meetings were communicated to the Program Division and IIFM vide OM dated 15.02.2023.</p> <p>The proposal is placed in Agenda Item No. 18B of the 22<sup>nd</sup> EC meeting of the National Authority for recommendation.</p>
	<p><b>4. Project Proposal by FSI on Establishment of Centre of Excellence in Forest Survey of India</b></p> <p><b>Decision:</b> The presentation of DG, FSI remain inconclusive on 13<sup>th</sup> February, 2023 and subsequent date was fixed on 20.02.2023</p>	<p>Directions/Minutes of meetings were communicated to the Program Division and FSI vide OM dated 15.02.2023.</p>
	<p><b>5. Project Proposal by FSI on Creation of Monitoring Cell of Monitoring Group (MG) at FSI to assist the MG of National Authority, CAMPA</b></p> <p><b>Decision:</b> The DGF&amp;SS directed to take up the upgradation of e-Greenwatch portal immediately in time bound manner within 6 months by utilising Rs. 83 lakhs approved earlier under the existing scheme “Monitoring Protocol” for plantations and assets created by State Forest Departments already approved by the Governing Body. FSI to make necessary modifications in existing scheme by including activities related to Monitoring Group, up gradation of e-Greenwatch and other related activities for supporting Monitoring Group.</p>	<p>The GB approved the recommendations of the Executive Committee for necessary modification in the existing scheme including suitable provisions for creation of monitoring cell at FSI to assist the Monitoring Group of National Authority and expeditious implementation. FSI should immediately start work for monitoring of CAMPA activities.</p>
	<p><b>6. Project proposal by ICFRE on Monitoring and Management of Lantana camara through utilization for improving livelihood of people in forest fringe villages</b></p> <p><b>Decision:</b> The EC approved the proposal subject to the condition that ICFRE should align their projects with State APO of concerned States and the amount to be spent in States should be adjusted against respective State APOs.</p>	<p>The GB approved the proposed scheme and desired that the project should come out with appropriate site specific models and strategies and effective control and removal of invasive Lantana weed and rehabilitation of forests. The strategies should also consider technological as well as market driven solutions. The total cost of Rs. 14.49 crores should be reduced from the budget to be utilized by the</p>

		concerned State Government for lantana removal.
	<p><b>7. Project proposal submitted by NTCA on Establishing metapopulation of Cheetah in India.</b></p> <p><b>Decision:</b> It was agreed to grant additional funds for the proposal for:</p> <ol style="list-style-type: none"> <li>1. Translocation of cheetahs from Namibia and South Africa to India by air</li> <li>2. Fencing part of Gandhi Sagar Wildlife Sanctuary/ Nauradehi WLS for ecological restoration so as to make the site ready for cheetah release.</li> <li>3. Implementation and monitoring which includes staff engagement of veterinarians, field logistics, biologists, technicians and other work force</li> </ol> <p>The EC approved the proposal excluding procurement of vehicles.</p>	The GB approved the proposed scheme as recommended by the EC. The activities and expenditure should be made as per the actual requirement of the scheme.
	<p><b>8. Project proposal submitted by FRI on Renovation and modernization of FRI Xylarium and establishment of demonstration centre of amazing wood biodiversity of India</b></p> <p><b>Decision:</b> EC advised that the project should include procurement of one Scanning Electron Microscope (SEM) for better and effective scientific studies and develop a state of art Xylarium. The project was approved on the recommendation of Program Division for the cost of Rs. 2.25 crores</p>	After detailed discussion with FRI, it was decided that the project will be on-going with the initial cost of proposal of Rs. 1.25 crores and the procurement of SEM will be taken up as future scope of the project.
	<p><b>9. Project proposal submitted by Institute of Wood Science and Technology, Bangalore on Roll out and preparedness of States for using National Transit Pass System.</b></p> <p><b>Decision:</b> The EC approved the proposal with the recommendation that the program coordinator stationed at IWST should be a regular employee from IWST because ultimately the entire NTPS portal will be handed over to IWST after the project period is over. The EC directed that to have a regular appointee officer to look after the coordination.</p>	The GB approved the proposed scheme for Rs. 4.67 crores and desired that the project should be rolled out at the earliest and timeline should be monitored by the Ministry.
	<p><b>10. Project proposal submitted by FRI on Strengthening and Up-gradation of National Forest Library and Information Centre.</b></p> <p><b>Decision:</b> The EC approved the proposal and asked FRI to increase the membership through online</p>	The GB approved the proposed scheme.



	readership and give wide publicity to invite students and interested public for joining the library.	
	<p><b>11. Project proposal submitted by CZA on Developing a detailed report for setting up National Referral Centre (NRC)- Wildlife for wildlife disease management, monitoring and prevention part of project Lion.</b></p> <p><b>Decision:</b> The EC agreed for modification of the earlier approved project for the purpose of preparation of the DPR only as part of Project Lion.</p>	The GB approved the proposed scheme.
<b>PART C: ANY OTHER MATTER WITH THE PERMISSION OF THE CHAIR</b>		
9.	<p><b>Project on Request from states for purchase of vehicles for field staff from the provision made in the FCA proposal against diversion of forests for monitoring of forest diversion activities, supervision of compensatory afforestation and forest protection.</b></p> <p><b>Decision:</b> The EC noted the agenda item and agreed to place the same before the Governing Body for direction.</p>	A Committee has been constituted after the approval of GB for preparing the guidelines on procurement of vehicles from the NPV component for frontline staff to meet their operational requirements of forestry and wildlife activities vide OM no NA-16/2/2023-NA dated 24.3.2023

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### **AGENDA ITEM NO. 3.**

#### **AGENDA ITEM NO.3: INFORMATION ABOUT THIRD MEETING OF GOVERNING BODY OF NATIONAL CAMPA HELD ON 15.02.2023**

The minutes of Third Governing Body meeting of the National Authority have been circulated on 15.02.2023 vide office letter NA-5/10/2022-NA dated 22.03.2023. The minutes of the meeting are circulated through email.

Important decisions taken by the GB are placed below:

1. Top priority is given for eco-restoration and recovery of land degradation through CAMPA works while approving the State/UT APOs. CAMPA activities also align with the international commitments of India.
2. To ensure full and timely release of funds by State to forest departments for implementing afforestation, fire control and other CAMPA seasonal activities. GB directed that the amount of State share collected by National Authority shall be transferred if the State government is releasing CAMPA funds to forest departments as per approved Annual Plans.
3. Grasslands are protected like the Banni Grassland Reserve near Great Runn of Kutch in Gujarat i.e. considered as the largest Grassland in Asia spreading over 2,618 kms and accounts for almost 45% of the pastures in Gujarat. Emphasis for grassland restoration is a part of forest restoration. In wildlife habitats grasslands are protected and should be properly managed.
4. Indigenous and local species shall be given preference in afforestation.
5. There is a need to support State Forest Departments in Model Nurseries at each Division/ Range level for ensuring availability of sufficient quality saplings. Field staff should be trained in modern techniques of plant propagation. Field visits to best nurseries should be organised. The idea to brand them as “LiFE nurseries” should be considered.
6. Promote innovation in forestry and wildlife management practices and use of IT, drones and remote sensing technology for efficient functioning of forest departments.
7. For taking required experts and professional in the National Authority office for its efficient functioning.
8. PCCFs of the States were asked that senior officers should personally supervise tree plantation.
9. The States should make use of Nagar Van/Nagar Vatika Yojana and develop urban greens
10. Farmers and Self-Help groups were encouraged and supported for raising nurseries of locally suited tree species and State Forest Departments should reach out to people.
11. Haryali Teej Festival should be celebrated like last year for extensive people’s participation in tree plantation in the country.

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## AGENDA ITEM NO. 4.

### ANNUAL PLAN OF OPERATION (APO) OF CHANDIGARH UT CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: **31.01.2023**
2. Date of approval of EC of State/UT: **07.09.2022**
3. Date of approval of the Steering Committee: **19.09.2022**
4. Total Amount/Outlay: **1.54 crores**
5. Funds status with the State/UT along with outlay proposed:- **upto 31.12.2022**

(Amount in Rs. crores)

S.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	2.06	1.22
	Catchment Area Treatment Plan	...	..
	Integrated Wildlife Management Plan	...	..
	Others	...	....
<b>2.</b>	<b>Net Present Value</b>	2.85	0.19
<b>3.</b>	<b>Interest</b>	1.07	0.13
<b>4.</b>	<b>Other Components</b>	..	..
	<b>TOTAL</b>		1.54

6. Funds released by State Government during the FY

(Amount in Rs. Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	1.27	1.27	Fully utilised	1.27
2019-20	1.87	--	The work for the year 2019-20 and 2020-21 has been carried, but the funds pertaining to UTs could not be released.	The work for the year 2019-20 and 2020-21 has been carried, but the funds pertaining to UTs could not be released.
2020-21	2.26	--		
2021-22	3.60	5.14	Rs. <b>5.14 Crore</b> has been received for the year 2019-20, 2020-21 and 2021-22 and it was utilized upto 31.03.2022	Rs. <b>5.14 Crore</b> has been received for the year 2019-20, 2020-21 and 2021-22 and it was utilized upto 31.03.2022
2022-23	1.56	1.56	The amount <b>83.25 Lakh</b> has been utilized upto 30.11.2022 the remaining amount will be utilized by 31.03.2023	1.56

7. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
(CA)	(PCA)	(CA+PCA)	(CA)	(PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)
110.80	0.00	110.80	110.80	0.00	110.80	----	---	---

8. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
Only previous year maintenance	0	0	0

9. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1.</b>		<b>Site-specific activities as per Section 6(a) of the CAF Act, 2016</b>					
	<b>Mandatory Activity</b>	Compensatory Afforestation	Only previous year maintenance	1.22	29600	68-72	--
<b>2.</b>	<b>Activity as per Rule 5(2) of CAF Rules, 2018</b>						
<b>3.</b>		<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>					
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	02	0.19	68	68-72	--
<b>4.</b>		<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>					
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	--	0.13		68-72	

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## AGENDA ITEM NO. 5

### ANNUAL PLAN OF OPERATION (APO) OF HIMACHAL PRADESH CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: 05.01.2023
2. Date of approval of EC of State/UT: 23.01.2023
3. Date of approval of the Steering Committee: 24.02.2023
4. Total Amount/Outlay: 237.22 crore
5. Funds Status with the State/UT along with outlay proposed

S.No.	CAMPA Activity	Funds Available with the State/UT	Outlay proposed in crore
1	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	183.94	25.00
	Catchment Area Treatment Plan	442.87	24.00
	Integrated Wildlife Management Plan	237.59	16.73
	Others	32.80	1.03
2	<b>Net Present Value</b>	509.28	166.96
3	<b>Interest</b>	176.54	3.50
	<b>TOTAL</b>	1583.02	237.22

6. Funds released by State Government during the FY.

Year	APO approved by National Authority during current financial year	Funds Released by State Government	Funds Utilized by State Authority	Total Outlay for the current year
2018-19	127.72	127.72	128.26	0
2019-20	145.73	145.00	88.51	0
2020-21	158.39	150.99	119.48	0
2021-22	138.10	138.10	94.77	0
2022-23	190.23	140.01	40.65	0

7. Financial outlay/ Budgetary Support under various Schemes (amount spent)

Year	CSS		CAMPA	State Plan/ Scheme Fund	Any other scheme
	Name of the scheme	Expenditure Provisions			
2020-21	Fire Prevention and control operations	3.14	119.48	1.27	0
	Integrated Wildlife Management				
	Green India Mission				
2021-22	Fire Prevention and control operations	1.14	94.77	1.84	0
	Integrated Wildlife Management				
	Green India Mission				
2022-23	Fire Prevention and control operations	21.23	40.65 (up to 31.12.2022 )	74.32	0
	Integrated Wildlife Management				
	Green India Mission				

2023-24*	Fire Prevention and control operations	32.54	237.22	128.03	0
	Integrated Wildlife Management				
	Green India Mission				

8. Status of Compensatory Afforestation

(Area in ha)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.03.2022 (in Ha.)	Afforestation carried out in the State as per site specific schemes till 2022-23 (in Ha.)	Afforestation to be carried out 2023-24 (in Ha)	Afforestation carried out percentage (in Ha)	Total Balance upto 2024-25 (in Ha)
30321.9	28205.9	1315	93.0%	801

9. Balance afforestation status

(Area in ha)

Balance Afforestation request as per FC Act (in ha)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
2112.77	1315	801	0

10. The details of APO are as under:

(Amount in Rs. Crore and Area in Ha.)

S. No.	CAF Act/ Rules	Activity	Proposed Outlay		Green Employment to be generated (in Mondays)	Page no.	Remark
			Phy Target	Fin Target			
1.	<b>Site Specific Activities as per Section 6(a) of the CAF Act, 2016</b>						
	Mandatory Activities	Compensatory Afforestation	1315 Ha.	25	319400	61-185	
		Catchment Area Treatment Plan	775 Ha.	24	312600	186-245	
		Integrated Wildlife Management Plan	Ls	16.73	348000	246-327	
		Other	Ls	1.03	17600	328-330	
		<b>Total Site Specific Activities</b>		<b>66.76</b>			
2.	<b>Non-Site Specific –</b>						
	<b>Activities as per Rule 5(2) of the CAF Rules 2018 (80%)</b>						
	5(2)(a)	ANR					

S. No.	CAF Act/ Rules	Activity	Proposed Outlay		Green Employment to be generated (in Mondays)	Page no.	Remark
			Phy Target	Fin Target			
	5(2)(b)	AR	4989 Ha.	46.63	968900	337-366	
	5(2)(c)	Silvicultural Operations	4747 Ha.	3.5	90900	366-387	
	5 (2)(d)	Protection of Plantations and Forests	3763 No. B/Pillars 37 No. of hiring of vehicle 1403 Ha. Removal of Lantana	14.65	339400	388-445	
	5(2)(e)	Pest and Disease Control in operation	50 Ha.	1.64	0	445	
	5(2)(f)	Forest fire prevention and Control operation	Fire watchers = 90626 MD Control Burning = 14046.32 Ha. Maint. of Fire line = 42903.72 mtr Hiring of vehicles, Tools and equipment, fire awareness etc.	10	155800	445-511	
	5(2)(g)	Soil and Moisture Conservation works	Roof Rain WHS 36 No. Natural springs 183 No.43726 Rmt trenches 7315 No. Str.	52.38	226700	512-587	
	5(2)h	Voluntary relocation of villagers from Protected Areas	0	0	0		
	5(2)(i)	Improvement of Wildlife Habitat	38 No.	0.18	0	588-589	Water ponds /Saltlicks / RRT
	5(2)j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors	0	0	0		

S. No.	CAF Act/ Rules	Activity	Proposed Outlay		Green Employment to be generated (in Mondays)	Page no.	Remark
			Phy Target	Fin Target			
	5(2)(k)	Establishment maintenance of animal rescue center and veterinary treatment facilities for wild animals	14 No.	1.12	0	589-590	Enclosure/ wildlife rescue equipment kits / Veterinary Treatment Facilities
	5(2)(l)	Supply of wood saving cooking appliances and other forest produce saving devices.	150 No. Solar water heater etc.	0.9	0	590	
	5(2)(m)	Management of Biological Diversity and Resources	10000 No. Monkey sterilizations.	2.55	25900	591-592	Monkey capturing studies / survey
		<b>Sub Total 5(2) Rule -</b>		<b>133.57</b>			
	5(3)(a).	Establishment upgradation and Maintenance of Modern Nursery	45 No.	6.75	105000	593	
	5(3)(b)	Promoting conservation sustainable use and documentation of biological diversity	1 No.	0.05	0	593	
	5(3) c	Purchase and maintenance of equipment of devices for communication, information and technology	232 No.	1.68	0	593-598	
	5(3)(d)	Construction upgradation and maintenance of inspection paths, forest roads, in forest areas, fire line, watch tower, check posts and timber posts	R/o & maint. of 278 No. Paths Timber depots 6 No., Check post 6 No..	8	124500	598-626	
	5(3)(e)	Construction of Residential and Official Buildings	65 No.	10.2	158900	598-626	
	5(3)f	Casual engagement of local people or labour to assist regular staff of state forest department	0	0	0		
	5(3)(g)	Survey and Mapping	42 No.	3	0	626-628	
	5(3)(h)	Independent concurrent monitoring and evaluation and third party monitoring	Ls	2	0	628	
	5(3)(i)	Publicity and Awareness Programme	0	0.8	0	628-630	



S. No.	CAF Act/ Rules	Activity	Proposed Outlay		Green Employment to be generated (in Mondays)	Page no.	Remark
			Phy Target	Fin Target			
	5(3)j	Production and distribution of quality planting material	20000 No.	0.4	8300	630	
	5(3)k	Forest certification and development of certification standards	0	0.5	0	631	
		<b>Sub Total 5(3) Rule -</b>		33.38			
		<b>Total of NPV</b>		166.95	1807600		
<b>4.</b>	6 (a) (i)	To offset incremental cost of CA /PCA at increased wages rate	0	0	0	632	
	6(a) (ii)	To offset increased cost of CAT at increased wage rate	0	0	0		
		<b>Sub Total of Interest</b>					
	6 (b) (iii)	To offset incremental cost of IWMP at increased wage rate	0	0	0		
	6 (b)(iv)	For disbursement of salary and allowances of member and staff	0	2	0		
	6 (b)(v)	For disbursement of sitting fees and allowances to nominated members	0	0.1	0		
	6 (b) (Vi)	Activities referred to in sub rule – (2) and (3) of Rule 5	0	0	0		
		<b>Sub Total Interest</b>		2.1			
	6 (b) (i)	Management of office establishment	0	0.29	0		
	6 (b) (ii)	Office equipment including computers and peripherals and its maintenance	0	0.3	0		
	6(b) (iii)	Hiring of staff cars for the use of officers and officials	0	0.45	0		
	6(b)iv	Hiring of buildings on lease for office establishment and residences of the officers	0	0.36	0		
	6(b) v	Other contingencies for management of state Authority	0	0	0		
	6(b) vi	Any other activity for management of forests and wildlife with the approval of steering Committee and included in the APO	0	0	0		

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## AGENDA ITEM NO. 6

### ANNUAL PLAN OF OPERATION (APO) OF GOA CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: 24.03.2023
2. Date of approval of EC of State/UT: 31-01-2023
3. Date of approval of the Steering Committee: 06-02-2023
4. Total Amount/Outlay: 40.62 Crores.
5. Funds status with the State/UT along with outlay proposed

(Rs. in crores)

S.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	13.94	13.16
	Catchment Area Treatment Plan	-	-
	Integrated Wildlife Management Plan	-	-
	Others	-	-
<b>2.</b>	<b>Net Present Value</b>	108.49	16.61
<b>3.</b>	<b>Interest</b>	102.84	10.83
<b>4.</b>	<b>Other Components</b>	2.49	

6. Funds released by State Government during the FY

(Rs. in Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	4.83	4.83	2.13	4.83
2019-20	20.17	15.52	6.86	20.17
2020-21	36.56	32.56	23.38	36.56
2021-22	21.55	32.70	17.76	21.55
2022-23	41.39	30.17	17.96 (upto Feb 23)	41.39

7. Financial outlays/ Budgetary Support under various Schemes (amount spent)

(Rs. in crore)

Year	CSS	CAMPA	State Plan/ Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/ Provisions		
<b>Forest Fire Prevention and Management Scheme</b>				
2020-21	0.5469	23.38	31.503	-
2021-22	0.0508	17.75	138.45	-
2022-23 (till Feb 23)	0.6615	17.96	86.31	-
2023-24*	-	-	-	-
<b>Integrated Development of Wildlife Habitat</b>				
2020-21	0.7888	-	-	-
2023-24*	-	-	-	-
<b>Conservation and Management of Mangrove &amp; Coral Reefs</b>				

2021-22	0.2136	-	-	-
2023-24	-	-	-	-

#### 8. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
(CA) 2426	(PCA) 1115	(CA+PCA) 3541	(CA) 2167	(PCA) 33	(CA+PCA) 2200	(CA+PCA) (470)	(CA+PCA) 62.13 %	(CA+PCA) 1141.4831

#### 9. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
1141.4831	470 Ha	335.75 Ha	335.74 Ha

#### 10. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1.</b>		<b>Site-specific activities as per Section 6(a) of the CAF Act, 2016</b>					
	Mandatory Activity	Compensatory Afforestation	470 Ha	5.87	-	Pg. No. 10 Sr. No. 1	-
		Other	-	7.29	-		-
		<b>Total site specific activities under CA</b>	470 Ha	13.16	-	Pg. No. 10	-
		<b>2. Activity as per Rule 5(2) of CAF Rules, 2018</b>					
	5(2)a	ANR	50 Ha	0.37	-	Pg. No. 11 Sr. No. (I) 1	-
	5(2)d	Protection of Plantations and forests	-	5.07	10000 Mandays	Pg. No. 11 Sr. No. (I)10	-

	5(2)f	Forest fire prevention and control operations	-	1.80	21000 Mandays	Pg. No. 12 Sr. No. (III) 1	-
	5(2)g	Soil and moisture conservation works	-	0.81	35 nos. (water retention structure)	Pg. No. 12 Sr. No. (II) 1	-
	5(2)i	Improvement of wildlife habitat	-	3.85	14000 Mandays	Pg. No. 13 Sr. No. (V)5	-
	5(2)m	Management of biological diversity and biological resource	-	1.31	5000 Mandays	Pg. No. 12 Sr. No. (IV)3	-
<b>3.</b>		<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>					
	5(3)c	Purchase and maintenance of equipment of devices for communication, information and technology	-	0.88	-	Pg. No. 14 -15 Sr. No. (VII)	-
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	-	1.52	-	Pg. No. 13 -14 Sr. No. (VI) 6	-
	5(3)h	Independent concurrent monitoring and evaluation and third party monitoring	-	0.25	-	Pg. No. 14 Sr. No. (VII) 6	-
	5(3)i	Publicity cum awareness programme	30 nos.	0.75	-	Pg. No. 14 Sr. No. (VII) 1-3	-
<b>4.</b>		<b>Activities as per Rule 6(a) of CAF Rules, 2018</b>					
	6(a)iv	For disbursement of salary and allowances of members and staff	-	0.29	-	Pg. No. 16 Sr. No. 4	-
<b>5.</b>		<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>					
	6(b)ii	Office equipment including computers and peripherals and its maintenance	-	0.15	-	Pg. No. 16 Sr. No. 9	-
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	-	10.40	-	Pg. No. 16	-

The wage rate of Goa State CAMPA for the Mandays is Rs. 405 per day.

## AGENDA ITEM NO. 7

### ANNUAL PLAN OF OPERATION (APO) OF KARNATAKA CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: 1.03.2023
2. Date of approval of EC of State/UT: 25.01.2023
3. Date of approval of the Steering Committee: 20.02.2023
4. Total Amount / Outlay: 307.77 Cr.

5. Funds status with the State/UT along with outlay proposed for Rs.

(Amount in Rs. Crores)

Sl No	CAMPA Activity	Fund Available with the State /UT (as on 31.03.2023)	Outlay proposed for 2023-24
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/ PCA/ Additional CA	93.61	21.70
	Catchment Area Treatment Plan	33.87	0.66
	Integrated Wildlife management Plan	-	-
	Others	-	-
<b>2.</b>	<b>Net Present Value</b>	231.33	177.55
<b>3.</b>	<b>Interest</b>	179.76	138.44
<b>4.</b>	<b>Other Components</b>	121.76	23.77

6. Funds released by State Government during the Financial Year

(Amount in Rs. Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund utilized by State Authority	Total Outlay for the current year
2018-19	101.42	101.40	88.85	101.42
2019-20	146.22	113.69*	104.14	150.75
2020-21	212.94	173.48	170.47	269.16
2021-22	321.09	301.59	299.99	321.09
2022-23	271.00	270.95	194.32	282.56

\* Rs.23.20 crores is saving amount of previous year

7. Financial outlays/ Budgetary Support under various Schemes (amount spent)

(Amount in Rs. Crores)

Year	CSS		CAMPA	State plan/ Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/ provisions			
2020-21	-	100.62	170.47	728.08	-
2021-22	-	79.12	299.99	809.08	-
2022-23	-	26.91	194.32	1072.05	-
2023-24*	Details filled up in Annexure IV				

\*Provision made in 2023-24. Details to be filled up in Annexure IV

8. Status of Compensatory Afforestation.

(Area in Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.03.2023			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance up to 2024-25
(CA)	(PCA)	(CA+PCA)	(CA)	(PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)
26417	2305.71	28722.71	24585.44	2263	26848.44	609.25	93.47	1874.54

9. Balance afforestation status.

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha.)		
	2023-24	2024-25	2025-26
1874.54	643.79 *	-	-

\* 618.40ha advance works carried out in financial year 2022-23 will be planted in 2023-24

10. Details of APO are as under.

(Amount in Rs. Crore and Area in Ha.)

Sl No	CAF Act/ Rules	Activity	Proposed Outlay		Green Employment to be generated (in Man-days)	Page No.	Remarks
			Phy. Target	Fin. Target			
1.		<b>Site Specific activity as per Section 6(a) of the CAF Act, 2016</b>					
	Mandatory Activity	Compensatory Afforestation	8696.144	18.58	888908	151-179	Raising & Maintenance

							of plantation - 14.48 cr Fresh work- 7.21 cr
		Catchment Area Treatment Plan	176.07	0.66	31576		Maintenance of plantation
		Integrated Wildlife Management Plan	-	-	-	-	-
		Other (WL mitigation plan/ SMC)	LS	3.12	149262	179	Fresh works
		<b>Total site-specific activities under CA</b>		<b>22.36</b>			
<b>2.</b>	<b>Activity as per Rule 5 (2) of CAF Rules, 2018</b>						
	5(2) a	ANR	53507.75	99.34	4752644	180 - 190	Raising & Maintenance of plantation - 70.59 cr Fresh work- 28.75 cr
	5(2) b	AR	4832.75	19.50	932923		Raising & Maintenance of plantation - 12.92 cr Fresh work- 6.58 cr
	5(2) c	Silvicultural Operations	-				
	5(2) d	Protection of Plantations and forests through CPT/compound wall/ rubble stone wall/fencing/retention wall/ chain link mesh etc.,	CPT/ Compound wall /Fencing/ Chain Link Mesh- 308.20 Km Retention wall- 2468.50 (Rmtr)	20.14	963542	191	Maintenance - 0.14 cr Fresh work- 20.00 cr
	5(2) f	Forest fire prevention and control operations	10000 km	13.00	621949	191	Fresh works
<b>3.</b>	<b>Activity as per Rule 5 (3) of CAF Rules, 2018</b>						

	5(3) a	Establishment, Maintenance of modern nurseries	20	1.00	47842	192	Fresh works
	5(3) c	Purchase and maintenance of devices for communication, information and technology	190Nos	2.00	95684	193	Fresh works
	5(3) d	Construction, up-gradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	Insp. paths - 25 km; Forest roads- 25km; Watch towers- 25nos; etc	4.00	191369	192	Fresh works

SI No	CAF Act/ Rules	Activity	Proposed Outlay		Green Employment to be generated (in Man-days)	Page No.	Remarks
			Phy. Target	Fin. Target			
	5(3) e	Construction of residential and official buildings	150 Nos	23.77	1137209	195	Fresh works
	5(3) g	Survey and mapping	950 km 120 RCC pillars	12.00	574106	191	Fresh works
	5(3) h	Independent concurrent monitoring and evaluation and third-party monitoring	3	1.00	47842	192	Fresh works
	5(3) i	Publicity cum awareness programme	50 Nos	1.00	47842	192	Fresh works
	5(3)	Training and Capacity building for staff and others	50 Nos	1.00	47842	192	Fresh works
		Pending Payment for the year 2022-23 (NPV)	LS	5.57	266481	-	Maintenance of plantation



Sl No	CAF Act/ Rules	Activity	Proposed Outlay		Green Employment to be generated (in Man- days)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>4.</b>		<b>Activity as per Rule 6(a) of CAF Rules, 2018</b>					
	6(a) iv	For disbursement of salary and allowances of members and staff	17 Nos	0.75	35882	193	
	5(2) h	Voluntary relocation of villages from protected areas	200 families	30.00	1435266	193	Fresh works
	5(2) i	Improvement of wildlife habitat (Maintenance of road network/grassland/ MAC mitigation/ Anti-poaching camp/ Marine rescue center/ Elephant barricades	1. Maint. of road network-500km 2. MAC-368.70km 3. Grass land-1485.14ha 4. APC-500Nos 5. Rail barricade-40km	83.00	4449325	193	Fresh works
	5(2) k	Elephant rescue center & Establishment, maintenance of animal rescue center and veterinary treatment facilities for wild animals	For management of elephant rescue center	5.00	239211	193	Fresh works
		-do-	For setting up Tiger/ leopard/ bears rescue center	5.00			
		-do-	For setting up other animals rescue center and veterinary facilities	5.00			

5.		<b>Activity as per Rule 6(b) of CAF Rules, 2018</b>					
	6(b)i	Management of office establishment	LS	0.29	-	194	

SI No	CAF Act/ Rules	Activity	Proposed Outlay		Green Employment to be generated (in Man-days)	Page No.	Remarks
			Phy. Target	Fin. Target			
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	1.Research – 762.30ha 2. three other projects	7.40	354032	194	Fresh works
		<b>Total:</b>		<b>362.12</b>	<b>1.732462</b>		

- Specify the wage rate: Rs.531.58 per day
- Specify the provision of wage employment in man-days during the proposed activities.- 1.73 Cr man-days

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## AGENDA ITEM NO. 8

### ANNUAL PLAN OF OPERATION (APO) OF KERALA CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: 5<sup>th</sup> December 2022
2. Date of approval of EC of State/UT: 20<sup>th</sup> December 2022
3. Date of approval of the Steering Committee: 27<sup>th</sup> January 2023
4. Total Amount/Outlay: 13.65 Crore
5. Funds status with the State/UT along with the Outlay proposed

(Amount in Rs. Crores)

S No	CAMPA Activity	Fund available with the State/UT	Outlay proposed
<b>1</b>	<b>Mandatory Activity</b>	<b>8,49,28,644</b>	<b>2,60,55,000</b>
	CA/PCA/Additional PCA	8,33,53,644	2,60,55,000
	CAT Plan	15,75,000	0
	IWMP	0	0
	Others	0	0
<b>2</b>	<b>Net Present Value</b>	<b>29,27,05,890</b>	<b>10,50,81,000</b>
<b>3</b>	<b>Interest</b>	<b>16,10,49,689</b>	<b>53,70,000</b>
<b>4</b>	<b>Other Components</b>	<b>79,72,879</b>	<b>0</b>

6. Funds released by State Government during the FY

(Amount In Rs. Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilized by State Authority	Total Outlay for the Year
2018-19	7.96	7.96	7.84	7.96
2019-20	0	0	0	0
2020-21	15.79	15.79	10.88	16.06
2021-22	25.13	16.08	16.03	27.19
2022-23	17.26	8.5	5.56*	22

7. Financial outlays/Budgetary support under various schemes				
				(Rs. In Crores)
Year	CSS	CAMPA	State plan/ Scheme Fund	
	Name of the scheme	Expenditure/ provisions		

2020-21	Integrated Development of Wildlife Habitats - Management of Wildlife Sanctuaries , National Parks & Kadalundi Vallikunnu Community Reserve including Protection of wildlife outside PAs	22.83	CAMP APO Amount - 15.78	STATE PLAN Amount - Rs. 191.92
	Project Tiger	14.04		
	Project Elephant	10.01		
	National Mission for Green India	15.52		
	Forest Fire Prevention & Management Scheme	4		
	Nilgiri Biosphere Reserve	2.5		
	Agasthyamala Biosphere Reserve	3		
	Wetland Conservation	4.24		
	Wayanad Wildlife Sanctuary for Voluntary Relocation of Settlements from Pas	0.01		
<b>Total</b>	<b>76.15</b>	<b>15.78</b>	<b>191.92</b>	
2021-22	Integrated Development of Wildlife Habitats - Management of Wildlife Sanctuaries , National Parks & Kadalundi Vallikunnu Community Reserve	7	CAMP APO Amount - 25.18	STATE PLAN Amount - Rs. 169.38
	Project Tiger	6.45		
	Project Elephant	5.2		
	National Mission for Green India	3.29		
	Forest Fire Prevention & Management Scheme	1.6		
	Nilgiri Biosphere Reserve	1		
	Agasthyamala Biosphere Reserve	1.2		
	Wetland Conservation	1.7		
Wayanad Wildlife Sanctuary for Voluntary Relocation of Settlements from Pas	6.9			
<b>Total</b>	<b>34.34</b>	<b>25.18</b>	<b>169.38</b>	

2022-23	Integrated Development of Wildlife Habitats - Management of Wildlife Sanctuaries , National Parks & Kadalundi Vallikunnu Community Reserve including Protection of wildlife outside PAs	27.7	CAMP APO Amount - 17.26	STATE PLAN Amount - Rs. 179.33
	Project Tiger	16.75		
	Project Elephant	13		
	National Mission for Green India	10		
	Forest Fire Prevention & Management Scheme	8.02		
	Nilgiri Biosphere Reserve	4.5		
	Agasthyamala Biosphere Reserve	3		
	Wetland Conservation	4.03		
	Wayanad Wildlife Sanctuary for Voluntary Relocation of Settlements from Pas	10		
	Minimum support price for minor forest produce	4		
	Integrated Development of Wildlife Habitats -protection of wildlife outside Pas			
	Recovery programme for Nilgiri Tahr	0		
	Recovery programme for saving critically endangered species (General)	0		
<b>Total</b>	<b>101.42</b>	<b>17.26</b>	<b>179.33</b>	
2023-24	Integrated Development of Wildlife Habitats - Management of Wildlife Sanctuaries , National Parks & Kadalundi Vallikunnu Community Reserve including Protection of wildlife outside PAs	27.1	CAMP APO Amount - 13.65	STATE PLAN Amount - Rs. 306.93
	Project Tiger	18.5		
	Project Elephant	14		
	National Mission for Green India	35		
	Forest Fire Prevention & Management Scheme	6		
	Nilgiri Biosphere Reserve	4.5		

	Agasthyamala Biosphere Reserve	5		
	Wetland Conservation	4.04		
	Wayanad Wildlife Sanctuary for Voluntary Relocation of Settlements from Pas	10		
	Minimum support price for minor forest produce	3		
	Recovery programme for Nilgiri Tahr	1.8		
	Recovery programme for saving critically endangered species (General)	1		
	<b>Total</b>	<b>129.94</b>	<b>13.65</b>	<b>306.93</b>

8. Status of Compensatory Afforestation

(Area in Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.03.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
(CA)	(PCA)	(CA-PCA)	(CA)	(PCA)	(CA-PCA)	(CA-PCA)	(CA-PCA)	(CA+PCA)
59025.11	0	59025.11	58701.137	0	58701.137	170.30	99.45	153.67 (170.30 Ha is proposed to be taken under CA during the FY 2023-24 from the total balance of 323.97 Ha)

9. Balance Afforestation Status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
323.97	170.30	153.67	-

10. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)							
S.No	CAF Act/Rules	Activity	Proposed Outlay		Green Employment to be generated (in Man days)	Page No	Remarks
			Physical Target	Financial Target			
<b>1</b>		<b>Site-specific activities as per Section 6(a) of the CAF Act, 2016</b>					
	Mandatory Activity	Compensatory Afforestation	251.15	2.61	29311	686	CA Creation and Maintenance
		<b>Total site specific activities under CA</b>	251.15	2.61			
<b>2</b>		<b>Activity as per Section 5(2) of the CAF Rules, 2018</b>					
	5(2)a	ANR	157.30	0.52	5878	690	Eco Restoration activities in monoculture plantations by planting indigenous / misc. species / preparatory works
	5(2)b	AR	192.9	2.68	30169	688	Eco Restoration activities in monoculture plantations by planting indigenous species & Maintenance
	5(2)d	Protection of Plantations and forest	40	0.74	8291	693	Protection of Research Plots and seed Production Areas
	5(2)f	Forest fire Prevention & Control operations	19375 MM + 110 Nos + 620 km	2.89	34472	713-716, 724 -735	Engaging fire gangs, Fire awareness campaigns, Purchase of fire fighting equipments and Creation of fire breaks
	5(2)g	Soil and moisture conservation works	0.35	0.57	6384	749 -756	Soil & Moisture Conservation, Gully plugging, Creation / Distillation of ponds

	5(2)i	Improvement of wildlife habitat	497.23	0.86	28758	702 712, 741 -748	Maintenance of Vayal, Removal of exotic weeds, Habitat enrichment, Engaging watchers to mitigate human animal conflict
	5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for Wild animals	LS	0.47		736	Establishment, operation and maintenance of animal rescue centre, and veterinary treatment facilities for wild animals, Maintenance of RRT vehicles
<b>3</b>		<b>Activity as per Section 5(3) of the CAF Rule, 2018</b>					
	5(3)h	Independent concurrent monitoring and evaluation and third party monitoring	LS	0.3	-		Third Party Monitoring and Evaluation by IFGTB
<b>4</b>		<b>Activity as per Section 6(a) of the CAF Rules, 2018</b>					
	6(a)i	To offset incremental cost of CA/PCA at increased wage rate	LS	0.05	-		
	6(a)iv	For disbursement of salary and allowances of members and staff	LS	0.34	-		
	6(a)v	For disbursement of sitting fees and allowances to nominated members	LS	0.01	-		
<b>5</b>		<b>Activity as per Section 6(b) of the CAF Rules, 2018</b>					
	6(b)i	Management of office establishment	LS	0.025	-		



	6(b)ii	Office equipment including computers and peripherals and its maintenance	LS	0.012	-		
	6(b)iii	Hiring of staff cars for the use of officers and officials	LS	0.05	-		
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	LS	0.05	-		

\*Specify the wage rate:- Rs. @800

\*Specify the provision of wage employment in mandays during proposed activities :- 1.43 lakh mandays

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## AGENDA ITEM NO. 9

### ANNUAL PLAN OF OPERATION (APO) OF MADHYA PRADESH CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt: 02.03.2023
2. Date of approval of EC of State/UT: 16.12.2022
3. Date of approval of the Steering Committee: 20.02.2023
4. Total Amount/Outlay: 1122.50 Cr.
5. Funds status with the State/UT along with outlay proposed

(Rs. in crores)

S.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	1980.38	116.44
	Catchment Area Treatment Plan	123.55	20.61
	Integrated Wildlife Management Plan	60.30	8.28
	Others	396.68	0
<b>2.</b>	<b>Net Present Value</b>	3178.20	959.99
<b>3.</b>	<b>Interest</b>	448.41	17.18
<b>4.</b>	<b>Other Components</b>		

6. Funds released by State Government during the FY

(Rs. in Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	383.67	272.36	287.67	
2019-20	456.09	453.50	343.06	
2020-21	860.93	500.00	475.00	
2021-22	713.46	616.88	561.09	
2022-23	889.84	856.04	647.00 (As on 20.03.23)	

7. Financial outlays/ Budgetary Support under various Schemes (amount spent)

(Rs. in crore)

Year	CSS		CAMPA	State Plan/ Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/ Provisions			
2020-21	(7488) राष्ट्रीय वनीकरण कार्यक्रम (ग्रीन इंडिया)	27.16	475.64	406.81	
	(3730) Wildlife Habitat वन्यजीव पयायवास का समन्वित विकास	95.91			
	(5109) ग्रामों के पुनर्वास हेतु मुआवजा	15.40			
	(5317) Modern Forest fire Control Method	2.69			
	(7458) समग्र बांस विकास योजना	15.55			

	(बांस ममशन)				
	(8863) प्रोजेक्ट एमरफ़ेंट	0.00			
	<b>योग</b>	<b>156.71</b>	<b>475.64</b>	<b>406.81</b>	
2021-22	(7488) राष्ट्रीय वनीकरण काययक्रम (ग्रीन इंडिया)	19.91	561.18	398.56	
	(3730) Wildlife Habitat वन्यजीव पयायवास का समन्वत ववकास	55.70			
	(5109) ग्रामों के पुनर्वास हेतु मुआवजा	8.60			
	(5317) Modern Forest fire Control Method	0.97			
	(7458) समग्र बांस ववकास योजना (बांस ममशन)	9.18			
	(8863) प्रोजेक्ट एमरफ़ेंट	0.21			
	<b>योग</b>	<b>94.57</b>	<b>561.18</b>	<b>398.56</b>	
2022-23 Expenditure as on (19.03.2023)	(7488) राष्ट्रीय वनीकरण काययक्रम (ग्रीन इंडिया)	38.28			
	(3730) Wildlife Habitat वन्यजीव पयायवास का समन्वत ववकास	56.15			
	(5109) ग्रामों के पुनर्वास हेतु मुआवजा	15.00			
	(5317) Modern Forest fire Control Method	9.55			
	(7458) समग्र बांस ववकास योजना (बांस ममशन)	0.96			
	(8863) प्रोजेक्ट एमरफ़ेंट	0.02			
	<b>योग</b>	<b>119.96</b>	<b>623.70</b>	<b>455.70</b>	
2023-24* (Proposal)	(7488) राष्ट्रीय वनीकरण काययक्रम (ग्रीन इंडिया)	96.15	1123.50	572.04	
	(3730) Wildlife Habitat वन्यजीव पयायवास का समन्वत ववकास	24.42			
	(5109) ग्रामों के पुनर्वास हेतु मुआवजा	100.74			

	(5317) Modern Forest fire Control Method	28.98			
	(7458) समग्र बांस ववकास योजना (बांस ममशन)				
	(8863) प्रोजेक्ट एमरफ़ेंट	0.65			
	<b>योग</b>	<b>250.94</b>	<b>1123.50</b>	<b>572.04</b>	

\*Provision made in 2023-24. Details to be filled up in Annexure IV

#### 7. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
(CA)	(PCA)	(CA+PCA)	(CA)	(PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)
289154	-	289154	246979		246979	1416	85	40759

#### 8. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
40759	1200	1400	1600

#### 9. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1.</b>	<b>Site-specific activities as per Section 6(a) of the CAF Act, 2016</b>						
	Mandatory Activity	Compensatory Afforestation	1416	24.57	1904762	1,28-29	
		Catchment Area Treatment Plan	79962	20.61	523810	3, 55	
		Integrated wildlife Management Plan	87036	8.28	139286	4,56	
		Other	31912	91.87	1093690	2, 30-54	
		<b>Total site specific activities under CA</b>	-	145.33	-	-	
<b>2. Activity as per Rule 5(2) of CAF Rules, 2018</b>							

	5(2)a	ANR					
	5(2)b	AR	41636	370.40	4409523	184-226	
	5(2)c	Silvicultural Operations	-	-	-	-	
	5(2)d	Protection of Plantations and forests	-	33.91	403690	273-274, 19, 20	
	5(2)e	Pest and disease control in forests	LS	1.47	-	12, 256	
	5(2)f	Forest fire prevention and control operations	-	37.43	4455952	15-16	
	5(2)g	Soil and moisture conservation works	-	6.16	73333	10, 240-244	
	5(2)h	Voluntary relocation of villages from protected areas	-	109.20	-	10, 245	
	5(2)i	Improvement of wildlife habitat	-	69.82	831190	10, 227-239	
	5(2)j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors	-	0.00	-	-	
	5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals	-	6.00	73000	12	
	5(2)l	Supply of wood saving, cooking appliances and other forest produce saving devices.	-	-	-	-	
	5(2)m	Management of biological diversity and biological resource	30	1.45	17261	8	
		Maintenance of previous Year Plantation under NPV	146676	167.70	1996428	5, 57-183	
<b>3.</b>	<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>						
	5(3)a	Establishment, Maintenance of modern nurseries	-	17.16	204285	23, 288-292	-
	5(3)b	Promoting conservation, sustainable use and	-	-	-	-	-

		documentation of biological diversity					
	5(3)c	Purchase and maintenance of equipment of devices for communication, information and technology	-	12.41	-	19	-
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	-	-	-	-	-
	5(3)e	Construction of residential and official buildings	-	76.17	906785	22, 275-286	
	5(3)f	Casual engagement of local people or labours to assist regular staff of State Forest Department	-	-	-	-	-
	5(3)g	Survey and mapping	-	-	-	-	
	5(3)h	Independent concurrent monitoring and evaluation and third party monitoring	-	1.00	11904	24	
	5(3)i	Publicity cum awareness programme	-	12.72	151428	27, 300	
	5(3)j	Production and distribution of quality planting material	-	-	-	-	
	5(3)k	Forest certification and development of certification standards	-	-	-	-	
		Other		24.71			
<b>4.</b>	<b>Activities as per Rule 6(a) of CAF Rules, 2018</b>						
	6(a)i	To offset incremental cost of CA/PCA at increased wage rate	-	-	-	-	-
	6(a)ii	To offset increment cost of CAT at increased wage rate	-	-	-	-	-

	6(a)iii	To offset incremental cost of IWMP at increased wage rate	-	-	-	-	-
	6(a)iv	For disbursement of salary and allowances of members and staff	-	2.61	-	26,299	-
	6(a)v	For disbursement of sitting fees and allowances to nominated members	-	-	-	-	
	6(a)vi	Activities referred to in sub rule-(2) and (3) of Rule 5	-	-	-	-	
<b>5.</b>	<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>						
	6(b)i	Management of office establishment	-	0.62	-	26,299	
	6(b)ii	Office equipment including computers and peripherals and its maintenance	-	0.22	-	26,299	
	6(b)iii	Hiring of staff cars for the use of officers and officials	-	0.33	-	26,299	
	6(b)iv	Hiring of buildings on lease for office establishment and residences of the officers	-	-	-	-	
	6(b)v	Other contingencies for management of State Authority	-	0.68	-	26,299	
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	LS	25.00	-		

\* Specify the wage rate: Rs. 420/- per day

\* Specify the provision of wage employment in mandays during the proposed activities

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## AGENDA ITEM NO. 10

### ANNUAL PLAN OF OPERATION (APO) OF MAHARASHTRA CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: 23.02.2023
2. Date of approval of EC of State/UT: 13.01.2023
3. Date of approval of the Steering Committee: 13.02.2023
4. Total Amount/Outlay: Rs. 841.33
5. Funds status with the State/UT along with outlay proposed

(Rs. in crores)

S.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	1141.35	53.15
	Catchment Area Treatment Plan	169.75	9.23
	Integrated Wildlife Management Plan	37.28	1.92
	Others	2120.17	7.41
<b>2.</b>	<b>Net Present Value</b>	441.67	759.17
<b>3.</b>	<b>Interest</b>	219.25	10.44
	<b>TOTAL</b>	4129.46	841.33

6. Funds released by State Government during the FY

(Rs. in Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	230.00	225.00	217.39	-
2019-20	499.38	151.52	151.52	-
2020-21	599.32	260.00	236.58	-
2021-22	688.27	487.50	422.43	-
2022-23	708.11	490.00	289.68*	-

\*Upto February 2023

7. Financial outlays/ Budgetary Support under various Schemes (amount spent)

(Rs. in crore)

Year	CSS		CAMPA	State Plan/ Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/ Provisions			
2020-21	-	70.35	236.58	714.16	253.75
2021-22	-	99.70	422.43	1094.39	269.71
2022-23	-	407.73	708.11	1879.46	332.04
2023-24*	-	366.55	841.33	2198.64	297.62

8. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
(CA)	(PCA)	(CA+PCA)	(CA)	(PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)



104174	3659	107833	97893	3247	101140	546	94	6146
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9. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
6146	546	844	4756

10. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1.</b>	<b>Site-specific activities as per Section 6(a) of the CAF Act, 2016</b>						
	Mandatory Activity	Compensatory Afforestation	10560.146	53.15	680561	49-142	
		Catchment Area Treatment Plan		9.23	118229	143-164	
		Integrated wildlife Management Plan		1.92	24610	165-166	
		Other		7.41	94892	162-184	
		<b>Total site specific activities under CA</b>		71.71			
<b>2.</b>	<b>Activity as per Rule 5(2) of CAF Rules, 2018</b>						
	5(2)a	ANR	1785.00	19.37	248030	285 to 286, 395 to 397, 434, 546 to 547, 596, 698	
	5(2)b	AR	9276.93 Ha.	29.35	375841	286 to 292, 306 to 308, 315 to 316, 361 to 364, 397 to 399, 421 to 425, 434 to 437, 547 to 549, 597 to 598, 699 to 700, 796	Artificial Regeneration Plantation, Plantation along river banks, Afforestation in scrub and barren land (LiDAR), Gramvan Plantation (Maintenance)
	5(2)c	Silvicultural Operations	5129 Ha.	88.11	1128206	293 to 297, 308, 317 to	Fodder Development Works (PPO to SYO)

						319, 364, 400, 438 to 442, 550, 701 to 704, 826	
	5(2)d	Protection of Plantations and forests	212555 Rmt. 40756 Nos.	134.06	1716660	297 to 298, 309, 319 to 333, 365 to 372, 401 to 405, 425 to 427, 443 to 459, 551 to 557, 598 to 643, 704 to 705, 748 to 750, 796 to 798, 826 to 832	Encroachment removal & Forest Protection, Survey, Demarcation & Fencing of Sensitive forest areas, Boundary Pillar, Construction, upgradation and maintenance of Protection camps / Protection Huts/Forest Custody/Labour Shed, Establishment and maintenance of wireless networks, Improving mobility of frontline staff for forest protection & patrolling.
	5(2)e	Pest and disease control in forests		0.00	0		
	5(2)f	Forest fire prevention and control operations	33586 Km. 4727 Nos.	27.03	576957	333 to 346, 373 to 392, 405 to 432, 459 to 492, 558 to 583, 643 to 684, 705 to 732, 750 to 773, 798 to 807, 832 to 837	Cutting and burning of fire lines and Fire watchers
	5(2)g	Soil and moisture conservation works	1858 Nos.	100.12	1282076	299 to 303, 309 to 312, 346 to 350, 413 to 415, 428 to 431, 492 to 541, 584 to 593, 685 to 694, 733 to 745, 774 to 775	Construction of Gabion Bandhara, Construction of Cement Bandhare, Construction of check dams, Creation of Forest ponds/Vantale/Khodtadi, Earthen/Mati Nala Bunds, Soil and Water Conservation / Harvesting works (LIDAR)
	5(2)h	Voluntary relocation of villages from protected areas	10 Nos.	100.00		807 to 808, 838	
	5(2)i	Improvement of wildlife habitat	-	48.09	615764	351 to 352, 775 to 785, 808 to 822, 838 to 839, 854	All wildlife Management works will be carried out as per approved Management plan, Meadow development, Creation & maintenance of water sources/water holes for

							wildlife, Eradication of invasive species
	5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals	-	45.84		785 to 786, 822 to 823, 839, 854	Establishment, operation and maintenance of animal rescue centre/ Transit treatment Centre, Veterinary treatment facilities for wild animals, Animal seizing & capturing devices, Rescue emergency operations, Strengthening of Rapid rescue teams, Management of rewilding of tiger cubs
	5(2)l	Supply of wood saving, cooking appliances and other forest produce saving devices.	-	3.00		352, 542, 694, 786	
	5(2)m	Management of biological diversity and biological resource	-	13.14		842 to 846, 855	New research projects and Maintenance of Ongoing Project by research wing of Maharashtra Forest Department, Base studies for forestry and wildlife related subjects, Conservation of Wildlife
		<b>TOTAL</b>		608.10			
<b>3.</b>	<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>						
	5(3)a	Establishment, Maintenance of modern nurseries	14 Nos.	1.74	29708	352, 416, 593	
	5(3)b	Promoting conservation, sustainable use and documentation of biological diversity	-	24.86	0	848 to 851	Documentation and Publications of study materials, Conducting Workshops/Trainings/Seminars/ Conferences for promoting conservation & sustainable use of biological diversity and capacity building of the frontline staff & officers, Capacity building and gender sensitization of Forest Staff's through FTI /TERI/Forest Academies/other Institutions/CFRMC/JFMC /PRI, Improving training inputs through guest faculties in Forest Training Institutes / Forest Academies

	5(3)c	Purchase and maintenance of equipment of devices for communication, information and technology	-	1.50		853	
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	33.94 Km. 143 Nos.	12.19	156136	304, 313, 353, 392 to 393, 416 to 417, 432, 543, 594, 694 to 695, 745, 787 to 793, 823, 839	
	5(3)e	Construction of residential and official buildings	318 Nos.	105.28	1348066	304 to 305, 313 to 314, 354 to 359, 393 to 394, 417 to 419, 532 to 433, 543 to 545, 594 to 595, 695 to 696, 746 to 747, 794 to 795, 824 to 825, 840 to 841, 847, 851	Construction of Type I Quarters, Type II Quarters, Type III Quarters, Range Office & Amenities for Woman Front line staff
	5(3)f	Casual engagement of local people or labours to assist regular staff of State Forest Department	-	1.00	21342	282	
	5(3)g	Survey and mapping	-	0.50	10671	282	
	5(3)h	Independent concurrent monitoring and evaluation and third party monitoring	-	1.00		857	
	5(3)i	Publicity cum awareness programme	-	2.50		305, 314, 360, 394, 420, 433, 545, 595, 697, 747, 795, 825, 841, 852	
	5(3)j	Production and distribution of	-	0.50	10671	282	

		quality planting material					
	Total of 5(3)			151.07			
	Total NPV			759.17			
<b>4.</b>	<b>Activities as per Rule 6(a) of CAF Rules, 2018</b>						
	6(a)i	To offset incremental cost of CA/PCA at increased wage rate	-	3.83	81633	51-142, 167-184	
	6(a)ii	To offset increment cost of CAT at increased wage rate	-	0.92	19705	143-164	
	6(a)iii	To offset incremental cost of IWMP at increased wage rate	-	0.19	4102	165-166	
	6(a)iv	For disbursement of salary and allowances of members and staff	-	2.00	53355	283-284	
	6(a)v	For disbursement of sitting fees and allowances to nominated members	-	0.50		284	
	6(a)vi	Activities referred to in sub rule-(2) and (3) of Rule 5	-	1.00		284	
	Total of 6(a)			8.44			
<b>5.</b>	<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>						
	6(b)i	Management of office establishment	-	0.50		284	
	6(b)ii	Office equipment including computers and peripherals and its maintenance	-	0.50		284	
	6(b)iii	Hiring of staff cars for the use of officers and officials	-	0.50		284	
	6(b)iv	Hiring of buildings on lease for office establishment and residences of the officers	-	0.50		284	
	Total of 6(b)			2.00			
	Total of Interest			10.44			

\* Specify the wage rate:

\* Specify the provision of wage employment in mandays during the proposed activities

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**AGENDA ITEM NO. 11.**

**ANNUAL PLAN OF OPERATION (APO) OF MEGHALAYA CAMPA FOR THE FINANCIAL YEAR 2023-24**

**Annual Plan of Operation (APO) for the financial year 2023-24 of Meghalaya State CAMPA**

1. Date of Receipt by NA: **30<sup>th</sup> January, 2023**
2. Date of approval of EC of State/UT: **5<sup>th</sup> December, 2022**
3. Date of approval of the Steering Committee: **09<sup>th</sup> January, 2023**
4. Total Amount/outlay: **Rs. 31,96,52,202/-**

**Details of APO are as under:**

Sl.No.	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays)	Remarks/ Page No.
			Phy. Target	Fin. Target		
<b>1.</b>						
	Mandatory Activity	Compensatory Afforestation	808.137 Ha	₹ 5,87,88,482.61	177080.42	1-4
			742 Beds	₹ 35,09,298		
			1667 mt.	₹ 65,55,600		
			1 No	₹ 3,13,281		
		Catchment Area Treatment Plan			-	
		Integrated wildlife Management Plan			-	
		Other (Biodiversity Conservation Programme Lafarge)	100 Ha	₹ 26,91,000	6900	5
			8 Nos.	₹ 27,07,060		
		<b>Total site specific activities under CA</b>				
<b>2.</b>						
	5(2)a	ANR	163 Ha	₹ 24,59,106	6925	6
			15000 Nos.	₹ 2,41,728		
	5(2)b	AR	1970.46 Ha	₹ 5,70,84,940	153727	7-9
			802 Beds	₹ 19,66,848		
			4 Km	₹ 6,24,000		
			445 Nos.	₹ 2,77,680		
	5(2)c	Silvicultural Operations	-	-	-	
	5(2)d	Protection of plantations and forests	2264.6 Rmt.	₹ 89,65,727	-	10-11
			464 Nos.	₹ 2,05,92,248		
			804.5 mtrs	₹ 41,10,420		
			52 Kms	₹ 9,12,000		
	5(2)e	Pest and disease control in forests				
	5(2)f	Forest fire prevention and control operations	141 Nos.	₹ 1,01,38,590	-	12-14
			2050 mtrs	₹ 14,57,900		
			153 Kms	₹ 20,04,440		
			36 Rkm	₹ 3,24,000		
			125.068 Ha	₹ 4,66,503		

	5(2)g	Soil and moisture conservation works	15010 Nos.	₹ 54,39,196	49559	15-16
			315 Rm	₹ 1,78,06,000		
			560.08 Ha	₹ 1,61,82,473		
			996 Beds	₹ 25,83,945		
			3.6 Km	₹ 5,61,600		
	5(2)h	Voluntary relocation of villages from protected areas			-	
	5(2) i	Improvement of Wildlife habitat	23297 Nos.	₹ 2,45,14,800	11,827	17-22
			4 Rm	₹ 24,400		
			141.514 Ha	₹ 33,02,379		
			10 cum	₹ 3,00,000		
			150.55 Km	₹ 19,84,600		
	5(2) m	Management of biological diversity and biological resource	4 Nos.	₹ 36,71,330		23
			2000 m	₹ 38,00,000		
<b>3.</b>						
	5 (3) a	Establishment, Maintenance of modern nurseries	109 Beds	₹ 6,17,760	7610	24
			50 RM	₹ 1,50,000		
			4 Nos	₹ 22,00,000		
	5 (3) b	Promoting conservation, sustainable use and documentation of biological diversity	216 Ha	₹ 9,72,636	-	25
			4 Nos.	₹ 2,00,000		
	5 (3) c	Purchase and maintenance of equipment of devices for communication, information and technology	30 Nos.	₹ 20,13,500	-	26
	5 (3) d & 5(3) e	Construction, up gradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check post and timber posts	87 Nos.	₹ 2,52,94,020	-	27-29
			89 m	₹ 1,01,100		
			60 Sq. ft	₹ 55,020		
	5(3) f	Casual engagement of local people or labours to assist regular staff of State Forest Department	122 Nos.	₹ 23,54,240	-	30
	5(3) g	Survey and mapping	3 Nos.	₹ 1,37,89,352	-	31
<b>4.</b>						
	6 (a) iv	For disbursement of salary and allowances of members and staff	7 Nos.	₹ 17,28,000	-	32
<b>5.</b>						

	6 (b)i	Management of office establishment		₹ 15,000	-	32
	6 (b) ii	Office equipment including computers and peripherals and its maintenance		₹ 10,00,000	-	32
	6 (b) vi	Any other activities for Management of forests and wildlife with the approval of Steering Committee and included in the APO		₹ 28,00,000	-	32

**Note: Wage Rate:** Rs. 390/mandays and **Provision of wage employment in man-days:** 413628.4

5. Funds status with the State/UT along with outlay proposed (Amount Rs. in Crores)

Sl. No	CAMPA Activity	Fund Available with the State/UT	Outlay Proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	6,00,28,437	7,45,64,722
	Catchment Area Treatment Plan	98,46,000	0
	Integrated Wildlife Management Plan	0	0
	Others	4,95,10,251	0
<b>2.</b>	Net Present Value	104,54,47,410	23,95,44,481
<b>3.</b>	Interest	46,82,33,655	55,43,000
<b>4.</b>	Other Components		
	<b>Total</b>	<b>1,63,30,65,753</b>	<b>31,96,52,202</b>

6. Funds released by the State Government during the FY

(Amount Rs. in Crores)

Year	APO approved by National Authority during current year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	NIL	NIL	NIL	NIL
2019-20	NIL	NIL	NIL	NIL
2020-21	33.97	22.42	22.07	33.97
2021-22	36.40	36.40	34.68	36.40
2022-23	26.67	Fund yet to be released by State Government	NA	NA

7. Financial outlays/Budgetary Support under various Schemes (amount spent)

Year	CSS		CAMPA	State Plan/Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/Provisions			



2020-21	<b>NA</b>	22.07	<b>NA</b>
2021-22		34.68	
2022-23		An amount of 26.67 has been approved by National Authority and the same is yet to be released by State Government.	
2023-24		A total amount of Rs. 31,96,52,202/- has been approved by the Steering Committee of the State and the APO for the financial year 2023-24 has been sent to National Authority for approval on 30 <sup>th</sup> January, 2023.	

8. Status of Compensatory Afforestation

(Area in Ha)

Afforestation required as per site specific scheme approved proposal for diversion of forest land under FC Act, 1980 till 31.03.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance up to 2024-25
(CA)	(PCA)	(CA+PCA)	(CA)	(PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)
1219.09	234.61	1453.7	907.85	14.71	922.56	293.416	63%	237.724

9. Balance afforestation Status

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
146.38	128.556	NA	NA

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## AGENDA ITEM NO. 12

### ANNUAL PLAN OF OPERATION (APO) OF ODISHA CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: **15.2.2023**
2. Date of approval of EC of State/UT: **20.12.2022**
3. Date of approval of the Steering Committee: **11.01.2023**
4. Total Amount/Outlay: **Rs 1085.95 Crore**
5. Funds status with the State/UT along with outlay proposed

(Amount in Rs. crores)

Sl.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	342.21	94.76
	Catchment Area Treatment Plan	68.32	1.15
	Integrated Wildlife Management Plan	738.34	107.24
	Others	219.02	12.81
<b>2.</b>	<b>Net Present Value</b>	2190.20	731.42
<b>3.</b>	<b>Interest</b>	540.18	138.57
<b>4.</b>	<b>Other Components (interest from Investment)</b>	576.93	
	<b>Total</b>	<b>4675.21</b>	<b>1085.95</b>

(upto 31.12.2022)

6. Funds released by State Government during the FY

(Amount in Rs. Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	- APO SKIPPED -			
2019-20	610.52	600.00	556.33	618.52
2020-21	773.39	803.53	676.34	803.66
2021-22	901.03	900.37	841.67	903.03
2022-23	1191.31	1121.75	722.86	1241.34

(upto 31.12.2022)

7. Financial Outlay/Budgetary Support under Various Schemes(amount Spent)

(Amount in Rs. Crores)

Year	CSS		CAMPA	State Plan	External Aided Management Project	Any other Schemes
	Name of Scheme	Expenditure/ Provision				
2020-21	Green India Mission, Elephant Management , Project Tiger, Mangrove etc	69.86	667.34	180.05	20.33	330.50
2021-22		39.49	841.67	88.55	8.15	291.37
2022-23		49.65	1191.31	316.44	5.10	109.22
2023-24		71.37	1085.94	146.40	-	443.16

8. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
CA	PCA	CA+PCA	CA	PCA	CA+PCA	CA+PCA	CA+PCA	CA+PCA
		80843.09			75278.289	1927.129	93.11	3637.672*

9. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
5564.807	1927.129	1818.836	1818.836

10. Details of APO are as under

(Amount in Rs. Crore and Area in Ha. Man-days in Lakhs)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mondays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1. Site-specific activities as per Section 6 a) of the CAF Act, 2016</b>							
	Mandatory Activity	Compensatory Afforestation	2592.3725 Ha & 29346 nos tree Plantation	94.76	17.073	31-38	
		Catchment Area Treatment Plan	145	1.15	0.207		
		Integrated wildlife Management Plan & SSWLM	113 Nos Projects	107.24	12.881		
		Other	484.4535	12.81	1.538		
		<b>Total site specific activities under CA</b>		215.96	31.699		
<b>2. Activity as per Rule 5(2) of CAF Rules, 2018</b>							
	5(2)a	ANR	28574	205.29	43.162	48-62	Including AJY

	5(2)b	AR	2552	67.91	12.236		
	5(2)c	Silvicultural Operations	95000	27.81	7.933	83-84	
	5(2)d	Protection of Plantations and forests	Georeferencing of 13046.87 Sq km of Notified forest Blocks and 3965.17 Sq Km of Revenue village and 316 Nos of Protection vehicle including WL	69.62	2.090	115-118 129-140	
	5(2)e	Pest and disease control in forests	NIL	NIL			
	5(2)f	Forest fire prevention and control operations	Procurement of Fire blowers, Trainings, Fire awareness Camps and 213 Nos Fire protection Squads with hired vehicle & 58 Fire squads in PAs	39.10	5.555	88-91	
	5(2)g	Soil and moisture conservation works	15424	53.99	8.106	92-93	
	5(2)h	Voluntary relocation of villages from protected areas	30 No of villages from 9 Forest Divisions	50.00	-	118-119	
	5(2)i	Improvement of wildlife habitat	Creation & maintenance of Waterbodies, Meadows, saltlicks, WHS Plantation of Fruit and Fodder around the water bodies, Bamboo Seedball, Ficus etc , Black bug Conservation etc	47.71	5.729	104-115	
	5(2)j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors	NIL	NIL			
	5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals	Maintenance of Nandankanan and other Zoos	11.00	0.90	115-116	
	5(2)l	Supply of wood saving, cooking appliances and other forest produce saving	NIL	-			

		devices.					
	5(2)m	Management of biological diversity and biological resource	Bio-diversity assessment in PAs and Monitoring and Surveillance and protection of meta population of WL	19.72	3.24	116-117	
3.	<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>						
	5(3)(1)	Capacity Building	Capacity Building of Forest Staffs	2.00	-	120	
	5(3)a	Establishment, Maintenance of modern nurseries	Establishment and Improvement of existing Permanent Nurseries	5.00	0.450	121-122	
	5(3)b	Promoting conservation, sustainable use and documentation of biological diversity	NIL	NIL			
	5(3)c	Purchase and maintenance of equipment of devices for communication, information and technology	Upgradation of Communication of information Technology, Server infrastructure development and maint. there of, Installation and Mint. Of VHF, Equipment for monitoring of Wild Animals , Communication and IT and Data Management	17.50	-	122-123 130-133	
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	Creation of 28500 KM Fireline, Forest Roads 2147 KM , 20 Nos of Fire Watch towers	19.46	2.922	123-127, 133-134	
	5(3)e	Construction of residential and official buildings	272 Nos	47.00	4.234	123-127, 134	
	5(3)f	Casual engagement of local people or labours to assist regular staff of State Forest Department	227 Squads	38.07	8.172	128-129	
	5(3)g	Survey and mapping		1.73		129	
	5(3)h	Independent concurrent monitoring and evaluation and		2.50		130	

		third paily monitoring					
	5(3)i	Publicity cum awareness Programme		6.00		130	
	5(3)j	Production and distribution of quality planting material	NIL	NIL			
	5(3)k	Forest certification and development of certification standards	NIL	NIL			
<b>4.</b>	<b>Activities as oer Rule 6(a) of CAF Rules, 2018</b>						
	6(a)i	To offset incremental cost of CA/PCA at increased wage rate		2.00	0.60	135	
	6(a)ii	To offset increment cost of CATP at increased wage rate	NIL				
	6(a)iii	To offset incremental cost of IWMP at increased wage rate	NIL				
<b>5.</b>	<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>						
	6(b)i	Management of office establishment		8.00		137	
	6(b)ii	Office equipment including computers and peripherals and its maintenance					
	6(b)iii	Hiring of staff cars for the use of officers and officials					
	6(b)iv	Hiring of buildings on lease for office establishment and residences of the officers					
	6(b)v	Other contingencies for management of State Authority		2.00		137	
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	Creation & Maintenance of 18 months Old Seedling 3.88 Crore Nos	126.57	26.60	135-136	
<b>Total</b>				<b>1085.95</b>	<b>163.23</b>		

\* Specify the wage rate: **Rs. 333/- mandays**

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## AGENDA ITEM NO. 13

### ANNUAL PLAN OF OPERATION (APO) OF RAJASTHAN CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt: 10.02.2023
2. Date of approval of EC of State/UT: 03.01.2023
3. Date of approval of the Steering Committee: 24.01.2023
4. Total Amount/Outlay: Rs. 298.57crores
5. The detailed APO is placed at **Annexure IV**
6. Funds status with the State/UT along with outlay proposed

(Rs. in crores)

S.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	211.39	55.33
	Catchment Area Treatment Plan	63.75	4.00
	Integrated Wildlife Management Plan	120.07	7.00
<b>2.</b>	<b>Net Present Value</b>	639.04	228.76
<b>3.</b>	<b>Interest</b>	209.65	3.47
<b>4.</b>	<b>Other Components</b>	102.66	0.00
	<b>TOTAL</b>	<b>1346.56</b>	<b>298.56</b>

7. Funds released by State Government during the FY

(Rs. in Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	205.67	169.24	132.82	-
2019-20	265.39	100.00	80.10	-
2020-21	280.70	250.00	186.45	-
2021-22	286.70	203.18	182.36	-
2022-23 upto 28.02.2023	249.19	230.88	167.51	-

8. Financial outlays/ Budgetary Support under various Schemes (amount spent)

(Rs. in crore)

Year	CSS		CAMPA	State Plan/ Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/ Provisions			
2020-21	-	18.19	186.45	179.91	-
2021-22	-	24.77	182.36	406.91	-
2022-23	-	9.76	167.51	411.48	-
2023-24*	-	-	298.56	-	-

9. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022	Afforestation carried out in the State as per site specific scheme till 2022-23	Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25

Total CA (NFL/DFL) including ACA/PCA to be done	Total CA (NFL/DFL) carried out including ACA/PCA	(CA+PCA)	(CA+PCA)	(CA+PCA)
41372.19	35698.83	1649.28	86.29	5673.36

10. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
5673.36	1649.28	2677.53	1446.55

11. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1.</b>		<b>Site-specific activities as per Section 6(a) of the CAF Act, 2016</b>					
	Mandatory Activity	Compensatory Afforestation	31502.09	5063.76	1368583	Pg. No. 51-74	
		Catchment Area Treatment Plan	LS	400.00	108108	Pg. No. 97-114	
		Integrated wildlife Management Plan	LS	650.00	175676	Pg. No. 75-95	
		Other	LS	519.82	99953	Committed Works	
		<b>Total site specific activities under CA</b>		<b>6633.58</b>	<b>1752320</b>		
<b>2.</b>	<b>Activity as per Rule 5(2) of CAF Rules, 2018</b>						
	5(2)a	ANR	60780.00	9124.50	2466080	Pg. No. 115-134	
	5(2)b	AR	9349.72	2723.93	718853	Pg. No. 135-145	
	5(2)c	Silvicultural Operations	2950.00	455.68	123158	Pg. No. 146-149	
	5(2)d	Protection of Plantations and forests	-	3061.71	636949	Pg. No. 150-181	
	5(2)e	Pest and disease control in forests	-	-	-	-	
	5(2)f	Forest fire prevention and control operations	1790.50	125.26	33855	Pg. No. 182-191	
	5(2)g	Soil and moisture conservation works	120.00	349.50	94459	Pg. No. 192-244	
	5(2)h	Voluntary relocation of	LS	2500.00	-	Pg. No. 245-250	



		villages from protected areas					
	5(2)i	Improvement of wildlife habitat	-	1091.54	295011	Pg. No. 251-285	
	5(2)j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors	-	-	-	-	
	5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals	67.00	200.00	-	Pg. No. 286-290	
	5(2)l	Supply of wood saving, cooking appliances and other forest produce saving devices.	-	-	-	-	
	5(2)m	Management of biological diversity and biological resource	LS	41.844	-	291-333	
<b>3.</b>	<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>						
	5(3)a	Establishment, Maintenance of modern nurseries	-	1675.00	445946	Pg. No. 334-341	
	5(3)b	Promoting conservation, sustainable use and documentation of biological diversity	-	-	-	-	
	5(3)c	Purchase and maintenance of equipment of devices for communication, information and technology	LS	262.00	-	Pg. No. 342-346	
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	-	170.00	45946	Pg. No. 347-350	
	5(3)e	Construction of residential and official buildings	-	523.03	141359	Pg. No. 351-358	

	5(3)f	Casual engagement of local people or labours to assist regular staff of State Forest Department	-	-	-	-	
	5(3)g	Survey and mapping	LS	20.00	-	Pg. No. 359	
	5(3)h	Independent concurrent monitoring and evaluation and third party monitoring	LS	202.00	-	Pg. No. 360 & 342-346	
	5(3)i	Publicity cum awareness programme	-	-	-	-	
	5(3)j	Production and distribution of quality planting material	-	-	-	-	
	5(3)k	Forest certification and development of certification standards	-	-	-	-	
	5(3)(1)	Capacity Building	LS	100.00	-	Pg. No. 361-376	
	5(2) & 5(3)	Pending Liabilities of NPV Items	LS	250.00	-	-	
<b>4.</b>	<b>Activities as per Rule 6(a) of CAF Rules, 2018</b>						
	6(a)i	To offset incremental cost of CA/PCA at increased wage rate	LS	100.00	-	-	
	6(a)ii	To offset increment cost of CAT at increased wage rate			-	-	
	6(a)iii	To offset incremental cost of IWMP at increased wage rate			-	-	
	6(a)iv	For disbursement of salary and allowances of members and staff	LS	170.00	-	-	
	6(a)v	For disbursement of sitting fees and allowances to nominated members	LS	7.00	-	-	
	6(a)vi	Activities referred to in sub rule-(2) and (3) of Rule 5	-	-	-	-	

5.	Activities as per Rule 6(b) of CAF Rules, 2018						
	6(b)i	Management of office establishment	LS	20.00	-	-	
	6(b)ii	Office equipment including computers and peripherals and its maintenance				-	
	6(b)iii	Hiring of staff cars for the use of officers and officials	LS	10.00	-	-	
	6(b)iv	Hiring of buildings on lease for office establishment and residences of the officers	-	-	-	-	
	6(b)v	Other contingencies for management of State Authority	LS	40.00	-	-	
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	-	-	-	-	

\* Specify the wage rate: @ Rs. 259/- per day labour rate.

\* Specify the provision of wage employment in mandays during the proposed activities

## AGENDA ITEM NO. 14

### ANNUAL PLAN OF OPERATION (APO) OF UTTAR PRADESH CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: 14.03.2023
2. Date of approval of EC of State/UT: 12.12.2022
3. Date of approval of the Steering Committee: 21.02.2023
4. Total Amount/Outlay:Rs. 190.00 crores
5. Funds status with the State/UT along with outlay proposed

(Rs. in crores)

S.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	627.11	44.42
	Catchment Area Treatment Plan	5.27	0.56
	Integrated Wildlife Management Plan	0.00	0.00
	Others	131.40	13.84
<b>2.</b>	<b>Net Present Value</b>	<b>77.57</b>	<b>55.61</b>
<b>3.</b>	<b>Interest</b>	<b>105.04</b>	<b>75.57</b>
<b>4.</b>	<b>Other Components</b>	-	-
	<b>TOTAL</b>	<b>946.39</b>	<b>190.00</b>

6. Funds released by State Government during the FY

(Rs. in Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	150.60	-	-	APO year 2023-24: Rs. 190.00 crores
2019-20	285.68	197.21	62.32	
2020-21	442.01	271.25	252.06	
2021-22	586.89	381.13	362.12	
2022-23	344.08	233.20	233.20	

7. Financial outlays/ Budgetary Support under various Schemes (amount spent)

(Rs. in crore)

Year	CSS		Campa	State Plan/Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/Provisions			
2020-21	Forest Fire prevention and management Scheme	1.8687	252.06	1056.6421	
	Project Tiger	20.4894			
	Integrated Development of Wildlife Habitates	5.8068			
	National Plan for conservation of aquatic eco system	0.0976			
	National Bamboo Mission	6.4172			
	Sub-mission on agro forestry	4.9894			
2021-22	Project Tiger	17.7123	362.12	1498.75	
	Project Elephant	0.8048			

	National Plan for conservation of aquatic eco system	1.5319			
	National Bamboo Mission	3.8909			
	Sub-mission on agro forestry	3.9792			
<b>2022-23</b>	Project Tiger	17.8542	233.20	1742.49	
	Integrated Development of Wildlife Habitates	4.0251			
<b>2023-24*</b>	Forest Fire prevention and management Scheme	3.0091	190.00	1772.68	
	Project Tiger	32.1749			
	Project Elephant	2.5366			
	Integrated Development of Wildlife Habitates	12.5600			
	National Plan for conservation of aquatic eco system	8.6000			
	National Bamboo Mission	14.6095			
	Green India Mission	100.0300			

8. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
(CA)	(PCA)	(CA+PCA)	(CA)	(PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)
32479.04	-	32479.04*	24782.72	-	24782.72	1355.43	76.30	7696.32

9. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
	1355.43	2796.61	3544.28

10. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays) Estimated	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1</b>	<b>Site-specific activities as per Section 6 (a) of the CAF Act, 2016</b>						
		<b>Compensatory Afforestation</b>					

	Mandatory Acitivity	Compensatory Afforestation during 2023 rains	1355.4261 ha. 59562 No. of Plants (Other than ha.)	13.32	397668	129- 186	Annexure- 10
		Advance Soil Work for planting 2024 rains	2796.6134 ha. 119047 No. of Plants (Other than ha.)	15.93	475390	187- 255	Annexure- 11
		Maintenance (Year 2014 to 2022)	13245.26463 ha. 498182 No. of Plants (Other than ha.)	15.17	603952	21	
		<b>Total site specific activities under CA</b>		<b>44.42</b>			
		Catchment Area Treatment Plan	LS	<b>0.56</b>	11128	256- 259	Annexure- 12
		Integreated Wildlife Management Plan					
		<b>Others</b>	<b>7 Works (As per APO Annexure-13)</b>	<b>13.84</b>	413032	260- 336	Annexure- 13
<b>2</b>	<b>Activity as per Rule 5(2) of the CAF Rules, 2018</b>						
	5 (2) a	ANR					
	5 (2) b	AR	21664.95 ha.	13.08	520612	26	2nd year Maintenance of 2021 Non-CA Plantation
	5 (2) c	Silvicultural Operation					
	5 (2) d	Protection of plantation and Forests	LS	3.00		363- 365	Annexure- 24
	5 (2) e	Pest and disease control in Forests					
	5 (2) f	Forest Fire Prevention and Control Operation					
	5 (2) g	Soil and moisture conservation works					
	5 (2) h	Voluntary relocation of villages from protected areas					
	5 (2) i	Improvement of wildlife habitat	3 Works (As per APO Annexure-15 to 18)	10.88	108260	366- 400	Annexure- 25 to 27
	5 (2) j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors					
	5 (2) k	Establishment, maintenance of animal rescue center and veterinary treatment facilities for wild animals	Nos. 4	18.13	180400	401- 402	Annexure- 28

	5 (2) l	Supply of wood saving, cooking appliances and other forest produce saving devices.					
	5 (2)m	Management of biological diversity and biological resource					
	<b>Total 5(3)-</b>			<b>45.09</b>			
<b>3</b>	<b>Activities as per Rule 5(3) of the CAF Rules, 2018</b>						
	5 (3) a	Establishment, maintenance of modern nurseries	21 Nos.	1.47	14626	403	Annexure-29
	5 (3) b	Promotion conservation sustainable use and documentation of biological diversity	LS	1.92		404-405	Annexure-30
	5 (3) c	Purchase and maintenance of equipment of devices for communication, information and technology	LS	3.16		406	Annexure-31
	5 (3) d	Construction upgradation and maintenance of inspection paths, forest roads in forest areas fire line, watch towers, check posts and timber posts					
	5 (3) e	Construction of residential and official buildings					
	5 (3) f	Casual engagement of local people or labours to assist regular staff of State Forest Department					
	5 (3) g	Survey and mapping	LS	1.00		406	Annexure-32
	5 (3) h	Independent concurrent monitoring and evaluation and third party monitoring	LS	1.00			
	5 (3) i	Publicity cum awareness programme					
	5 (3) j	Production and distribution of quality planting material					
	5 (3) k	Forest certificate and development of certification standards.					
	5 (3)g	Making and strengthening of working plans	LS	1.96		407	Annexure-33
	<b>Total 5(3)-</b>			<b>10.51</b>			
	<b>Total (CA+CAT+OTHER+NPV) Component</b>			<b>114.42</b>			
<b>4</b>	<b>Activities as per Rule 6 (a) of CAF Rules, 2018</b>						
	6 (a) i	To offse incremental cost ofCA/PCA at increased wage rate				30	

	6 (a) ii	To offse incremental cost of CAT at increased wage rate					
	6 (a) iii	To offse incremental cost of IWMP at increased wage rate					
	6 (a) iv	For desbursement of salary and allowances of members and staff	LS	6.19			
	6 (a) v	For desbursement of sitting fees and allowances to nominated members					
	6 (a) vi	Activities reffered to in sub Rule-(2) and (3) of Rule (5)	38212 ha.	66.16			1st year Maintenance of 2022 Non-CA Plantation
	<b>Total 6(a)-</b>			<b>72.35</b>			
<b>5</b>	<b>Activities as per Rule 6 (b) of CAF Rules, 2018</b>						
	6 (b) i	Management of office establishment,	LS	1.69			
	6 (b) ii	Office equipment including computers and peripherals and its maintenance	LS	0.66			
	6 (b) iii	Hiring of staff cars for the use of officers and officials					
	6 (b) iv	Hiring of building on lease for office eshtablishment of State Authority					
	6 (b) v	Other contegencies for management of State Authority	LS	0.55			
	6 (b) vi	Any other activity for management of forests and wildlife with the approval of steering Committee and included in the APO	LS	0.33			
	<b>Total 6(a)-</b>			<b>3.23</b>			
	<b>Total of Accrued Interest Outlay</b>			<b>75.58</b>			
	<b>Grand Total (CA+CAT+OTHER+NPV+INTEREST)</b>			<b>190.00</b>			

\* Specify the wage rate: Rs. 201.00 per Mandays

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## AGENDA ITEM NO. 15

### ANNUAL PLAN OF OPERATION (APO) OF WEST BENGAL CAMPA FOR THE FINANCIAL YEAR 2023-24

1. Date of Receipt by NA: 15.12.2022
2. Date of approval of EC of State/UT: 18.01.2023
3. Date of approval of the Steering Committee: 24.02.2023
4. Total Amount/Outlay: Rs. 86.90 crores
5. Funds status with the State/UT along with outlay proposed

(Rs. in crores)

S.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA	32.77	5.22
	Catchment Area Treatment Plan	11.54	-
	Integrated Wildlife Management Plan	0.3822	15.58
<b>2.</b>	<b>Net Present Value</b>	109.32	63.35
<b>3.</b>	<b>Interest</b>	42.32	2.75
<b>4.</b>	<b>Other Components</b>	25.86	-
	<b>Total</b>	222.1922	86.90

6. Funds released by State Government during the FY

(Rs. in Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19	21.22	21.22	25.36	
2019-20	70.07	-	13.53*	
2020-21	74.00	8.48	8.25**	
2021-22	58.30	19.25	12.92	
2022-23	52.83	22.73	12.77(on going)	

\* expenditure from CAMPA bank account i.e. Ad-hoc CAMPA fund

\*\* expenditure of Rs. 1.90 crore from Ad-hoc CAMPA fund and Rs. 6.35 crore from SCAF fund

7. Financial outlays/ Budgetary Support under various Schemes (amount spent)

(Rs. in crore)

Year	CSS		CAMPA	State Plan/ Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/ Provisions			
2020-21	Project Tiger, Project Elephant, IDWH, Sundarban Mangrove	23.44	8.25	-	-
2021-22	-do-	25.70	12.92	-	-
2022-23	-do-	Ongoing	12.77 (on going)	-	-
2023-24*	Fire Prevention and control operations, IWMP, Forest protection, Project elephant, vehicles	-	86.9	107.4	-

8. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
(CA)	(PCA)	(CA+PCA)	(CA)	(PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)
3266.98	-	3266.98	2946.639	-	2946.639	321.658	90.19	320.341

9. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26
	321.658	320.341	-

10. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1.</b>	<b>Site-specific activities as per Section 6(a) of the CAF Act, 2016</b>						
	Mandatory Activity	Compensatory Afforestation	1193.528	5.22		43-55	
		Catchment Area Treatment Plan					
		Integrated wildlife Management Plan	As per APO	15.58		56-65	
		Other					
		<b>Total site specific activities under CA</b>		20.80			
<b>2.</b>	<b>Activity as per Rule 5(2) of CAF Rules, 2018</b>						
	5(2)a	ANR					
	5(2)b	AR	1697.52	4.33		67-76	
	5(2)c	Silvicultural Operations					
	5(2)d	Protection of Plantations and forests	As per APO	5.91		77-121	
	5(2)e	Pest and disease control in forests					

	5(2)f	Forest fire prevention and control operations	As per APO	3.17		94-120	
	5(2)g	Soil and moisture conservation works					
	5(2)h	Voluntary relocation of villages from protected areas	246 family	36.90		192	
	5(2)i	Improvement of wildlife habitat	As per APO	8.75		122-173	
	5(2)j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors					
	5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals	As per APO	0.175		174	
	5(2)l	Supply of wood saving, cooking appliances and other forest produce saving devices.	3 Nos.	0.24		175	
	5(2)m	Management of biological diversity and biological resource	As per APO	0.10			
<b>3.</b>		<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>					
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	As per APO	1.21		176-180	
	5(3)e	Construction of residential and official buildings	As per APO	2.38		181-191	
	5(3)h	Independent concurrent monitoring and evaluation and third party monitoring	As per APO	0.14			

	5(3)i	Publicity cum awareness programme		0.05			
<b>4.</b>	<b>Activities as per Rule 6(a) of CAF Rules, 2018</b>						
	6(a)i	To offset incremental cost of CA/PCA at increased wage rate		0.05			
	6(a)iv	For disbursement of salary and allowances of members and staff		1.25			
	6(a)v	For disbursement of sitting fees and allowances to nominated members		0.02			
	6(a)vi	Activities referred to in sub rule-(2) and (3) of Rule 5		0.40			
<b>5.</b>	<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>						
	6(b)i	Management of office establishment		0.60			
	6(b)ii	Office equipment including computers and peripherals and its maintenance		0.03			
	6(b)iii	Hiring of staff cars for the use of officers and officials		0.20			
	6(b)v	Other contingencies for management of State Authority		0.01			
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO		0.19			

\* Specify the wage rate: Rs. 284/Md

\* Specify the provision of wage employment in man-days during the proposed activities

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**SCHEMES/PROJECT PROPOSED BY INDIAN COUNCIL OF FORESTRY RESEARCH  
AND EDUCATION (ICFRE)**

<b>Agenda Item No.</b>	<b>Scheme/Project</b>	<b>(Rs. in Crores)</b>
16 A	Livelihood improvement of forest dependent communities through resource survey, sustainable harvesting & market linkages of commercially important NTFPs	9.94
16 B	Deciphering salinity responses in <i>Salvadora persica</i> and <i>Tamarix aphylla</i> at morpho-physiological and functional genomics level	0.39
16 C	Tree improvement programme on <i>Corymbia</i> (Syn. Eucalyptus) hybrids: Field evaluation for agroforestry and end use testing of wood for short rotation timber, plywood, paper and pulp	7.174
16 D	Production of quality planting material of <i>Melia dubia</i> Cav. for commercial deployment with specific end-uses	6.82
16 E	Delineating <i>Melia species</i> through conventional and non-conventional approaches	1.39
16 F	Exploration, Selection and Evaluation of <i>Chukrasia tabularis</i> A.Juss germplasm for genetic improvement	0.98
16 G	Identification of superior genotypes of <i>Olea ferruginea</i> Royale bearing high oil content in North Western Himalayan Region and development of its propagation and cultivation techniques	0.475
16 H	Study on regulation and management of cone induction and seed yield in <i>Pinus gerardiana</i> Wall. Ex D.Don”	0.57
16 I	Testing of selected superior strains of <i>Picrorhiza kurroa</i> Royale ex Benth. and <i>Valeriana jatamansi</i> Jones through regional and national level multi-location trials to release their varieties for the benefit of the farming communities	0.597
16 J	Genetic improvement of <i>Chloroxylon swietenia</i> DC. for increasing the availability of medium timber in dry lands of India.	0.42
16 K	Establishment of clonal trial and evaluation of selected clones of <i>Pongamia pinnata</i> (L.) Pierre for fruit yield and oil content	0.48
16 L	Development and Deployment of Teak ( <i>Tectona grandis</i> Linn.f) Half and Full sib Families: Harnessing Provenance Variations towards developing hybrids	0.638
16 M	Variability studies <i>Wrightia tinctoria</i> -an important species for handcraft sector in Karnataka	0.306
16 N	Hazardous Division Proposal for PMU for Green Credit Scheme by ICFRE	20.05
	<b>Grand Total</b>	<b>50.23</b>

### AGENDA ITEM NO. 16 A

#### Project Proposal by ICFRE: “Livelihood improvement of forest dependent communities through resource survey, sustainable harvesting & market linkages of commercially important NTFPs”

<b>Name of Scheme</b>	<b>Livelihood improvement of forest dependent communities through resource survey, sustainable harvesting &amp; market linkages of commercially important NTFPs”</b>
<b>Implementing Agency</b>	<b>ICFRE</b>
<b>Project Duration/Period</b>	<b>4 years</b>
<b>Project Outlay</b>	<b>Rs. 9.94 crores</b>
<b>Objectives of the Project</b>	
<ul style="list-style-type: none"> <li>• Resource assessment and mapping</li> <li>• Development of sustainable harvesting protocols</li> <li>• Development of value addition and processing protocols</li> <li>• Standardization of propagation and cultivation techniques for NTFP species</li> <li>• Capacity building to forest dependent communities and</li> <li>• Value chain on NTFPs/ products</li> </ul>	
<b>Outcome of Project:</b>	
<ul style="list-style-type: none"> <li>• Development of a baseline data on availability of selected NTFP species in the forest areas of the concerned states for sustainable management and utilization of resources.</li> <li>• Development of packages of practices for sustainable harvesting techniques.</li> <li>• Development of pilot demonstration unit for dissemination purposes • Strengthening of marketing channels for end use products.</li> <li>• Outreach of the technologies to the stakeholders especially youth, SHGs and NTFP gatherers through capacity building</li> </ul>	

#### Budget Estimate

<b>S. No.</b>	<b>Institutes/ SAUs</b>	<b>Budget for 4 years (in lakh)</b>
<b>1</b>	Tropical Forest Research Institute, Jabalpur (M.P.)	<b>181.98</b>
<b>2</b>	Institute of Forest Genetics and Tree Breeding, Coimbatore (Tamil Nadu).	<b>130.80</b>
<b>3</b>	Institute of Forest Biodiversity, Hyderabad (Telangana)	<b>73.27</b>
<b>4</b>	Rain Forest Research Institute, Jorhat (Assam)	<b>70.04</b>
<b>5</b>	Forest Research Centre for Eco-rehabilitation (FRCER), Prayagraj (U.P.)	<b>66.75</b>
<b>6</b>	Institute of Wood Science and Technology, Bengaluru (Karnataka)	<b>51.54</b>
<b>7</b>	Arid Forest Research Institute, Jodhpur (Rajasthan)	<b>79.84</b>
<b>8</b>	Institute of Forest Productivity, Ranchi (Jharkhand)	<b>153.12</b>
<b>9</b>	Himalayan Forest Research Institute, Shimla (HP)	<b>83.08</b>
<b>10</b>	Forest Research Institute, Dehradun (Uttarakhand)	<b>103.08</b>
	<b>Total Budget of the project (Rs. in lakh)</b>	<b>993.50</b>

**AGENDA ITEM NO.16 B**

**Project Proposal by ICFRE:” Deciphering salinity responses in *Salvadora persica* and *Tamarix aphylla* at morpho-physiological and functional genomics level**

<b>Name of Scheme</b>	<b>Deciphering salinity responses in <i>Salvadora persica</i> and <i>Tamarix aphylla</i> at morpho-physiological and functional genomics level</b>
<b>Implementing Agency</b>	ICFRE (AFRI, Jodhpur)
<b>Project Duration/Period</b>	<b>03 Years</b>
<b>Project Outlay</b>	<b>Rs. 0.39 crore</b>
<b>Objectives of the Project</b>	
<ul style="list-style-type: none"> <li>• To observe and record growth and morphological/developmental parameters of plants of the selected species grown at different salt concentrations</li> <li>• To investigate Physiological and Biochemical parameters indicative of salinity response in selected species</li> <li>• To carry out expression analyses for some important salinity tolerance genes, i.e., <i>NHX1</i>, <i>SOS1</i> and <i>HKT1</i></li> <li>• To understand the correlation between the trees morpho-physiology and functional genomic characteristics under salt stress and to develop strategies for future genetic improvement programmes for trees suitable for abiotically challenged ecosystems, eco-restoration and climate change resilience</li> </ul>	
<b>Outcome of Project:</b>	
<ul style="list-style-type: none"> <li>• Deciphering salinity tolerance levels and salinity response of the selected tree species for future work.</li> <li>• Deciphering the growth and development changes in response to salinity stress.</li> <li>• Determination of the important physiological/biochemical changes in response to salinity stress.</li> <li>• Determination of changes in expression levels of salinity tolerance genes for transporters <i>SOS1</i>, <i>NHX1</i> and <i>HKT1</i></li> </ul>	

## AGENDA ITEM NO.16 C

### **Project Proposal by ICFRE: “Tree improvement programme on *Corymbia* (Syn. *Eucalyptus*) hybrids: Field evaluation for agroforestry and end use testing of wood for short rotation timber, plywood, paper and pulp**

<b>Name of Scheme</b>	<b>Tree Improvement Programme on <i>Corymbia</i> (Syn. <i>Eucalyptus</i>) hybrids (<i>C. citriodora</i> Hook. <i>C. torelliana</i> F.v. Muell): Field Evaluation for AGRO-FORESTRY and End Use Testing of Wood for Short Rotation Timber, Plywood, Paper and Pulp.</b>
<b>Implementing Agency</b>	<b>ICFRE</b>
<b>Project Duration/Period</b>	<b>06 Years</b>
<b>Project Outlay</b>	<b>Rs. 7.174 Crores</b>
<p><b>Objectives of the Project</b></p> <ul style="list-style-type: none"> <li>• Study of genetic stability and uniformity of clonal hybrids in on-going multi location trails using classical and molecular approaches.</li> <li>• New hybrids and development of its cloning protocols.</li> <li>• Multi location field trails across India through institutional network.</li> <li>• Study of Hybrid performance as tree crops in agro-forestry</li> <li>• Round log of different ages for veneer and plywood production.</li> <li>• Composite wood from differCnt ages and parts</li> <li>• Evaluation of wood drying characteristics and development of wood drying schedule</li> <li>• Evaluation of preservative intake related properties</li> <li>• Evaluation of physical and mechanical properties of the timber</li> <li>• Determination of working quality index</li> </ul>	
<p><b>Out Come of Project:</b></p> <ul style="list-style-type: none"> <li>• Selected hybrids can be fast growing and high-income source species for farmers and community. The expected outcome of this proposed proposal is development of cultivated hybrid clonal varieties for timber, plywood, composite wood and pulp in short rotation.</li> <li>• Registration and release of clonal hybrid varieties of <i>Corymbia</i>.</li> <li>• Disease and insect-pest management of clonal hybrids.</li> <li>• Plywood and composite wood industry will get new raw materials with all necessary technical information. (Wood technologist Association, president of Federation of saw miller and timber and plywood manufacturers liked this species and wanted to include as raw material).</li> <li>• Methodologies for manufacturing of plywood and composite wood.</li> <li>• Solid wood industry will get new timber and import can be reduced. The programme result will give parameters like wood quality index, drying schedule, evaluation of natural durability, preservative intake, physical mechanical properties, wood working ability necessary for timber use.</li> <li>• Methodologies will be develop for facilitation of different timber uses of <i>Corymbia</i> hybrids like in furniture, structural uses in wooden frames, wooden tiles and panels, high end pellet industries etc.</li> <li>• Demonstration plantations and trainings will be provide to different stakeholder. Also, technical manuals/booklets will be developed to assist stakeholders. Scientific information will be published in research papers. Varieties and patents will be developed as intellectual properties.</li> </ul>	



## Budget Estimate

### Budget of FRI

(Rs in Lakhs)

Sl. No.	Heads	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	<b>Recurring (Component)</b>						
	A	40.09	34.48	33.75	37.93	41.77	188.02
	B	5.9	7.34	7.6	6.9		27.74
	C	5.00	16.7	17.42	17.21	17.06	73.39
	D	6.9	8.64	8.9	8.2		32.64
	E	7.2	7.64	7.9	7.9		30.64
		65.09	74.8	75.57	78.14	58.83	352.43
	<b>Non recurring - Capital assets</b>						
	A	64.00	20.00	0.00	0.00	0.00	84.00
	C	16.00	0.00	0.00	0.00	0.00	16.00
	D	12.00	0.00	0.00	0.00	0.00	12.00
	E	16.0	0.00	0.00	0.00	0.00	16.0
	Sub total	108.00	20.00	0.00	0.00	0.00	128.00
<b>Total</b>		112.00	94.8	75.57	78.14	58.83	480.43

### Budget of CSFRE - Allahabad

		Year 1	Year 2	Year 3	Year 4	Year 5	Total
	<b>Recurring</b>	7.20	7.64	7.90	7.90	8.00	38.64
	<b>Non recurring</b>	16.00	0.00	0.00	0.00	0.00	16.00
<b>Total</b>		23.2	7.64	7.9	7.9	8	54.64

### Budget of IFGTB

Sl. No.	Heads	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	<b>Recurring</b>	10.44	13.4	14.89	15.43	17.02	71.18
2	<b>Non recurring</b>	20.00					20.00
	<b>Total</b>	30.44	13.4	14.89	15.43	17.02	91.18

### Budget of TFRI

Sl. No.	Heads	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	<b>Recurring</b>	10.44	13.4	14.89	15.43	17.02	71.18
2	<b>Non recurring</b>	20.00					20.00
	<b>Total</b>	30.44	13.4	14.89	15.43	17.02	91.18

**Grand Total: Rs. 717.43 lakhs**

## AGENDA ITEM NO.16 D

### **Project Proposal by ICFRE:” Production of quality planting material of *Melia dubia* Cav. for commercial deployment with specific end-uses.”**

<b>Name of Scheme</b>	<b>Production of quality planting material of <i>Melia dubia</i> Cav. for commercial deployment with specific end-uses</b>
<b>Implementing Agency</b>	ICFRE
<b>Project Duration/Period</b>	<b>05 years</b>
<b>Project Outlay</b>	<b>Rs. 6.82 Crores</b>
<p><b>Objectives of the Project</b></p> <ul style="list-style-type: none"> <li>• Genetic Improvement of <i>Melia</i> species for deployment and diversification of agroforestry in India</li> <li>• To screen and develop high biomass yielding genotypes / clones, and development of protocols for clonal propagation and commercial deployment.</li> <li>• To manufacture and analyse face veneer, plywood, pulp and other products from woods of different genotypes and recommend best suitable genotype for specific end use.</li> <li>• To characterize selected genotypes as per published DUS descriptors and registration with PPV&amp;FRA for protection of IPR.</li> <li>• To carry out association mapping for identifying genotypes with promising traits of economic importance and apply biotechnological tools to enhance gains of applied breeding.</li> <li>• To develop agroforestry models for different geographical regions and climatic conditions, and drive suitable tree crop interactions for higher returns under agroforestry.</li> <li>• To screen productive and genetically diverse parents and establishment of germplasm repositories across research and academic organizations.</li> <li>• To develop strategies for tree breeding to produce hybrids by analysing reproductive and breeding characteristics.</li> <li>• To characterize different genotypes for morphological, anatomical, physiological, biochemical and pulping traits and establish clonal propagation tools with rejuvenation. of adult genotypes and commercial production of clonal planting stock.</li> <li>• To establish breeding populations for various end uses and future breeding and biotechnological programmes.</li> <li>• To release productive germplasm for commercial cultivation both at regional and national level.</li> </ul>	
<p><b>Outcome of Project:</b></p> <ul style="list-style-type: none"> <li>• The project would successfully ensure availability of improved planting stock with well characterized genotypes which would be deployed for commercial cultivation in different geographical locations.</li> <li>• It has been considered to be a serious lacuna even for indigenous tree species to work on sporadic germplasm without keeping end product in view. The presented approach would ensure development of repositories of genetically divergent germplasm across the locations and institutions.</li> <li>• The farmers of India though have been growing few species as commercial tree crop for decades, and availability of productive planting stock with diverse nature has always been restriction. The</li> </ul>	

project will therefore ensure availability of planting stock of indigenous tree species which will have more productivity than that of existing stocks of exotic stocks.

- In wood-based pulp and paper industry, supply of raw material is increasing substantially owing to increased capacity which has enhanced pressure on costs raw material. During last five years, paper industry has invested around Rs 20,000 Crore towards capacity enhancement, technology upgradation and various acquisitions, average cost of various raw materials rose at a compounded annual rate of 10 – 15 per cent or even more, compared with six and seven per cent for wood pulp and waste paper, respectively. Similar is the situation with plywood and timber industries whereby shortage of wood based raw material has become cause of concern
- Though agro-forestry policy was implemented in 2014 by Government of India without much filed impacts, it has therefore become utmost essential to develop such planting materials that could easily be promoted in an economic manner under such robust systems.
- The project is expected to help both farmers / growers in doubling the income and wood- based industry to have uninterrupted supply of quality raw material for production of goods conforming to international standards. The pressure on industry is also expected to be reduced to import face veneer and reduce burden of foreign imports

## AGENDA ITEM NO.16 E

### Project Proposal by ICFRE: “Delineating *Melia species* through conventional and non-conventional approaches”

<b>Name of Scheme</b>	<b>Delineating <i>Melia species</i> through conventional and non-conventional approaches</b>
<b>Implementing Agency</b>	ICFRE
<b>Project Duration/Period</b>	<b>03 years</b>
<b>Project Out Lay</b>	<b>Rs. 1.39 crores</b>
<b>Objectives of the Project</b> <ul style="list-style-type: none"><li>• Delineating <i>Melia species</i> through conventional and non-conventional approaches.</li></ul>	
<b>Out Come of Project:</b> <ul style="list-style-type: none"><li>• The species has gained substantial importance as quality raw material for various wood-based industries, particularly in panel industry for face veneering and therefore species of <i>Melia dubia</i> Cav. and <i>Melia azedarach</i> Linn. need to be delaminated through conventional and non- conventional approaches.</li><li>• The outcome of the project will help in correct identification of species of <i>Melia dubia</i> Cav. and <i>Melia azedarach</i> Linn. through conventional and non-conventional approaches and help in developing authority of ICFRE in co-ordination with professional agency of Botanical Survey of India.</li></ul>	

## AGENDA ITEM NO.16 F

### Project Proposal by ICFRE:” Exploration, Selection and Evaluation of *Chukrasia tabularis* A.Juss germplasm for genetic improvement”

<b>Name of Scheme</b>	<b>Exploration, Selection and Evaluation of <i>Chukrasia tabularis</i> A.Juss germplasm for genetic improvement</b>
<b>Implementing Agency</b>	<b>ICFRE</b>
<b>Project Duration/Period</b>	<b>05 Years</b>
<b>Project Outlay</b>	<b>0.98 Crore</b>
<b>Objectives of the Project</b> <ul style="list-style-type: none"><li>• Genetic Improvement of <i>Chukrasia tabularis</i> A. Juss</li><li>• Exploration and collection of phenotypically superior germplasm for genetic evaluation</li><li>• Population genetic analysis of <i>Chukrasia tabularis</i></li><li>• Genetic evaluation of selected half sib progenies at early growth stage</li></ul>	

## AGENDA ITEM NO.16 G

**Project Proposal by ICFRE:” Identification of superior genotypes of *Olea ferruginea* Royale bearing high oil content in North Western Himalayan Region and development of its propagation and cultivation techniques”**

<b>Name of Scheme</b>	<b>“Identification of superior genotypes of <i>Olea ferruginea</i> Royale bearing high oil content in North Western Himalayan Region and development of its propagation and cultivation techniques</b>
<b>Implementing Agency</b>	ICFRE
<b>Project Duration/Period</b>	<b>4 Years</b>
<b>Project Outlay</b>	<b>0.475 Crore</b>
<b>Objectives of the Project</b>	
<ul style="list-style-type: none"> <li>• To survey and select superior genotypes of <i>O. ferruginea</i> on the basis of morphometric traits for higher seed production.</li> <li>• To identify high oil yielding individuals of <i>O. ferruginea</i></li> <li>• To develop propagation and cultivation technique for <i>O. ferruginea</i> for mass production and cultivation of superior planting stock</li> <li>• To conduct training and awareness programme for the end user.</li> </ul>	
<b>Outcome of Project:</b>	
<ul style="list-style-type: none"> <li>• Superior plus trees of <i>O. ferruginea</i> for higher seed production and oil yield will be identified and marked in natural population</li> <li>• Standardization of propagation technique for mass multiplication by sexual/asexual method.</li> <li>• Standard cultivation technique for higher growth, survival and yield.</li> <li>• Restoration, conservation and domestication of indigenous olive species.</li> <li>• Dissemination of the project output to the end users</li> </ul>	

**Detail of Budget year wise is given below**

**(Rs. in Lakhs)**

Sl. No.	Budget Heads	First Year	Second Year	Third Year	Fourth Year	Total
1	1 JPF@21,600/month including HRA for two years and then JPF will be promoted as Senior Project Fellow (SPF) @24800/month including HRA 1 PA @ 19000 PM (Fixed)	4.87	4.87	5.26	5.26	20.26
2	Travel (including TA/ DA, Fuel etc.)	1.50	2.00	2.00	2.50	8.00
3	Material and supplies – M&S (consumables, glassware and chemicals)	0.50	1.00	0.50	0.20	2.20
4	Forest Research Expenses (FRE)	2.50	2.50	2.50	2.50	10.00
5	Capital (Equipment)	1.00	-	-	-	1.00
	<b>Sub-Total</b>	<b>10.37</b>	<b>10.37</b>	<b>10.26</b>	<b>10.46</b>	<b>41.46</b>
	<b>Institutional charges @ 15% of recurring budget</b>	<b>1.41</b>	<b>1.55</b>	<b>1.54</b>	<b>1.57</b>	<b>6.07</b>
	<b>Total</b>	<b>11.78</b>	<b>11.92</b>	<b>11.8</b>	<b>12.03</b>	<b>47.53</b>

## AGENDA ITEM NO.16 H

### Project Proposal by ICFRE: "Study on regulation and management of cone induction and seed yield in *Pinus gerardiana* Wall. Ex D.Don"

<b>Name of Scheme</b>	<b>Study on regulation and management of cone induction and seed yield in <i>Pinus gerardiana</i> Wall. Ex D.Don</b>
<b>Implementing Agency</b>	ICFRE
<b>Project Duration/Period</b>	<b>5 Years</b>
<b>Project Outlay</b>	<b>0.57 Crore</b>
<b>Objectives of the Project</b>	
<ul style="list-style-type: none"> <li>• To assess the impact of annual thermal oscillation, precipitation pattern and edaphic factors on cone production in <i>P. gerardiana</i></li> <li>• To determine the role of metabolic and gene regulation in induction of cones</li> <li>• To study the effect of exogenous application of growth regulators on cone formation and seed yield.</li> </ul>	
<b>Outcome of Project:</b>	
<ul style="list-style-type: none"> <li>• Correlation between climatic factors and reproductive developmental processes as well as quality seed production will be determined. It will give an insight in to understanding the effect of climate change on cone and seed production of <i>P. gerardiana</i>.</li> <li>• The proposed metabolomic analysis will give a new insight into understanding the role of phytohormones and other metabolites in regulation of cone formation in <i>P. gerardiana</i>.</li> <li>• Transcriptome analysis will help in understanding the mechanism underling the gene regulation of cones formation Transcriptomeic sequence data of <i>P. gerardiana</i> will be generated that can be further utilized as a reference in various omics studies.</li> </ul> <p>A protocol for the artificial cone induction will be developed to manage the seed source/seed orchards of <i>P. gerardiana</i> for regular improved seed production</p>	

**Detail of Budget year wise is given below**

S. No	Budget Heads	First Year	Second Year	Third Year	Fourth Year	Total
1	Fellowship (1JPF @20000/- per month + 9% HRA for first two years; SPF @23000/- PM + 9% HRA for remaining three years)	2.62	2.62	3.01	3.01	11.26
2	Travel	2.00	2.00	1.75	1.00	6.75
3	Material and Supplies – M&S	2.00	2.00	2.00	1.00	7.00
4	Forest Research Expenses (FRE)	1.25	2.50	5.00	2.00	10.75
5	Capital (Equipment) one RT-PCR (15 lakh) and one autoclave (1 lakh)	16.00	0	0	0	16
6	Overheads (@15%)	1.18	1.37	1.76	1.05	5.36
	<b>Total</b>	<b>25.05</b>	<b>10.49</b>	<b>13.52</b>	<b>8.06</b>	<b>57.12</b>

## AGENDA ITEM NO.16 I

**Testing of selected superior strains of *Picrorhiza kurroa* Royale ex Benth. and *Valeriana jatamansi* Jones through regional and national level multi-location trials to release their varieties for the benefit of the farming communities**

<b>Name of Scheme</b>	<b>Testing of selected superior strains of <i>Picrorhiza kurroa</i> Royale ex Benth. and <i>Valeriana jatamansi</i> Jones through regional and national level multi-location trials to release their varieties for the benefit of the farming communities</b>
<b>Implementing Agency</b>	<b>ICFRE</b>
<b>Project Duration/Period</b>	<b>05 Years</b>
<b>Project Outlay</b>	<b>0.597 Crore</b>
<b>Objectives of the Project</b>	
<ul style="list-style-type: none"> <li>• To establish regional and national level multilocation trial of <i>Picrorhiza kurroa</i> and <i>Valerian jatamansi</i> to release their variety.</li> <li>• To evaluate the stability for a.i. content and postharvest growth characteristics of superior strains of <i>P. kurroa</i> and <i>V. jatamansi</i></li> <li>• To create awareness among different stakeholders regarding the released varieties of the medicinal plants</li> </ul>	
<b>Outcome of Project:</b>	
<ul style="list-style-type: none"> <li>• Role of genetic and environmental factors on growth as well as yield of the selected strains will be determined</li> <li>• New varieties of <i>P. kurroa</i> and <i>V. jatamansi</i> will be released for commercial cultivation.</li> <li>• Capacity building of stakeholders for medicinal plant cultivation</li> </ul>	

**Detail of Budget year wise is given below**

**(Rs in Lakhs)**

<b>S. No</b>	<b>Budget Heads</b>	<b>First Year</b>	<b>Second Year</b>	<b>Third Year</b>	<b>Fourth Year</b>	<b>Fifth Year</b>	<b>Total</b>
1	Fellowship (One JPF @20000/- PM + 8%HRA for first two years; SPF @23000/- PM+9% HRA for remaining three years)	2.62	2.62	3.01	3.01	3.01	14.27
	One FA @17000/pm (Consolidated)	2.04	2.04	2.04	2.04	2.04	10.2
2	Travel	1.25	1.5	2	1.5	1.25	7.5
3	Material and Supplies – M&S	1.00	1.00	2.00	2.00	2.00	8.00
4	Field Research Expenses (FRE)	1.5	5.00	2.00	2.50	2.00	12.00
5	Capital (Equipment)	0	0	0	0	0	0
6	Overheads (@15%)	1.26	1.82	1.66	1.66	1.55	7.80
	<b>Total</b>	<b>9.67</b>	<b>13.98</b>	<b>12.71</b>	<b>12.71</b>	<b>11.85</b>	<b>59.77</b>



## AGENDA ITEM NO.16 J

### Genetic improvement of *Chloroxylon swietenia* DC. for increasing the availability of medium timber in dry lands of India

<b>Name of Scheme</b>	<b>Genetic improvement of <i>Chloroxylon swietenia</i> DC. for increasing the availability of medium timber in dry lands of India</b>
<b>Implementing Agency</b>	<b>ICFRE</b>
<b>Project Duration/Period</b>	<b>5 Years</b>
<b>Project Outlay</b>	<b>0.42 Crore</b>
<b>Objectives of the Project</b>	
<ul style="list-style-type: none"> <li>• To collect, assemble germplasm and create a base population for future breeding of <i>C. swietenia</i></li> <li>• To study the morphological variability that exists in the different populations and Study Karyo-morphology</li> <li>• To develop eco-distribution mapping based on extensive survey conducted from selected states of India</li> <li>• To document the propagation methods for production of quality planting stock.</li> </ul>	
<b>Outcome of Project:</b>	
<ul style="list-style-type: none"> <li>• Collection and assemblage of genetic resources for future tree improvement and conservation.</li> <li>• Standardization of seed and vegetative propagation methods for producing good quality planting material.</li> <li>• Identification of chromosome number and estimation of genome size of the species.</li> <li>• Documentation of the genetic diversity and population structure of the species for identifying adaptive genetic hotspot areas for conservation.</li> <li>• Distribution of quality planting material to farmers and state forest departments to increase wood productivity.</li> </ul>	

Detail of Budget year wise is given below

(Rs. in Lakhs)

Sl. No.	Budget heads	First year	Second year	Third year	Fourth year	Fifth year	Total
1.	Fellowship (1 JPF)+18% HRA 20,000/m (1 <sup>st</sup> and 2 <sup>nd</sup> year), 23,000/m(3 <sup>rd</sup> year)+ 18% HRA	2.44	2.44	2.5	2.5	2.5	9.88
2.	Travel (including TA/ DA, Fuel, etc.)	2.5	2.5	2.5	2.5	2.5	12.5
3.	Material and supplies –(consumables, glassware and chemicals)	1.0	1.0	2.0	2.0	2.0	8.0
4.	Forest Research Expenses (FRE)	1.0	1.0	2.0	2.0	1.5	7.5
5.	Capital (Equipments)	1.0	1.0	0	0	0	2.0
6.	Contingency	0.5	0.5	0.5	0.5	0.5	2.5
<b>Total</b>		<b>8.44</b>	<b>8.44</b>	<b>9.5</b>	<b>9.5</b>	<b>9</b>	<b>42.38</b>

## AGENDA ITEM NO.16 K

### **Project Proposal by ICFRE: Establishment of clonal trial and evaluation of selected clones of *Pongamia pinnata* (L.) Pierre for fruit yield and oil content**

<b>Name of Scheme</b>	<b>Establishment of clonal trial and evaluation of selected clones of <i>Pongamia pinnata</i> (L.) Pierre for fruit yield and oil content</b>
<b>Implementing Agency</b>	<b>ICFRE</b>
<b>Project Duration/Period</b>	<b>5 Years</b>
<b>Project Outlay</b>	<b>0.48 Crore</b>
<p><b>Objectives of the Project</b></p> <ul style="list-style-type: none"> <li>• To establish <i>Pongamia pinnata</i> agroforestry based clonal trials across different agro climatic zones in Tamil Nadu for tree improvement</li> <li>• Evaluation of selected <i>P.pinnata</i> clones for growth, seed and oil yield</li> <li>• To develop methods of increasing flowering, fruiting for reproductive success</li> <li>• To establish agroforestry trials across five different agro climatic zones in Tamil Nadu</li> <li>• To develop candidate DUS characteristics for pongamia selection</li> <li>• To develop value added products viz., Pongamia honey, fuel briquettes, biofibers, biodiesel, soap for agricultural use, <i>Pongamia pinnata</i> coated Zinc oxide nanoparticles for biological therapeutics etc.</li> </ul>	
<p><b>Outcome of Project:</b></p> <ul style="list-style-type: none"> <li>• Package of cultivation practices</li> <li>• Shortlisting productive clones for variety release</li> <li>• DUS characteristics will be developed for <i>Pongamia pinnata</i> for varietal release</li> <li>• Bio products will be developed for income generation viz. (Pongamia honey, fuel briquettes, biofibers from seed hull, biodiesel and soap etc.)</li> </ul>	

## AGENDA ITEM NO.16 L

### Development and Deployment of Teak (*Tectona grandis* Linn.f) Half and Full sib Families: Harnessing Provenance Variations towards developing hybrids

<b>Name of Scheme</b>	<b>Development and Deployment of Teak (<i>Tectona grandis</i> Linn.f) Half and Full sib Families: Harnessing Provenance Variations towards developing hybrids</b>
<b>Implementing Agency</b>	ICFRE
<b>Project Duration/Period</b>	<b>05 Years</b>
<b>Project Outlay</b>	<b>0.638 Crore</b>
<b>Objectives of the Project</b>	
<ul style="list-style-type: none"> <li>• To control pollinate teak genetic resources with short pedigrees and develop fullsib families for screening hybrids.</li> <li>• To test the pest resilience patterns in half and full sib families with reference to leaf skeletoniser (<i>Eutectona machaeralis</i>) and defoliator (<i>Hyblaea puera</i>).</li> <li>• To develop trials and demonstrate short pedigreed selections in agroforestry, canal bank and block plantations.</li> </ul>	
<b>Outcome of Project:</b>	
<ul style="list-style-type: none"> <li>• Development of hybrids from full and half-sib for different land uses and stakeholders.</li> <li>• Improving productivity through short pedigreed deployment selection resilient to leaf skeletonizer and defoliator</li> <li>• Creation of demo plots specific to land uses</li> </ul>	

**Detail of Budget year wise is given below**

Sl. No.	Budget heads	First year	Second year	Third year	Fourth year	Fifth year	Total
1.	Fellowship (2 JPFs)	5.664	5.664	6.5136	6.5136	6.5136	30.868
2.	Travel (including TA/ DA, Fuel, etc.)	1.50	1.50	1.50	1.50	1.50	7.50
3.	Material and supplies – (consumables, glassware and chemicals, ladders)	4.00	1.00	1.00	1.00	1.00	8.00
4	Forest Research Expenses (FRE)	3.00	3.00	3.00	2.00	2.00	13.00
5.	Capital (Equipments)	0	0	0	0	0	0
6.	Contingency	1.5	1.5	0.5	0.5	0.5	4.5
<b>Total</b>		<b>15.664</b>	<b>12.664</b>	<b>12.5136</b>	<b>11.5136</b>	<b>11.5136</b>	<b>63.868</b>
<b>Rupees sixty three lakh eighty six thousand only</b>							

### AGENDA ITEM NO.16 M

#### Project Proposal by ICFRE: Variability studies *Wrightia tinctoria*-an important species for handcraft sector in Karnataka

<b>Name of Scheme</b>	<b>Variability studies <i>Wrightia tinctoria</i>-an important species for handcraft sector in Karnataka</b>
<b>Implementing Agency</b>	ICFRE
<b>Project Duration/Period</b>	<b>04 Years</b>
<b>Project Outlay</b>	<b>0.306 Crore</b>
<b>Objectives of the Project</b> <ul style="list-style-type: none"><li>• Study variation with reference to tree morphology, seed and seedling traits</li><li>• Study variability with reference to wood traits such as basic density</li><li>• Assess genetic diversity using molecular markers</li><li>• To document the status of natural regeneration</li></ul>	
<b>Outcome of Project:</b> <ul style="list-style-type: none"><li>• The present study would provide baseline information about <i>W. tinctoria</i> population in Karnataka for growth, wood quality, seed and seedling traits along with genetic variability thespecies harbours.</li><li>• This information would be the passport data for initiating any tree improvement programmes on this important species. Also, the natural regeneration status can provide the health and survival of this important species.</li></ul>	

**SCHEMES/PROJECT PROPOSED BY INDIAN INSTITUTE OF FOREST MANAGEMENT  
(IIFM)**

<b>Agenda Item No.</b>	<b>Scheme/Project</b>	<b>(Rs. in Crores)</b>
17 A	Establishment of Training and Capacity Building Infrastructure Development for Sustainable Forest Management and Biodiversity Conservation at IIFM, Bhopal”	24.06
17 B	Proposal for establishment of a Centre of Excellence for Forest Landscape Restoration	4.54
17 C	Establishment of Centre of Excellence for Urban Green Management at IIFM, Bhopal	4.54
	<b>Grand Total</b>	<b>33.14</b>

**AGENDA ITEM NO. 17A**

**Establishment of Training and Capacity Building Infrastructure Development for Sustainable Forest Management and Biodiversity Conservation at IIFM, Bhopal”**

<b>Name of Scheme</b>	<b>Establishment of Training and Capacity Building Infrastructure Development for Sustainable Forest Management and Biodiversity Conservation at IIFM, Bhopal</b>
<b>Implementing Agency</b>	<b>IIFM, Bhopal</b>
<b>Project Duration/Period</b>	<b>02 Years</b>
<b>Project Outlay</b>	<b>Rs. 24.06 Crores</b>
<b>Objectives of the Project</b>	
<ul style="list-style-type: none"> <li>• Organise capacity building programmes in subject areas related to biodiversity conservation and Sustainable forest management cater to different stakeholders</li> <li>• Develop and impart need based and sector driven capacity building programmes</li> <li>• Building state of art training &amp; capacity building infrastructure for sustainable forest management and biodiversity conservation</li> </ul>	
<b>Outcome of Project:</b>	
<ul style="list-style-type: none"> <li>• IIFM will organise more capacity building programmes for various stakeholders and improve the efficiency and effectiveness of the participants thereby contributing the organisational mandate of the organisation.</li> <li>• Institute shall organise various short-term training and capacity building programmes in biodiversity management and allied areas tailored to the needs of particular groups such as government officers, scientists, communities, teachers, resource managers, non-governmental organisations, and senior decision-makers</li> </ul>	

**AGENDA ITEM NO. 17 B**

**Project Proposal by IIFM:” Proposal for establishment of a Centre of Excellence for Forest Landscape Restoration”**

<b>Name of Scheme</b>	<b>Proposal for establishment of a Centre of Excellence for Forest Landscape Restoration</b>
<b>Implementing Agency</b>	<b>IIFM, Bhopal</b>
<b>Project Duration/Period</b>	<b>05 Years</b>
<b>Project Outlay</b>	<b>Rs. 4.54 Crores</b>
<b>Objectives of the Project</b> <ul style="list-style-type: none"><li>• Engage in knowledge generation and dissemination to devise innovative restoration strategies for forest land degraded by various drivers such as fires, mining, invasive species etc. in diverse geographies of the country.</li><li>• Act as a repository for scientific and management information related to FLR.</li><li>• Create a platform for intersectoral partnerships for developing comprehensive FLR solutions.</li><li>• Contribute to policy discourses and design of governance mechanisms around ecological restoration.</li></ul>	
<b>Out Come of Project:</b> <ul style="list-style-type: none"><li>• The Centre shall engage in developing and implementing research projects and collaborate with suitable partners for knowledge generation on FLR.</li><li>• The research projects will cover ecological, social, economic, institutional and financing angles of FLR and will involve long term engagement of researchers, given the significant time requirement to assess the improvement in forest ecosystem health and productivity and resultant socio-economic impacts from restoration.</li><li>• The proximity of IIFM to the Central Indian forest landscapes, harboring important wildlife habitats and facing severe developmental pressure, would allow the setting up of pilots for demonstrating FLR strategies as well as study plots for long term monitoring of restoration success in ecological and socio-economic dimensions</li><li>• The Centre in collaboration with other relevant organizations at the national and international level shall engage in capacity building of key stakeholders</li></ul>	

## AGENDA ITEM NO. 17 C

### Establishment of Centre of Excellence for Urban Green Management at IIFM, Bhopal

<b>Name of Scheme</b>	<b>Establishment of Centre of Excellence for Urban Green Management at IIFM, Bhopal</b>
<b>Implementing Agency</b>	<b>IIFM, Bhopal</b>
<b>Project Duration/Period</b>	<b>5 Years</b>
<b>Project Outlay</b>	<b>Rs. 4.54 crores</b>
<b>Objectives of the Project</b> <ul style="list-style-type: none"><li>• The Centre shall act as repository for scientific and management information related to the urban green management.</li><li>• The Centre shall engage in policy and research to provide meaningful solutions for urban green management.</li><li>• The Centre shall create partnership with various stakeholders to develop strategies for urban green management.</li><li>• The Centre shall engage in conducting outreach and promotion activities on urban green management.</li></ul>	
<b>Outcome of Project:</b> <ul style="list-style-type: none"><li>• Undertake Research Projects</li><li>• Develop database/Indices</li><li>• Capacity Building</li><li>• Conduct Workshop /Conferences</li><li>• Organize Short Term/ Medium Term Courses</li><li>• Engagement with civic bodies, Government agencies, Institutions, Communities, etc</li><li>• Lecture Series</li><li>• Documentation and Dissemination of Best Practices</li><li>• Technical Report/Newsletter</li></ul>	

## AGENDA ITEM NO. 18

### STRENGTHENING NATIONAL CAMPA FOR MONITORING OF CAMPA ACTIVITIES AND APPRAISAL OF APOs AND SCHEMES/ PROJECTS

The proposal is to engage professionals to assist National Authority in (i) Appraisal and Management of CAMPA activities and (ii) creation of National Monitoring & Evaluation Cell (NMEC) for monitoring and evaluation. The detailed proposal is placed at **Annexure V**

The proposal for strengthening of office CEO, National Authority by engaging Program Management Consultancy (PMC) and National CAMPA Monitoring and Evaluation Cell (NMEC) was first placed before 2<sup>nd</sup> meeting of Governing Body after recommendation by Executive Committee. The Governing Body advised to engage IIFM for providing PMC and NMEC. However the proposal of IIFM was not agreed to by the EC in its 21<sup>st</sup> meeting held on 02.02.2023 and CEO National Authority was asked to prepare proposal for engagement of professional manpower at appropriate level for strengthening the CEO office of the National Authority for proper discharge of its function. This recommendation was accepted by Governing Body in its 3<sup>rd</sup> Meeting held on 15th February, 2023.

Accordingly, this proposal for engagement of professional manpower at the office of the CEO National Authority has been submitted for consideration and approval of Executive Committee.

1. ***Appraisal and Management Team*** for appraisal of APOs, Schemes and projects, planning and managements of CAMPA activities and funds. The *Appraisal and Management Team* will consist of eight consultants in the field of forestry, wildlife, forest economics/ statistics, IT, Soil & Water conservation. Provision of Young Professional is also made to assist the expert members including professionals with experience in data analysis and report writing.

***Functions of Appraisal and Management Team:*** The consultants/ expert members will be responsible for preparation and implementation of Perspective Plan, scrutiny of Annual Plan of Operations (APOs) submitted by various States/UTs and Schemes/ project proposals submitted by Programme Divisions of the Ministry for approval, develop and implement reporting mechanisms. In addition, they will coordinate the compilation and analysis of data for preparation of various reports viz. quarterly & annual reports, field reports and third-party evaluation reports design a research development component under CAMPA.

S. No	Position	Experience in years	Number	Remuneration per month
1	Forestry Expert and Team Leader	15 years and above	1	In position



2	Forest Consultants- East &North East, Central &West, North, South	5 to 10 years	4*	80,000-1,20,000
3.	Soil & water Conservation Expert	5 to 10 years	1	80,000-1,20,000
4.	Consultant (IT- Software Developer)	5 to 10 years	1	1,00,000-1,20,000
5	Economics/ Forest Economics/ Statistician	5 to 10 years	1	80,000-1,20,000
6	Young Professionals/	Post Graduates	4	50,000-60,000

\* **Already approved. Offer of engagement letter for 2 consultants is issued.**

**2. National Monitoring & Evaluation Cell (NMEC) for Monitoring and Evaluation of CAMPA activities and Performance Assessment.**

***Manpower Requirement of NMEC:***

S. No	Position	Education Qualification & Experience	Number	Remuneration per month per person
1	Forestry professional and Team Leader	M.Sc Forestry with experience of 5 years/ IFS (Retired)	1	In Position
2	Management/ Communication & Media	MBA with 2 years' experience in relevant field	1	80,000
3	Remote Sensing & GIS Young Professional	Management Profile with experience of more than 5 years	2	80,000
4	Data Management, MIS & Analyst/	Engineering graduates with 5 years of working experience in relevant field	1	80,000
5	Young Professional Social Science/Statistics/Ecology/Mathematics	Post Graduate Social Sciences/Sociology/Anthropology	4	50,000-60,000

### **Budget**

1. For management appraisal and management team, Rs. 7.80 lakh per month and Rs. 93.60 lakh annually with 5 % increase for the next year.
2. For NMEC, Rs. 5.20 lakh per month and Rs. 62.40 lakh annually with 5% increase for next year.
3. Total financial implication of approximately Rs. 1.56 crores per year for engagement of professionals in National Authority.

## AGENDA ITEM NO. 19

### Hazardous Division Proposal for PMU for Green Credit Scheme by ICFRE

<b>Name of Scheme</b>	<b>Hazardous Division Proposal for PMU for Green Credit Scheme by ICFRE</b>
<b>Implementing Agency</b>	<b>ICFRE</b>
<b>Project Duration/Period</b>	<b>03 Years</b>
<b>Project Outlay</b>	<b>Rs. 20.05 Crores</b>
<b>Objectives of the Project</b> <ul style="list-style-type: none"><li>• To promote activities for increasing the green cover across the country through tree plantation and related activities</li><li>• To promote sectoral level water conservation, water harvesting and water use efficiency/savings, including treatment and reuse of waste water</li><li>• To promote natural and regenerative agricultural practices and land restoration to improve productivity, soil health and nutritional value of food produced, while reducing the harmful impact on surrounding ecosystems</li><li>• To promote sustainable and improved practices for waste management, including collection and treatment</li><li>• To promote a range of measures, to be undertaken by Municipalities, Gram Panchayats or Industrial entities, for reducing air pollution</li><li>• To promote a range of measures, to be undertaken by Municipalities, Gram Panchayats or community groups, for conservation and restoration of mangroves</li></ul>	

**AGENDA ITEM NO. 20**  
**ANY OTHER MATTER WITH THE PERMISSION OF THE CHAIRPERSON**

**1. Proposal For Establishment of Centre of Excellence in Forest Survey of India  
Submitted by FSI, Dehradun**

FSI submitted a proposal for Establishment of Centre of Excellence dated 10<sup>th</sup> February, 2023. After examining the proposal by SU Division and then approval of DGF&SS, MoEF&CC of hiring 2 experts in SU Division to analyse and apprise the projects and incorporating the proposal of hiring of two experts in SU Division in the project of Establishment of Centre of Excellence.

The Ministry vide its letter dated 16<sup>th</sup> March, 2023 directed FSI to send revised proposal in response to FSI's earlier proposal dated 10<sup>th</sup> February, 2023.

Accordingly, FSI submitted the Revised Proposal for Establishment of Centre of Excellence in Forest Survey of India. The FSI has sent this proposal for Establishment of Centre of Excellence in Forest Survey of India to the minutes of the meeting held on 13<sup>th</sup> October, 2022 under the Chairmanship of DGF&SS in which various issues related to Forest Survey of India, Dehradun were discussed. The decision 2 of the said meeting is reproduced as follows:-

"Centre of Excellence Project: IG (FC) highlighted the salary requirement of Senior Technical Assistants (STAs) in IROs. In this regard, it was finally decided that a single project may be made on the pattern of earlier Centre of Excellence Project to be financed under National CAMPA. This CoE project will take care the needs of STAs, e-Green Watch improvements and any other futuristic requirements". FSI has further informed that two of the above activities namely e-Green Watch and WEB GIS based Decision Support System (DSS) for Forest Clearance, which were sanctioned under earlier CoE project, are continued at present. However, the salary of the contractual staff engaged under these two activities is being paid from one of the sanctioned CAMPA Project "Monitoring of Plantations under CAF' as no other funds are available with FSI.

Accordingly, FSI has prepared a revised Centre of Excellence project containing the following activities. The detailed proposal may kindly be seen at

The requirement of budget for the period 2023-24 to 2028-29:-

S.No	Activities	Proposed Budget (Rs. in crores)
1	Climate Change studies and Monitoring of Incremental Carbon Stock	108.50
2	e-Greenwatch	6.32
3	WEB GIS based Decision Support System (DSS) for Forest Clearance	5.00
4	Forest Fire monitoring including burnt area assessment	9.40
5	Above Ground Biomass (AGB) Estimation using Synthetic Aperture Radar (SAR) data	3.00
6	Deforestation Alert System	4.00
7	LiDAR for Forestry Applications	2.00
	Total	138.22

The total budgetary requirement of proposed Centre of Excellence is Rs 138.22 crore for the five years from 2023-24 to 2028-29. Accordingly, the revised proposal may be sent to CEO, CAMPA National Authority for consideration and approval in the meeting of the Executive Committee scheduled to be held on 31<sup>st</sup> March, 2023. The detailed proposal is placed at **Annexure VI**

## **2. Impact Of Voluntary Relocation of Villages from Tiger Reserves Submitted by IIFM, Bhopal**

- i. The tiger is a critically endangered top predator that has been the focus of attention of conservation action in India since Project Tiger began in 1973. Since the beginning of Project Tiger, the population in India has increased from a low of about 1500 to almost 4000. Since tigers require a large home range and are territorial animals, the current estimates are that protected inviolate areas of at least 800-1200 sq km is required for a viable tiger population
- ii. A tiger reserve consists of two parts, viz., ‘a core or critical tiger habitat’, and ‘a buffer or peripheral area’. The core area is to be identified on the basis of scientific and objective criteria, and is to be kept inviolate for tiger conservation, without affecting the rights of the indigenous people. The voluntary relocation of people needs to be done only in these identified core areas or critical tiger habitats in tiger reserves so as to make them inviolate.
- iii. Several Tiger Reserves have had relocation and rehabilitation programs implemented over the years. Hundreds of villages have been relocated. It is important to understand the effect of these relocations on the people, the habitat and the wildlife. It is therefore proposed to use mixed methods- qualitative methods for increased understanding and the rigorous quantitative framework of impact evaluation studies, to evaluate the impact of relocation on both the habitat as well as the lives of the relocated people in all the tiger reserves in the country.
- iv. **OBJECTIVES: The objectives of the study are of two types:**
  - a. **Impact on the relocated villagers**
    - Measure the impact of relocation on the change in household income of the villagers
    - Quantify the difference in vulnerability to climate change due to relocations.
    - Measure changes in the quality of life using various standard indicators.
  - b. **Impact on the wildlife habitat at the original site of the relocated village**
    - Quantify the changes in vegetation at and around the relocated village areas.
    - Quantify the changes in wildlife abundance at and around the relocated village areas.
- v. **Methodology**
  - There are 54 tiger reserves in the country in 18 states. Many tiger reserves have had relocations stretching back to the 1970s, from Kanha.
  - This provides an opportunity to quantify the effects at various time intervals after the relocation process.
  - Tiger Reserves will be selected from various parts of the country, after consultation with NTCA.
  - Villages will be sampled from these tiger reserves after appropriate stratification.
  - Stratification will be done using social and ecological criteria after understanding the specific characteristics of each location.

**It is proposed to sample about 10 percent of relocated villages from these Tiger Reserve.**

1. **Impact on the relocated villagers:** Structured interview schedules at the household level, interviews with key informants, focus group discussions and qualitative methods like PRA will be used to gather data. The impact on relocated villagers will be measured using methods like Propensity Score Matching and Double Difference, which are standard quasi-experimental techniques to measure differences between the treatment (Relocation) and control (cases where

villages are not relocated). Appropriate Impacts will be identified at both the household and village levels. These will include impacts on income, wealth and asset creation, vulnerability to climate change, and changes to quality of life.

2. **Impact on the wildlife habitat at the original site of the relocated villages:** It is expected that there will be vegetation recovery at abandoned village site. The site undergoes a restoration process including removal of man-made structures, removal of weeds and habitat management measures. The effect of this is expected to be an improvement in conditions for wildlife to use the site. Some changes are immediate while other changes take place over several years. The affected area will be gridded with appropriately sized cells. Vegetation plots will be laid in each cell, at various distances in and around the abandoned village site to monitor the recovery process. Pellet and dung plots will be used to quantify the extent of wildlife use of the area. Occupancy modelling will be used to quantify use of the area and habitat by both herbivores and carnivores. Models of occupancy at target sites will be compared to adjacent sites where there has been no relocation as well as comparable habitat that have not had human use and inhabitation. Quantitative measures of the effect of relocation on probability of use by wildlife will be obtained by this method.

**vi. Budget**

<b>Budget Head</b>	<b>Expense</b>
10 Senior Research Fellows @41500 per month for 8 months	Rs 3320000
Travelling, vehicle hire and accommodation for faculty and researchers	Rs 13,00,000
Laptops	Rs 7,00,000
Satellite imagery and software	Rs 5,00,000
Miscellaneous	Rs 6,32,000
Institute overheads a@15%	Rs 10,42,800
GST @18.5%	Rs 14,79,038
<b>Total</b>	<b>Rs 94,73,838</b>

NA-5/1/2020-NA  
Government of India  
Ministry of Environment, Forest and Climate Change  
National Compensatory Afforestation Fund Management and Planning Authority.  
(National Authority)

Annexure I

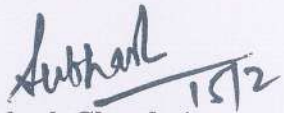
Room no. A-232, 2<sup>nd</sup> Floor  
Agni Wing, Indira Paryavaran Bhawan  
Aliganj Road, Jor Bagh, New Delhi-110003.  
Dated: 15<sup>th</sup> February, 2023.

**OFFICE MEMORANDUM**

Sub: Minutes of the 21<sup>st</sup> Meeting of Executive Committee of the National Authority-reg.

Please find the minutes of 21<sup>st</sup> Meeting of the Executive Committee of the National Authority held on 02.02.2023 through hybrid and online mode under the Chairmanship of Director General of Forests & Special Secretary, Ministry of Environment, Forest and Climate Change the Chairperson of the Executive Committee of National Authority CAMPA for information and necessary action.

Encl: As above.

  
(Subhash Chandra)  
Chief Executive Officer  
National Authority.

**Distribution:**

1. Director General of Forests and Special Secretary, Ministry of Environment, Forest and Climate Change, Government of India, Chairperson;
2. Additional Secretary & Financial Advisor, Ministry of Environment, Forest and Climate Change, Government of India, Member;
3. Additional Director General of Forests (Forest Conservation), Ministry of Environment, Forest and Climate Change, Government of India, Member;
4. Additional Director General of Forests (Wildlife), Ministry of Environment, Forest and Climate Change, Government of India, Member;
5. Mission Director, National Mission of Green India, Ministry of Environment, Forest and Climate Change, Government of India, Member;
6. All members of Executive Committee
7. Head of All Integrated Regional Officers (IROs), Ministry of Environment, Forest and Climate Change, Government of India, Member;
8. Inspector General of Forests, (Forest Conservation), Ministry of Environment, Forest and Climate Change, Government of India, Member;

Copy to:

1. The Chief Secretary, All States/UTs.
2. Additional Chief Secretary/Principal Secretary, Secretary, Department of Forests, All States/UTs.
3. Principal Chief Conservator of Forests (HoFF), All States, UTs.
4. CEO, State Authority, All States/UTs.
5. IGF(NAEB)/IGF(SU)/IGF(FPD)/IGF(WL)/IGF(NTCA)/IG(ROHQ).



## MINUTES OF THE 21<sup>ST</sup> MEETING OF THE EXECUTIVE COMMITTEE OF THE NATIONAL AUTHORITY.

The 21<sup>st</sup> meeting of the Executive Committee (EC) of the National Authority was held in Krishna Conference Room, Indira Paryavaran Bhawan, New Delhi on 2<sup>nd</sup> and 13<sup>th</sup> February, 2023 under the chairmanship of the Director General of Forests & Special Secretary (DGF&SS), MoEF&CC, and Chairperson, Executive Committee of the National Authority. The list of members and other participants of the meeting is attached at **Annexure- I**.

### 2. The proceedings of the meeting are given hereunder:

- 1) Chief Executive Officer (CEO), National Authority welcomed DGF &SS, the Chairman of EC and members of the Executive Committee and the officers present in the meeting. He extended warm welcome to non-official experts.
- 2) The DGF&SS welcomed all members and officers present in the meeting and those who were present online. He urged Non-official Members for giving their views and guidance in the meeting and informed that the Executive Committee gives due regard to their suggestions while considering the APOs from State Authorities as per the provisions of the Compensatory Afforestation Fund (CAF) Act, 2016, and CAF Rules, 2018.
- 3) The CEO National Authority informed that all heads of IROs of the Ministry and all CEOs of State/UT Authorities have been requested to attend the meeting. He mentioned that as decided in the previous EC meeting, the data of Compensatory Afforestation against each project wise Forest Land diversion proposals has not been reconciled in many States which requires nodal officers of FC and CEO, State CAMPA of each State/UT to sit together and sort out project wise compensatory afforestation. DGF&SS directed all IROs of the State/UT for CAMPA works compilation by 31<sup>st</sup> March, 2023. All the States/UTs CEOs were further directed to provide the National Authority the year wise Compensatory Afforestation compilation since beginning i.e. 1980.
- 4) CEO, National Authority updated EC about the release of CAMPA funds state-wise and informed that though there is some improvement after the DGF&SS wrote to Chief Secretaries of the States/UTs but still this is an issue with few States. DGF&SS expressed serious concern that States/UTs are still not releasing funds to the State Forest Department/CAMPA Authorities for carrying out CAMPA activities as per approved Annual Plan of Operations.
- 5) The CEO, National Authority informed the EC that a few States/UTs have reported increase in the target CA/PCA under FC Act, 1980 by 49,495.80 ha and an increase of achievement by 50,801.76 ha from their earlier submissions for CA/PCA and other works taken up under CAMPA funds from 1980 to 2022. The total CA/PCA plantation of 10.29 lakh hectare is reported by the States/UTs to the National Authority till 31.03.2022 against the target of 11.38 lakh hectare. The progress shown in the previous draft Annual Reports have also been amended accordingly.
- 6) AS&FA informed that there is lack of utilization of funds under centrally sponsored schemes of Forest and Wildlife Sector. He said that the CSS schemes are similar to

Subhan



some CAMPA activities and, therefore, APOs should clearly indicate as to how much funds the Departments are getting from CAMPA, CSS and other sources.

- 7) CEO, National Authority further reiterated that the Annual Plan of Operations for the year 2023-24 of remaining States/UTs should be sent immediately to the National Authority after the approval of the State/UT Steering Committee for timely approval.
  - 8) All the States/UTs were requested to mention the funds available with them in their submitted Annual Plan of Operations and accordingly submit realistic APOs.
  - 9) Further all States and UTs CAMPA authorities have been asked to submit integrated APOs including activities wise physical and financial targets under CSS, State Plan Funds, CAMPA and any other Schemes. CEO, National Authority conducted online meeting with all State/UT CEOs, PCCFs and HoFFs regarding preparation of integrated APOs.
3. Thereafter, with the approval of DGF&SS, the agenda items of the Executive Committee were taken up for detailed discussion.

#### **PART A: General**

##### **3.1 AGENDA ITEM NO 1. Confirmation of Minutes of 20<sup>th</sup> Meeting of Executive Committee of National Authority:**

The Executive Committee confirmed the minutes of the 20<sup>th</sup> meeting of EC held on 9<sup>th</sup> November 2022 at 10.30AM.

##### **3.2 AGENDA ITEM NO. 2: ACTION TAKEN REPORT ON 20<sup>TH</sup> MEETING OF THE EC:**

The CEO, NA, CAMPA presented before the committee the action taken on the decision of the 20<sup>th</sup> Executive Committee. The Action Taken Report on the decision of the 20<sup>th</sup> meeting of the EC of the National Authority was perused and noted.

##### **3.3 AGENDA ITEM NO.3: UPDATE ON THE ACTION TAKEN ON 2<sup>nd</sup> GOVERNING BODY MEETING**

The CEO, National Authority informed about the Second Meeting of the Governing Body held on 20<sup>th</sup> September 2022 under the chairmanship of Hon'ble Minister, Environment, Forest & Climate Change and explained briefly on the decisions taken in the meeting.

The Executive Committee noted the progress.



**PART B- APPROVAL OF STATES ANNUAL PLANS OF OPERATIONS 2023-2024**

**4. AGENDA ITEM NO.4: ANNUAL PLAN OF OPERATION (APO) FOR THE YEAR 2023-24 OF CHANDIGARH UT AUTHORITY**

**Decision:** Annual Plan of Operation for the financial year 2023-24 has been received from the Chandigarh UT. The Steering Committee of the UT CAMPA has approved the Annual Plan of Operation (APO) for an outlay of Rs. 1.53 crores only for the year 203-24. The discussions on the APO were deferred in view of the absence of CEO of Chandigarh UT in the meeting physically for presenting the APO before the Executive Committee.

Arbhal

**5. AGENDA ITEM NO.5: ANNUAL PLAN OF OPERATION (APO) FOR THE YEAR 2023-24 OF CHHATTISGARH STATE AUTHORITY**

The Chhattisgarh Annual Plan of Operation 2023-24 with financial outlay of Rs. 544.39 crores was discussed in detail by the Executive Committee of the National Authority during the 21<sup>st</sup> Executive Committee meeting of the National Authority.

1. Date of Receipt : 29-12-2022
2. Date of approval of EC of State/UT : 12-12-2022
3. Date of approval of the Steering Committee : 21-12-2022
4. Total Amount/Outlay : Rs. 544.39 crores
5. Total Amount approved by National Authority : Rs. 471.36 crores

The details of approved component-wise activities are as follows:

(Amount in Rs. Crore and Area in Ha.)

S. No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in lakh Mandays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1. Site-specific activities as per Section 6 a) of the CAF Act, 2016</b>							
	Mandatory Activity	Compensatory Afforestation	515.843 ha.	11.31	1.39	15-18	Approved
		Catchment Area Treatment Plan	24 work	5.47	1.35	19-21	Approved
		Integrated wildlife Management Plan	183 work	8.88	1.09	22-45	Approved
		Other	26695.949 ha. Old CA and Other Plantation Maintenance	59.93	14.70	18	Approved
		<b>Total site specific activities under CA</b>		<b>85.59</b>			Approved
<b>2. Activity as per Rule 5(2) of CAF Rules, 2018</b>							
	5(2)a	ANR	6695 ha.	7.10	1.75	78-93	Approved
	5(2)b	AR	212113.528 ha.	106.08	7.08	47-77	Approved
	5(2)c	Silvicultural Operations	450.235 ha.	1.80	0.45	93-94	Approved

*Arvind*

5(2)d	Protection of Plantations and Forests	290 Nos. Vehicles & 5941 Nos Pillars	16.51	1.67	190	Approved for hiring of 145 vehicles at Rs. 7.20 crores. Approved Rs. 5.10 crores for 5941 Pillars
5(2)e	Pest and disease control in forest	0	0	-	-	--
5(2)f	Forest fire prevention and control operations	4126 Beat.	15.75	4.87	186	Approved
5(2)g	Soil and moisture conservation works	217 Nos.	180.04	25.08	95-126	Approved, the Soil & water conservation works should be done as per Namami Gange and
5(2)h	Voluntary relocation of villages from protected area	0	0	-	0	--
5(2)i	Improvement of wildlife habitat	4914.50 ha. & 183 work	21.29	2.41	127-185	Approved
5(2)j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors	0	0	-	-	--
5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals	0	0	-	-	--
5(2)l	Supply of wood saving, cooking appliances and other forest produce saving devices.	0	0	-	-	--
5(2)m	Management of biological diversity and biological resource	09 Nos. Eco Development & Eco Tourism Activities	26.30	3.26	191	Not Approved
3.	<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>					
5(3)a	Establishment, Maintenance of modern nurseries	24 Nos.	1.25	0	195	Approved
5(3)b	Promoting conservation, sustainable use and documentation of biological diversity	2169 Nos PBR	24.94	6.18	195	Not Approved

*Amrindal*

5(3)c	Purchase and maintenance of equipment of devices for communication, information and Technology	6 Nos. Geomatic center & other IT Application	5.98	0.60	194	Not approved Details are required.
5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	41 Nos. Causeway/Culvert	3.69	0.46	196	Approved
5(3)e	Construction of residential and official buildings	40 Nos. building & Development Staff Amenities	17.11	2.12	188	Approved
5(3)f	Casual engagement of local people or labours to assist regular staff of State Forest Department	40 divisions. protection in most sensitive area	5.50	1.70	189	Approved
5(3)g	Survey and mapping	All Division	7.00	0.86	197	Not Approved
5(3)h	Independent concurrent monitoring and evaluation and third party monitoring	All Division	3.00	-	196	Approved
5(3)i	Publicity cum awareness Programme	All Division	5.89	-	197 & 187	Rs. 2.00 crores approved
5(3)j	Production and distribution of quality planting materials	0	0	-	-	--
5(3)k	Forest certification and development of certification standards	0	0	-	-	--

**Activities as per Rule 6(a) of CAF Rules, 2018**

6(a)i	To offset incremental cost of CA/PCA at increased wage rate	0	0	-	-	--
6(a)ii	To offset increment cost of CAT at increased wage rate	0	0	-	-	--
6(a)iii	To offset incremental cost of IWMP at increased wage rate	0	0	-	-	--
6(a)iv	For disbursement of salary and allowances of members and staff	1 Year	4.95	0.12	198	Approved
6(a)v	For disbursement of sitting fees and allowances to nominated members	1 Year	0.17	-	198	Approved

*Amul*

6(a)vi	Activities referred to in sub rule-(2) and (3) of Rule 5	-	-	-	-	--
<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>						
6(b)i	Management of office establishment	1 Year	0.83	-	199	Approved
6(b)ii	Office equipment including computers and peripherals and its maintenance	0	0	-	-	
6(b)iii	Hiring of staff cars for the use of officers and officials and Forest Protection Staff	1 Year	2.91	-	190 & 199	Approved
6(b)iv	Hiring of buildings on lease for office establishment and residences of the officers	-	-	-	-	
6(b)v	Other contingencies for management of State Authority	1 Year	0.87	-	199	Not approved
6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	-	-	-	-	--
	<b>Grand Total of APO 2023-24</b>		<b>471.36</b>			<b>Approved</b>

**Decision:** The Executive Committee after detailed discussion approved Annual Plan of Operation for the financial year 2023-24 of Chhattisgarh State Authorities for an outlay of Rs. **471.36 crores** in its 21<sup>th</sup> meeting.

Further, the Executive Committee directed CEO Chhattisgarh State Authority for furnishing specific details of items of spill over from after the completion of current financial year.

*Kantahal*

**AGENDA ITEM NO.6: ANNUAL PLAN OF OPERATION (APO) FOR THE YEAR 2023-24 OF PUNJAB STATE AUTHORITY**

The Annual Plan of Operation for the financial year 2023-24 has been received from the Punjab State CAMPA Authority. The State Steering Committee of State CAMPA has approved the Annual Plan of Operation (APO) for an outlay of Rs.259.39 crores only for the year 2023-24.

- |    |   |   |                   |
|----|---|---|-------------------|
| 1. | Date of Receipt in NA                       | : | 20-01-2023        |
| 2. | Date of approval of EC of State/UT          | : | 20-12-2022        |
| 3. | Date of approval of the Steering Committee  | : | 16-01-2023        |
| 4. | Total Amount/Outlay                         | : | Rs. 259.39 crores |
| 5. | Total amount approved by National Authority | : | Rs. 257.1 crores  |

The details of considered component-wise activities are as follows:

S.No	CAF Act/ Rules	Activity	Outlay		Remarks
			Phy. Target	Fin. Target (Rs. In Crore)	
<b>1</b>	<b>Site Specific activities under CA</b>				
	Mandatory Activity	Compensatory Afforestation	Advance work (2024-25) 770 ha, Plantation of 993.873 Ha (983.981 ha. CA, 8.985 Ha. Penal CA and 0.907 NFL) and Maintenance of 9630.317 ha.(CA + PCA+NFL) and New plantation of 158599 Tall plants, maintenance of Tall plants 436444 under ACA and raising of 27.72 lakh Plants in Nursery (Annexure- 1A, 1-AA, 1-AB, 1B, 1C,1D, 1E & 1i)	43.78	Approved
		Catchment Area Treatment Plan	--	-	
		Integrated wildlife Management Plan	--	--	
		Other	As per APO Annexure- 1F, 1G, 1H	16.63	Approved
		<b>Total site specific activities under CA</b>		<b>60.41</b>	
<b>2.</b>					
	5(2)a	ANR	Advance work (2024-25) 2900 ha, Plantation of 2257 Ha and Maintenance of	38.86	Approved

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S.No	CAF Act/ Rules	Activity	Outlay		Remarks
			Phy. Target	Fin. Target (Rs. In Crore)	
1	Site Specific activities under CA				
			5835 ha. Annexure-3,3A,3B		
	5(2)b	AR	Advance work (2024-25) 1735 ha, Plantation of 2374 Ha and Maintenance of 8115.50 ha., Raising of 2.40 lakh Plants in Nursery. maintenance of existing nursery 94500 plants, Plantation of Tall plants 157000 and maintenance of Tall plants 532500 Raising of Nursery and maintenance of replacement of plants 118.83 lakh (Annexure- 2,4,5,6,7, 12)	73.91	Approved
	5(2)c	Silvicultural Operations	77 plots (Annexure- 8)	0.93	Approved
	5(2)d	Protection of Plantations and forests	As per APO (Annexure- 9)	13.58	Approved
	5(2)e	Pest and disease control in forests	--	--	
	5(2)f	Forest fire prevention and control operations	As per APO (Annexure- 9)	2.59	Approved
	5(2)g	Soil and moisture conservation works	As per APO (Annexure- 8)	14.47	Approved
	5(2)h	Voluntary relocation of villages from protected areas	--	--	
	5(2)i	Improvement of wildlife habitat	As per Annexure 15-16	12.15	Approved
	5(2)j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors	--	--	
	5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals	As per APO Annexure 15	2.79	Approved subject to CZA/ NTCA guidelines.
	5(2)l	Supply of wood saving, cooking appliances and other forest produce	--	--	

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S.No	CAF Act/ Rules	Activity	Outlay		Remarks
			Phy. Target	Fin. Target (Rs. In Crore)	
<b>1</b>	<b>Site Specific activities under CA</b>				
		saving devices.			
	5(2)m	Management of biological diversity and biological resource	--	--	
<b>3.</b>					
	5(3)a	Establishment, Maintenance of modern nurseries	Raising of Nursery Stock (Tall Plant) 2.30 lakh, Maintenance 1.00 lakh and vermicompost unit (32 No.s) and seed store (19 Nos.) etc. (Annexure 12-A)	4.35	Approved
	5(3)b	Promoting conservation, sustainable use and documentation of biological diversity	--	-	-
	5(3)c	Purchase and maintenance of equipment of devices for communication, information and technology	As per APO Annexure-13	4.52	Approved
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts	Creation and maintenance of fire lines (Annexure-10)	2.73	Approved
	5(3)e	Construction of residential and official buildings for frontline staff	Range office, Forester & Forest Guard house and Toilet in forest nurseries (Annexure-10)	5.66	Approved
	5(3)f	Casual engagement of local people or labours to assist regular staff of State Forest Department	As per Annexure-16	1.53	Approved
	5(3)g	Survey and mapping	As per Annexure-11	1.00	Approved
	5(3)h	Independent concurrent monitoring and evaluation and third party monitoring	As per Annexure-11	2.70	Approved. All CA and CAMPA activities carried out to be monitored.
	5(3)i	Publicity cum awareness	As per Annexure-14	2.17	Approved

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S.No	CAF Act/ Rules	Activity	Outlay		Remarks
			Phy. Target	Fin. Target (Rs. In Crore)	
<b>1</b>	<b>Site Specific activities under CA</b>				
		programme			
	5(3)j	Production and distribution of quality planting material	--	---	
	5(3)k	Forest certification and development of certification standards	--	---	
		<b>Total NPV</b>		183.94	
<b>4.</b>	6(a)i	To offset incremental cost of CA/PCA/ NPV at increased wage rate	As per Annexure-17	11.00	Approved
	6(a)ii	To offset increment cost of CAT at increased wage rate	--		
	6(a)iii	To offset incremental cost of IWMP at increased wage rate	--		
	6(a)iv	For disbursement of salary and allowances of members and staff	As per Annexure-17	0.90	Approved
	6(a)v	For disbursement of sitting fee and allowances to nominated members	As per Annexure-17	0.25	Approved
	6(a)vi	Activities referred to in sub rule-(2) and (3) of Rule 5	As per Annexure-17	0.05	Not approved
	6(b)i	Management of office establishment	As per Annexure-18	0.40	Rs. 10 lakh approved
	6(b)ii	Office equipment including computers and peripherals and its maintenance	As per Annexure-18	0.20	Approved
	6(b)iii	Hiring of staff cars for the use of officers and officials	As per Annexure-18	0.30	Approved
	6(b)iv	Hiring of buildings on lease for office establishment and residences of the officers		--	
	6(b)v	Other contingencies for management of State Authority	As per Annexure-18	0.10	Not approved
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO	As per Annexure-18-A	1.84	Not approved
		Total (out of interest)		<b>12.75</b>	

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S.No	CAF Act/ Rules	Activity	Outlay		Remarks
			Phy. Target	Fin. Target (Rs. In Crore)	
1	Site Specific activities under CA				
		G. Total of APO 2023-24		257.1	Approved

**Decision:** The Executive Committee after detailed discussion approved Annual Plan of Operation for the financial year 2023-24 of Punjab State Authority for an outlay of Rs. **257.1 crores** in its 21<sup>th</sup> meeting.

Further, the Executive Committee of the National Authority desired specific details of items of spill over from CEO State authority Chhattisgarh after the completion of current financial year.

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**AGENDA ITEM NO.7: ANNUAL PLAN OF OPERATION (APO) FOR THE YEAR 2023-24 OF JAMMU AND KASHMIR UT AUTHORITY**

The Jammu and Kashmir Annual Plan of Operation 2023-24 with financial outlay of Rs. 274.05 crores was discussed in detail by the Executive Committee of the National Authority during the 21<sup>st</sup> Executive Committee meeting of the National Authority.

1. Date of Receipt : 25-12-2022
2. Date of approval of EC of State/UT : 12-01-2023
3. Date of approval of the Steering Committee : 23-01-2023
4. Total Amount/Outlay : Rs. 274.05 crores
5. Total amount approved from National Authority : Rs. 272.65 crores

The details of considered component-wise activities are as follows:

**Details of APO are as under:**

(Amount in Rs. Crore and Area in ha.)

S. No	CAF ACT/Rules	Activity	Proposed outlay		Green Employment to be generated (in Man days)	Page No.	Remarks	
			Physical Target	Financial Target				
<b>1</b>		<b>Site-specific activities as per Section 6 (a) of the CAF Act, 2016</b>						
	<b>Mandatory Activity</b>	Compensatory Afforestation	311	5.99	77014	20-21	Approved	
		Catchment Area Treatment Plan	0.00	0.00				
		Integrated Wildlife Management Plan	0.00	9.69	124585	22	Approved	
		Other	0.00	0.00				
		<b>Total site specific activities under CA</b>	<b>311</b>	<b>15.68</b>			Approved	
<b>2</b>		<b>Activity as per Rule 5(2) of CAF Rules, 2018</b>						
	<b>5(2) a &amp; b</b>	<b>ANR/AR</b>	<b>13014</b>	110.37	1419042	24-25	Approved	
	<b>5(2)c</b>	Silvicultural Operations		2.54		25	Approved	
	<b>5(2)d</b>	Protection of Plantations and forests		22.07	283757	25&34	Approved	
	<b>5(2)e</b>	Pest and disease control in forests		0.40		25&34	Not approved	
	<b>5(2)f</b>	Forest Fire Prevention and Control Operations		5.97	74962	25&34	Approved	
	<b>5(2)g</b>	Soil and moisture conservation works		48.59	624728	25&34	Approved	
	<b>5(2)h</b>	Voluntary relocation of villages from protected areas		0.00				
	<b>5(2)i</b>	Improvement of wildlife habitat	<b>394</b>	8.65	111214	33-34	Approved	
	<b>5(2)j</b>	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors		0.00				
	<b>5(2)k</b>	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals		6.20		34	Approved	
	<b>5(2)l</b>	Supply of wood saving, cooking appliances and other forest produce		0.00				

		saving devices.					
	<b>5(2) m</b>	Management of biological diversity and biological resources.		1.21		25&34	Approved
		<b>Sub total</b>	<b>13408</b>	<b>206.00</b>			Approved
<b>3</b>		<b>Activity as per Rule 5 (3) of the CAF Rules, 2018</b>					
	<b>5 (3)a</b>	Establishment, Maintenance of modern nurseries	As per details	3.97	51042	25&34	Approved
	<b>5 (3)b</b>	Promoting conservation, sustainable use and documentation of biological diversity		0.00			
	<b>5 (3) c</b>	Purchase and maintenance of equipment devices for communication, information and technology		3.22		25,26, 34 & 35	Approved
	<b>5 (3)d</b>	Construction, up-gradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber depots.		3.69	47442	26&35	Approved
	<b>5 (3)e</b>	Construction of residential and official buildings.		20.40	262285	26&35	Approved
	<b>5 (3)f</b>	Casual engagement of local people or labours to assist regular staff of State Forest Department		11.48	374159	26&35	Approved
	<b>5 (3)g</b>	Survey and mapping	LS	1.21		26&35	Approved
	<b>5 (3)h</b>	Independent concurrent monitoring and evaluation and third party monitoring.	LS	1.06		26&34	Approved
	<b>5 (3)i</b>	Publicity cum awareness programme	LS	2.74		26&35	Approved
	<b>5 (3)j</b>	Production and distribution of quality planting material		0.00			
	<b>5 (3)k</b>	Forest certification and development of certification standards.		0.00			
			<b>Sub total</b>	<b>47.77</b>			Approved
<b>4</b>		<b>Activities as per Rule 6(a) of CAF Rules, 2018</b>					
	<b>6 (a)i</b>	To offset incremental cost of CA/PCA at increased wage rate.		0.00			
	<b>6 (a)ii</b>	To offset increment cost of CAT at increased wage rate		0.00			
	<b>6 (a)iii</b>	To offset incremental cost of IWMP at increased wage rate.		0.00			
	<b>6 (a)iv</b>	For disbursement of salary and allowances and staff		0.90		37	Approved
	<b>6 (a)v</b>	For disbursement of sitting fees and allowances to nominated members.		0.05		37	Approved
	<b>6 (a)vi</b>	Activities referred to in sub rule-(2) and (3) of Rule 5		0.00			
		<b>Sub total 6 (a)</b>		<b>0.95</b>		37	Approved
<b>5</b>		<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>					
	<b>6 (b)i</b>	Management of office establishment.		1.95		37	Approved
	<b>6 (b)ii</b>	Office equipment including computers and peripherals and its maintenance.		0.20		37	Approved

	<b>6 (b)iii</b>	Hiring of buildings on lease for office establishment and residences of the officials		0.00		
	<b>6 (b)iv</b>	Hiring of buildings on lease for office establishment and residences of the officers		0.00		
	<b>6 (b)vi</b>	Any other activity for management of forests and Wildlife with the approval of Steering Committee and included in the APO.		1.50	37	Rs. 0.50 crore approved
		<b>Sub total (b)</b>		<b>3.65</b>		Approved
		<b>Total 6 (a) &amp; (b)</b>		<b>4.60</b>		Approved
		<b>Grand Total of APO 2023-24</b>		<b>272.65</b>	<b>3450230</b>	Approved

**Decision:** The Executive Committee after detailed discussion approved Annual Plan of Operation for the financial year 2023-24 of J&K Union Territory Authorities for an outlay of Rs. **272.65** in its 21<sup>th</sup> meeting.

Further, the Executive Committee directed CEO of J&K UT Authority for providing specific details of items of spill over of CAMPA activities after the completion of current financial year.

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**AGENDA ITEM NO.8A: APPROVAL/ DECISION ON SCHEMES AND OTHER ITEMS SEEKING FINANCIAL SUPPORT FROM THE NATIONAL FUND OF CAMPA**

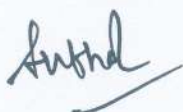
**I. INDIAN INSTITUTE OF FOREST MANAGEMENT (IIFM), BHOPAL**

**Agenda item No 8A: Proposal on “Project Management Consultancy Unit (PMC)” and “National CAMPA Monitoring and Evaluation Cell (NMEC)”**

<b>1.</b>	<b>Name of the Scheme</b>	<b>“Project Management Consultancy Unit (PMC)” and “National CAMPA Monitoring and Evaluation Cell (NMEC)”</b>
<b>Implementing Agency</b>		Indian Institute of Forest Management (IIFM), Bhopal
<b>Project Duration Period</b>	<b>Duration</b>	5 years
<b>Project Outlay</b>		Rs. 24.81 crores
<b>Objectives of the Project</b> <ol style="list-style-type: none"><li>1. Prepare a perspective plan</li><li>2. Monitoring and Evaluation of CAMPA Activities and Performance Assessment</li><li>3. Assist National Authority in analysis and appraisal of the Annual Plan of Operations (APOs) provided by the States/UTs,</li><li>4. Design a research and development component under the CAMPA along with guidelines.</li><li>5. Conceptualizing and designing new schemes/programmes to meet emerging challenge and opportunities in the forestry sector.</li><li>6. Any other requirement(s) of the National Authority</li><li>7. Any other similar needs of the Ministry.</li></ol>		
<b>Presented By</b>		Shri. K. Ravichandran, Director, IIFM, Bhopal.

**Decision of the Executive Committee:**

The proposal was not approved. It was decided that minimum number of required professionals in desired fields should be recruited by National Authority on contract basis through open advertisement on the lines of NITI Aayog or similar scientific/ technical organisations/ Ministries.



**Agenda item No 8B: Proposal on “Training and Capacity Building Infrastructure Development for Sustainable Forest Management and Biodiversity Conservation”**

<b>2. Name of the Scheme</b>	<b>“Training and Capacity Building Infrastructure Development for Sustainable Forest Management and Biodiversity Conservation”</b>
<b>Implementing Agency</b>	Indian Institute of Forest Management (IIFM), Bhopal
<b>Project Duration Period</b>	6 months for planning and tender processing and 24 months for execution
<b>Project Outlay</b>	Rs. 24.56 crores
<b>Objectives of the Project</b> <ol style="list-style-type: none"><li>1. To organise capacity building programmes in subject areas related to biodiversity conservation and sustainable forest management catering to different stakeholders.</li><li>2. Develop and impart need based and sector driven capacity building programmes.</li><li>3. Building state of art training and capacity building infrastructure for sustainable forest management and biodiversity conservation.</li><li>4. The proposal includes the construction of 100 rooms hostel building for trainees and other related infrastructure.</li></ol>	
<b>Presented By</b>	Shri K. Ravichandran, Director, IIFM, Bhopal.

**Decision of the Executive Committee:**

As suggested by Shri Girish Kuber, Expert Member of the Executive Committee, IIFM should also explore training course designed for Van Vigyan Kendra and Krishi Vigyan Kendra for community forest resource management. The Committee deliberated the induction of in-house training during the capacity building programme on sustainable forest and biodiversity conservation management. AS&FA suggested that it should be examined by concerned Programme Division of the Ministry whether the proposal is covered under the scheme as per Section 5 (b) (iii) of the CAF Act, 2016.

The Executive Committee deferred the proposal for comments of Programme (RT) Division.





**Agenda item No 8C: Proposal on “Centre of Excellence for Urban Green Management at IIFM Bhopal”**

<b>3. Name of the Scheme</b>	<b>“Centre of Excellence for Urban Green Management at IIFM Bhopal”</b>
<b>Implementing Agency</b>	Indian Institute of Forest Management (IIFM), Bhopal
<b>Project Duration Period</b>	5 years
<b>Project Outlay</b>	Rs. 4.5 crores
<b>Objectives of the Project</b>	
<ol style="list-style-type: none"><li>1. The centre shall act as repository for scientific and management information related to urban green management.</li><li>2. The centre shall engage in policy and research to provide meaningful solutions for urban green management.</li><li>3. The centre shall create partnership with various stakeholders to develop strategies for urban green management.</li><li>4. The centre shall engage in conducting outreach and promotion activities on urban green management</li></ol>	
<b>Presented By</b>	Shri. K. Ravichandran, Director, IIFM, Bhopal.

**Decision of the Executive Committee:**

The Executive Committee deferred the proposal and directed IIFM, Bhopal to devise a self-sustaining revenue model and submit to the National Authority an action plan for the proposal.

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## II. FOREST SURVEY OF INDIA

Agenda item No 9A: Proposal on “Establishment of Centre of Excellence in Forest Survey of India”

<b>1. Name of the Scheme</b>	<b>Establishment of Centre of Excellence in Forest Survey of India</b>
<b>Implementing Agency</b>	Forest Survey of India (FSI), Dehradun
<b>Project Duration Period</b>	5 years
<b>Project Outlay</b>	Rs. 129.32 crores
<b>Objectives of the Project</b>	
<ol style="list-style-type: none"><li>1. To prepare a comprehensive State of the Forest Reports (SFR) including National Vegetation Map (NVM) once every two years. It will also prepare thematic maps through use of remote sensing data with minimum essential ground truth verification on a ten-year cycle.</li><li>2. To collect, store and retrieve necessary forestry and forestry related data for national and state level planning and to create a computer based National Basic Forest Inventory System (NBFIS)</li><li>3. To undertake work in regard to preparation of forest inventory in selected States/UTs on agency basis until establishment of their own resources survey units.</li><li>4. To impart training in modern forestry survey techniques to foresters at various levels of responsibility in the States/UTs/GoI</li><li>5. To advise the States/UTs on design and development of regional NBFIS.</li></ol>	
<b>Presented By</b>	Shri Anoop Singh, DG,FSI Shri Prakash Lakhchaura, DDG, FSI, Dehradun

### Decision of the Executive Committee:

The presentation of DG, FSI remained inconclusive on 13<sup>th</sup> February, 2023 and subsequent date was fixed on 20<sup>th</sup> Feb, 2023.

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**Agenda item No 9B: Proposal on Creation of a Monitoring Cell of Monitoring Group (MG) at FSI to assist the MG of National Authority, CAMPA**

<b>2. Name of the Scheme</b>	<b>Creation of a Monitoring Cell of Monitoring Group (MG) at FSI to assist the MG of National Authority, CAMPA</b>
<b>Implementing Agency</b>	Forest Survey of India (FSI), Dehradun
<b>Project Outlay</b>	Rs. 4.70 crores
<b>Objectives of the Project</b>	
<ol style="list-style-type: none"> <li>1. Liaisoning with National Authority for getting the information on different activities carried out by utilizing the funds from National and State CAMPA authorities.</li> <li>2. Preparation of methodology for monitoring of plantations and assets with the help of MG.</li> <li>3. Selection of sample sites for the inspection as per the methodology finalized by the MG.</li> <li>4. Designing of formats for the field data collection for monitoring of plantations and assets.</li> <li>5. Monitoring of the field works to be carried out by designated agencies.</li> <li>6. Planning of visits of members of MG to different SFDs for monitoring</li> <li>7. Making various arrangements for conducting of meetings of MG.</li> <li>8. Maintenance of database and portal of MG.</li> <li>9. Any other works assigned by the members of the MG.</li> <li>10. Logistic arrangements for conducting the meeting and visits of members of MG.</li> </ol>	
<b>Presented By</b>	DG,FSI Shri Prakash Lakhchaura, DDG, FSI, Dehradun

**Decision of the Executive Committee:**

DGF&SS asked for a detailed presentation on 13<sup>th</sup> February 2023 by FSI on all on-going and proposed projects of FSI focusing on money released till date, physical objective, target for the proposal/ pilot project both physical and financial, progress made so far, balance achievement and the funds utilized till date along with any other relevant information highlighting the progress of the on-going projects so far.

The presentation was made in the meeting on 13<sup>th</sup> February 2023, where DG, FSI was directed to take up upgradation of eGreenwatch portal immediately in time bound manner within 6 months by utilising the Rs 83 lakhs approved earlier under existing scheme "Monitoring protocol for plantations and assets created by State Forest Departments" already approved by Governing Body. Necessary modifications should be made in the existing Scheme by including the activities related to Monitoring Cell, up gradation of e-Greenwatch and other related activities for supporting Monitoring Group of National Authority.

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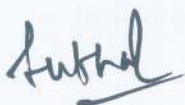
## INDIAN COUNCIL OF FORESTRY RESEARCH AND EDUCATION

**Agenda item No 10: Project proposal on “Monitoring and Management of Lantana camara through utilization for improving livelihood of people in forest fringe villages”**

<b>1. Name of the Scheme</b>	<b>Monitoring and Management of Lantana camara through utilization for improving livelihood of people in forest fringe villages</b>
<b>Implementing Agency</b>	Indian Council of Forestry Research and Education (ICFRE)
<b>Project Duration Period</b>	5 years
<b>Project Outlay</b>	Rs. 14.49 crores
<b>Objectives of the Project</b>	<ol style="list-style-type: none"><li>1. Mapping of Lantana invasion</li><li>2. Removal and restoration of lantana invaded areas and monitoring of eradicated sites in 5 States.</li><li>3. Demonstration of value based products from lantana and analysing the value chains and business models.</li></ol>
<b>Presented By</b>	Shri. A.S Rawat, DG, ICFRE, Dehradun.
<b>Decision of the Executive Committee:</b>	The presentation focused on proposed sites for the study in Gujarat, Madhya Pradesh, Uttar Pradesh, Kerala and Jharkhand and involved the following organizations: <ol style="list-style-type: none"><li>1. ICFRE and its institutions</li><li>2. Wildlife Institute of India, Dehradun</li><li>3. Indian Institute of Forest Management, Bhopal</li><li>4. National Remote Sensing Centre, Hyderabad</li><li>5. Forest Survey of India, Dehradun</li><li>6. CSIR-Indian Institute of Petroleum, Dehradun</li><li>7. State Forest Departs of Gujarat, Jharkhand, Kerala, Madhya Pradesh and Uttar Pradesh</li></ol>

### **Decision of the Executive Committee:**

The Executive Committee after detailed discussion on the proposed project approved the proposal subject to the condition that ICFRE should align their projects with State APO of concerned States and the amount to be spent in States should be adjusted against respective State APOs.



### III. NATIONAL TIGER CONSERVATION AUTHORITY

#### Agenda item No 11: Project proposal on “Establishing metapopulation of Cheetah in India”

<b>1. Name of the Scheme</b>	<b>Establishing metapopulation of Cheetah in India</b>
<b>Implementing Agency</b>	National Tiger Conservation Authority (NTCA)
<b>Project Duration Period</b>	1 year. Extendible as required after the review.
<b>Project Outlay</b>	Rs. 57.30 crores
<b>Objectives of the Project</b> <ol style="list-style-type: none"><li>1. To establish breeding cheetah populations in safe habitats across its historical range and manage them as metapopulation.</li><li>2. To use the cheetah as a charismatic flagship and umbrella species to garner resources for restoring open forest and savannah systems that will benefit biodiversity and ecosystem services.</li><li>3. To enhance India’s capacity to sequester carbon through ecosystem restoration activities in cheetah conservation areas and thereby contribute towards the global climate change mitigation goals.</li><li>4. To use the ensuing opportunity for eco-development and eco-tourism to enhance local community livelihoods.</li><li>5. To manage any conflict between cheetah or other wildlife with local communities within cheetah conservation areas expediently through compensation, awareness and management actions to win community support.</li></ol>	
<b>Presented By</b>	Dr. Amit Mallick, IGF, NTCA, MOEFCC.

#### **Decision of the Executive Committee:**

The Executive Committee after detailed discussion on the proposed project on granting of additional funds for the Project Cheetah for:

1. International transportation of cheetah from Namibia and South Africa to India, by air
2. Fencing part of Gandhi Sagar Wildlife Sanctuary/ Nauradehi WLS for ecological restoration so as to make the site ready for cheetah release.
3. Implementation and monitoring which includes staff engagement which includes engagement of veterinarians, biologists, technicians and other work force, filed logistics.

The Executive Committee, National Authority approved the proposal excluding procurement of vehicle.



**Agenda item No 12: Status of Accounts and Reconciliation of CAMPA fund in the National Authority**

**Decision:** The Executive Committee, National Authority noted and approved the Annual Accounts of the National Authority conducted by the C&AG Audit team during August 2022. Audit certificate has been issued by C&AG vide letter dated 4<sup>th</sup> November 2022.

**Agenda item No 13: Update on Review Committee meeting for reviewing Schemes/Projects supported from National Authority**

CEO, National Authority presented the report of the Review Committee before the Executive Committee and informed that there has been good progress after the review. Around Rs. 40 crores have been released to various implementing agencies and the implementation has improved. Following 5 projects have been completed:

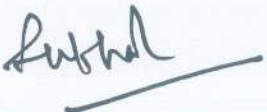
- i. Centre of Excellence on Forest Based livelihoods in Uttarakhand: A Pilot Study (UCOST)
- ii. National Programme for Forest Genetic Resources(FGRs) (FRI)
- iii. Execution of Readiness Activities for Implementation of REDD+ in India (ICFRE)
- iv. Enhanced Capacity Building of Stakeholders and State Government on Forest Landscape Restoration and Reporting Mechanism on Bonn Challenge (IUCN)
- v. Preparation of DPR with LiDAR Survey for one pilot watershed in forest area of each State/UT (WAPCOS)

The DGF&SS has granted no cost extension to schemes for their continuation. The details are given below:

- i. Execution of Readiness Activities for Implementation of REDD+ in India
- ii. Estimation of Economic Losses in Real Term Per Hectare Basis Due to Forest Fire in Uttarakhand and Madhya Pradesh.
- iii. UNESCO Category2 Centre (C2C) on Natural World Heritage Management and Training for the Asia-Pacific Region VII
- iv. Preparation of DPR with LiDAR Survey for one pilot watershed in forest area of each State/UT
- v. Range-wide enumeration of River Dolphin populations in India
- vi. Endangered Species Recovery Programme (ESRP)-
  - a. Development of Conservation plan for Gangetic River Dolphin
  - b. Habitat improvement and conservation breeding of Great Indian Bustard
  - c. Conservation of Manipur's Brow Antlered Deer (Sangai)
  - d. Recovery of Dugongs and their Habitats in India

**Decision:** The Executive Committee, National Authority noted and approved the minutes of the review committee meeting for reviewing schemes/ Projects supported from National Authority held on 29.11.2022, 30.11.2022 and 12.01.2023 under the chairmanship of Director General of Forests & Special Secretary, Ministry of Environment, Forest and Climate Change.

The decision of the EC is to be placed before the Governing Body for ratification.



**Agenda item No 14: Laying of draft annual reports of the National Authority for the year: 2018-19, 2019-20, 2020-21, 2021-22**

**Decision:** The Executive Committee, National Authority noted and approved the draft annual reports laid by the National Authority highlighting the major CAMPA activities and the annual progress of various States/UTs along with the schemes as per the Compensatory Afforestation Fund Act, 2016 and Rules, 2018.

**Agenda item No 15: Any other matter with the permission of the chair**

**Agenda item No. 15.1**

**Request from States for purchase of vehicles for field staff from the provision made in the FCA proposal against diversion of forests for monitoring of forest diversion activities, supervision of compensatory afforestation and forest protection.**

Rajasthan, Punjab, Goa J&K and a few other States have time to time raised issue for purchase of vehicle for field staff engaged in supervision of compensatory afforestation, forest protection duties from the CA levies realised from user agencies. This is required in view of no patrolling vehicles are provided by the State Government to field officials who have to travel long distances in the forests for protection duties. Further, hiring of vehicles has security hazards and leak of secrecy in forest and wildlife protection and also not being cost effective.

**Decision:** The Executive Committee (EC), National Authority noted the agenda item and agreed to place the same before the Governing Body for direction.

*Author*

Agenda item No. 15.2

**PROJECT PROPOSALS FROM FOREST RESEARCH INSTITUTE (FRI), DEHRADUN**

<b>1.</b>	<b>Name of the Scheme</b>	<b>Renovation and modernization of FRI Xylarium and establishment of demonstration centre of amazing wood biodiversity of India</b>
	<b>Implementing Agency</b>	Wood Anatomy Discipline, Botany Division, Forest Research Institute, Dehradun
	<b>Programme Division</b>	RT Division of MoEF&CC
	<b>Project Outlay</b>	Rs. 1.25 crores
	<b>Time for Implementation</b>	2 years
<b>Objectives of the Project</b> <ol style="list-style-type: none"><li>1. Renovation and Repair work of Xylarium-II</li><li>2. Demonstration Centre of amazing wood biodiversity of India</li><li>3. Modernization of Xylarium and establishment of demonstration centre of amazing wood biodiversity of India</li></ol>		
	<b>Presented By</b>	Shri A S Rawat, Director General, ICFRE

**Decision of the Executive Committee:** The Executive Committee after detailed discussion on the project proposal advised that the project should include procurement of one Scanning Electron Microscope (SEM) for better and effective scientific studies and develop a state of art Xylarium. The Project was approved on the recommendation of Programme Division for the cost of 2.25 crores.

Senthil



Agenda item No. 15.3

**PROJECT PROPOSALS FROM INSTITUTE OF WOOD SCIENCE AND TECHNOLOGY, BANGALORE**

<b>3.</b>	<b>Name of Scheme</b>	<b>Roll out and preparedness of States for using National Transit Pass System</b>
	<b>Implementing Agency</b>	Institute of Wood Science and Technology, Bangalore
	<b>Programme Division</b>	<b>Forest Policy Division</b>
	<b>Project Outlay</b>	Rs. 4.67 crores
	<b>Programme duration</b>	3 years
<p><b>Objectives of the Project:</b></p> <ol style="list-style-type: none"> <li>1. The proposal seeks to provide technical manpower support for maintenance and support of NTPS for 3 years. It consisted of two teams one stationed at NIC New Delhi and the other at IWST Bangalore in order to enable roll out National Transit Pass system (NTPS) in the states for issuing, monitoring and keeping records of Pan India Transit Permit for interstate and intra state transportation of bamboo and other timber produce.</li> <li>2. Effective support and assistance will be provided to the State Forest officers and applicant through mails and Query-Response module of the portal.</li> <li>3. NTPS will be enriched as per the requirements being emerged during the roll out.</li> <li>4. Some of the recommendations were suggested by different States during the training phase. Those recommendations/suggestions will be discussed with IWST and/or the Forest Policy Division. Modules will be integrated as per the requirements and discussion.</li> <li>5. Preparing the other states for on boarding on NTPS in terms of data preparation for exempted species and non-exempted species, login activation and other details.</li> <li>6. NTPS will provide effectiveness and transparency in obtaining the transit permit for movement of the wood products obtained from non forest lands across the country. It will facilitate individual to register the details of their wood products grown on non-forest/ private lands in order to get the transit permit easily.</li> <li>7. Portal will remove the hardship being faced by transporters, growers and farmers while moving the bamboo/ bamboo products including timber obtained from non-forest land across the country.</li> <li>8. API integration for bringing the data of local Transit Permit Management System being developed and run by the States to NTPS</li> </ol>		
	<b>Presented By</b>	Shri R. Raghu Prasad, Joint CEO, National Authority, MOEFCC.

**Decision of the Executive Committee:** The Executive Committee, National Authority approved the proposal with the recommendation that the program coordinator stationed at IWST should be a regular employee from IWST because ultimately the entire NTPS portal will be handed over to IWST after the project period will be over. The EC directed to have a regular appointee officer to look after the coordination part so that later on there is no hassle in continuation of the portal maintenance at IWST.

**Agenda item No. 15.4**

**PROJECT PROPOSALS FROM FOREST RESEARCH INSTITUTE, DEHRADUN**

<b>4.</b>	<b>Name of the Scheme</b>	<b>Strengthening and Up-gradation of National Forest Library and Information Centre</b>
	<b>Implementing Agency</b>	Forest Research Institute, Dehradun
	<b>Project Outlay</b>	Rs. 1.63 crores
	<b>Project Duration</b>	1 year
<b>Objectives of the Project</b>		
<ol style="list-style-type: none"><li>1. Subscription of Full text and Bibliographic Databases:</li><li>2. Installation of Radio Frequency Identification (RFID) technology in NFLIC:</li><li>3. Purchase of text and reference books:</li><li>4. Civil and electrical maintenance work to make NFLIC energy efficient (LED lights with mobility sensors)</li><li>5. Work Stations/Personal Computers for strengthening Computer based documents and literature search services</li><li>6. E-book readers</li><li>7. Laptops ( for the presentations / training)</li><li>8. Server, database and other equipment maintenance for library automation</li><li>9. Digitization of old document and updating the database of National Forest Archive. NFLIC</li></ol>		
	<b>Presented By</b>	Shri A S Rawat, Director General, ICFRE

**Decision of the Executive Committee:**

The Executive Committee approved the proposal and asked FRI to increase the membership through online readership and give wide publicity to invite students and interested public for joining the library.

*Subhan*

### Agenda item No. 15.5

**PROJECT PROPOSALS FROM CENTRAL ZOO AUTHORITY FOR** Developing a detailed project report for Setting up **National Referral Centre (NRC)- Wildlife** for wildlife disease management, monitoring and prevention part of the Project Lion.

5.	<b>Name of the Scheme</b>	Developing a detailed project report for Setting up <b>National Referral Centre (NRC)- Wildlife</b> for wildlife disease management, monitoring and prevention part of Project Lion.
	<b>Implementing Agency</b>	Central Zoo Authority (CZA)
	<b>Programme Division</b>	Wildlife Division
	<b>Project Outlay</b>	Rs. 3.00 crores
	<b>Duration</b>	3 years
	<b>Objectives:</b>	<ol style="list-style-type: none"><li>1) Work with the government and stakeholders to improve preparedness, understanding, and management of wildlife diseases.</li><li>2) Establish and maintain a centralized, web-enabled close to real time national database of wildlife health information.</li><li>3) Capacity building of zoo veterinary staff in modern diagnostic and therapeutic methods of managing zoonotic diseases.</li></ol>
		The Programme Division i.e., Wildlife Division has recommended the proposal.

The Member Secretary, CZA explained that the initial proposal for the development of National Referral Centre for monitoring wildlife diseases was approved in year 2020 with an outlay of Rs. 3.00 crores. In 2021-22, an initial grant of Rs. 25.00 lakhs made by CAMPA has been utilised for organising a national level stakeholders meeting at Kewadia Gujarat (utilization certificate received from CZA). The deliberations by the committee constituted for overseeing the development of NRC, the blueprint document and stakeholder meeting has recommended that exact details of NRC structure and budget outlay for the state of art NRC-W facility will be decided based on the detailed project report (DPR). The original budget of Rs. 3.00 crore will not be sufficient for development of centre and to ascertain the total cost of project for development of NRC project a DPR should be prepared. For the development of DPR, an experienced professional team is to be engaged for DPR preparation and carrying out necessary stakeholders. The creation of NRC-W is part of project Lion and proposed to be constructed at Junagarh, Gujarat.

Following activities are proposed to be taken up as part of DPR preparation as follow:

S.N.	Activities	2022-23 (Rs. in cr)
1	<b>National Consultative Workshop</b>	<b>0.25</b> (UC received)
2	National/ regional stakeholders consultative meeting in 2022-23	0.17
3	National/ regional stakeholders consultative meeting in 2023-24	0.93
4	DPR preparation	1.62
5	Miscellaneous	0.03
	<b>Total</b>	<b>3.00</b>

**Decision:** The Executive Committee agreed for modification of the earlier approved project for the purpose of preparation of the DPR only as part of Project Lion. The financial outlay of the project remains the same Rs. 3.00 crore with requirement of 2022-23 for Rs. 1.82 crore. The Executive Committee agreed for recommending the proposal for Governing Body.

## Annexure I

List of Participants in the 21<sup>st</sup> Meeting of the Executive Committee of the National Authority held on 02.02.2023 and 13.02.2023.

1. Shri Chandra Prakash Goyal, DGF&SS, MOEFCC & Chairperson, Executive Committee.
2. Shri Subhash Chandra, CEO, National Authority, MOEFCC.
3. Shri Pravir Pandey, AS&FA, MOEFCC.
4. Dr. S.P Yadav, ADG, FC, NTCA, MOEFCC.
5. Shri Bivash Ranjan, ADG, Wildlife, MOEFCC.
6. Shri B.K Singh, ADG, GIM, MOEFCC.
7. Shri Ramesh Pandey, IGF, FC, MOEFCC.
8. Dr. Amit Mallick, IGF, NTCA, MOEFCC.
9. Shri Rajendra Garawad, DIG, NTCA, MOEFCC.
10. Shri Anil Kumar Ganeriwala, Expert Member.
11. Shri Ashwani Kumar, Expert Member.
12. Shri Girish Kuber, Expert Member.
13. Shri Kailash Chandra Sharma, Expert Member.
14. Dr. Mohit Gera, PCCF (HOFF) & Chairman, Jammu and Kashmir.
15. Shri A.S Rawat, DG, ICFRE, Dehradun.
16. Shri R.K Mishra, PCCF (HOFF), Punjab.
17. Shri Dharminder Sharma, CEO CAMPA, Punjab.
18. Shri R. Raghu Prasad, Joint CEO, National Authority, MOEFCC.
19. Shri Anoop Singh, Director General, FSI, Dehradun
20. Shri Sanjay Kumar Shukla, MS, CZA and IGF, NAEB/ GIM
21. Dr. K. Ravichandran, Director, IIFM, Bhopal.
22. Shri Prakash Lakhchaura, DDG, FSI, Dehradun.
23. Shri V. Shreenivasa Rao, CEO CAMPA, Chhattisgarh.
24. Shri Sarvesh Rai, CEO, J&K CAMPA
25. Ms Akanksha Mahajan, DIG, NTCA and Director NZP
26. Shri Anand Prabhakar, Dy. CEO, National Authority & DIG, RT
27. Shri P.K Saxena, Consultant, Finance and Accounts, National Authority, MOEFCC.
28. Shri Jai Pal Sharma, Consultant, Audit, National Authority, MOEFCC.
29. Dr. Priyanka Tripathi, Consultant, Forestry and Wildlife, National Authority, MOEFCC.
30. Ms. Apoorva Gupta, Consultant, GIS&MIS, National Authority, MOEFCC.
31. Shri Ram Asray, Supdt, Punjab Forest Department.
32. Shri J.C Bhatia, Consultant, CAMPA, Punjab.
33. Shri Shyam Kumar Thakur, Staff Officer, CAMPA, Chhattisgarh.
34. CEO of State Authorities & DDGs, IROs participated through online mode

*Asray*



File No. NA-1/6/2023-NA  
Government of India  
Ministry of Environment, Forest and Climate Change  
National Compensatory Afforestation Fund Management and Planning Authority  
E-mail: [adhoc-campa-mef@nic.in](mailto:adhoc-campa-mef@nic.in)  
\*\*\*\*\*

Hall No.1, 4<sup>th</sup> Floor,  
Block No. 3, CGO Complex,  
Lodhi Road, New Delhi-110003  
Dated the 24<sup>th</sup> March 2023

To,  
The Chief Executive Officer of State/UT CAMPA  
All States/UTs

**Sub: Submission of information on reconciliation of project-wise Compensatory Afforestation against each proposal of Forest Land diversion since 1980-reg**

**Ref: Official letter dated 21.07.2022 on the subject**

Sir/ Madam,

Please refer to the office letter dated 21.07.2022 on the subject cited above (copy enclosed). The information has not been received inspite of more than 6 month delay. The reconciliation of data of compensatory afforestation raised against each FC proposal for diversion of forest land since 1980 is very important for arriving at true picture of compensating the loss of diversion of forest land and ecosystem services.

2. This matter has come up for discussion in various meetings of Executive Committee and the Governing Body of National Authority. Recently, it was also raised in the 21<sup>st</sup> meeting of Executive Committee of National Authority and the State/UT were directed to reconcile and provide data on Compensatory Afforestation raised against each Project wise Forest land diversion proposal since 1980. It is requested to submit the information on the subject mentioned above as per the proforma to the National Authority through mail- [adhoc-ncampa-mef@nic.in](mailto:adhoc-ncampa-mef@nic.in) latest by 31.3.2023 positively

This may kindly be treated as **Most Urgent**.

**(Encl. as above)**

Yours faithfully



(Subhash Chandra)  
Chief Executive Officer

Copy to:

1. Additional Director General of Forests (FC), MoEF&CC, New Delhi
2. Inspector General of Forest (ROHQ)/FC, MoEF&CC, New Delhi
3. All Head of IROs of MoEF&CC
4. The PCCF/Head of State Forest Departments,.
5. The Nodal Officers, Forest Conservation Act, 1980, all States/UTs except West Bengal

**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**Compensatory Afforestation Fund Management and Planning Authority**  
**National Authority**

\*\*\*

Room No. A- 232, 2<sup>nd</sup> Floor,  
Agni Wing, Indira Paryavaran Bhawan,  
Aliganj Road, Jorbagh,  
New Delhi - 110003.  
**Dated: 21<sup>st</sup> July, 2022**

To,  
The PCCF & HoFF/PCCF/Head of Forest Department  
All States/UTs.

**Sub: Updation of records of CA carried out against the diversion of forest land under the Forest (Conservation) Act, 1980 since 1980.**

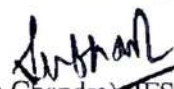
Sir,

The States/UTs Forest Department are carrying out Compensatory Afforestation (CA) against the forest land diverted as per the provisions of the Forest (Conservation) Act, 1980 (FCA, 1980) from the Compensatory Afforestation amount realised from various User Agencies. National Authority does not have information on the Compensatory Afforestation carried out against each case of diversion of forest land which makes it difficult to ascertain whether CAs have been carried out against diversion of each forest land under various FC clearance cases.

2. It is therefore requested to kindly send the information from the beginning of implementation of FCA, 1980 as per following proforma (**attached as Annex I**) to this office by 08/08/2022.

3. This may kindly be treated as **Most Urgent**.

Yours faithfully,

  
(Subhash Chandra), IFS  
Chief Executive Officer

Copy to:

1. Additional Director General of Forests (FC), Ministry of Environment, Forest and Climate Change, New Delhi
2. The CEO of State/UT CAMPA of All State/UTs.
3. Inspector General of Forest (ROHQ)/ FC, Ministry of Environment, Forest and Climate Change, New Delhi
4. All Head of IROs of Ministry of Environment, Forest and Climate Change

Annexure -J

Sl. No.	Year	Details of Forest land diverted under FC Act against each project proposal	Forest Area Diverted (In ha)	CA Proposed (In ha)	Amount of CA received	Year in which CA was completed	Total Amount Spent on CA	CA yet to be raised/completed	Amount available under State CAMPA	Monitoring Report

Signature \_\_\_\_\_

Name \_\_\_\_\_

CEO of State CAMPA

State/UT \_\_\_\_\_



NA-15/3/2022-NA

Government of India

Ministry of Environment, Forest and Climate Change  
National Compensatory Afforestation Fund Management and Planning Authority  
E-mail: adhoc-campa-mef@nic.in

\*\*\*\*\*

Hall No.1, 4<sup>th</sup> Floor,  
Block No. 3, CGO Complex,  
Lodhi Road, New Delhi-110003  
Dated the 20<sup>th</sup> February, 2023

To,

The Chief Executive Officer,  
All States/UTs

**Sub: Submission of Integrated APOs for approval to the National Authority inclusive of physical activities and financial targets under APOs of CSS, State Plan, CAMPA & any other scheme -Reg**

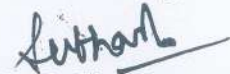
Madam/Sir,

With reference to the DO letter dated 23<sup>rd</sup> March 2022 issued by the DGF&SS, National Authority, during the 16<sup>th</sup> Executive Committee meeting of National CAMPA held on 10<sup>th</sup> & 15<sup>th</sup> March 2022, it has been observed that substantial amount has been demanded for Fire Protection measures and Wildlife Management. Moreover, it has been indicated that separate funding of these items is being done under various Centrally Sponsored Schemes of this Ministry and State Fund, which may lead to duplication of the work. Hence, three consolidated APOs are requested to be submitted by the States/UTs namely (i) Forest Fire Prevention and Management including Forest Protection (ii) Integrated Development of Wildlife Habitat including Project Tiger and Elephant (iii) Green India Mission. These APOs shall include works undertaken under CAMPA, Centrally Sponsored Scheme, External Aided Management Project and also form any State Sponsored Scheme or any source of funding.

As mentioned in the Compensatory Afforestation Fund Rules, 2018(Rule 38) the Annual Plan of Operation of the State Authority shall be prepared in Form XII (Annexure I) and shall be submitted by the State Authority before 31<sup>st</sup> December of the year to the National Authority for the next financial year. In addition, information on integrated APO is required for assessing the requirement of funds under CAMPA.

The APOs received so far does not include this integrated aspect of APOs. Therefore, the States/UTs Authorities are requested to prepare consolidated APO for submissions as provided in Annexure II, Annexure III and Annexure IV highlighting all the activities given as per Compensatory Afforestation Fund Act, 2016 and Rules, 2018.

Yours faithfully,



**Subhash Chandra**  
Chief Executive Officer  
National Authority

Copy To:

The PCCFs and Head of Forest Departments of all States/UTs

## Annual Plan of Operation

[To be submitted by the 31<sup>st</sup> December of current year for the next financial year]

The annual plan of operation (APO) shall be prepared on the following parts:

**1. Part I: Brief History and Past Performance****Part-I of APO shall contain:**

- a) Brief description of forest and forestry sector in the State
- b) Compensatory Afforestation, other forestry and related schemes (physical and financial) including catchment area treatment, wildlife management and community development works and activities carried out therein in the State in last five years from the State Fund, in tabular form
- c) Forestry and other related schemes (physical and financial) and activities carried out therein in the state in previous years from the fund received under the schemes of the Government in tabular form.
- d) Year wise total forest area diverted in the various district/ forest divisions of the State since 1980 in tabular form
- e) Year wise total compensatory afforestation carried out in the State since 1980, in tabular form.
- f) Brief description and abstract of the monitoring work done by the independent monitoring (Third Party Monitoring) in the State
- g) Any other important information for consideration relevant for preparing the APO.

**2. PART-II: Activities to be undertaken for compensatory afforestation, additional compensatory afforestation, penal compensatory afforestation, catchment area treatment plan and for any other site specific scheme may be used as per site-specific schemes submitted by the State along with the approved proposals for diversion of forest land under the Forest (Conservation) Act, 1980 (69 of 1980) referred to in clause (a) of section 6 of the Act:**

- a) District/Forest/Division wise details of new compensatory afforestation, catchment area treatment plan works, wildlife management activities to be done as per the conditions imposed under forest clearance granted by the Central Government under the Forest (Conservation) Act, 1980.
- b) Location, estimated cost and implementation schedule of each activity proposed to be executed from State Fund to be provided district/ division wise
- c) Details of maintenance works in physical and financial terms proposed to be undertaken in the current financial year in the case of compensatory afforestation work, catchment area treatment plan works, wildlife management activities and other such activities undertaken in previous years which need maintenance for its survival and sustainability.

**Note:** Details of only those districts may be provided where compensatory afforestation, penal compensatory afforestation, catchment area treatment, wildlife management and other activities referred to in section 6 of the Act have to be undertaken during the current financial year under consideration

**3. Part III- Activities to be undertaken from net present value and interest component referred in rule 5 and rule 6:**

- a) District/ forest division wise details of activities to be done in the State on specified activities referred to in rule 5 and rule 6
- b) Location, estimated cost and implementation schedule of each activity proposed to be executed from State Fund to be provided district/ division wise.
- c) Details of maintenance works in physical and financial terms, proposed to be undertaken in the current financial year in the case of activities undertaken in the State on specified activities referred to in rule 5 and rule 5 undertaken in previous years which needs maintenance for its survival and sustainability.

**Note:** Details of only those districts may be provided where these activities referred to in rule 5 and rule 6 have to be done during the current financial year under consideration.

**4. Part IV: Measurable output of all physical activities and targets of each permissible activity along with the period required for achieving the measurable output:**

- a) Physical and financial targets of each activity to be undertaken in measurable quantity along with the estimated cost of such activities in tabular form including details provided in part II and part III.
- b) Measurable output of all physical activities to be undertaken along with the period required for achieving the measurable output
- c) Details of the concurrent monitoring and evaluation report including third party monitoring undertaken in past with photographs

**Note:** The APO duly approved by the State Authority shall be submitted by the State Authority before 31<sup>st</sup> December of every year to the National Authority for the next financial year.

**Declaration**

The above annual plan of operation has been adopted by the State Authority.

Signature

Member-Secretary

**Annexure II**

**Format for Annual Plan of Operation Summary Submission 2023-24**

**Annual Plan of Operation (APO) for the financial year \_\_\_\_\_ of \_\_\_\_\_ State CAMPA**

1. Date of Receipt:
2. Date of approval of EC of State/UT:
3. Date of approval of the Steering Committee:
4. Total Amount/Outlay:
5. Funds status with the State/UT along with outlay proposed

(Rs. in crores)

S.No	CAMPA Activity	Fund Available with the State/UT	Outlay proposed
<b>1.</b>	<b>Mandatory Activity</b>		
	CA/PCA/Additional CA		
	Catchment Area Treatment Plan		
	Integrated Wildlife Management Plan		
	Others		
<b>2.</b>	<b>Net Present Value</b>		
<b>3.</b>	<b>Interest</b>		
<b>4.</b>	<b>Other Components</b>		

6. Funds released by State Government during the FY

(Rs. in Crores)

Year	APO approved by National Authority during current financial year	Fund Released by State Government	Fund Utilised by State Authority	Total Outlay for the current year
2018-19				
2019-20				
2020-21				
2021-22				
2022-23				

7. Financial outlays/ Budgetary Support under various Schemes (amount spent)

(Rs. in crore)

Year	CSS		CAMPA	State Plan/ Scheme Fund	Any other scheme
	Name of the scheme	Expenditure/ Provisions			
2020-21					
2021-22					
2022-23					
2023-24*					

\*Provision made in 2023-24. Details to be filled up in Annexure IV

8. Status of Compensatory Afforestation

(Area In Ha.)

Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 31.3.2022			Afforestation carried out in the State as per site specific scheme till 2022-23			Afforestation to be carried out 2023-24	Afforestation carried out percentage	Total Balance upto 2024-25
(CA)	(PCA)	(CA+PCA)	(CA)	(PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)	(CA+PCA)

9. Balance afforestation status

(Area in Ha.)

Balance Afforestation required as per FC Act (in ha.)	Balance Afforestation to be completed in Financial Year (in Ha)		
	2023-24	2024-25	2025-26

10. Details of APO are as under

(Amount in Rs. Crore and Area in Ha.)

S.No	CAF Act/Rules	Activity	Proposed outlay		Green Employment to be generated (in Mandays)	Page No.	Remarks
			Phy. Target	Fin. Target			
<b>1.</b>	<b>Site-specific activities as per Section 6(a) of the CAF Act, 2016</b>						
	Mandatory Activity	Compensatory Afforestation					
		Catchment Area Treatment Plan					
		Integrated wildlife Management Plan					
		Other					
		<b>Total site specific activities under CA</b>					
<b>2.</b>	<b>Activity as per Rule 5(2) of CAF Rules, 2018</b>						
	5(2)a	ANR					
	5(2)b	AR					
	5(2)c	Silvicultural Operations					
	5(2)d	Protection of Plantations and forests					

	5(2)e	Pest and disease control in forests					
	5(2)f	Forest fire prevention and control operations					
	5(2)g	Soil and moisture conservation works					
	5(2)h	Voluntary relocation of villages from protected areas					
	5(2)i	Improvement of wildlife habitat					
	5(2)j	Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors					
	5(2)k	Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals					
	5(2)l	Supply of wood saving, cooking appliances and other forest produce saving devices.					
	5(2)m	Management of biological diversity and biological resource					
<b>3.</b>	<b>Activities as per Rule 5(3) of the CAF Rule, 2018</b>						
	5(3)a	Establishment, Maintenance of modern nurseries					
	5(3)b	Promoting conservation, sustainable use and documentation of biological diversity					
	5(3)c	Purchase and maintenance of					

		equipment of devices for communication, information and technology					
	5(3)d	Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts					
	5(3)e	Construction of residential and official buildings					
	5(3)f	Casual engagement of local people or labours to assist regular staff of State Forest Department					
	5(3)g	Survey and mapping					
	5(3)h	Independent concurrent monitoring and evaluation and third party monitoring					
	5(3)i	Publicity cum awareness programme					
	5(3)j	Production and distribution of quality planting material					
	5(3)k	Forest certification and development of certification standards					
<b>4.</b>	<b>Activities as per Rule 6(a) of CAF Rules, 2018</b>						
	6(a)i	To offset incremental cost of CA/PCA at increased wage rate					
	6(a)ii	To offset increment cost of CAT at increased wage rate					

	6(a)iii	To offset incremental cost of IWMP at increased wage rate					
	6(a)iv	For disbursement of salary and allowances of members and staff					
	6(a)v	For disbursement of sitting fees and allowances to nominated members					
	6(a)vi	Activities referred to in sub rule-(2) and (3) of Rule 5					
<b>5.</b>	<b>Activities as per Rule 6(b) of CAF Rules, 2018</b>						
	6(b)i	Management of office establishment					
	6(b)ii	Office equipment including computers and peripherals and its maintenance					
	6(b)iii	Hiring of staff cars for the use of officers and officials					
	6(b)iv	Hiring of buildings on lease for office establishment and residences of the officers					
	6(b)v	Other contingencies for management of State Authority					
	6(b)vi	Any other activity for management of forests and wildlife with the approval of Steering Committee and included in the APO					

\* Specify the wage rate:

\* Specify the provision of wage employment in mandays during the proposed activities





5. Table 5: Net Present Value (NPV) & Interest

S.No	Plantation Target as per Working Plan for Current Year	Plantation under NPV			Others Schemes		Interest Amount to offset incremental cost of NPV	Remarks
		Physical	Location	Financial	Physical	Financial		
	Project Name/Details	(in Ha.)	(kml file)	(in lakhs)	(in Ha.)	(in lakhs)		

6. Table 6: Net Present Value and Interest :ANR

S.No	ANR Target as per Working Plan for Current Year	Plantation under NPV			Others Schemes		Interest Amount to offset incremental cost of ANR	Remarks
		Physical	Location	Financial	Physical	Financial		
	Project Name/Details	(in Ha.)	(kml file)	(in lakhs)	(in Ha.)	(in lakhs)		

7. Table 7: Net Present Value and Interest: Soil and Moisture Conservation works

S.No	Soil Conservation Target as per ICFRE DPR for Current Year	Soil Conservation Structures under NPV			Others Schemes		Interest Amount to offset incremental cost of NPV	Remarks
		Physical	Location	Financial	Physical	Financial		
	Project Name/Details	(in Ha.)	(kml file)	(in lakhs)	(in Ha.)	(in lakhs)		

8. Table 8: Net Present Value and Interest: Wildlife Habitat Improvement

S.No	Target Activities as per Integrated wildlife Management Plan for Current Year	Wildlife Activities under NPV			Others Schemes		Interest Amount to offset incremental cost of Wildlife Habitat Improvement	Remarks
		Physical	Location	Financial	Physical	Financial		
	Project Name/Details	(in Ha./ No.)	(kml file)	(in lakhs)	(in Ha./ No.)	(in lakhs)		

9. Table 9: Net Present Value and Interest: Fire Management

S.No	Target Activities as per Integrated Fire Management Plan for Current Year	Fire Management Activities under NPV			Others Schemes		Interest Amount to offset incremental cost of Fire Management	Remarks
		Physical	Location	Financial	Physical	Financial		
	Project Name/Details	(in Ha./ No.)	(kml file)	(in lakhs)	(in Ha./ No.)	(in lakhs)		

10. Table 10: Net Present Value and Interest: Capacity Building/ Awareness Activities

S.No	Target Activities as per State Plan for Current Year	Activities		Others Schemes		Interest Amount to offset incremental cost of Capacity Building/Awareness Activities	Remarks
		Physical	Financial	Physical	Financial		
	Project Name/Details	(in Nos.)	(in lakhs)	(In Nos.)	(in lakhs)		

11. Table 11: Net Present Value and Interest: Frontline Staff Quarters

S.No	Target Activities as per State Plan for Current Year	Activities		Others Schemes		Interest Amount to offset incremental cost of Frontline Staff Quarters	Remarks
		Physical	Financial	Physical	Financial		
	Project Name/Details	(in Nos.)	(in lakhs)	(In Nos.)	(in lakhs)		

12. Table 12: Net Present Value and Interest : Casual Labours

S.No	Target Activities as per State Plan for Current Year	Activities		Others Schemes		Interest Amount to offset incremental cost of Casual Labours	Remarks
		Physical	Financial	Physical	Financial		
	Project Name/Details	(in Nos.)	(in lakhs)	(In Nos.)	(in lakhs)		

13. Table 13: Net Present Value and interest : Hiring of Vehicles

S.No	Target Activities as per State Plan for Current Year	Activities		Others Schemes		Interest Amount to offset incremental cost of Hiring of Vehicles	Remarks
		Physical	Financial	Physical	Financial		
	Project Name/Details	(in Nos.)	(in lakhs)	(In Nos.)	(in lakhs)		

14. Table 14: Net Present Value and interest: Other Activities

S.No	Target Activities as per State Plan for Current Year	Activities		Others Schemes		Interest Amount to offset incremental cost of Other Activities	Remarks
		Physical	Financial	Physical	Financial		
	Project Name/Details	(in Nos.)	(in lakhs)	(In Nos.)	(in lakhs)		

15. Table 15: Net Present Value and interest: Overhead Expenditure

S.No	Target Activities as per State Plan for Current Year	Activities		Others Schemes		Interest Amount to offset incremental cost of Overhead Expenditure	Remarks
		Physical (in Nos.)	Financial (in lakhs)	Physical (In Nos.)	Financial (in lakhs)		
	Project Name/Details						



**DETAILS OF FINANCIAL OUTLAY FOR INTEGRATED APOS**

**Physical Activities and Financial Targets under APOs of CSS, State Plan, CAMPA & any other scheme**

**2023-24\* expected**

S. No	Activities	CAMPA		CSS (Centrally Sponsored Schemes)		External Aided Project		State Plan		Any other scheme	
		Physical Area in ha.	Financial Rs.in crores	Physical Area in ha.	Financial Rs.in crores	Physical Area in ha.	Financial Rs.in crores	Physical Area in ha.	Financial Rs.in crores	Physical Area in ha.	Financial Rs.in crores
1.	Fire Prevention and control operations										
2.	Integrated Wildlife Management										
3.	Forest Protection										
4.	Project Tiger										
5.	Project Elephant										
6.	Green India Mission										
7.	Forest Infrastructure										
8.	Vehicles										
9.	Office Establishment										
10.	Hiring of buildings										
11.	Any other item Specify: _____										
	-do-										

\* Expected figures for 2023-24

## Annexure IV

### Form No.-XII

## The Rajasthan State Compensatory Afforestation Fund Management and Planning Authority

### Annual Plan of Operation (APO) for the Year 2023-24

*As per Rule 39 of CAF Rules, 2018*

Approved by the Steering Committee

Labour Rate @ Rs. 259/ per day

*(Rs. In Lacs)*

Sr. No.	CAF Rule	Item	Activity	Proposed Outlay				Green Employment to be generated (in Mandays)	APO Item No. and Page No. of Annex.	Remarks
				Unit	Unit Cost	Phy. Targets	Fin.			

**Part II of the APO :**

**Site Specific Activities as per Section 6(a) of CAF Act, 2016 in which amount has been received in lieu of FCA Cases :**

**COMPENSATORY AFFORESTATION :**

<b>1</b>	As per Specific Condition	CA on allotted Non-Forest Land for Compensatory Afforestation (CA-NFL)	i) New Advance Action	Ha.	0.55397	1351.3190	748.5902	202322	APO Item No. 1(i) & Page No. 51-54	
			ii) Committed (1st year)	Ha.	0.65481	734.7358	481.1123	130030	Committed Works/Activities	
			iii) Committed (2nd year)	Ha.	0.18864	116.9850	22.0681	5964		
			iv) Committed (3rd year)	Ha.	0.05810	243.9220	14.1719	3830		
			v) Committed (4th year)	Ha.	0.05810	1054.0260	61.2389	16551		

			year)						
			vi) Committed (5th year)	Ha.	0.05810	747.7450	43.4440	11742	
			vii) Committed (6th year)	Ha.	0.05810	696.8785	40.4886	10943	
			viii) Committed (7th year)	Ha.	0.05810	1150.8000	66.8615	18071	
			ix) Committed (8th year)	Ha.	0.05810	1518.4850	88.2240	23844	
			x) Committed (9th year)	Ha.	0.05810	1868.7070	108.5719	29344	
			xi) Committed (10th year)	Ha.	0.05810	342.0500	19.8731	5371	
			xii) Committed (11th year)	Ha.	0.05810	529.3200	30.7535	8312	
			xiii) Committed (12th year)	Ha.	0.05810	538.8800	31.3089	8462	
		<b>Total of CA-NFL</b>					<b>1756.707</b>	<b>474786</b>	
<b>2</b>	As per Specific Condition	CA on Degraded Forest Land for Compensatory Afforestation (CA-DFL)	i) New Advance Action	Ha.	0.46333	651.5210	301.8692	81586	APO Item No. 2(i) & Page No. 55-57
			ii) Committed (1st year)	Ha.	0.42842	391.9009	167.8982	45378	Committed Works/Activities
			iii) Committed (2nd year)	Ha.	0.13506	327.8068	44.2736	11966	
			iv) Committed (3rd year)	Ha.	0.06195	564.5938	34.9766	9453	
			v) Committed (4th year)	Ha.	0.06195	1093.8260	67.7625	18314	
			vi) Committed (5th year)	Ha.	0.06195	1862.8400	115.4029	31190	
			vii) Committed (6th year)	Ha.	0.06195	1909.2500	118.2780	31967	

			viii) Committed (7th year)	Ha.	0.06195	3955.9980	245.0741	66236		
			ix) Committed (8th year)	Ha.	0.06195	1547.0811	95.8417	25903		
			x) Committed (9th year)	Ha.	0.06195	3182.0300	197.1268	53278		
			xi) Committed (10th year)	Ha.	0.06195	1033.0100	63.9950	17296		
			xii) Committed (11th year)	Ha.	0.06195	1000.0000	61.9500	16743		
			xiii) Committed (12th year)	Ha.	0.06195	1000.0000	61.9500	16743		
		<b>Total of CA-DFL</b>					<b>1576.399</b>	<b>426054</b>		
<b>3</b>	As per Specific Condition	Additional Compensatory Afforestation (ACA)	i) New Advance Action	Ha.	0.46333	8.1110	3.758	1016	APO Item No. 3(i) & Page No. 58-59	
			ii) Committed (1st year)	Ha.	0.42842	74.5681	31.946	8634	Committed Works/Activities	
		<b>Total of ACA</b>					<b>35.705</b>	<b>9650</b>		
<b>4</b>	As per Specific Condition	Penal Compensatory Afforestation (PCA)	i) New Advance Action	Ha.	0.46333	566.5800	262.514	70950	APO Item No. 4(i) & Page No. 60-61	
			ii) Committed (1st year)	Ha.	0.42842	802.1608	343.662	92882	Committed Works/Activities	
		<b>Total of PCA</b>					<b>606.175</b>	<b>163831</b>		
<b>5</b>	As per Specific Condition	Plantation of Medicinal/Dwarf plants under electric transmission lines or Medicinal Plantation below transmission lines	(i) New Advance Action	Ha.	0.51944	9.8080	5.0946	1377	APO Item No. 5(i) & Page No. 62-63	
			(ii) Plantation/Planting Year	Ha.	2.22005	424.7741	943.0202	254870	Committed Works/Activities	
			(iii) 1st Year Maintenance	Ha.	1.49757	25.4094	38.0525	10284		
			(iv) 2nd Year Maintenance	Ha.	0.88526	59.7521	52.8962	14296		



			(v) 3rd Year Maintenance	Ha.	0.17724	82.5320	14.6276	3953		
			(vi) 4th Year Maintenance	Ha.	0.17724	34.6880	6.1479	1662		
		<b>Total of Medicinal/Dwarf Plants</b>					<b>1059.839</b>	<b>286443</b>		
<b>6</b>	As per Specific Condition	Plantation of 100 trees/plants in lieu of diversion of forest land to petrol pump/roads/water cases and others	(i) New Advance Action-cum-Planting	No. of Plants	0.00653	3345.0000	21.8306	5900	APO Item No. 6(i) & Page No. 64-74	
			(ii) 1st Year Maintenance	No. of Plants	0.00051	7145.0000	3.6395	984	Committed Works/Activities	
			(iii) 2nd Year Maintenance	No. of Plants	0.00045	2580.0000	1.1689	316		
			(iv) 3rd Year Maintenance	No. of Plants	0.00036	1790.0000	0.6424	174		
			(v) 4th Year Maintenance	No. of Plants	0.00036	4600.0000	1.6510	446		
		<b>Total of 100 trees/plants plantation</b>					<b>28.932</b>	<b>7820</b>		
<b>7</b>		<b>Pending liability for CA - NFL/DFL/ ACA /PCA/Medicinal Plants/100 Plants of the year 2022-23</b>					<b>100.000</b>			
		<b>Total of CA - NFL/DFL/ ACA/PCA/ Medicinal Plants/100 Plants</b>					<b>5163.757</b>			

8	As per Specific Condition	<b>WildLife Management Plan (Wildlife Clearance Proposals) :</b>								
		1. Parwan Dam Project (Wildlife Kota Division)		LS			<b>500.000</b>	135135	APO Item No. 8 & Page No. 75-95	
		2. Chambal Bhilwara Pipeline Project at Mukundra National Park, Kota		LS			<b>150.000</b>	40541		
9		<b>Pending liability of the year 2022-23</b>				<b>50.000</b>				
		<b>Total for Wildlife Management Plan</b>				<b>700.000</b>	<b>175676</b>			
10	As per Specific Condition	Catchment Area Treatment (CAT) Plan	For New/Committed Works	LS		400.000	108108	APO Item No. 10 & Page No. 97-114		
		<b>Total of CAT Plan</b>				<b>400.000</b>	<b>108108</b>			
11	As per Specific Condition	<b>Mitigative Measures (Forest Clearance of NH-76 Kota-Chittorgarh) :</b>								
		Plantation Activity (for Mitigative Measures area only)	i) New Advance Action	Ha.	0.90344	0.000	0.000	0	Committed Works/Activities	
			ii) Planting Year (1st year)	Ha.	0.27011	700.000	189.074	51101		
			iii) 2nd Year Maintenance	Ha.	0.21779	480.000	104.540	28254		
			iv) 3rd Year Maintenance	Ha.	0.17421	250.000	43.553	11771		
	v) 4th Year Maintenance		Ha.	0.13063	250.000	32.658	8827			
	<b>Total of Mitigate Measures</b>				<b>369.825</b>	<b>99953</b>				
		<b>Total Part II of the APO</b>				<b>6633.582</b>				

**Activities as per Rule 5(2) of CAF Rules, 2018 :**

<b>Net Present Value (NPV) :</b>									
<b>Net Present Value (NPV) 80% :</b>									
<b>12</b>	As per CAF Rule 5(2) (a)	Assisted Natural Regeneration (ANR) (Restocking of Degraded Forest Areas)	i) New Advance Action	Ha.	0.50316	13700.000	6893.292	1863052	APO Item No. 12 (i) & Page No. 115-134
			ii) Committed (1st year)	Ha.	0.11674	10500.000	1225.770	331289	Committed Works/Activities
			iii) Committed (2nd year)	Ha.	0.04174	9950.000	415.313	112247	
			iv) Committed (3rd year)	Ha.	0.02216	16680.000	369.629	99900	
			v) Committed (4th year)	Ha.	0.02216	9950.000	220.492	59592	
		<b>Total of ANR</b>						<b>9124.496</b>	
<b>Road Side Plantation/Planting of plants :</b>									
<b>13</b>	As per CAF Rule 5(2) (b)	a) Road Side tree plantation on both sides of the road in different divisions	i) 4th Year Maintenance in Chittorgarh (75.52 Rkm.)	RKM.	0.30301	75.520	22.883	6185	Committed Works/Activities
			ii) 5th Year Maintenance in Jaisalmer (17.20 Rkm.) and Bundi (20.00 Rkm.)	RKM.	0.07227	37.200	2.689	727	
		b) Road Side tree plantation of the road in the district Baran (NH 27 Palayta to Kasba Thana)	i) 1st Year Maintenance	RKM.	2.42631	0.000	0.000	0	
			ii) 2nd Year Maintenance	RKM.	1.62038	10.000	16.204	4379	
			iii) 3rd Year Maintenance	RKM.	1.97791	0.000	0.000	0	

			iv) 4th Year Maintenance	RKM.	1.14754	10.000	11.475	3101		
		c) Road Side tree plantation on both sides of the road in Ring pit. i) NH 52 Sikar to Bikaner	i) 5th Year Maintenance	RKM.	0.77459	50.000	38.730	10467		
		d) Road Side tree plantation in district Rajsamand ( NH -8 Km 225 to Shakun Hotel via Ganesh Tekri)	i) 8th Year Maintenance	KM.	0.50000	2.000	1.000	270		
		<b>Total of Road Side Plantation</b>					<b>92.980</b>	<b>25130</b>		
<b>14</b>	As per CAF Rule 5(2) (b)	Artificial Regeneration (AR) {Other than ANR/NFL/DFL}	ia) Reforestation of Degraded Forests-II (RDF-II) {New Advance Action}	Ha.	0.50932	600.000	305.592	82592	APO Item No. 14 (ia) Page No.135-136	
ib) Reforestation of Degraded Forests-II (RDF-II) {1st Year Maintenance}			Ha.	0.16379	1000.000	163.790	44268	Committed Works/Activities		
iiia) Sand Dunes Stabilization (SDS) for IGNP Areas {New Advance Action}			Ha.	0.41216	600.000	247.296	66837	APO Item No. 14 (iia) Page No.137-138		
iiib) Sand Dunes Stabilization (SDS) for IGNP Areas {1st Year Maintenance}			Ha.	0.42221	1000.000	422.210	114111	Committed Works/Activities		

			iiia) Block Plantation (BP) for IGNP Areas {New Advance Action}	Ha.	0.37028	250.000	92.570	25019	APO Item No. 14 (iiia) Page No.139	
			iiib) Block Plantation (BP) for IGNP Areas {1st Year Maintenance}	Ha.	0.61375	300.000	184.125	49764	Committed Works/Activities	
			iiic) Block Plantation (BP) for Non-IGNP Areas {New Advance Action}	Ha.	0.55375	500.000	276.875	74831	APO Item No. 14 (iiic) Page No.140	
			iiid) Block Plantation (BP) for Non-IGNP Areas {1st Year Maintenance}	Ha.	0.54777	120.000	65.732	17766	Committed Works/Activities	
			iva) Canal Side Plantation (Distributory) {CSP(D)} for IGNP Areas {New Advance Action}	RKM.	0.15956	100.000	15.956	4312	APO Item No. 14 (iva) Page No.141	
			ivb) Canal Side Plantation (Distributory) {CSP(D)} for IGNP Areas {1st Year Maintenance}	RKM.	0.14218	100.000	14.218	3843	Committed Works/Activities	
			va) Canal Side Plantation (Minor) {CSP(M)} for IGNP	RKM.	0.27357	100.000	27.357	7394	APO Item No. 14 (va) Page No.142	

			Areas {New Advance Action}							
			vb) Canal Side Plantation (Minor) {CSP(M)} for IGNP Areas {1st Year Maintenance}	RKM.	0.14757	200.000	29.514	7977	Committed Works/Activities	
		<b>Total of AR</b>					<b>1845.235</b>	<b>498712</b>		
<b>15</b>	As per CAF Rule 5(2) (b)	Silvi Pastoral Planting Model for IGNP Areas	i) New Advance Action	Ha.	0.21391	300.000	64.173		APO Item No. 15 (i) Page No.143	
			ii) Committed (1st year)/ Planting Year	Ha.	0.27835	200.000	55.670	15046	Committed Works/Activities	
			iii) Committed (2nd year)/ Maintenance 1st Year	Ha.	0.08712	100.000	8.712	2355		
			iv) Committed (3rd year)/ Maintenance 2nd Year	Ha.	0.03245	500.000	16.225	4385		
		<b>Total of Silvi Pastoral Model for IGNP Areas</b>					<b>144.780</b>	<b>21786</b>		
<b>16</b>	As per CAF Rule 5(2) (b)	Silvi Pastoral Planting Model for Non-IGNP Areas	i) New Advance Action	Ha.	0.19148	1600.000	306.368	82802	APO Item No. 16 (i) Page No.144-145	
			ii) Committed (1st year)/ Planting Year	Ha.	0.27869	1010.000	281.477	76075	Committed Works/Activities	
			iii) Committed (2nd year)/ Maintenance 1st	Ha.	0.11498	250.000	28.745	7769		

			Year								
			iv) Committed (3rd year)/ Maintenance II <sup>nd</sup> Year	Ha.	0.07267	335.000	24.344	6580			
		<b>Total of Silvi Pastoral Model for Non-IGNP Areas</b>					<b>640.934</b>	<b>173226</b>			
		<b>Total of Silvi Pastoral Model</b>					<b>785.714</b>	<b>195011</b>			
<b>17</b>		<b><i>Silvicultural Operations in Forests :</i></b>									
		<b>Productivity Enhancement Operation/Activity (to conserve/promote Natural Regeneration) :</b>									
	As per CAF Rule 5(2) (c)	1.Cultural operation of Bamboo	i) Advance Action	Ha.	0.36176	1000.000	361.760	97773	APO Item No. 17 1(i) Page No. 146		
			ii) Committed (1st year)	Ha.	0.02015	750.000	15.113	4084	Committed Works/Activities		
		2. Cultural operation of Tendu	i) Advance Action	Ha.	0.06568	1200.000	78.812	21300	APO Item No. 17 2(i) Page No. 147-149		
		<b>Total of Productivity Enhancement/Silvicultural Operations</b>					<b>455.684</b>	<b>123158</b>			
		<b><i>Protection of Plantations and Forests :</i></b>									
<b>18</b>	As per CAF Rule 5(2) (d)	Eco restoration and protection of forest area by construction of pucca wall <b>(6 feet height)</b> fencing at the boundary of the protected areas and other wildlife prone areas.		RMT.	0.03350	29000.000	971.500	262568	APO Item No. 18 Page No. 150-157		

19	As per CAF Rule 5(2) (d)	Eco-restoration & protection of forest area by construction of Pucca wall fencing ( <b>4 feet height</b> ) specially in the encroachment and mining prone areas	Except wildlife area	RMT.	0.02620	30000.000	786.000	212432	APO Item No. 19 Page No. 158-175	
20	As per CAF Rule 5(2) (d)	Eco-restoration & protection of forest area by construction of Pucca wall fencing ( <b>4 feet height</b> ) specially <b><i>Diversion of Pratapgarh - Padi Road NH-113</i></b>	Forest Block Hudabavji & Punapathar, Range- Pipalkhunt	RMT.	0.02620	2500.000	65.500	17703	APO Item No. 20 Page No. 176	
21	As per CAF Rule 5(2) (d)	Eco-restoration & protection of forest area Kahrani at Alwar Division from illegal mining	a) Eco-trail 2000 Rmt. @ Rs. 910.5 per Rmt.	RMT.	0.00911	2000.000	18.210	4922	APO Item No. 21 Page No. 177-179	
			b) 4' pucca wall 2500 Rmt. @ Rs. 2620 per Rmt.	RMT.	0.02620	2500.000	65.500	17703		
22	As per CAF Rule 5(2) (d)	Forest Boundary Protection / Demarcation by erection of RCC Boundary Pillars	All forest area	Nos.	0.09000	5000.000	450.000	121622	APO Item No. 22 Page No. 180-181	
23	As per CAF Rule 5(2) (d)	Hiring of machinery for eviction of encroachment and prevention of illegal mining and camp equipment		LS			150.000			
24	As per CAF Rule 5(2) (d)	Purchasing/Hiring of Patrolling vehicles for forest protection and wildlfe management	a) Purchasing of Motor cycles for front line field staff for protection of	Nos.	0.90000	50.000	45.000			



			forests.								
			b) Purchasing of four wheel/4x4 vehicle for front line field staff for protection of forests.	Nos.	20.00000	20.000	400.000				
			c) Hiring of Patrolling Vehicles for forest protection and rescue of wildlife @ Rs. 2.00 Lacs each forest division (If required).	LS			110.000				
		<b>Total of Purchasing/Hiring of Patrolling Vehicles</b>					<b>555.000</b>				
<b>25</b>	As per CAF Rule 5(2) (f)	<b>Forest Fire Prevention and Control Operations :</b>									
		<b>Creation/Maintenance of Fire Line &amp; combating of forest fire for prevention of forest fire in forest areas :</b>									
		(A) Amount for Creation of Fire Line		KM.	0.08500	1149.300	97.691	26403	APO Item No. 25 (A) Page No. 182-186		
		(B) Amount for Maintenance of Fire Line		KM.	0.04300	641.200	27.572	7452	APO Item No. 25 (B) Page No. 187-191		
		<b>Total of Fire Management</b>					<b>125.262</b>	<b>33855</b>			

26	As per CAF Rule 5(2) (g)	Soil and moisture Conservation (SMC) Works in and around Protected Areas /Conservation Reserves/Potential Wild life Areas	a) Anicut type III	Nos.	6.50000	30.000	195.000	52703	APO Item No. 26 (a) Page No. 192-201	
			b) Anicut type II	Nos.	3.75000	30.000	112.500	30405	APO Item No. 26 (b) Page No. 202-221	
			c) MPT	Nos.	0.70000	60.000	42.000	11351	APO Item No. 26 (c) Page No. 222-244	
		<b>Total of SMC Works</b>					<b>349.500</b>	<b>94459</b>		
27	As per CAF Rule 5(2) (h)	Voluntary Relocation of villages from Protected Areas	Sariska Tiger Reserve/ Mukundra Tiger Reserve /Ranthambhore Tiger Reserve/Proposed Ramgarh Vishdhari Tiger Reserve	LS			2500.000		APO Item No. 27 Page No. 245-250	
		<b>Improvement of wildlife habitat as provided in the approved Wildlife Management Plan or Working Plan :</b>								
28	As per CAF Rule 5(2) (i)	Habitat & Corridor Development Works in National Parks & Sanctuaries (Habitat Improvement Works in outside PA/CA but wildlife prone areas)	(i) Advance Action	Ha.	0.42925	310.000	133.068	35964	APO Item No. 28 (i) Page No. 251	
			(ii) 1st Year Maintenance	Ha.	0.08528	0.000	0.000	0	Committed Works/Activities	
			(ii) 2nd Year Maintenance	Ha.	0.02906	300.000	8.718	2356		
		<b>Total of Habitat &amp; Corridor Development Works</b>					<b>141.786</b>	<b>38320</b>		
29	As per CAF Rule	Habitat Improvement Works in National Parks,	(i) Advance Action	Ha.	0.42925	1250.000	536.563	145017	APO Item No. 29 (i) Page No. 252-257	

	5(2) (i)	Sanctuaries, Conservation Reserves, Closures and other potential wildlife areas for Biodiversity Conservation	(ii) 1st Year Maintenance	Ha.	0.08528	670.000	57.138	15443	Committed Works/Activities	
			(ii) 2nd Year Maintenance	Ha.	0.02906	200.000	5.812	1571		
		<b>Total of Habitat Improvement Works</b>					<b>599.512</b>	<b>162030</b>		
<b>30</b>	As per CAF Rule 5(2) (i)	Conservation of Bansial Khetri Conservation Reserve Jhunjhunu as per project	a) Construction of 6'ft wall	RMT.	0.03350	500.00	16.750	4527	APO Item No. 30 Page No. 258-260	
			b) Habitat improvement (Advance Action)	Ha.	0.19148	100.00	19.148	5175		
			c) Habitat improvement (Committed Year 1st - Planting Year)	Ha.	0.27869	0.000	0.000	0		
			d) Habitat improvement (Committed Year 2nd - Maintenance 1st Year)	Ha.	0.11498	50.000	5.749	1554		
			e) Habitat improvement (Committed Year 3rd - Maintenance IIInd Year)	Ha.	0.07267	50.000	3.634	982		
			f) Construction of Water Holes/ Gabion Structure / Anicut	Nos./ LS	0.60000	3.000	1.800	486		

		<b>Total of Bansial Khetri Conservation Reserve, Jhunjhunu</b>					<b>47.081</b>	<b>12724</b>		
<b>31</b>	As per CAF Rule 5(2) (i)	Conservation of Bansial Khetri-Bagour Conservation Reserve Jhunjhunu as per project	a) Construction of 6'ft wall	RMT.	0.03350	500.00	16.750	4527	APO Item No. 31 Page No. 261-264	
		b) Habitat improvement (Advance Action)	Ha.	0.19148	100.00	19.148	5175			
		c) Habitat improvement (Committed Year 1st - Planting Year)	Ha.	0.27869	0.000	0.000	0			
		d) Habitat improvement (Committed Year 2nd - Maintenance 1st Year)	Ha.	0.11498	50.000	5.749	1554			
		e) Habitat improvement (Committed Year 3rd - Maintenance 11nd Year)	Ha.	0.07267	100.000	7.267	1964			
		f) Construction of Water Holes/ Gabion Structure / Anicut	Nos./ LS	0.60000	3.000	1.800	486			
		<b>Total of Bansial Khetri - Bagour Conservation Reserve, Jhunjhunu</b>					<b>50.714</b>	<b>13706</b>		
<b>32</b>	As per CAF Rule	Conservation Reserve Beed Jhunjhunu as per	a) Construction of 6'ft wall	RMT.	0.03350	500.00	16.750	4527	APO Item No. 32 Page No.	

	5(2) (i)	Project	b) Habitat improvement (Advance Action)	Ha.	0.19148	100.00	19.148	5175	265-270	
			c) Habitat improvement (Committed Year 1st - Planting Year)	Ha.	0.27869	0.000	0.000	0		
			d) Habitat improvement (Committed Year 2nd - Maintenance 1st Year)	Ha.	0.11498	50.000	5.749	1554		
			e) Habitat improvement (Committed Year 3rd - Maintenance 1st Year)	Ha.	0.07267	100.000	7.267	1964		
			f) Construction of Water Holes/ Gabion Structure / Anicut	Nos./ LS	0.60000	3.000	1.800	486		
		<b>Total of Conservation Beed Reserve, Jhunjhunu</b>					<b>50.714</b>	<b>13706</b>		
<b>33</b>	As per CAF Rule 5(2) (i)	Mansamata Conservation Reserve, Jhunjhunu (Plan 2020-21 to 2029-30)	a) Construction of 6'ft wall	RMT.	0.03350	500.00	16.750	4527	APO Item No. 33 Page No. 271-274	
			b) Habitat improvement (Advance Action)	Ha.	0.19148	50.00	9.574	2588		
			c) Habitat improvement (Committed Year 1st - Planting Year)	Ha.	0.27869	0.000	0.000	0		

			d) Habitat improvement (Committed Year 2nd - Maintenance 1st Year)	Ha.	0.11498	50.000	5.749	1554		
			e) Construction of Water Holes/ Gabion Structure / Anicut	Nos./ LS	0.60000	3.000	1.800	486		
		<b>Total of Mansamata Conservation Reserve, Jhunjhunu</b>					<b>33.873</b>	<b>9155</b>		
<b>34</b>	As per CAF Rule 5(2) (i)	Conservation of Lesser Florican Conservation Reserve , Arwar Forest Block 271 ha. Sarwar, Ajmer	a) Development of grass bir by sowing grass/mung/other crops etc.	Nos.	0.01000	130.000	1.300	351	APO Item No. 34 Page No. 275-284	
			b) Planting and other silvicultural activities	Ha./ Nos.	0.00100	300.000	0.300	81		
			c) Watch and ward 6x12 months	Nos.	0.05538	72.000	3.987	1078		
		<b>Total of Conservation of Lesser Florican, Ajmer</b>					<b>5.587</b>	<b>1510</b>		
<b>35</b>	As per CAF Rule 5(2) (i)	Shahabad Conservation Reserve, Baran	a) Eco restoration and protection of forest area by construction of pucca wall (6 feet height) fencing at the boundary of the protected areas and other wildlife prone	RMT.	0.03350	1000.000	33.500	9054	APO Item No. 35 Page No. 285	

			areas.							
			b) Habitat Improvement Works in Shahabad Conservation Reserve-I and Reserver-Taleti (Advance Action)	Ha.	0.42925	300.000	128.775	34804		
		<b>Total of Shahabad Conservation Reserve, Baran</b>					<b>162.275</b>	<b>43858</b>		
<b>36</b>	As per CAF Rule 5(2) (k)	Establishment, operation and maintenance of animal Rescue Centres/Rescue Wards and veterinary treatment facilities for wild animals	a) Maintenance of Rescue Wards (Other than Nagaur, Bikaner, Jodhpur and Barmer Districts)	Nos.	2.00000	11.000	22.000		APO Item No. 36 (a) Page No. 286-287	
b) Maintenance of Rescue Wards in Nagaur, Bikaner, Jodhpur and Barmer Districts			Nos.	4.00000	24.000	96.000		APO Item No. 36 (b) Page No. 288		
c) Running and maintenance of Rescue Centres for wild animals (Other than Nagaur, Bikaner,			Nos.	2.00000	23.000	46.000		APO Item No. 36 (c) Page No. 289		

			Jodhpur and Barmer Districts)							
			d) Running and maintenance of Rescue Centres for wild animals in Nagaur, Bikaner, Jodhpur and Barmer Districts	Nos.	4.00000	9.000	36.000		APO Item No. 36 (d) Page No. 290	
		<b>Total of Establishment &amp; Maintenance of Rescue Centres/Rescue Wards</b>					<b>200.000</b>			
<b>37</b>		<b>Research Proposals by AFRI :</b>	<b>as Spill-over activity</b>							
	As per CAF Rule 5(2) (m)	1) Survey and selection of Candidate Plus Trees and Identification of Seed Production Areas and Broad Leaves Species of Rajasthan	for IIIrd Year	LS			5.190		APO Item No. 37 Page No. 291-333	
		2) Development of Seed Production Areas of Economically Important Tree Species of Rajasthan.	for IIIrd Year	LS			3.715			



		3) Improvement of Survival Rate in Kair i.e Capparis decidua under field planting conditions by Architecting Root Biomass and in-situ Moisture Management	for IIIrd Year	LS			8.372			
		4) Other Research Projects	(i) Hydroponics based early growth boosting technique for recalcitrant and slow-growing tree species saplings (for Ist Year)	LS			15.000			
			(ii) Assessment of flora and faunal (insect pollinators) biodiversity of Ramgarh Crater Baran in contest of Climate Change (for Ist Year)	LS			9.567			
		<b>Total of Research Proposals</b>					<b>41.844</b>			
		<b>Total for Net Present Value (NPV) 80% Items</b>					<b>19673.968</b>			
<b>Activities as per Rule 5(3) of CAF Rules, 2018 :</b>										
		<b>Net Present Value (NPV) 20% :</b>								
<b>38</b>		<b>Establishment, up-gradation and maintenance of modern nurseries and other planting :</b>								
	As per CAF Rule 5(3) (a)	(i) Nursery Infrastructure upgradation/Upgradation of Nursery		LS			1500.000	405405		

		(ii) Creation of New Nursery		Nos.	15.00000	10.000	150.000	40541	APO Item No. 38 (ii) Page No. 334		
		(iii) Installation of Solar System at Abhera Biological Park, Kota		LS			25.000		APO Item No. 38 (iii) Page No. 335-341		
		<b>Total for Nurseries</b>					<b>1675.000</b>	<b>445946</b>			
<b>39</b>		<b><i>Purchase and maintenance of equipment or devices used for communication and information technology for the purpose of protection of forest and wildlife :</i></b>									
		<b>Information and Communication Technology (ICT) :</b>									
	As per CAF Rule 5(3) (c)	a) Procurement of Data Storage devices (Portable Hard Disk) and Power Backup equipment (for mobile)		LS			12.000		APO Item No. 39 Page No. 342-346		
		b) Maintenance & upgradation of Hardware and IT related equipment		LS			15.000				
		c) Procurement of High Quality GPS for interactive maps facility		LS			15.000				
		d) Capacity Building and Infrastructure strengthening regarding communication /devices (Laptops/ Tablets) for forest officers		LS			70.000				
		e) IT Task	To maintain and update the data/statistics of various FCA diversion		LS			10.000			

			proposals							
		f) Drone dispersal of seeds on high ridges	For 10 divisions @ Rs. 5.00 lacs per division	LS			50.000			
		g) Purchase of devices used for communication and information technology such as wireless sets, trap cameras etc. for the purpose of protection of forests and wildlife		LS			60.000			
		e) Creation of VC setup at the level of CCF		LS			30.000			
		<b>Total for Information &amp; Communication Technology (ICT)</b>					<b>262.000</b>			
<b>40</b>	As per CAF Rule 5(3) (d)	Construction, up-gradation and maintenance of inspection paths, forest roads in forest area, watch towers, check posts and timber depots for protection of forest and wildlife	Watch Towers	Nos.	5.00000	7.000	35.000	9459	APO Item No. 40 Page No. 347-349	
			Check Posts	Nos.	5.00000	2.000	10.000	2703		
			Forest Roads/Inspection Paths in forest area	RKM.	10.00000	5.000	50.000	13514		
		<b>Total</b>					<b>95.000</b>	<b>25676</b>		
<b>41</b>	As per CAF Rule 5(3) (d)	Construction, up-gradation and maintenance of	Construction of Cause Way in Range Sarmathura	Nos.	5.00000	3.000	15.000	4054	APO Item No. 41 Page No. 350	

		inspection paths, forest roads etc for patrolling of Tiger Tracking at Damoh in Dholpur Division	Construction of Forest Roads/Inspection Paths in Range Sarmathura for Tiger Tracking (6Km x 5m)	RKM.	10.00000	6.000	60.000	16216		
<b>42</b>	<b><i>Construction of residential and official buildings in forests for front line staff deployed for protection of forest and wildlife :</i></b>									
As per CAF Rule 5(3) (e)	Infrastructure development and construction of Forest Chowkies, Buildings for Forest protection and Management	a) Forest Guard Chowkies (for plinth area 675 Sq. ft.)	Nos.	8.53710	14.000	119.519	32303	APO Item No. 42 (a) & (b) Page No. 351-355		
		b) Forest Guard Chowkies (for plinth area 675 Sq. ft.) (for WL Areas)	Nos.	12.78710	7.000	89.510	24192			
		c) Office-cum-Residence (OCR) for Range Forest Officers (for plinth area 1000 Sq. ft.)	Nos.	11.96663	6.000	71.800	19405	APO Item No. 42 (c) & (d) Page No. 356		
		d) Office-cum-Residence (OCR) for Range Forest Officers (for plinth area 1000 Sq. ft.) (for WL Areas)	Nos.	22.83983	5.000	114.199	30865			
	<b>Total for Infrastructure development</b>					<b>395.028</b>	<b>106764</b>			

43	As per CAF Rule 5(3) (e)	Construction of Toilets/Bathrooms for facilitate to frontline staff (specially for women) in the field		Nos.	0.70000	40.000	28.000	7568	APO Item No. 43 Page No. 357-358		
44	As per CAF Rule 5(3) (e)	Improvement of residential and official buildings in forests for front line staffs deployed for protection of forest and wildlife/Improvement of residential quarters of frontline staff (forestor nakas & guard chowkies/ barracks)	Building constructed under CAMPA	LS			100.000	27027	Committed Works/Activities		
45	As per CAF Rule 5(3) (g)	Survey and mapping of forest areas for Forest Fire control, Compensatory Afforestation Works, Soil and Moisture Conservation, Catchment Area Treatment and Wildlife Management for preparing Annual Plans to be executed from the State Fund		LS			20.000		APO Item No. 45 Page No. 359		
		<b><i>Independent concurrent monitoring and evaluation and third party monitoring of various works undertaken from the State Fund :</i></b>									
		<b>Monitoring and Evaluation (M &amp; E) :</b>									
46	As per CAF Rule 5(3) (g) & (h)	Preparation of Status Report on CAMPA Works as per FCA proposals Division wise		LS			6.000		APO Item No. 46 to 48 Page No. 360 & 342-346		

47	As per CAF Rule 5(3) (h)	Monitoring and Evaluation of Works executed under CAMPA (Third Party Evaluation)		LS			70.000			
48	As per CAF Rule 5(3) (h)	Providing SIM based Internet facility to field staff for monitoring of plantation through various applications/portals of the Department		LS			126.000			
		<b>Total for M &amp; E</b>					<b>202.000</b>			
49		<b>Capacity Building :</b>								
	As per CAF Rule 5(3) (1)	Capacity Enhancement, Skill development and Knowledge upgradation trainings/workshops for Senior Executives/DCFs/ACFs/Ros/ Surveyers/Forest staff/ policy makers/technical staff/drivers etc		LS			100.000			APO Item No. 49 Page No. 361-376
		<b>Total for Capacity Building</b>					<b>100.000</b>			
		<b>Total for Net Present Value (NPV) 20% Items</b>					<b>2952.028</b>			
50		<b>Pending liability of NPV Items for the year 2022-23</b>					<b>250.000</b>			
		<b>Grand Total of Net Present Value (NPV) 80+20 %</b>					<b>22875.996</b>			

		<b>Interest Transferred to the State Fund and Interest accrued on the deposits in the State Fund/ Interest Part :</b>								
<b>Activities as per Rule 6(a) of CAF Rules, 2018 :</b>										
		<b>INTEREST PART (60%) :</b>								
<b>51</b>	As per CAF Rule 6(a) (i)	To offset the incremental cost of compensatory afforestation and penal compensatory afforestation at the increased wage rates		LS			100.000		Interest Component	
<b>52</b>	As per CAF Rule 6(a) (v)	For disbursement of sitting fees and allowances to nominated members of the State Authority		LS			7.000			
<b>53</b>	As per CAF Rule 6(a) (iv)	For disbursement of salary and allowances of members and staffs, both regular and contractual, of the State Authority		LS			170.000			
		<b>TOTAL of Interest (60%)</b>					<b>277.000</b>			
<b>Activities as per Rule 6(b) of CAF Rules, 2018 :</b>										
		<b>INTEREST PART (40%) :</b>								
<b>54</b>	As per CAF Rule 6(b) (i) & (ii)	Management of office establishment; office equipment including computers and peripherals and its maintenance for the State Authority		LS			20.000		Interest Component	

55	As per CAF Rule 6(b) (iii)	Hiring of staff cars for the use of the officers and officials of the State Authority		LS			10.000			
56	As per CAF Rule 6(b) (v)	CAMPA Work Auditing		LS			20.000			
57		Other contingencies for management of the State Authority, with the approval of the Steering Committee of the State Authority		LS			20.000			
		<b>TOTAL of Interest (40%)</b>		LS			<b>70.000</b>			
		<b>Grand Total of Interest</b>					<b>347.000</b>			
		<b>Grand Total of APO</b>					<b>29856.577</b>	<b>6753935</b>		



ANNEXURE V



Proposal for Strengthening of National Authority

**Requirement of Professional  
Manpower for Appraisal & Management  
and Monitoring & Evaluation of CAMPA  
Activities**



**Government of India  
Ministry of Environment, Forest and Climate Change**

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## **Proposal for strengthening of National Authority office by setting up of Appraisal & Management Team and National CAMPA Monitoring and Evaluation Cell (NMEC)**

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1. **Background:** The Compensatory Afforestation Fund Act, 2016 (CAF Act 2016) was enacted in 2016 for providing mechanism for planning and implementation of compensatory afforestation and other related activities. The compensatory levies received from User Agencies while granting of approval for diversion of forest lands as per provisions of the Forest (Conservation) Act, 1980 are deposited in the Public Accounts of India and each State for raising of compensatory afforestation, additional compensatory afforestation, penal compensatory afforestation (PCA) and implementation of catchment area treatment plan and integrated wildlife management plan. The amount collected as net present value (NPV) is spent as per provisions of CAF Act and Rules for improvement of quality of forests, forest protection, fire control, strengthening of forest related infrastructure etc. The CAF Act, 2016 also provides for setting up of National Authority at national level and State/UT Authorities at State/ Union Territories levels. The CAF Rules were notified in 2018. The National Authority came into force w.e.f. 30.09.2018.
2. The proposal for strengthening of office CEO, National Authority by engaging Program Management Consultancy (PMC) and National CAMPA Monitoring and Evaluation Cell (NMEC) was first placed before 2<sup>nd</sup> meeting of Governing Body after recommendation by Executive Committee. The Governing Body advised to engage IIFM for providing PMC and NMEC. However the proposal of IIFM was not agreed to by the EC in its 21<sup>st</sup> meeting held on 02.02.2023 and CEO National Authority was asked to prepare proposal for engagement of professional manpower at appropriate level for strengthening the CEO office of the National Authority for proper discharge of its function. This recommendation was accepted by Governing Body in its 3<sup>rd</sup> Meeting held on 15th February, 2023.
3. Accordingly, this proposal for engagement of professional manpower at the office of the CEO National Authority has been submitted for consideration and approval of Executive Committee.
4. **The functions of the National Authority, CAMPA** are listed below:
  - i. Maintain the accounts of Compensatory levies received under CAF Act,2016
  - ii. Reconciliation of Funds and release of State/UT's share
  - iii. Approval of APOs of State/ UTs
  - iv. Management of National Fund
  - v. Approval of Schemes under National Fund
  - vi. Monitoring and evaluation of CAMPA activities
  - vii. Preparation of Annual Accounts & reports
  - viii. Coordination with States/ UTs and Institutions for effective implementation of CAMPA activities
  - ix. Confirmation of compensatory levies for forest conservation clearances
  - x. Other functions as per CAF Act, 2016 & Rules.

The National Authority is administering funds collected as per the Compensatory Afforestation Fund Act, 2016 and Rules, 2018. The National Authority, CAMPA ensures overall implementation, management and monitoring of CAF Act, 2016 and Rules, 2018 focusing on promoting afforestation and regeneration activities as a way of compensating for forest land diverted onwards non forest purposes.

## 5. Present Set-up of National Authority:

The CAF Act, 2016 provides for the posts of CEO, Joint CEO, Financial Advisor cum Chief Accounts Officer and Dy. CEO. Out of these four posts, presently only CEO is posted on regular basis other positions are held by officers of the Ministry as additional charge. A proposal for creation of 21 posts after the approval of Competent Authority has been submitted to Department of Expenditure, Ministry of Finance. These posts sanctioned in the First Meeting of Governing Body in 2019 are mostly of administrative nature and support staff. In the last four and half years, the work of National Authority has expanded manifold. There are 37 States/UTs Authorities which send Annual Plan of Operations (APOs) for approval of National Authority with description of large numbers of CAMPA activities ranging from Compensatory Afforestation, Forest Fire Prevention and Control, Forest Protection Measures, Soil and Water Conservation, Wildlife Habitat Improvement. The APOs are voluminous and are to be examined in detail as per the provisions of CAF Act & Rules and in the light of directions of Governing Body and Executive Committee in time-bound manner for approval of Executive Committee. Thereafter, the implementation of CAMPA activities is to be coordinated with agencies.

In addition, presently around 40 Schemes/Projects are being implemented by different institutions, which need to be regularly reviewed in coordination with program divisions of the Ministry and necessary fund flow is to be ensured. Many new schemes in the priority areas of the Ministry in the field of forest and wildlife conservation are in pipeline.

The professional and complex nature of the task at times involving multiple stakeholders require engagement of professional and experts in the relevant field. This requirement will be in addition to the manpower which has been submitted to Department of Expenditure, Ministry of Finance for creation of 21 posts, mostly of administrative and secretarial nature.

Existing Professional Manpower:

At present, there are following consultant in position –

- |   |    |
|---|----|
| 1. Senior Consultant (Monitoring)                               | :1 |
| 2. Senior Consultant (Forestry & Wildlife) joined on 27.03.2023 | :1 |
| 3. Consultant (GIS & MIS)                                       | :1 |
| 4. Consultant Forestry  | :1 |
| 5. Consultant (Finance)   | :1 |
| 6. Consultant (Audit)   | :1 |

While consultant (Finance) and Consultant (Audit) are responsible for finance and accounts functions of the National Authority, the manpower gap is quite wide for forestry, wildlife,

Remote Sensing, GIS & MIS and other related fields to cover the CAMPA activities in its entirety. The National Authority is facing acute shortage of professional and technical human resource to assist in mandated important functions as provided in the CAF Act & Rules. Besides, the efforts for filling up of vacant post of Joint CEO, Financial Advisor & CAO, Deputy CEO have not succeeded despite repeated attempts. In view of limited manpower, the National Authority is able to discharge the routine functions only. Therefore, the proposal to engage professional manpower has been prepared.

### **1. Administrative, Supervisory & Financial Team:**

The CEO, Joint CEO, Financial Advisor, Dy CEO,

Support staff- Consultants Finance, Audit, IT and Hindi Cell (Official Language)

Function:- Administration, Technical Supervision, Coordination (with MoEF&CC and other Stakeholder Ministries, Departments State Governments), RTI, Parliamentary Matters, management and Planning of CAMPA Funds, Accounts, Audit etc.

### **2. Appraisal & Management Team:**

It is proposed to engage professionals to assist National Authority in appraisal of APOs, Schemes and projects, Planning and managements of CAMPA activities and funds. The composition, scope of works for are appraisal team is as under-

This Unit shall consist of eight Consultants in the field of Forestry, economics, wildlife, forest, remote sensing and geographical information system and social sector. Provision of Young Professional is also made to assist the expert members including professionals with experience in data analysis and report writing.

**Functions of Appraisal Team:** The consultants/ expert members will be responsible for preparation and implementation of Perspective Plan, scrutiny of Annual Plan of Operations (APOs) submitted by various States/UTs and Schemes/ project proposals submitted by Programme Divisions of the Ministry for approval, develop and implement reporting mechanisms. In addition, they will coordinate the compilation and analysis of data for preparation of various reports viz. quarterly & annual reports, field reports and third-party evaluation reports design a research development component under CAMPA.

**Profile of Team leader of Management Team:** The team leader is a forestry expert/professional with experience of 15 years and above or a retired IFS officer.

**Profile of Appraisal Team members:** Professionals with 5-10 years of working experience in research and management in the domains of environment, economics, wildlife, forest, and soil & water conservation sector. Four positions of Consultants Forestry are proposed to

enable scrutiny of Annual Plans and Schemes/ Projects on zonal basis.

S. No	Position	Experience in years	Number	Remuneration per month
1	Forestry Expert and Team Leader	15 years and above	1	In position
2	Forest Consultants- East & North East, Central & West, North, South	5 to 10 years	4*	80,000-1,20,000
3.	Soil & water Conservation Expert	5 to 10 years	1	80,000-1,20,000
4.	Consultant (IT-Software Developer)	5 to 10 years	1	1,00,000-1,20,000
5	Economics/ Forest Economics/ Statistician	5 to 10 years	1	80,000-1,20,000
6	Young Professionals/	Post Graduates	4	50,000-60,000

\* Already approved. Offer of engagement letter for 2 consultants is issued.

#### **Functions of Appraisal & Management Team:**

- (a) Assist National Authority in analysis and appraisal of the Annual Plan of Operations (APO) provided by the States/ UTs, develop a uniform/ standard framework for the APO and correlate information between FC clearances, CA data and actual work done.
- (b) Collate and manage data related to diversion of forest land from PARIVESH and map it with CA works being done in the States/UTs, track expenditure.
- (c) Analyse the progress reports submitted by the States with reference to APOs for better progress monitoring and in also assessing overlap with the regular activities carried out by the State Forest Department or other central schemes.
- (d) Preparation of Monthly, Quarterly and Annual Reports.
- (e) Publication of Technical bulletins, Research reports, Best practices, Newsletters, etc.
- (f) Reconciliation of CAMPA receipts and other functions assigned by CEO/ Joint CEO.

### **3. National Monitoring and Evaluation Cell (NMEC) for Monitoring and Evaluation of CAMPA activities and Performance Assessment:**

#### **Functions of NMEC:**

- (a) Monitoring expenditure of funds provided to States by the Authority and analyse the monitoring reports submitted by the States.

- (b) Support the Monitoring Group with adequate data and reports from time to time and perform such functions as directed by National Authority and the Monitoring Group.
- (c) Facilitate in documentation of best practices, prepare output– outcome analysis. Define indicators and parameter to measure outcomes and methodology for reporting on the parameters.
- (d) NMEC will be responsible for monitoring, evaluation and documentation of CAMPA activities.
- (e) Develop reporting format for APO, quarterly reports, annual reports, audit reports, field survey reports and third-party evaluation reports to ensure uniformity in reporting formats across all States/ UTs.
- (f) Coordinate among the State/ UT CAMPA for compilation and analysis of data, implement the geo-spatial portal for monitoring.

## **B. Research and Development**

- (a) Design a research and development component under the CAMPA along with guidelines so that states and other research institutions can tap the funds for high quality research and developing solutions for critical/ emerging challenges faced by the sector.
- (b) Develop a network of scientific and expert institutions for knowledge sharing, infusion of new ideas and best practices, collaboration and scheme designing.
- (c) Develop a data management system for analysis, retrieval quick reporting and archival by leveraging information technology systems.
- (d) Development of strategy for knowledge management to support the sector.
- (e) Support research on identification of state(s) specific priority areas which could be supported through CAMPA funds.
- (f) Through involvement of research institutions, identifying areas of long- term support like Climate change mitigation, provisioning of ecological services, strategies for eco-restoration of degraded forests, etc.

## **C. Conceptualising and Designing New Schemes/ programmes to meet emerging challenges and opportunities in the forestry sector**

- (a) Identification and Assessment of themes and subject areas for new scheme development. Coordinate with SFDs and other expert organisations for the same.
- (b) Support identification of areas in which new scheme can be designed and provide necessary data and research support for the same.
- (c) Facilitate and coordinate wider discussions on designing of such schemes through workshops and seminars, preparation of scheme draft and finalisation of the scheme.
- (d) Appraisal of new schemes proposed by States.

**D. Other activities**

- (a) Help in organisation of workshops and seminars through identification of topics, resources persons, participants, and support in management.
- (b) To leverage and support activities under the various streams within the Ministry related to the country's plan for combating climate change, land degradation and biodiversity and wildlife conservation.
- (c) Tracking of afforestation and natural regeneration activities under various schemes for contribution to mitigating climate change and achievement of the NDCs.
- (d) To identify key stakeholders and develop communications strategy for CAMPA and develop extension material as per the strategy.
- (e) Any other requirement(s) of National Authority.

*Manpower Requirement of NMEC:*

<b>S. No</b>	<b>Position</b>	<b>Education Qualification &amp; Experience</b>	<b>Number</b>	<b>Remuneration per month per person</b>
1	Forestry professional and Team Leader	M.Sc Forestry with experience of 5 years/ IFS (Retired)	1	In Position
2	Management/ Communication & Media	MBA with 2 years' experience in relevant field	1	80,000
3	Remote Sensing & GIS Young Professional	Management Profile with experience of more than 5 years	2	80,000
4	Data Management, MIS & Analyst/	Engineering graduates with 5 years of working experience in relevant field	1	80,000
5	Young Professional SocialScience/Statistics/Ecology/Mathematics	Post Graduate Social Sciences/Sociology/ Anthropology	4	50,000-60,000

**Budget**

1. For management appraisal and management team, Rs. 7,80,000 per month and Rs. 93,60,000 annually with 5 % increase for the next year.
2. For NMEC, Rs. 5,20,00 per month and Rs. 62,40,000 annually with 5% increase for next year.
3. Total financial implication of approximately Rs. 1.56 crores per year for engagement of professionals in National Authority.





**Proposal for Establishment of  
Centre of Excellence  
in  
Forest Survey of India**



**Forest Survey of India  
(Ministry of Environment, Forests & Climate Change)**

**Dehradun**



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## **Proposal for Establishment of Centre of Excellence in Forest Survey of India**

### **1.0 FSI: Creation and Mandate**

Forest Survey of India (FSI) is a premier institution under the Ministry of Environment, Forests and Climate Change. As regular assessment of the forest resources of the country became a key input in the decision-making of the Government on India, the FSI was conceived as the organisation that would make such data available. On the recommendation of the National Commission on Agriculture, FSI was created in June, 1981 as a successor to “Pre-Investment Survey of Forest Resources” (PISFR), a project initiated in 1965 by the Govt. of India and sponsored by FAO and UNDP, for survey and inventory of forest resources in different parts of the country. The mandate of FSI as laid out in 1986 contained the following objectives:

1. To prepare a comprehensive State of the Forest Reports (SFR) including National Vegetation Map (NVM) once every two years. It will also prepare thematic maps through use of remote sensing data with minimum essential ground truth verification (most ground – truth verification would be done by the respective state governments) on a ten-year cycle.
2. To collect, store and retrieve necessary / forestry and forestry – related data for national and state level planning and to create a computer based National Basic Forest Inventory System (NBFIS).
3. To design methodologies relating to forest surveys and subsequent updating. This would include methodologies for –
  - a. Vegetation mapping including thematic maps through use of satellite imageries / aerial photographs.
  - b. Ground – truth verification
  - c. Growing stock and volume assessment.
4. To undertake work in regard to preparation of forest inventory in selected States/UTs on agency basis until establishment of their own resources survey units.
5. To impart training in modern forest survey techniques to foresters at various levels of responsibility in the states/UTs/GOI.
6. To advise the states/UTs on design and development of regional NBFIS.
7. To support and oversee techniques/inventory work undertaken by states/UTs Forest Departments.

## 2.0 Major Activities of FSI

The following are the major activities of FSI, which have been further elaborated in the Annexure

- Forest Cover Mapping
- Forest Fire Monitoring
- National Forest Inventory
- Decision Support System (DSS)
- E-Green Watch
- Training of forestry personnel in modern geomatic tools
- Projects sponsored by Central Ministries/SFDs.

## 3.0 Background of the CoE sanctioned in 2014

During the fifth meeting of National CAMPA Advisory Council held on 24.11.2014 under chairmanship of then Hon'ble Union Ministry of State (I/C) of Environment Forest and Climate Change, the CAMPA Council agreed for granting financial support for developing FSI as a Centre of Excellence. Under the CoE the following activities were approved.

1. Development of Infrastructure
2. Capacity Building
3. Burnt Area Assessment
4. Special Study on production & consumption of Wood, fuelwood, fodder and other biomass
5. Revisiting of Forest Survey of India Types
6. intensification of Inventory Special, study on bamboo, Special study of NTFP
7. Research and Development
8. Creation of DSS cell in the Ministry, Regional Offices of ministry and Zonal offices of FSI
9. Use of Very High resolution satellite data

An amount of Rs 75.00 crore was sanctioned by the Ministry from Adhoc CAMPA Fund which was release to FSI in three separate instalments of Rs. 37.50 crore, Rs 15.00 crore and Rs 22.50 crore respectively.

The Chief Controller of Accounts MoEF&CC wide their letter No.PR, AD/MoEF&CC/IAW/FSI-CoE/2018-19/2756, dated 26-03-2019, informed that in view of the notification of CAMPA Rules, the Adhoc CAMPA Fund have been brought to Government Account and any unutilized CAMPA Funds along with accrued interest should be brought into the Public Account of India. Accordingly, FSI was directed to deposit the unutilized fund along with accrued interest. It was informed to the Ministry that all the activities approved under the CoE at FSI are very important and return of balance funds under CoE will cause a major disruption in the activities of FSI and discontinuity of technical personnel even for a month may result in losing experience

technical hands. Despite of repeated request, FSI had to return the unutilized funds allotted under CoE. As most of the activities listed in CoE are still continued, FSI is facing a huge financial crunch in continuation of these activities along with mandated activities. All above facts were presented before DGF&SS during the review meeting of FSI taken by DGF& SS at MoEF &CC on 13.10.2022. The DGF&SS has directed FSI to prepare a new CoE scheme and include all the important activities which are already approved and any new activity which FSI wants to carry out. Accordingly, FSI has prepared a new CoE scheme with following activities which are already approved under the earlier CoE scheme.

#### 4.0 Activities proposed under Centre of Excellence

##### Financial Outlay (ABSTRACT TABLE WITH ALL ACTIVITIES)

The financial outlay to carry out the above activities for five years from 2023-24 to 2028-29 is as follows:

**Table 1: Requirements of budget for the period 2023-24 to 2028-29**

S. No.	Activities	Proposed Budget (Rs. in Crores)
1	Climate change studies and Monitoring of Incremental Carbon Stock	108.50
2	e-Greenwatch	6.32
3	WEB GIS based Decision Support System (DSS) for Forest Clearance	5.00
4	Forest fire monitoring including burnt area assessment	9.40
5	Above Ground Biomass (AGB) Estimation using Synthetic Aperture Radar(SAR) data	3.00
6	Deforestation Alert System	4.00
7	LiDAR for Forestry Applications	2.00
<b>Total</b>		<b>138.22</b>

#### 4.1 Climate change studies and Monitoring of Incremental Carbon Stock

##### *4.1.1 Study on impacts of Climate change on forests*

NITI Aayog conceptualizes categorization of all Institutes under Ministry on four verticals, which will be called as “National Institutes for Research and Application of Natural Resource to Transform, Adapt, and build Resilience (NIRANTAR)”. The ‘Ecosystem Survey and Analysis’ is one of the Verticals under the NIRANTAR framework comprising the following constituent Institutions namely the Forest Survey of India (FSI), Botanical Survey of India (BSI), Zoological Survey of India (ZSI), National Museum of Natural History (NMNH) and National Zoological park and National Biodiversity Authority (NBA). All the above organisations possess specialised competences in floral & faunal research. The NIRANTAR framework

(through the workshops held on 6th - 7th June 2022, 9th June 2022 and 24th September 2022) has opened domains of collaboration between organisations for integrated surveys, mapping & monitoring studies using GIS based documentation of biological diversity, training & capacity building and development of other R&D tools/activities for supporting the climate change dialect. FSI conducted a VC meeting with BSI & ZSI on 3<sup>rd</sup> October 2022 to explore possibilities of collaboration between Botanical Survey of India (BSI), Zoological Survey of India (ZSI) and Forest Survey of India (FSI). Subsequently, a virtual meeting was held on 17<sup>th</sup> October 2022 under the chairmanship of Hon'ble Minister Environment Forest & Climate Change to know the progress made by the Ecosystem Survey and Analysis vertical.

#### 4.1.1.1 Current status:

FSI collects data from about 6,500 sample plots in forest area and 10, 000 sample plots in TOF spread across the country every year following a grid based sampling design. FSI has a huge repository of field inventory database. As of now data indicating climate change except the Carbon stock is not being collected from the field. However, considering the effect of climate change on forest, there is an urgent need to collect some parameters which indicate about the climate change and its effect on our forest.

FSI will carry out the impacts of climate change on forest through collaboration with BSI and ZSI as envisaged under the NIRANTAR. The NIRANTAR framework, through its workshops held on 6-7 June 2022, 9 June 2022 & 24 September 2022, has open domains of collaboration between organizations, to have:

1. For integrated surveys, mapping & monitoring studies using GIS based documentation of biological diversity,
2. Training & capacity building
3. Development of other R&D tools/activities for supporting the climate change dialect
4. Collaboration in Field Surveys under National Forest Inventory
5. Climate Change Studies
6. Any other requirement of organizations/Ministry.

FSI had a meeting with BSI and ZSI on 3<sup>rd</sup> October to explore the possibilities of collaboration. The following activities have been listed for possible areas of collaboration.

#### 4.1.1.2 Works to be carried out:

##### **Climate Change Studies**

- Shifting of tree line or timber line and identification of such hotspots.
- Study on indicator species reflecting climate change in the Forest type groups.



- Spatial distribution and mapping of forestry tree species and herbs and their symbiotic relationship
- Habitat studies on Orchids (mapping & distribution) in the Himalayan region and NE region
- Mangrove ecosystem – Holistic study on flora and fauna distribution over time and space.

#### **Training & Capacity Building**

- General Training in Taxonomy - BSI is requested to develop capacity of FSI field staff in identification of trees, herbs and shrubs and preparation of herbarium through its regional centres.
- Specific training on Orchid identification with the point of view of climate change indicator species by BSI
- Training on pest incidence to be conducted by ZSI for field staff of FSI

#### **Other R & D works**

- Insect incidence on forest tree species and its effect on the growing stock.
- Ethnobotanical or Ethno-medicinal studies and identification of forestry tree species.
- Large scale and long term study on assessing the impacts of forest fire on the biodiversity of India (Flora, Fauna)

#### ***4.1.2 Monitoring of Incremental Carbon Stock***

##### **4.1.2.1 Introduction:**

The two major activities of FSI namely Forest Cover Mapping and National Forest Inventory forms the basis for calculation of carbon stock in the country's forests. FSI is conducting National Forest Inventory (NFI) since its inception and therefore has a large repository of data on forest growing stock which form the basis for estimation of carbon stock. FSI made the first tentative estimate of woody growing stock of the country's forests in 1995 using its forest inventory data collected during 1965 to 1990, thematic maps and forest cover information (SFR, 1995). This information has been the main input for estimating forest carbon stock by different institutions and scientists.

**During 2001- 03, FSI has been the major contributor on forest biomass estimation and carbon stock change (during 1984 and 1994) in India's Initial National Communication (INC) submitted to UNFCCC in 2004.** In INC (also referred as NATCOM -I) process, the FSI estimated forest carbon of only woody growing stock. The growing stock (volume) data was first converted into biomass by using species wise specific gravity of the wood. Thereafter, biomass expansion factors were used to convert woody biomass to total above ground biomass which

included all other factors like small wood and foliage of trees, shrub, herbs etc. Similarly, below ground biomass was computed using default root-shoot ratio from GPG. The total biomass so obtained was then converted into carbon using conversion factor ('tier 1 approach').

During the year 2008-10, Ministry of Environment and Forests had given a project to FSI on estimation of carbon stock at two points of time. The project was a part of **Second National Communication (SNC) to UNFCCC** in which FSI was assigned the task of conducting '**Greenhouse gas inventory in Forest Land Remaining Forest Land & Land Converted into Forest Land for the period 1994 to** under 'Land Use, Land-Use Change and Forestry (LULUCF)'.

For Second National Communication (SNC), FSI conducted 'Greenhouse gas inventory in Forest Land Remaining Forest Land & Land Converted into Forest Land for the period 1994 to 2004' under 'Land Use, Land-Use Change and Forestry (LULUCF)'. GHG fluxes in the LULUCF sector are generally estimated as net changes in carbon stocks over time. The use of carbon stock changes to estimate CO<sub>2</sub> emissions and removals is based on the fact that changes in ecosystem carbon stocks are predominantly through CO<sub>2</sub> exchanges between the land surface and the atmosphere. The increase in total carbon stocks over time are equated with a net removal of CO<sub>2</sub> from the atmosphere and decreases in total carbon stocks (less transfer to other pools such as harvested wood products) are equated with net emissions of CO<sub>2</sub>.

**FSI completed this project in the year 2010 and carbon stock was estimated for 1994 and 2004 in respect of Forest Land Remaining Forest Land & Land Converted into Forest Land.** This information provides the net changes in the carbon stock over a period of 10 years. This information was also given in India State of Forest Report (ISFR) 2011. The more updated information on carbon stock has been given in ISFR 2013. Thus **reporting of carbon stock has now become an important feature of ISFR.**

It is pertinent to mention here that the **Prime Minister's National Action Plan on Climate Change has 8 important national missions. One such mission is Green India Mission** in which it is mentioned that "Forests also constitute one of the most effective carbon-sinks." Therefore, enhancement of carbon stock in forest is one of the outcomes of most of the afforestation schemes. For the proper study of climate change including requirement of REDD+, the country must have information on carbon stock in India's forest on a periodic basis at national and regional level. The growing stock constitutes the basis for calculation of carbon stored in the forests which is obtained from forest inventory done by FSI on regular basis. It is pertinent to mention here that the 13th Finance Commission under is para (5) of the guidelines for release and utilization of grant in aid for forest is as follows: **"The MoEF & CC shall assign to the Forest Survey of India the task of developing a uniform inventory design for information on growing stock and related parameters like bio-diversity and Non Timber Forest Produce (NTFP) as well. This would help bring**

**clarity to the role of the country's forest wealth in climate change mitigation and also help to base fiscal transfers on more robust parameters in future".**

The scheme would include requirements of monitoring 13<sup>th</sup> Finance Committee grants utilization, Green India Mission, NAP and other schemes including measurement of growing stock and related parameters like NTFP and bio-diversity.

FSI has switched over a new grid based sampling design for NFI in place of district based design since 2016 which has already been described below. The information collected from NFI along with Forest cover mapping is being utilised for estimation of carbon stock in forest.

#### **4.1.2.2 Revisiting National Forest Inventory of India**

Generally the information generated by NFI are used in 1) Forest policy making at national and international levels; 2) Regional and national forest management planning; 3) Planning of forest investments; 4) Assessing sustainability of forests 5) Evaluation of greenhouse gas emissions and changes in carbon storage; and Research etc.

The considerations related to use of data for planning sustainable forest management require that sampling units are uniformly spread (not a two-stage cluster sampling) and revisited at shorter intervals (five years) to monitor changes and national sample plots and state plots must have statistical compatibility. It should include new parameters like NTFP, few of eco-system services, evaluation of greenhouse gas emissions, disturbances in forests etc. At the same time it should provide information at state level so that information for MRV of REDD Plus are generated. Remote Sensing data has greater statistical role for state level applications when integrated with field survey.

#### **4.1.3 Current Status**

##### **4.1.3.1 Revised National Forest Inventory design of India since 2016**

The revised NFI is a new generation of national forest inventory system geared for providing comprehensive information essentially to meet information requirements of sustainable forest management including those under Green India Mission and CAMPA. Also included are parameters for meeting reporting obligations under the conventions on climate change (UNFCCC), on biodiversity (UNCBD) and on combating desertification (UNCCD). It may be mentioned that, under REDD+, countries may expect considerable payments when they successfully implement policies that reduce emissions from deforestation and forest degradation. These payments, however, are strictly performance based, which indicates that the success of the policies needs to be evidenced by methodologically sound and transparently documented forest monitoring (REDD+ MRV).

The considerations related to use of data for planning sustainable forest management require that sampling units are uniformly spread (not a two-stage cluster sampling)

and revisited at shorter intervals (five years) to monitor changes and national sample plots and state plots must have statistical compatibility.

The NFI designs of different countries including FAO suggests seven main points: 1) all the countries (and FAO) are following systematic sampling for NFI; 2) Nation-wide wall to wall grids are considered; 3) Cluster of plots are considered; 4) there are permanent and temporary plots; 5) all the nation relevant data is collected; 6) use of geomatics, specially remotely sensed data; and 7) There is a provision of repeating the same plot after fixed time period.

Incorporating above suggestion according to national interest and utility, FSI has redesigned the NFI in 2016. The new NFI design provides information about traditional variables viz growing stock, regeneration, landuse within Recorded Forest Area (RFA), grazing, size classes, humus classes, origin of stand etc. as well as newer variables viz. quantification of important NTFP resource species, biodiversity indicators, climate change indicators, carbon storage etc. It also provides estimates at state level within acceptable precision. The new NFI design both for inventory of forest and outside forest is described as follows:

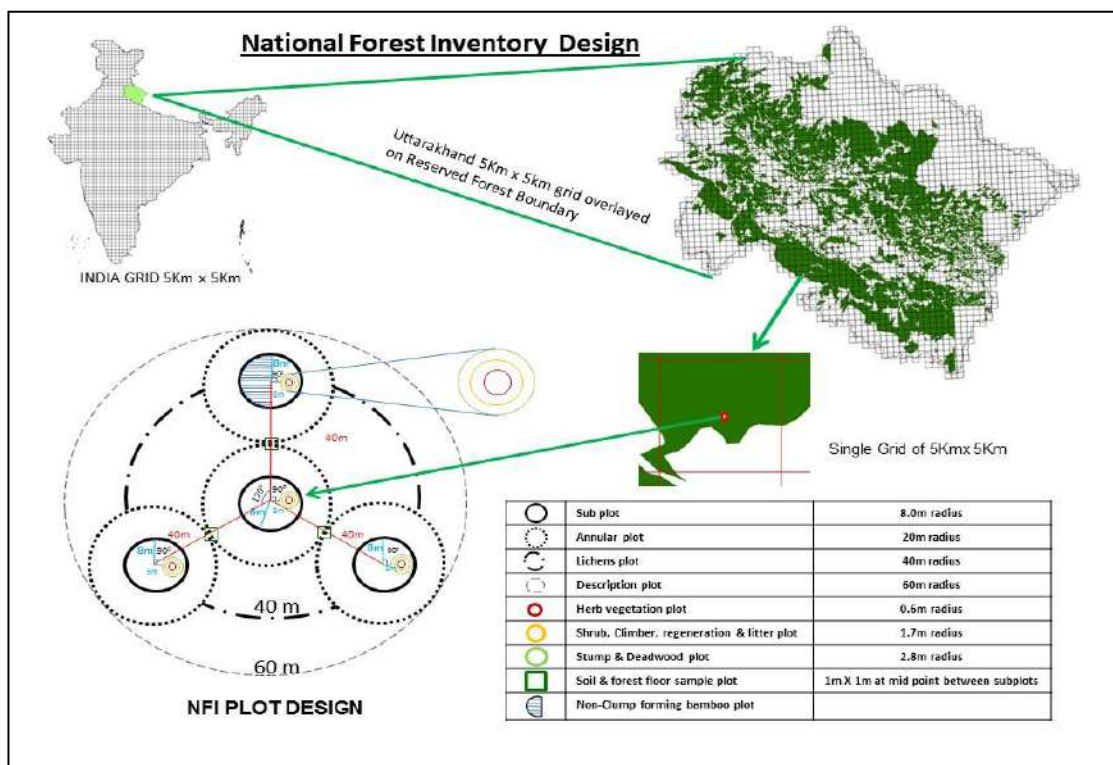
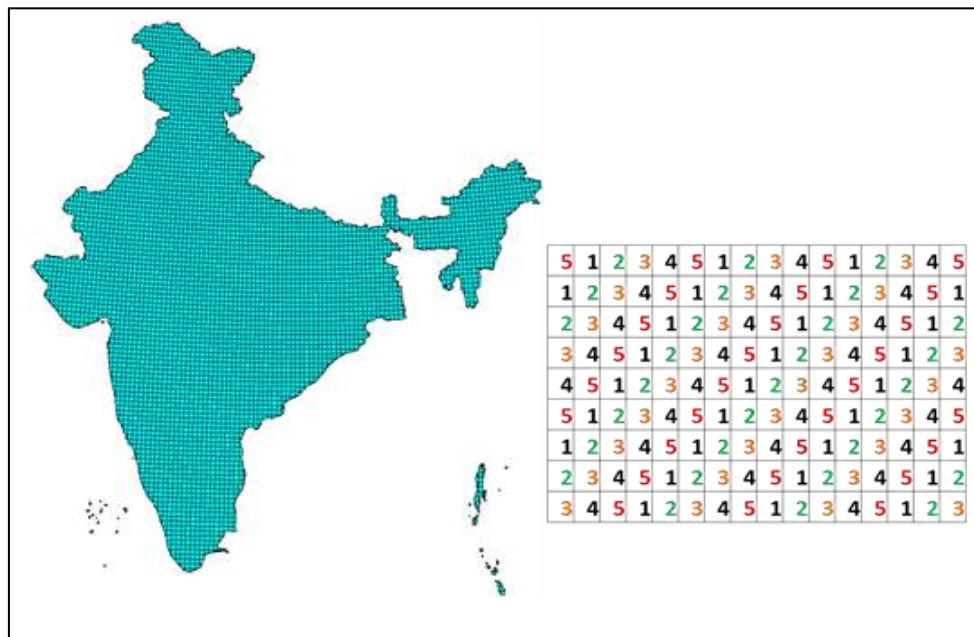
#### **4.1.3.2 Forest Inventory**

**FSI has switched over to a grid based sampling design from a district based design since 2016.** The new design is based on country wide uniform grids of size 5 km x 5 km and each year inventory of forest and TOF is carried out in systematically selected grids across the country. The plot configuration has also been changed from a single square plot to cluster of circular plots having radius of 8 meter. Before launching of the new design, extensive technical discussions were held within FSI and also involving other stake holders like SFDs. A pilot study was conducted in all the zones of FSI to ascertain the size of the circular plots and distance between central subplots and other sub-plots. Additional parameters such as NTFPs, invasive species, water bodies near sample plots, diseases etc have also been included in the forest inventory.

For forest inventory, the revisit time to the same grid has been fixed at 5 years and for TOF at 10 years. Accordingly, for forest inventory, all grids are numbered as 1 to 5 and for TOF inventory, the grids are numbered as 1 to 10. The digital layer of RFA/Green Wash boundaries have been used to determine the grids for forest inventory. Since generation of State level estimates is one of the main objectives of the new sampling design, the optimum sample size has been calculated at State level using past inventory data and the digital layer of RFA/GreenWash. Grids having specific number in the panel are covered in a single survey year.

Within the selected forest grids, random points are generated using Geographical Information System (GIS). These points form the plot centre of the sample point around which a sub-plot of radius 8 m is laid out. Other three sub-plots of the cluster are laid out at a distance of 40 m from the plot centre at a specified angle. Further micro plots within each sub-plot are laid out for collection of data on herbs, shrubs,

regeneration and dead wood. The list of sample plots are generated in GIS and sent to the zonal offices of FSI for field survey, data collection from each sub-plots and recording in the specified field forms. A schematic diagram of plot design is shown in following Figure.



#### 4.1.3.3 Trees Outside Forest (TOF)

Since the cycle for the TOF inventory in the new design has been kept at 10 years, all TOF grids are marked with numbers 1 to 10. Grids of a particular number are taken for inventory in a particular year. TOF grids consist of both TOF (Rural) and TOF (Urban). As generation of State level estimates is one of the main objectives of the

new sampling design, the optimum sample size has been calculated at State level separately for rural and urban areas using past inventory data.

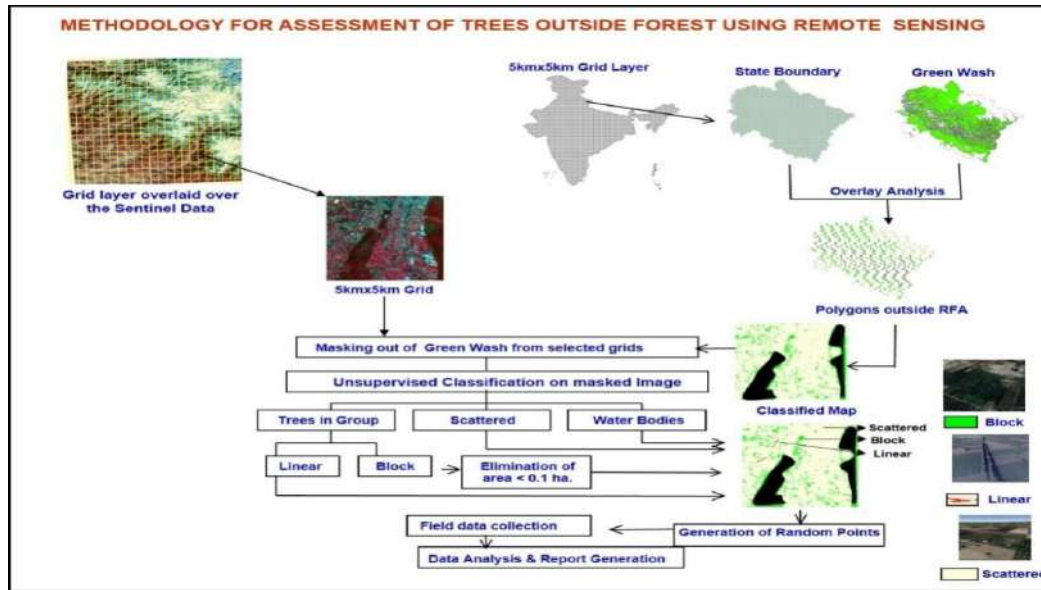
For urban TOF inventory, urban centers defined by the Registrar General of India are considered as study area. The sampling unit for urban inventory is taken as Urban Frame Survey (UFS) from National Sample Survey Office(NSSO). The urban centers of a district are delineated into blocks called 'UFS blocks', which are shown on maps with well-defined boundaries, and generally cover 600 to 800 population size or 120-160 households. These blocks cover the whole area within the geographical boundary of a town including vacant lands.

The list of all urban towns and cities with name and area as per census 2011 have been used to identify the urban grids. The latitude and longitude of centroid of all such towns have been arrived at using BHUVAN and GOOGLE earth portals. Using the latitude and longitude of centroid and area of the towns, a circular buffer zone of appropriate radius is created. At State level, this layer of buffer is considered as a proxy of digital urban area of that State. In a GIS framework, this urban layer is overlaid on the 5km x 5km NFI grid layer. All such grids intersecting the urban buffer layer are termed as urban grids for TOF Urban inventory. All urban grids which are numbered 'one' will be considered for 1st year TOF (Urban) inventory and number 3 in the second year and likewise in the subsequent years. Within the selected urban grid, the name of town (s) is communicated to the zonal offices for obtaining UFS block maps from NSSO. One UFS block is selected randomly from each grid for urban TOF inventory. Remaining grids are covered under TOF (Rural) inventory.

For TOF (Rural) inventory, a two phase sampling design is used. In the first phase, the selected grid areas are stratified into block, linear and scattered strata using high resolution remote sensing satellite data. In the second phase, optimum sample points are generated in the selected grids. The latitude and longitude of all random points are sent to the zonal offices for field data collection. The methodology used for stratification of tree resources of the grid into block, linear and scattered strata is described in the following schematic diagram.

The Multispectral data of Sentinel-2 with spatial resolution of 10m and swath of 290 km has been used for classification of the selected grids. The sentinel satellite data is downloaded and geo-rectified with the help of Survey of India (SOI) open series map toposheets on 1:50,000 scale. The image is then classified into settlement, water bodies, tree cover, agriculture and other land cover classes. This classification enables the interpreter to distinguish between tree cover and other classes. The classified image is visually analysed for editing and refinement. Since the minimum mappable area is 0.1 ha, pixels are clumped and cluster of pixels having area less than 0.1 ha are eliminated. After editing of the classified image, the final classified map is generated having three classes in TOF areas, namely Block, Linear and Scattered. From the classified TOF map, area under each category (stratum) is calculated. In addition, areas which do not support tree vegetation, like rivers and water bodies, riverbeds, snow covered mountains etc. which are termed as Un-

Culturable Non Forest Area are also calculated. The schematic chart of the methodology of TOF using remote sensing is depicted in the following Figure 7.7.



Schematic chart of the methodology of TOF

The optimum size of the plot for each stratum has been determined by FSI after conducting a pilot study. The optimum plot size for Block and Linear strata is 0.1 ha square plot and 10 m ×125 m strip, respectively. In case of scattered stratum, square plots of the optimum size 3.0 ha for non-hilly and 0.5 ha for hilly areas are laid out. In the new grid based design, the scattered plots are identified as hilly or non-hilly based on altitude of a particular plot in the grid and same is mentioned against each plot.

#### 4.1.4 Work to be carried out

Under the new design, for estimation of carbon stock and monitoring of incremental carbon stock, about 4,000 additional sample plots in forest area and 10,000 additional sample plots in TOF are being laid out. The advantage of new design along with additional sample plots is better representation of all the forest types of the country and more precise estimates of carbon stock. This activity was approved in earlier scheme of centre of excellence which was discontinued in 2019 after creation of CAF. FSI will continue to collect the NFI data from above mentioned additional sample plots for generating more precise estimates of incremental carbon stock. Moreover, some additional parameters required to study the climate change and its effect on forests will also be collected during the regular national forest inventory and also in different seasons as per the requirements. Such parameters and modalities of data collection will be finalised after discussion with BSI and ZSI under the NIRANTAR Framework.

**Table 2: Requirements of funds for five years for Climate & Carbon Study**

S. No	Budget heads	Amount (in Rs lakhs)
1	Survey & Mapping	8,000
2	Capacity Building	50
3	Climate Change studies	200
5	Analysis of the field data including procurement of hardware and software	2,500
6	Report writing and publication	50
7	Miscellaneous expenditure	50
	<b>Total</b>	<b>10,850</b>

The total funds required for this activity for five years will be Rs. 10,850.00 lakhs.

## 4.2 e-Greenwatch

### 4.2.1 Introduction:

As per the guidelines on the State CAMPA issued by the MoEFCC on July 2<sup>nd</sup> 2009, the Hon'ble Supreme Court ordered the Ministry to develop "an independent system for concurrent monitoring and evaluation of the works implemented in the States utilizing the funds available will be evolved and implemented to ensure effective and proper utilization of funds."

With this in view, the e-Greenwatch portal has been developed by NIC in consultation with the MoEFCC, FSI and State Forest Departments. It is an integrated system to facilitate management and monitoring of all plantation and other activities being carried out by the State Forest Departments (SFDs) using CAMPA funds. The project was initiated with 5 pilot states viz. Andhra Pradesh, Karnataka, Madhya Pradesh, Sikkim and Tripura in nearly mid of 2012. *"The e-Green Watch is a web-based, user friendly online monitoring system. It is an integrated portal (<http://www.egreenwatch.nic.in>) for monitoring of plantations and assets created under CAMPA."*

At present 32 States/ UTs are linked to the e-Green Watch portal. The application is capable of monitoring of following five categories of CAMPA activities:

1. **Compensatory afforestation Land (CA sites)** - Land received as a compensation of forest land diversion for non-forest activities.
2. **Diverted land (DL)** - Forest Land diverted for non-forest activities.
3. **Plantation work (PW)**- Plantation work carried out on CA sites
4. **Other Plantation Work (OPW)**- Plantation work carried out on Non- CA sites
5. **Assets** - All other expenditures other than plantation work comes under assets category.



**Key features of e-Greenwatch portal:** An integrated online system that is transparent, reliable and accountable

1. Presents the data in real time and accessible to all stakeholder and public at large.
2. Allows online monitoring and evaluation of CA and other activities under CAMPA.
3. Very high resolution imageries on Google Earth are used for monitoring
4. Facilitates two-way communication between SFDs and FSI

FSI is carrying out analysis and monitoring of polygons uploaded by SFDs/UTs on e-Green Watch portal and the same is downloaded in KML format. Polygons are analyzed using Google Earth imageries and accordingly comments (Correct, Incorrect and unascertainable) are given for each category of activities. Commenting is a two-way system in which SFDs/UTs can re-comment on FSI comments on the web portal. Performance reports are generated online and sent to the Ministry on monthly basis

**4.2.2 Current Status:**

Till January, 2023, FSI has analyzed 1,82,294 polygons under fresh category and 1,13,196 under revisited category, from 32 States/UTs and the details are given in the table. Total uploaded polygons till January, 2022 are 2,33,905.

**Table 3: e-Greenwatch Report till January 2022**

S. No	(1)	(2)	(3)	(4)
Category	<b>Total Polygons analyzed</b>	<b>Correct</b>	<b>Incorrect</b>	<b>Unascertainable</b>
	1,82,294	41,378	81,134	59 782

**4.2.3 Activities to be done:**

The present activities of monitoring of plantations and other activities will be continued. For this the financial requirement is given below.

**Table 4: Requirements of funds from 2023-24-2028-2029 for e-Greenwatch Activities:**

SI.No.	Item	Person	Amount (INR)
1	Wages for contractual staff engaged for e-Green Watch for 5 Years including current year	20	4,28,64,677
2	IT cost which is not included in the earlier scheme including High end PC, Printer, Cartridge Furniture etc.	Lump sum	50,00,000/-
3	Maintenance of existing e-Green Watch Portal	One time	50,00,000/-

4.	Payment of two experts hired at SU Division, MoEF & CC*	2	78,42,197/-
5.	Contingencies @5% of above items 1, 2 & 3	-	24,86,670/-
<b>Budget requirement for 5 years ( 2023-24-2028-29) including current year requirements</b>			<b>6,31,93,544/-</b>

\*as per the SU division letter No. E.F. No. 17-4/2022-SU dated 16<sup>th</sup> March, 2023, two experts are to be hired from the outsourcing agency of FSI to examine the proposals received from States, Institutions and organisation for CAMPA funding (which may be increased by 10% after satisfactory performance on continuously completion of two years as an experts)

**Total amount required for 5 years is nearly Rs. 632 lakhs**

#### 4.3 WEB GIS based Decision Support System (DSS) for Forest Clearance

##### 4.3.1 Introduction:

Hon'ble Supreme Court of India, in Lafarge case (Lafarge Judgement of Hon'ble SCI in IA 1868 of 2007 CWP 202 of 1995), dated 6/07/11 directed MoEFCC to develop a Web based GIS system for speedy disposal of cases related to FC Act, 1980 and other applications. Subsequently, the Decision Support System (DSS) was launched in Nov 2014. The server of DSS portal is hosted at FSI HQ, Dehradun, which is widely used by MoEFCC, its regional officers and SFDs (> 1000 users) and other Ministries for example Central Electricity Authority, Power Grid Corporation of India, Ministry of Power, Mineral Exploration Corporation Limited, Department of Hydrocarbon, National Highway Authority of India, GIM Directorate, Geological Survey of India.

ArcGIS server software & Flex technology has been used for this GIS system. But on 12th January, 2021 Adobe stopped service to Flash Technology. Currently, it is being used on old browser e.g. Mozilla Firefox, Chrome etc. Therefore, DSS requires upgrade.

##### 4.3.2 Current status:

In view of Parivesh portal, which has incorporated DSS in it, additional funds are not required currently. **However, Payment of wages to the Technical Associates/Sr. Technical Associates working in IRO (8), Ministry (2) and FSI (5) as part of GIS-DSS cell, is an issue.** Technical Associates were appointed in IROs & Ministry under Centre of Excellence (CoE) Project as part of GIS-DSS cell project during 2015-2016. Ministry released a fund of Rs. 75 crore in three instalments during 2015-2018 under CoE. Since then Technical Associates are being paid from CoE project. Amount of

Rs. 25.99 crore was returned to the Ministry during 2020-2022. Amount of Rs. 32,918/- only is currently available under CoE project. As CoE is not having sufficient funds for payment of wages to Technical Associates/ Sr. Technical Associates working in IROs and Ministry, therefore, FSI has spent an amount of Rs. 20,74,100/- from internal budget of FSI from March, 2022 to July, 2022 on the wages to Technical Associates/Sr. Technical Associates. Since FSI is not having adequate funds under the regular budget, the salary of Technical Associates/ Sr. Technical Associates working in IROs and Ministry is being paid from one of the sanctioned CAMPA project "Monitoring of Planation under CAF" after receiving the direction from MOEF & CC.

**In order to continue paying salaries to the Technical Associates as mentioned above, an amount of Rs. 5 Crore is required.**

#### *4.3.3 Requirements of funds for five years*

**Table 5: Requirements of funds for Web GIS Based DSS**

Sl.No.	Item	Person	Amount
1.	Salary of 15 Technical Associate/Sr. Technical associate, working at IRO, MoEFCC and FSI  Rs. 50000 per person per month X 15 TAs X 12 month X 5 year = 5 Crores (including escalation)	15	5 Cr
	<b>For current financial year and for next 5 years budget requirement</b>		<b>5 Cr.</b>

**The total funds required for this activity for five years will be Rs. 500.00 lakhs.**

#### 4.4 Forest fire monitoring including burnt area assessment

##### **4.4.1 Introduction:**

Forest fires are a recurrent phenomenon in India during fire season, presumed to be between the months of November to June. Forest fires cause incalculable loss to the timber, ground flora, fauna and loss of biodiversity in the region. The losses from the fires are long lasting and damage caused at larger scale brings about secondary changes in terms of climatic variations, ecological and biodiversity changes, loss of exotic species and wildlife. Forest Survey of India started making use of spatial data as point location, which displays active fire location based on MODIS sensor from 2004. Presently, both MODIS and SNPP-VIIRS satellite sensors are used for forest fire detection and monitoring.

Forest fires are one of the most important causes of land degradation that lead to biodiversity loss, deforestation and desertification processes. In India, most forest fires are restricted to the forest floor and are well controlled by beating the fire with the help of the local community. But, the intensity and number of fires vary greatly across the years and are dependent on mostly the moisture conditions in the forest areas. Drier winters, late monsoon onset cause fire season to aggravate and also extent which resulted in large scale damage in some of the parts of the country.

The losses caused to the ecosystem are even more dangerous causing serious losses. As a result of burning of trees and forest floor, the carbon sequestered in middle/under storey vegetation and in dry twigs and litter cause most of the carbon locked to be released in the atmosphere.

#### ***4.4.2 Current status:***

As per ISFR 2021, 2.81% of the forest cover is Extremely Fire Prone, 7.85% of the forest cover is Very Highly Fire Prone and 11.61% of the forest cover is Highly Fire Prone. In the fire season of 2021-2022, 2,23,333 fire detections have been observed by SNPP-VIIRS sensor & 29,675 fire detections have been observed by MODIS sensor and 13,555 large forest fire detections have been observed throughout the country. At present, alerts are being disseminated for three major programs- Pre-Fire alerts, Near Real time alerts and large forest fire alerts. Under the common alerting program (CAP), the alerts shall also be disseminated through broadcast systems and media.

#### ***4.4.3 Activities already in place:***

The Following activities are in place for the past few years. A brief note on each of the activities is given below:

1. Near Real Time Alert dissemination: The near real time alerts are generated **using the detections from MODIS and SNPP-VIIRS sensor and are disseminated to the registered subscribers as SMS alert including the PCCF(HoFF) & forest fire nodal officer of the respective states.** The alerts are also sent to the forest fire nodal officer and PCCF/HoFF of the state as email alert. So far, around 1.6 lakh approx. subscribers have been registered for receiving SMS alert.
2. Large Forest Fire Alert dissemination: The large forest fire alerts are generated using at least 3 proximate detections of SNPP-VIIRS sensor and are disseminated to the subscribers as SMS alert and to the PCCF(HoFF) & forest fire nodal officer of the SFD as email alert.
3. Pre-Fire Alert dissemination: The pre-fire alerts are generated based on the Fire Weather Index that has been customized for different physiographic zones of the country. These alerts are disseminated as email.

In addition to the above activities, the following is proposed for the coming years to understand the impact of forest fires on climate, biodiversity and contribution to atmospheric carbon and strengthen the above activities (item 1 to 3) in terms of technology updation, efficient and robust against false alarms.

#### ***4.4.4 Activities to be done:***

- **Near real time burnt area assessment** at country level and dissemination of polygons to the State Forest Department for validation. This includes layer generation for field parameters that are closely associated with fires. Attempt would be to identify regions effected by forest fires based on their **severity index**. Under the activity, **Advanced methods** of image processing using ML

tools would be applied to **unmix burnt/unburnt signatures** and reduce generalization in classification of categories.

- **Customization of algorithms** under different methods of geospatial layer classification using advanced methods such as **AI, ML, Deep learning methods** shall be carried out to handle complex data.
- Creation and use of **Digital Elevation Model (DEM)** layer generation as support layer to analyze forest fire under different topographical gradients and their association with the local topographical factors.
- Based on the study correlating biodiversity with ecosystem, loss in ecosystem services on account of forest fires shall be studied.
- Effort shall also be made to calculate **damage cost to the environment and ecosystem services** on account of forest fires. An important objective of the forest fire studies would be to assess overall damage to the forest flora, fauna, biodiversity, environmental degradation and the ecosystem. Besides, loss to soil fertility, soil moisture, and loss of exotic species can also be studied and mapped.
- A study is also planned to understand and quantify the impact of forest fires on climate. For that the forest fire burnt area region shall be used as an input in the climate change model. For creation of **accurate burnt area maps**, suitable mixer modeling techniques using AI/ML based methods shall be adopted.
- For understanding impact of fires on climate, work on customization on existing climate change models shall be carried out.
- Estimation of **Carbon sequestered and released on account of fires**- Pre and post optical and SAR data would be used to map AGB in the effected areas. Based on the AGB and suitable empirical factors, carbon sequestered and released in the affected areas would be precisely estimated. The same shall be further used as input in climate change models for creation of simulation models for climate change effects in the coming time.
- **Forest Fire Risk Zonation Mapping** drawn from field inventory parameters and knowledge base approach- The output risk zonation map would help enable states in prioritizing their resources and for drawing their fire management plan in an effective manner.
- **Fire Progression and Simulation modelling**- Suitable models would be developed to map fire progression based on the data on dynamic variables received from real from respective agencies (IMD, INCOIS etc.)
- Use of **drone technology** with **LiDAR/Optical sensor** for real time data capture of burnt area, fire detection and assessment of severity of fires- The drone technology would be used for closed period monitoring of large fires
- **Wireless sensor detection** methods in highly sensitive areas through installation of wireless sensor detecting networks and connecting these sensors through **local cloud** to **FSI server** for further processing and dissemination- For low intensity fires, such sensors would detect the light particles emerging from small but multiple fires and shall capture information and send it to the local cloud

- To meet the targets stated above, **02 Project Associates at middle level management** having knowledge and experience on burnt area assessment, remote sensing based forest fire alert generation and attributing same to the changes in environment using climate change models shall have to be engaged for a 05 years period.
- In addition, **04 Technical Associates** would be engaged to meet out the above targets in lab based processing of satellite data and other datasets. They will also carry the post field correction of the identified burnt polygons on the ground, besides collecting data on vulnerable forest types, species at different point of time.

**4.4.5 Requirements of funds for five years**

**Table 6: Requirements of funds for five years for Forest Fire Monitoring etc.**

<b>S. No.</b>	<b>Particulars</b>	<b>Total Amount</b>
1	Wages of 2 Project Associate	75,00,000
2	Wages of 4 Sr. Technical Associate	1,00,00,00
3	Wages of 1 Programmer	60,00,000
4	Wages of one System, Database, and Network Administrator	60,00,000
5	Cost of Satellite Data(Mid and High Resolution)	250,00,00
6	Procurement of Drone(including maintenance cost for 05 yrs)	50,00,00
7	Wireless Sensor detection system(for one pilot district preferably a tiger reserve)	70,00,000
8	Ground Truthing and Field visits including cost of new vehicles	130,00,000
9	2 Anticipated Trainings/workshops each year	25,00,000
10	Software/Hardware including AMC cost	40,00,000
11	Miscellaneous Cost(including purchase of field equipment's etc.)	10,00,000
	<b>Total</b>	<b>940,00,000</b>

**The total funds required for this activity for the five years (April 2023 to March 2028) will be Rs. 940.00 lakhs.**

**4.5 RADAR application studies in Forestry**

Above Ground Biomass (AGB) Estimation using Synthetic Aperture Radar (SAR) data

**4.5.1 Introduction:**

The above ground biomass comprising mainly of trees, understory vegetation constituting shrubs, middle storey trees, and other woody and non-woody vegetation is an important component of forest and is an indicator of forest health that is equally

significant for a healthy ecosystem, environment, wild life conservation, forest soil and drainage. The synthetic aperture radar(SAR) data owing to its unique capability to penetrate Cloud and plant canopy provides significant information of below canopy strata including information on forest structure, forest composition and untimely the total biomass of the forest. A study has already been carried out to estimate above ground biomass using SAR data at country level. The study carried out for the first time at pan India level needs to be further refined in terms of methodology, data quality, accuracy. The study is proposed to be further taken up for generating forest carbon maps at country level using SAR data.

**4.5.2 Current status:**

- Generated estimates of biomass under different forest cover across the country using ALOS PALSAR global mosaic (25m) data
- Creation of Basic Above Ground Biomass(AGB) Wall to Wall Map of the country with different biomass ranges at state level
- Explored the potential of Synthetic Aperture Data for understanding forest structure and ultimately biomass within a tree and Forest
- Prepared uncertainty map for the prepared biomass map
- Prepared detailed report on Above Ground Biomass estimation using SAR data.

**4.5.3 Activities to be done:**

- Estimation of forest carbon map (wall to wall) using AGB estimates
- Estimation of GHG emission based on the estimates of forest carbon sequestered within the tree and forest
- Estimation of AGB (Carbon) using multi-frequency SAR (NISAR) data on cycle basis.

**4.5.4 Requirements of funds for five years**

**Table 7: Requirements of funds for five years for RADAR Study**

<b>S. No.</b>	<b>Particulars</b>	<b>Total (in Rs.)</b>
1	Wages of 02 Project Associates	85,000,00
2	Wages of 4 Sr. Technical Associate	1,00,000,00
3	Capacity Building	35,00,000
4	Hardware/Software	35,00,000
5	SAR Data cost	32,00,000
6	Field Visit	10,000,00
7	Contingencies and other expenditure	3,00,000
	<b>Total</b>	<b>3,00,000,00</b>

**The total funds required for this activity for five years period (during April 2023 to March 2028) would be Rs. 300.00 lakhs.**

## 4.6 Deforestation Alert System

### 4.6.1 Introduction

FSI has been carrying out Forest Cover Assessment over a period of two years and uses LISS3 sensor imageries and publishes the India State of Forest Report biennially. However a need is felt for reporting deforestation as early as possible to the State Forest Departments for timely action.

### 4.6.2 Current status

Currently there is no satellite based system existing in India for reporting deforestation. However research studies are existing for utilizing RADAR data and optical data over small areas and using ML and AI for identifying deforested areas.

### 4.6.3 Activities to be done

- Research studies will be carried out for use of optical data of different resolutions and RADAR data for early identification of deforested areas.
- Using AI and ML, models will be developed and field tested for identifying deforested areas in different forest types.
- Finally robust models will be used for developing a Rapid Alert system for deforestation

### 4.6.4 Requirements of funds for five years

**Table 8: Requirements of funds for five years for Deforestation Alert System Development**

Sl.No.	Item	Person	Amount (in lakhs)
1.	Procurement of data for studies		100
2.	Salaries to Technical Assistants (Rs. 50,000 X 5 X 12 months X 3 years)	5	90
3.	Salaries for Programmer (Rs. 70,000 X 3 X 12 X 3 years)	5	75.6
4.	Salary for Senior Programmer (Rs. 1,50,000 X 1 X 12 X 3 years)	1	54
5.	Salary for DBA (Rs. 1,50,000 X 1 X 12 X 3 years)	1	54
6	Field work		25
	Contingencies and unforeseen expenditure		1.4
	<b>Budget requirement for next 3 years</b>		<b>400 lakhs</b>

**The total funds required for this activity for five years (during April 2023 to March 2028) will be Rs. 400.00 lakhs.**



## 4.7 LiDAR for Forestry Applications

### *4.7.1 Introduction*

Apart from the other mandates of the organization, monitoring of the forest resources of the country on regular basis and National Forest Inventory based on large number of sample plots laid across the country is also carried out.

To obtain the higher accuracy in forest mensuration and mapping, LiDAR technology may provide better results in various applications of FSI. An important use of LiDAR data and technology is forest inventory, where retrieval of forest parameter can be effectively carried out with minimum effort and on wall to wall basis. The present objectives technology will also precisely validate the existing species-wise volume equations comprising of tree diameter (DBH), tree height, crown diameter etc. collected in forest inventory.

LiDAR (Light Detection and Ranging) is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth, with its capability to detect even small objects and create exact 3D models, offers a incredibly accurate and consistent results.

LiDAR technology is currently used for creating super detailed 3D maps and models of landscapes, buildings, and human-made objects and various applications. This technology comes with two types namely - Airborne and Terrestrial.

### *4.7.2 Objectives*

- To extract forest parameters towards vertical tree height, density, basal area & timber volume.
- Mapping of individual tree/species.
- Precise calculation of Above Ground Biomass to estimate forest carbon storage.
- Burnt Area and Damage Assessment.
- Creation of Water shed development plan for overall development of the watershed using LiDAR data
- Mapping and estimation of ecosystem services based on the derived parameters using LiDAR data.

Knowledge of Growing Stock, or the volume of all living tree is essential to understand dynamics of forest stands, their productive capacity and their sustainable management. Such information is also important in the determination of the quantum of biomass existing in the forests and for further calculation of emission factors, carbon stock assessments and related information. LiDAR technology helps for correct measurement. There are nearly 15 parameters that may be collected by this technology using TLS (Terrestrial Laser Scanner). The precise values of these parameters would lead to more accurate results.

These are:

1. General topography
2. Slope

3. Aspect
4. Crop composition
5. Canopy layer or storey
6. Top height
7. Size class
8. Fire incidence
9. Presence of understory vegetation
10. Bamboo density
11. Compacted and uncompact crown length
12. DBH (over bark)
13. Tree height
14. Crown width
15. Clear bole height

#### **4.7.3 Current status**

- In the initial phase, stress would be on understanding the technology through capacity building. For that preliminary discussions are being carried out with IIRS, Dehradun, IIT Kanpur and IIT Bombay.
- A pilot area preferably in Uttarakhand shall be identified for which both the field inventory data and the LiDAR data is available for the same area.
- Attempt shall be made to relate the forest parameter extracted through LiDAR data with forest fire, AGB and Carbon. For that the existing data on forest fire, AGB and Carbon sample plots shall be used.
- Attempt shall also be made to relate the forest cover change with the loss of individual tree loss using LiDAR. For that two cycles or decadal data may be used.

#### **4.7.4 Activities to be done**

- Study and develop techniques for generation of information on forest parameters on wall to wall basis and at short intervals of time.
- Based on the above parameters, devise methods for generation of data on Above Ground Biomass (AGB) and forest carbon.
- Devise methodology using advance methods for estimation of extent of tree area affected on account of surface fires could be estimated.
- For estimation of topographical variables such as slope, relief and other Parameters, LiDAR data shall be used for creation of Digital Elevation Model (DEM) and Digital Elevation Model (DEM)
- Generation of parameters for studies related to watershed development Plan using LiDAR
- Creation of a Research and Development team that would explore the potential of LiDAR data in meeting the requirement of FSI in forest parameter extraction, field inventory, watershed development plan, ecosystem services, forest fire studies , DEM and for derivation of other forest parameters currently not possible from other datasets.
- Field visits for collection of data at sample locations on periodic basis and on case by case basis as per the requirement

4.7.5 Funds Required

**Table 9: Requirements of funds for five years for LIDAR Based Forestry**

<b>Particulars</b>	<b>Total</b>
Wages of 1 Project Scientist	36,00,000
Wages of 4 Technical Associate	1,00,000,00
Software/Hardware including AMC cost	17,00,000
LiDAR Data Cost	25,00,000
Capacity Building	22,00,000
<b>TOTAL</b>	<b>2,00,00,000</b>

The total funds required for this activity for 5 years period (during April 2023 to March 2028) would be Rs. 200.00 lakhs.