



सत्यमेव जयते

Agenda Notes for the 20th meeting
of
Executive Committee of the
National Authority, CAMPA
on
09.11.2022



Ministry of Environment, Forest and Climate Change
Government of India

Provisional Agenda Items for 20th meeting of the Executive Committee of the National Authority to be held on 9.11.2022

S. No.	Agenda	Content	Page No.
1	Agenda Item No. 1:	Confirmation of Minutes of 19 th meeting of the Executive Committee of the National Authority.	04
2	Agenda Item No. 2:	Action Taken on 19 th meeting of the Executive Committee.	04
3.	Agenda Item No. 3:	Apprising the Executive Committee of National Authority about Second Meeting of Governing Body and 6 th Meeting of the Monitoring Group of the National Authority.	06
	Deferred Activities		
4	Agenda Item No. 4:	APO for the year 2022-23 of Andaman and Nicobar State Authority	06
5	Agenda Item No. 5:	APO for the year 2022-23 of Arunachal Pradesh State Authority	11
6	Agenda Item No. 6:	APO for the year 2022-23 of Assam State Authority	12
7	Agenda Item No. 7:	APO for the year 2022-23 of Chhattisgarh State Authority	13
8	Agenda Item No. 8:	APO for the year 2022-23 of Jammu & Kashmir State Authority	25
9	Agenda Item No. 9:	APO for the year 2022-23 of Mizoram State Authority	27
10	Agenda Item No. 10:	APO for the year 2022-23 of Odisha State Authority	29
11	Agenda Item No. 11:	APO for the year 2022-23 of Punjab State Authority	34
12	Agenda Item No. 12:	APO for the year 2022-23 of Sikkim State Authority	36
13	Agenda Item No. 13:	. APO for the year 2022-23 of Tripura State Authority	39
14	Agenda Item No. 14:	APO for the year 2022-23 of Uttarakhand State Authority	44
15	Agenda Item No. 15:	Update on Schemes/Pilot Project initiated under National Fund	51
16.	Agenda Item No. 16:	Project Proposal of Nagaland State CAMPA for Transitioning from Shifting to Settled Land Use seeking support from National Fund	53
17	Agenda Item No.17:	Project proposal Submitted by ICFRE through Research and Training Division, Ministry. 1. Multilingual Mobile Application for Enhancing Agroforestry 2. Proposal for & Implementation of Human Resource and Financial Management System 3. Operationalization of Centre of excellence on Sustainable land management	56

S. No.	Agenda	Content	Page No.
		<p>4. Livelihood improvement of forest dependent communities through resource survey, sustainable harvesting & market linkages of commercially important NTFPs.</p> <p>5. Infrastructural Up-gradation of Capital Assets of the Indian Council of Forestry Research & Education (ICFRE)</p>	
18	Agenda Item No.18:	<p>Project proposal submitted by Forest Survey of India, MoEFCC</p> <ol style="list-style-type: none"> 1. Climate Changes Studies and Monitoring of Incremental Carbon stock 2. E-Green Watch 3. WEB GIS based Decision Support System (DSS) for Forest Clearance 4. Forest Fire Monitoring Including burnt area assessment 5. Above Ground Biomass (AGB) estimation using Synthetic Aperture Radar (SAR) data 6. Deforestation Alert System 7. LiDAR for Forestry Applications 	57
19	Agenda Item No.19:	<p>Proposal on “Roll Out and preparedness of states for using National Transit Pass System (NTPS)” submitted by Indian Institute of Institute of Wood Science and Technology, Bangalore through Forest Policy division, MoEF&CC</p>	58
20	Agenda Item No. 20:	Any other matter with the permission of chair	59

Agenda Item No. 1: Confirmation of Minutes of 19th meeting of Executive Committee of National Authority

Minutes of the 19th Meeting of Executive Committee of National Authority circulated vide OM of even No. dated 16.09.2022 is placed before Executive Committee for Confirmation. The Minutes of meeting of 19th Executive Committee is placed at **Annexure-I**.

Agenda Item No. 2: Action Taken on 19th meeting of the Executive Committee of the National Authority.

Sl.No	DECISIONS	ACTION TAKEN								
	<p>The 19th meeting of the Executive Committee (EC) of the National Authority was held on the 2nd September 2022 under the chairmanship of the Director General of Forests & Special Secretary (DGF&SS), MoEF&CC, and Chairperson, Executive Committee of the National Authority. The Chief Executive Officer (CEO), National Authority welcomed the DGF &SS, the Chairman of EC and all other members of the Executive Committee and the officers present in the meeting.</p> <p>With the permission of the Chairperson, the CEO National Authority briefly explained the action taken on the decision of the 18th Executive Committee and the agenda items of the 19th meeting. Thereafter, agenda items of the Executive Committee were taken up for detailed discussion.</p>	<p>Directions/Minutes of meetings were communicated to all States/UTs vide OM dated 16.09.2022</p>								
PART A. APPROVAL OF ANNUAL PLANS OF OPERATIONS 2022-23										
	<table border="1"> <thead> <tr> <th>Name of the State/UT</th> <th>Date of Sanctioned Issued</th> </tr> </thead> <tbody> <tr> <td>Uttarakhand</td> <td>21.09.2022</td> </tr> <tr> <td>Punjab</td> <td>21.09.2022</td> </tr> <tr> <td>Bihar</td> <td>20.09.2022</td> </tr> </tbody> </table>	Name of the State/UT	Date of Sanctioned Issued	Uttarakhand	21.09.2022	Punjab	21.09.2022	Bihar	20.09.2022	Sanction order has been communicated to States/UTs
Name of the State/UT	Date of Sanctioned Issued									
Uttarakhand	21.09.2022									
Punjab	21.09.2022									
Bihar	20.09.2022									
APPROVAL OF DEFERRED ACTIVITIES OF ANNUAL PLANS OF OPERATIONS 2022-2023										
	<table border="1"> <thead> <tr> <th>Name of the State/UT</th> <th>Date of Sanctioned Issued</th> </tr> </thead> <tbody> <tr> <td>Uttar Pradesh</td> <td>21.09.2022</td> </tr> <tr> <td>Goa</td> <td>16.09.2022</td> </tr> </tbody> </table>	Name of the State/UT	Date of Sanctioned Issued	Uttar Pradesh	21.09.2022	Goa	16.09.2022	Sanction orders have been issued and communicated to all States/UTs.		
Name of the State/UT	Date of Sanctioned Issued									
Uttar Pradesh	21.09.2022									
Goa	16.09.2022									
PART B: APPROVAL/ DECISION ON SCHEMES AND OTHER ITEMS SEEKING FINANCIAL SUPPORT FROM THE NATIONAL FUND OF CAMPA										
	<p>Approval for the proposal for creation of 1000 Nagar Vans under Nagar Van Yojana</p> <p>Decision: The proposal was recommended for the approval of the Governing Body under the provisions of Section 5(b)(iii) of the CAF Act, 2016</p>	<p>Directions/Minutes of meetings were communicated to all States/UTs vide OM dated 16.09.2022</p>								

PRESENTATION OF DRAFT ANNUAL ACCOUNTS AND ANNUAL REPORTS OF NATIONAL AUTHORITY, CAMPA (2018-19, 2019-2020, 2020-2021 & 2021-2022)

	<p>The Chief Executive Officer of National Authority CAMPA presented draft annual reports and account of National Authority CAMPA.</p> <p>The Executive Committee perused and noted Annual Reports.</p>	<p>The C&AG has certified the Annual Accounts of National CAMPA for the year 2018-19, 2019-20, 2020-21 & 2021-22 during August 2022 and the C&AG has issued certificate on 4th November, 2022.</p>
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ANY OTHER MATTER WITH THE PERMISSION OF THE CHAIR

	<p>1. Request for Proposal (RFP) for Programme Management Consultancy Unit in National Authority;</p> <p>The Executive Committee has approved the proposal for setting up of Programme Management (Consultancy) Unit in National Authority for assisting CEO and other officials in effective functioning of the Authority. The proposal was submitted for concurrence of IFD. After detailed deliberations it was decided to call for Expression of interests or RFP to invite renowned Consultancy Firms having expertise in desired areas.</p> <p>CEO of National Authority presented the proposal of "Request for Proposal (RFP) for Selection of Programme Management Consultancy Firm at NICS rates. He informed the Committee that IFD has advised for considering floating an Expression of Interest and RFP with tender process on CPP for wider participation, as the requirement is quite broad- technical, financial and administrative nature. Accordingly, the proposal has been placed before the Executive Committee of National Authority for consideration and approval.</p> <p>Decision: The Executive Committee discussed the proposal for RFP for engagement of Programme Management Consultancy through open tender or through NICS and recommended the proposal for approval of Governing Body of the National Authority.</p>	<p>The Matter has been approved by Governing Body and a letter has been issued to the IIFM Bhopal as follow up action.</p>
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Agenda Item No.3: Apprising the Executive Committee of National Authority about Second Meeting of Governing Body and 6th Meeting of the Monitoring Group of the National Authority.

The Second Meeting of the Governing Body was held on 20.09.2022 under the chairmanship of Hon'ble Minister, Environment, Forest & Climate Change. (Minutes of the Meeting enclosed). CEO, National Authority will brief the Executive Committee on action points).

The 6th Meeting of Monitoring Group has taken place on 27.10.2022. the minutes of the meeting are awaited from Forest Survey of India.

Agenda Item No.4: Annual Plan of Operation (APO)for the year 2022-23 of Andaman and Nicobar State Authority

File No: NA-15/22/2020-NA

The Addl. PCCF, (CRZ& FC) Nodal Officer, CA& MS, A&NCZMA of Andaman & Nicobar Islands State Authority vide letter No. CAMPA/2/(SCM) 2021-22/15 dated 08.04.2022 has submitted Annual Plan of Operation of the Andaman & Nicobar Islands CAMPA for the financial year 2022-23 through e-mail to the National Authority. The APO has been approved by the Steering Committee of UT of Andaman & Nicobar Island Authority in its meeting held on 02.02.2022 under chairmanship of Chief Secretary, Andaman & Nicobar Islands. The outlay of various forestry and wildlife activities in APO 2022-23 is for **Rs.15.73 crore**.

2. During 17th meeting of Executive Committee of the National Authority has approved an **amount of Rs.6.91crore** and activities amounting to **Rs.8.82 crores deferred**.

3. The Union Territory of Andaman & Nicobar Islands State Authority has submitted detail justification on deferred activities as mentioned below:

(Amount in Rs. Crore)

S. No.	Activity	Proposed Outlay		CAF Rules	During 17 th EC meeting	Remarks & Page no.
		Physical Target (in ha./Km/nos)	Financial Target			
II	Conservation of Wildlife and Management of Protected Areas in Great Nicobar Island/ Nicobar Islands					
A	Consolidation of Sanctuary area					
i	Survey and demarcation of Sanctuary boundaries (@Rs.5 lakhs for each PA)	Entire area	0.10	5(3)(e)	Deferred	
ii	Erection of boundary pillars of 1.2m X1.2Mx1.0m masonry structure in land areas and floating buoys in water areas (@ Rs. 10 lakhs for each PA)	All major points	0.20	5(2)(d)		

S. No.	Activity	Proposed Outlay		CAF Rules	During 17 th EC meeting	Remarks & Page no.
		Physical Target (in ha./Km/nos)	Financial Target			
B	Strengthening of Protection measures					
I	Establishment of protection Camps in GNI	4	0.30	5(3)(e)	Deferred	
ii	construction of Watch towers	2	0.20	5(2)(d)	Deferred	
iii	Establishment of a Camp office	1	0.20	5(3)(e)	Deferred	
iv	Procurement of boat	1	0.75	5(2)(d)	Deferred	
v	Procurement of Dugout Dinghies	2	0.15	5(2)(d)	Deferred	
vi	Procurement of utility vehicle	2	0.20	5(2)(d)	Deferred	
vii	Establishment of wireless stations including repeater/ mobile facility with handheld sets	2	0.10	5(2)(d)	Deferred	
C	Habitat Improvement and Management activities				Deferred	
i	Forests, Near Shore Habitats, Intertidal Habitats, Pelagic habitats, Coral Reefs and Seafloor Habitats	Entire area	0.10	5(2)(d)	Deferred	
ii	Identification and management of Megapode mounds including abandoned ones	Entire area	0.10	5(2)(d)	Deferred	
D	Research and monitoring					
i	Survey and assessment of terrestrial animals, birds, benthic invertebrates, fishes, seabirds, and marine animals	1	0.1	5(3)(g)	Deferred	
ii	Monitoring studies on Coral Reefs and improvement of reef areas	1	0.15	5(2)(d)	Deferred	
iii	Monitoring studies on Nicobar Megapode and its habitat	1	0.15	5(2)(d)	Deferred	
iv	Procurement of Scuba Diving Equipment viz. BCDs, Depth gauge, Pressure gauge & Compass, Dive Computer, Scuba tanks/ Cylinders, masks, snorkels, wetsuits, fins, gloves, weight belts, Tank Bangers, Defoggers, Dive knives, underwater lights, writing states, and Dive long book, and one high pressure Scuba air Compressor portable and underwater camera	10 sets	0.15	5(2)(d)	Deferred	
v	Establishment of a weather station	1	0.03	5(2)(d)	Deferred	
E	Turtle Management Programme					

S. No.	Activity	Proposed Outlay		CAF Rules	During 17 th EC meeting	Remarks & Page no.
		Physical Target (in ha./Km/nos)	Financial Target			
i	Beach management protection from predators	Entire area	0.05	5(2)(d)	Deferred	
ii	Hatchery management Establishment of hatchery, Collection of eggs and its maintenance in Hatchery, release of hatchlings back into sea, Protection from predators	1	0.10	5(2)(d)		
F	Education and outreach activities					
i	Preparation of Management Plan/ Conservation Plan for Leatherback turtles	1	0.20	5(2)(d)	Deferred	
ii	Preparation of management Plan/ Conservation Plan for Megapode	1	0.20	5(2)(d)	Deferred	
iii	Training programmes for frontline staff and other stakeholders	2	0.02	5(2)(d)	Deferred	
iv	Documentary on Leatherback Turtle/ Megapode	2	0.04	5(2)(d)	Deferred	
g.	Recreation and Wildlife Tourism activities					
i.	Visitor amenities - 4 umbrella huts and 2 wash rooms		0.15	5(2)(d)	Deferred	
ii	Nature Trail		0.05	5(3)(d)	Deferred	
IV	Infrastructure for Protection					
A	Inspection Path (6 feet wide) from North bay light House to Old Madhuban, Old Madhuban to Mirchidera, and Mirchidera to Shoal Bay 19	26 km	1.3	5(3)(d)	Deferred	
B	Inspection Path from Badakhadri to Jhaji beach Rutland	10KM	0.3	5(3)(d)	Deferred	
C.	Inspection huts at Jhaji Beach	1	0.3	5(3)(e)	Deferred	
D	Inspection Log huts at Pongibalu	1	0.45	5(2)(d)	Deferred	
E	Protection Camp at Shalbay 19	1	0.3	5(3)(e)	Deferred	
F	Protection Camp at Mirchi Dera	1	0.3	5(3)(e)	Deferred	
G.	Protection Camp at Madhuban	1	0.3	5(3)(e)	Deferred	
H	Construction of Inspection Hut at Diglipur	1	0.3	5(3)(e)	Deferred	
I	Construction of Inspection Hut at Mayabunder	1	0.3	5(3)(e)	Deferred	

S. No.	Activity	Proposed Outlay		CAF Rules	During 17 th EC meeting	Remarks & Page no.
		Physical Target (in ha./Km/nos)	Financial Target			
A	Fibre coated Engine Dinghies with 20 hp engines	4	0.4	5(2)(d)	Deferred	
B	Procurement of Multi Utility Vehicle	4	0.4	5(2)(d)	Deferred	
C	Procurement of motorcycle	20	0.2	5(2)(d)	Deferred	
Grand total deferred			8.82			

The APO of Andaman & Nicobar Island State Authority for financial year 2022-23 is placed for consideration for Executive Committee of the National Authority. As per direction of 17th EC, The Union Territory of Andaman & Nicobar Islands State Authority has submitted project wise forest areas diverted, the Non-Forest Land (NFL) received, Compensatory Afforestation areas (NFL) received which do not require compensatory afforestation due to already existing vegetation/tree cover.

The details are as follows

SL No.	Name of the proposal	Diverted Forest Area (In ha)	Year of Diversion	Non-Forest Land (NFL) received for CA	Fund for CA received	Reason for CA required not
1.	Diversion of 1367 ha of forest land for regularization of pre-1978 encroachments	1367	19.08.1988	1367 ha	Nil	The non-forest area provided has good forest cover/vegetation
2.	Kalpong Micro Hydel Project, North Andaman	200	11.04.1989	526.41 ha	Rs.30.00lakhs & Rs. 5.04lakhs	
3.	Power House at Kamorta	2.02	11.04.1989			
4.	Construction of ATR in North Andaman	165.00	17.04.1989			
5.	Vishnu Nallah Minor Irrigation scheme, Little Andaman	70.99	17.04.1989			
6.	R.K. Pur Minor	88.40	17.04.1989			

	Irrigation Scheme, Little Andaman					
7.	Diversion of 100.00 ha of forest land for extension of runway at Shibpur	100.00	04.02.2022	200ha (100 ha NFL & 100 ha DFL)	3,50,62,2 91	The non-forest area provided has good forest cover/vegetation. Hence in addition to NFL, CA is to be taken in Degraded Forest area CA will be taken up n 2023-24 by using the amount given by User agency.
	Total	1993.41				

The APO of Arunachal Pradesh State Authority is placed for consideration for Executive Committee of the National Authority.

Agenda Item No.5: Annual Plan of Operation (APO) for the year 2022-23 of Arunachal Pradesh State Authority

Annual Plan of Operation (APO) for the financial year 2022-23 has been received from Arunachal Pradesh State CAMPA Authority, Government of A.P vide letter no. FOR.101/State Authority/2021/2020 dated 11/07/2022. The Arunachal Pradesh State Authority has reported that the Steering Committee of State Authority has approved the Annual Plan of Operation (APO) in its meeting held on 8th July'2022 over an outlay of **Rs.199.28 crore** only for the year 2022-23.

2. During 18th Meeting of the Executive Committee the APO of 2022-23 deliberated and approved with an amount of **Rs.194.06 crore** and deferred **Rs.5.217crore** proposed outlay of **Rs.199.28** crore only for the year 2022-23.

3. Arunachal Pradesh State Authority has submitted the details along with justification.

S. No.	CAF Act/Rules	Activity	Proposed Outlay		Decision of 18 th EC meeting
			Physical Target (in ha.)	Financial Target (in Crore)	
1. ActivitiesasperRule5(3) of theCAFRules,2018 (20%)					
	5(3)(f)	Casual engagement of local people or labours for protection of forest and wildlife undertaken from State Fund	274 Nos.	2.19	Deferred Details have been submitted
2. ActivitiesasperRule6(a) (60%)					
	6(a)(iv)	Operationalization branches of State Authority.	48 Nos.	0.72	Not approved
	6(a)(vi)	Professional fee for Audit etc.	As per APO	0.30	Not approved
	6(a)(vi)	Third Party Monitoring	As per APO	0.90	Approved for Rs. 50 lakhs out of Rs. 90lakhs
Grand Total Approved			4.11		

The APO of Arunachal Pradesh State Authority is placed for consideration for Executive Committee of the National Authority.

Agenda Item No.6: Annual Plan of Operation (APO) for the year 2022-23 of Assam State Authority

File No. NA-15/11/2020-NA

The Addl. PCCF& CEO, Assam State Authority vide their letter No. FG.27/CAMPA/SLSC/ 2022 dated 17.10.2022 has submitted Additional Annual Plan of Operation of the State CAMPA for the year 2022-23 through e-mail to the National Authority having a proposed outlay of **Rs. 53.16 crore** and has requested to approve the Additional APO for the year 2022-23.

2. The office of the Chief Executive Office, Assam has also informed that the matter was discussed with Hon'ble Union Minister, Environment, Forests and Climate Change and Hon'ble Chief Minister, Assam for providing land compensation to affected families at Kaziranga National Park on 27.08.2022 As per 5(2)(h), Voluntary relocation of villages from protected areas (CAF Rules 2018).

3. During 17th meeting of executive committee the APO of 2022-23 deliberated and approved with an amount of **Rs. 109.41 crore** and **deferred Rs 34.86 crore** proposed outlay of Rs. 144.27 crore for the financial year 2022-23.

4. The State Authority of Assam has informed that till date an amount of Rs.100 crores is released by State department.

4. Assam State Authority has submitted the details along with justification.

Project Name	LA Case No.	Area	Value of land in Rs.	Value of Assets in Rs	Solatium in Rs.	Additional Compensation @12% in crore	Total Amount (in crore)
2 nd Addition of KNP	4/1989-90	190B,2K,14L	0.61	0.74	6.81	0.36	13.25
3 rd and 5 th Addition of KNP	2/1991-92	11 B,1K,11L	0.38	0.0044	0.34	0.0023	0.79
	1/1991-92	321B, O.K,19L	10.80,	0.03	10.83	0.065	22.32
	3/88-89	305 B,3K,17L	9.74	0.21	9.95	0.058	20.49
Total Area		827 B,6K,61L				Total	56.86

Total Land Compensation : Rs.56.86 crore
 Land Compensation disbursed to SDO(C), Bokakhat under CSS-PT during 2022-23 : Rs. 3.70 crore
 Balance amount of Land Compensation APO 2022-23 by National CAMPA : Rs 53.16 crore (proposed to be approved under Additional)

The addition Annual Plan Operation Assam, state Authority for 2022-23 is placed for consideration of the Executive Committee of National Authority.

Agenda Item No.7: Annual Plan of Operation (APO) for the year 2022-23 of Chhattisgarh State Authority
File No. 15-2(7)/2020-NA(Pt)

1. Approval for deferred items of APO 2022-23
2. Spill Over APO (on going/spill over projects of APO 2021-22)

PCCF & Hoff & Chairman, Executive Officer (CAMPA), vide letter F. No. CAMPA/SO/343/2022/3419 dated 22.06.2022 requested approval for the items deferred in the 16th and 17th Executive Committee meeting for APO – 2022-23 of Chhattisgarh State Authority.

2. During 16th meeting of Executive Committee of National Authority has approved APO of 2022-23 with financial outlay of **Rs. 566.54** crore and deferred **Rs 267.85** crore out of proposed outlay of **Rs. 945.85 crore**.

3. In 17th EC meeting Executive Committee the agenda was deliberated and approved the APO of 2022-23 with financial outlay of **Rs.138.32 crore** and deferred activities amounting to **Rs.320.05 crore**. The State Authority submitted the detailed justification for the deferred items amounting to **Rs.120.74 Crore** and requested approval as these items are very important.

4. The State Authority of Chhattisgarh has informed that till date an amount of **Rs 400 crore** is released by State department.

5. Chhattisgarh State Authority has submitted the details along with justification.

Sl. No.	CAF Rules	Activities	Physical (Ha/Nos./KM/)	Amount (In Rs. Crore)	Decision of 17 th EC	Remarks
A.		80% of NPV (As per CAF Rules 2018-Rule 5 (2))				
1.	5(2) (d)	Running Group Dialling System for Connecting of Office & field staff for protection & Development Purpose	2500 Sim Cards	0.55	Deferred	Details required.
2.	5(2) (g)	Soil Moisture conservation, Plantation & Catchment Area Development (Project Formulation by G.O.I., MoEF& CC by LiDAR Technic)	607 Nos. & 663.90 Ha.	16.54	Deferred	Subject to submission of DPR
3.	5(2)(d) 5(2)(a) 5(2)(b)	Maintenance and Committed Liabilities River bank, Fruit Bearing Plantation & Forage/Grass land 2nd to 5th Yr. Maintenance of Old Plantations, Lantana & Improvement of Growing Stock in orange areas & Soil Moisture conservation work for stream rejuvenation etc.	1714442.130 Ha.	99.01	Rs.20.00 crore approved in 16 th EC out of the total Rs.119.01 crore.	
B.		20% of NPV (As per CAF Rules 2018-Rule 5 (2))				
	5(3) (d)	Construction of High-tech Barrier	29 Nos.	4.64	Not approved	
		Grand Total		120.74		

2. Spill Over APO (on going/spill over projects of APO 2021-22)

PCCF & HoFF& Chairman, State Authority CAMPA of Chhattisgarh vide letter F. No./CAMPA/SO/319/2022/2904 dated 19.05.2022 submitted revised additional APO for year 2022-23 requesting approval for ongoing/spill over projects approved by National Authority for APO for year 2020-21. The following activity were approved by National Authority as per sanction orders below.

Sr. No.	APO	Sanction Letter No. and Date	Sanction Outlay
1.	APO 2021-22	1. File No. 15-2(7)/2020-NA(Pt) Dt. 03.05.2021	623.77
		2. File No. 15-2(7)/2020-NA(Pt) Dt. 15.09.2021	821.19
		3. File No. 15-2(7)/2020-NA(Pt) Dt. 01.11.2021	55.80
	Total		1,500.76
2.	Additional APO 2021-22 (Spill over APO of Addl. APO 2020-21 (Part I))	4. File No. 15-2(7)/2020-NA(Pt) Dt. 01.11.2021	964.91
3.		5. File no.15-2(7)/2020-NA (part1) Dt.04.07.2022	85.94
	Grand total		2,551.61

4. Against above approval of Rs. 2,465.67 crores an amount of Rs. 834.34 crore has been utilised till March, 2022 and unutilised amount of Rs.1717.35 crores. The State Authority requested approval for completion of incomplete works of APO (on going/spill over projects of APO 2021-22).

5. The details of deferred activities are as under:

APO 2021-22 (Addl. APO 2022) Ongoing Works									
Sr No.	Works Name	Target		Achievement		Surrendered Amount (in Crore)	Spill Over Amount (in Crore)	Remark	Pg.No
		Physical	Financial (in Cr.)	Physical	Expenditure (in Cr.)				
1	2	3	4	5	6	7	8	9	
Table- 01, Mandatory Works									
1	Compensatory Afforestation Plantations	3901.213 ha.	57.47	1299.28 ha	19.91	16.15	21.40	Site preparation is completed, payment pending. Plantation will be done in upcoming rainy season.	
2	Addl. CA Plantations	2.25 ha.	0.04	2.25 ha	0.04	0.01	0.00	Surrender	
3	Penal CA Plantations	29 Ha.	0.49	24.80 ha	0.17	0.07	0.25	Site preparation is completed, payment pending. Plantation will be done in upcoming rainy season.	
4	Plantations below Transmission line	210.077 ha	3.15	132.54 ha	1.14	0.00	2.02	Site preparation is completed	

								ed, payment pending. Plantation will be done in upcoming rainy season.	
5	Creation of safety Zone	5 ha.	0.06	5 ha.	0.06	0.00	0.00	Site preparation is completed, payment pending. Plantation will be done in upcoming rainy season.	
6	Wildlife Management Plan	LS	110.16	48 Work	14.26	42.46	53.44	Site selection, project formulation is completed & works are going on. payment pending	
7	Soil-Water Conservation Work	4336.98 ha.	4.85	1002.64 ha.	1.26	0.00	3.59	Site selection, project formulation is completed & works are going on. payment pending	
8	Avi-Fauna Development	7 Division	12.98	0.000	0.00	0.00	12.98	Site selection, project formulation is completed & works are going on.	
9	Other activities	22 Works	0.85	2 Works	0.08	0.00	0.77	Site selection, project formulation is completed & works are going on.	
10	Maintenance of Committed liabilities Old CA Plantation & Wildlife Management Plan (2nd Yr. To 10th Yr.)	30889 Ha .	119.85	29836.21 Ha	26.21	16.35	77.29	All old plantation maintenance works are going on. Payments pending.	
	Total of Mandatory - Table-01	36397.178 Ha.	309.90		63.13	75.04	171.74		
Table - 02, 80% of NPV (As per CAF Rules 2018-Rule 5 (2)									
11	Rehabilitation of Existing degraded Bamboo Plantation & RDBF Areas	24257.611 ha.	15.06	19394.26 ha.	6.00	0.00	9.06	Site preparation is completed, payment pending. Plantation will be done in upcoming rainy season.	

12	Regeneration & Protection of Forest in highly Sensitive Areas	3312.20 Ha.	60.74	2085.92 ha.	5.87	0.00	54.87	Work is completed. Payment pending
13	ANR (Added natural regeneration of Economically Valuable Specific species)	11500.213 Ha.	12.57	7784.57 ha.	2.71	0.00	9.86	Work is completed. Payment pending
14	Irrigated Miscellaneous Plantation	1258 ha.	20.15	741.29 ha.	3.52	0.00	16.63	Site preparation is completed, payment is pending. Plantation will be done in upcoming rainy season.
15	Irrigated Bamboo Plantation	500 ha.	5.32	390 ha.	3.32	0.00	2.01	Site preparation is completed, payment is pending. Plantation will be done in upcoming rainy season.
16	Un Irrigated Bamboo Plantation	2621 Ha.	10.74	2415 ha.	5.15	0.00	5.59	Site preparation is completed, payment is pending. Plantation will be done in upcoming rainy season.
17	River Bank Plantation/Plantation and Treatment ICFRE	6029 ha.	127.45	1981 ha.	12.69	0.00	114.77	Site preparation is completed, payment is pending. Plantation will be done in upcoming rainy season.
18	Multi-tier plantation	189.270 ha.	0.59	135 ha	0.27	0.00	0.32	Site preparation is completed, payment is pending. Plantation will be done in upcoming rainy season.
19	Other plantation	50 ha.	0.85	50 ha	0.77	0.00	0.08	Site preparation is completed, payment is pending. Plantation will be done in upcoming rainy season.

20	Development of Seed Collection/Production Center-SPA's, SSO's, CSO's Maintenance Works as per sanctioned project	953.360	3.50	456.36 ha	0.97	1.79	0.74	Work is going on		
21	(a) Improvement of Growing stock in Orange areas with plantation	7271.293 ha.	5.57	3243.574 ha.	3.41	0.00	2.16	Site preparation is completed. Work will be completed after upcoming rainy season. payment pending		
22	(b) Improvement of Growing stock in Orange areas without plantation	5763.49 Ha.	10.68	5055.96 ha.	4.26	0.00	6.42	Work are completed. payment pending		
23	Eradication of the Invasive alien species Lantana	311837.734	162.15	475120.430	143.75	0.00	18.40	Work are completed. payment pending		
24	Eradication of the Invasive alien species Eupatorium	97884.350 Ha.	51.60	93636.37 ha.	28.55	0.00	23.05	Work are completed. payment pending		
25	Fire Protection - during the fire Session 15 Feb. To 15 June by Fire Watcher Engaged of Local Resident	4126 Beat	30.54	4126 Beat	14.59	0.00	15.96	Works to be completed till 15 June. Payment pending		
26	Purchase of Fire fighting equipments & their maintenance									
27	(a) Back Pack Fire Blower	1600 Nos.	17.00	1000 Nos	11.76	0.00	6.98	Procurements completed, Payment pending		
28	(b) Fire extinguisher	248 Nos.	1.74	200 Nos.						
29	(c) Brushwood Cutter	248 Nos.	1.74	0.000	0.00	0.00	1.74		Purchasing procedure is going on.	
30	(d) Pole Saw	248 Nos.	1.74	0.000	0.00	0.00	1.74			
31	(e) Power Chain Saw	248 Nos.	2.48	0.000	0.00	0.00	2.48			
32	(f) Maintenance Works	LS	2.00	0.000	0.00	0.00	2.00			
33	(a) Patrolling in forest area by Territorial & Wildlife staff to prevent illicit felling, anti-poaching, encroachment, illegal mining, illegal transportation of forest produce (Mobility Expenditure)	290 Nos.	12.55	250 Nos.	6.44	0.03	6.08	Works are completed, Payment pending		

34	Major Repairing Vehicle	150 Nos.	1.58	35 Nos.	0.59	0.99	0.00	Surrender	
35	(b)Patrolling in most sensitive areas Wildlife wings & Territorial) 10 Labours for each Forest Division	40 Divisions	9.00	40 Divisions	3.62	1.01	4.37	Works are completed, Payment pending	
36	Running Group Dialing System for Connecting of Office & field staff for protection & Development Purpose	2500 Sim Cards	0.51	1800 Sim cards	0.29	0.00	0.22	Payment pending to BSNL	
37	Protection Wall	36391 RM	31.32	35648.50 RM	17.18	0.00	14.14	Works are completed, Payment pending	
38	Chain Link Enclosure	155285 RM		153782.79 RM				Works are completed, Payment pending	
39	Conservation & Protection of Sacred Wood land inside the forest areas	142 Nos.	10.76	0.000	4.05	0.00	6.71	Works are completed, Payment pending	
40	Block boundaries (Pillars)	5000 Nos.	4.30	250 Nos	0.05	4.25	0.00	Surrender	
41	Block boundaries in PA's (Pillars)								
42	Elephant Proof Trench	20 km	3.69	0.00	0.00	3.69	0.00	Surrender	
43	Pest & disease	4 WL Circles	0.99	0.00	0.00	0.00	0.99	Works are completed, Payment pending	
44	Protection of Wild animals in forest fringe areas	22219 R. m	3.26	0.000	0.50	0.00	2.76	Works are going on	
45	Strengthening of communication (c) GPS & other device (32 Divisions)	600 Nos.	1.00	0.000	0.00	0.00	1.00	Procurements procedure is under process	
46	DGPS Survey in forest areas (Balodabazar, Manendragarh, Korba, Bilaspur, Kanaker, Mahasmund] Khairagarh, Surajpur, Balrampur, Kondagoan Division	1393526	59.94	0.000	0.00	0.00	59.94	DGPS survey will be done through outsourcing. Tender document preparation is under progress. Work will be done after completion of all the formalities	
47	Creation of New Fire Line	8668.5 Km.	1.22	4735.56 km.	0.07	0.45	0.70	Works are going on	
48	Soil Moisture conservation work for str	698 Nos.	672.86	511 Nos.	255.70	0.00	461.93	Site wise DPR completed.	

	eam rejuvenation (Territorial) inside the forest areas							Works to be completion payment pending	
49	Soil Moisture conservation work for stream rejuvenation (Wildlife) inside the forest areas	45 Nos.	53.18	44 Nos.	8.40				
50	Construction of water Harvesting Structures	85 Nos.	85.94	65 Nos.	20.14	0.00	65.80	Works are under completion payment pending.	
51	Maintenance Work Soil Moisture Conservation Committed Liabilities	137 Nalas	16.00	17 Nos.	3.53	0.00	12.47	As per the site requirement, maintenance works are going on payment pending	
52	Soil Moisture conservation, Plantation & Catchment Area Development (Project Formulation by G.O.I., MoEF&CC by LiDAR Technic) (Project Area 9608 Ha.)	607 Nos. 663.90 Ha.	15.00	0.000	0.00	0.00	15.00	Ground truthing work is under process as per the DPR of ICFRE. Site specific DPR preparation is under progress.	
53	Grass land/Pasture development (with Seed Sowing)	18990.32 ha.	37.15	11853.9 ha.	19.40	0.00	18.74	Project formulation and site preparation works completed. Grass land developing works will be done in upcoming rainy season.	
54	Grass land/Pasture development (Without Seed Sowing)	3072 Ha.	5.74	4791.09 ha.	4.76				
55	Fruit Bearing Plantation	2138 ha.	14.10	1485 ha.	7.74	0.00	6.36	Project formulation and site preparation is completed. Plantation works will be done in upcoming rainy season.	
56	Conservation of Hill Maina (Kangerghati N.P.)	1 division	0.46	1 division	0.13	0.00	0.33	Works are going on, payment pending	
57	Conservation of Vulture (ATR, GGNP, Bijapur, Durg division)	4 division	1.34	2 division	0.33	0.00	1.01	Works are going on, payment pending	
58	Research project on Pangolin	1 division	0.05	1 division	0.04	0.00	0.01	Works are going on, payment pending	

59	Radio collaring of Tigers	WL areas	0.04	0.00	0.00	0.00	0.04	Works are going on, payment pending	
60	Documentation of Grasses on the Protected areas of CG	9 WL Div . Protected areas	0.08	0.00	0.00	0.00	0.08	Works are going on, payment pending	
61	Establishment of Elephant Reserve Lemru (5 Divisions@ 20 crores)	5 Divisions	90.51	5 Divisions	7.31	0.00	83.20	Works are under completion, payment pending	
62	Village relocation (3 villeges 70 families)	70 Families 03 Villeges	7.70	0.00	0.00	7.70	0.00	Surrender	
63	Planting and rejuvenation of forest cover on Wildlife Corridor (Achanakmarkanha Wildlife Corridor)	36306 Ha .	21.29	19 works	0.51	0.00	20.78	Ground truthing and site wise DPR completed works are under going	
64	Animal rescue center Raipur, Sanctioned by CZA	3 Nos.	2.58	2 Nos.	1.07	0.00	1.51	Works are going on	
65	Maintenance of Committed Liabilities River bank, Fruit Bearing Plantation & Forage/Grass land 2nd to 5th Yr. Maintenance of Old Plantations, Lantana & Improvement of Growing Stock in orange areas & etc.	256462 Ha.	97.87	248425 Ha.	62.34	0.00	35.53	Works completed, payment pending	
	Total of 80% NPV Works - Table-02		1806.20		671.76	19.92	1212.54		
Table - 03, Proposed work under 20% of NPV as per CAF Rules 2018- 5 (3)									
66	Construction of Hi-tech Nursery for Plant Production	22 Nos.	81.68	12 Nos.	11.64	0.00	70.04	Nursery establishment works are under process, payment pending	
67	Construction of Boundary wall Nursery	1580 R.m .	1.24	0	0.00	0.00	1.24	Works are on going	
68	Preparation of PBR	5423.00	54.96	2081.00	12.42	0.00	42.54	PBR preparation works are under completion, payment pending	
69	IT in Forestry, Monitoring & Evaluation/ICFRE - Monitoring & Evaluation/Up gradation of FMIS division with Procurement of software GIS	6 GeomaticCenter & 04 Division For ICFRE, 01 FMIS division	6.46	6 GeomaticCenter	1.07	0.00	5.39	Works are going on, payment pending	

70	Hi-tech Barrier	25 Nos.	4.00	20 Nos.	1.29	0.00	2.71	Works are going on, payment pending	
71	Construction of inspection path (Murram Road)	130.2 Km	8.46	116.50 Km.	5.11	0.00	3.36	Works are going on, payment pending	
72	Up gradation of Forest Road in Forest areas (only WBM Road) (Territorial) Forest road mentioned in the working plan	1137.00	166.55	546.90	42.92	0.00	123.62	Works are going on, payment pending	
73	Construction of Causeway/Culvert (Territorial) on forest road mentioned in the working plan	401	37.61	58.00	6.37	0.00	31.23	Works are going on, payment pending	
74	Construction of Watch Tower	1 Nos.	0.40	0.00	0.00	0.00	0.40	Works are going on, payment pending	
75	R.O. Office Building	23 Nos.	4.78	10	2.26	0.00	2.52	Works are going on, payment pending	
76	R.O.- Residential Building	27 Nos.	4.13	13.00	1.25	0.00	2.88	Works are going on, payment pending	
77	Forester/Dy.R.O. - Residential	74 Nos.	5.96	21.00	1.22	0.00	4.74	Works are going on, payment pending	
78	Forest guard - Residential	95 Nos.	5.11	49.00	1.79	0.00	3.32	Works are going on, payment pending	
79	Development & Staff Amenities	40 Divisions	23.55	40 Divisions	7.02	0.00	16.53	Works are going on, payment pending	
80	Preparation of DPR	10 Circle & 40 Divisions	11.17	0.00	0.53	0.00	10.64	Works are going on, payment pending	
81	Publicity/Awareness Programme/ICFRE	All Circle	9.69	0.00	0.14	0.00	9.56	Works are going on, payment pending	
82	Plant Production for Govt. Land (distribution in Subsidised Rates)	1600000 Plants	2.76	150000 Plants	1.17	0.00	1.59	Works are going on, payment pending	
83	Forest certification and development of certification standards	All Divisions	0.75	0.00	0.00	0.00	0.75	Works are going on, payment pending	
Total of 20% NPV Works - Table-03			429.24		96.17	0.00	333.07		
Table - 04 - Proposed Activity from 60 % Interest Amount as per CAF Rules 6(a) & (b)									
84	Salary and other allowances of regular staff	LS	2.50	LS	1.74	0.76	0.00	Surrender	
85	Salary of contractual/Job Rate Staff	LS	2.00	LS	0.45	1.55	0.00	Surrender	

86	Disbursement of sitting fees and allowances to nominated members of the State authority	6 Months	0.02	6 Months	0.01	0.01	0.00	Surrender	
Total of Proposed Activity from 60 % Interest Amount (Table-04)			4.52		2.21	2.31	0.00		
Table - 05 - Proposed Activity from 40 % Interest Amount as per CAF Rules 6(a) & (b)									
87	Management of office establishment	LS	0.50	LS	0.16	0.34	0.00	Surrender	
88	Office equipments (Computer & Peripherals and its maintenance)	LS	0.25	LS	0.13	0.12	0.00	Surrender	
89	Hiring of Staff car for the use of the offices & officials of the State authority	LS	0.50	LS	0.49	0.01	0.00	Surrender	
90	Other Contingencies expenditure (Protocol, Meeting arrangements and others exp.)	LS	0.50	LS	0.29	0.21	0.00	Surrender	
Total of Proposed Activity from 40 % Interest Amount (Table-05)			1.75		1.07	0.68	0.00		
			6.27		3.28	2.98	0.00		
Grand Total APO 2021-22			2551.61		834.34	97.94	1717.35		

The Annual Plan of Operation of Chhattisgarh State Authority for 2022-23 for the partially approved activities is placed for consideration of the Executive committee of the National Authority.

Agenda Item No.8: Annual Plan of Operation (APO) for the year 2022-23 of Jammu & Kashmir State Authority

The Additional Principal Chief Conservator of Forests, Department of Environment, Forests & Climate Change, Jammu and Kashmir CAMPA vide letter no. PCCF/CAMPA/2022-23/F.No.1175/1652-53 dated 07.09.2022 has requested that considering the large areas of J&K under Protected Area Network (11.8% of the geographical area of J&K) and based on the justification given by the Chief Wildlife Warden, J&K Wildlife Protection

2. During 16th EC meeting Executive Committee the agenda was deliberated and approved the APO of 2022-23 with financial outlay of **Rs. 297.65 crore**. The Executive Committee deliberated and approved the APO of **Rs. 117.61 crore** and deferred **Rs. 163.81 crore**.

3. The State Authority of Jammu & Kashmir has informed that till date an amount of **Rs 162 crore** is released by State department.

4. Jammu & Kashmir State Authority has submitted the details along with justification.

(Rs. in crore)

Activities for which additional approval is required	Amount proposed in the APO 2022-23	Amount approved by National Authority	Additional approval required for APO 2022-23
Wildlife management related activities under rule 5(2) of the CAF Rules, 2018 (NPV)			
Habitat Management (Wetlands)			
De-weeding operation in wetlands	0.15		
Release of fish, bird feed in wetlands	0.15		
Protection and development of turtle breeding ground	0.21		
Desilting	0.59		
Miscellaneous works (construction of pools, waterways, embankments, etc.)	0.44		
Total	1.54	0.40	1.16
Publicity cum awareness programme & exhibitions etc.			
Publicity and Awareness	0.39		
Training & Capacity Building	0.09		
Workshop	0.06		
Awareness and education-Events, documentaries and multi-media	0.30		
Total	0.85	0.40	0.45
Site specific activities as per section 6 (a) of the CAF Act, 2016			
Environment Management Plan-Mitigation Plan of Kishtwar High Altitude National Park (KHANP) under Chenab Valley Power Project			
Survey & Mapping	1.22	0.50	0.25
Total	3.66	1.30	1.86

5. Spill over works 2021-22

Sl No	Activities for which additional approval is required	Amount proposed in the APO 2022-23	Amount approved by National Authority	Additional approval required for APO 2022-23
1.	Forest Infrastructure related activities under Rule 5(3) of the CAF Rules, 2018(NPV)			
	Survey & Mapping/point sampling	1.08	0.50	0.58
2	Training & Capacity Building			
	Training/Workshop	0.30		
	Training & Capacity Building	1.31		
		1.62	1.00	0.61
3	Documentation			
	Documentation and publication	0.13		
	Documentation- documentation	0.25		
		0.38	0.20	0.18
4	Publicity-cum-awareness			
	Awareness and education-events, documentaries and multimedia	0.21		
	Publicity and awareness-publicity/awareness	0.66		
		0.87	0.20	0.67
5	Expenditure covered under Rule 6(a) of central CAF Rules,2018			
	Outsourcing of upkeep for need based persons and allowance to non-official members of executive/Steering Committee of CAMPA	0.90	0.50	0.40
6	Expenditure covered under Rule 6(b) of Central CAF Rules, 2018			
	Books Periodicals and Publications	0.10	0.05	0.05
	Total	4.95	2.45	2.49

6. Supplementary APO for the FY 2022-23 for amount of Rs.10.05crore (liability and Spill over -works against the approved APO of FY (2021-22)

7. Additional Rs.3.51crore under the interest component required for meeting wages of casual watch and wards

The Annual Plan of Operation of Jammu and Kashmir Authority for 2022-23 for the partially approved activities is placed for consideration of the Executive committee of the National Authority.

Agenda Item No.9: Annual Plan of Operation (APO) for the year 2022-23 of Mizoram State Authority
File No.NA-15/16/2020-NA

APO for the year 2022-23 of Mizoram State Authority-remaining activities

The Annual Plan of Operation of Mizoram was discussed in the 16th Executive Committee meeting of the National Authority held on 10th March, 15th March and 06th April, 2022.

The Principal Chief Conservator of Forests, Department of Environment, Forests & Climate Change, Mizoram vide letter No.B.20018/54/2021-CAMPA/PCCF/124-125 dated 04th October, 2022 has submitted the details of remaining activities that has not been approved by the National Authority.

2. During 16th Executive Committee Meeting Mizoram State Authority has proposed outlay of **Rs.20.40 crore**. The Executive committee deliberated and approved outlay of **Rs. 16.75 crore** and **deferred Rs.1.25 crore** and Rs.2.40 crore not approved.

3. The State Authority of Mizoram has informed that till date an amount of Rs. is released by State department

4. Mizoram State Authority has submitted the details along with justification.

S.No	CAF Act/Rules	Activity	Proposed outlay		Decision of 16 th & 17 th Meetings of EC	Justification
			Physical Target (in ha.)	Financial Target (Rs. in Crore)		
1.			Activities as per Rule 5 (2) of CAF Rules, 2018 (80%)			
	5(2)(m)	Management of biological diversity and biological resources in forests including wetlands.	10 Divisions	1.40	Not Approved	Some forests areas namely Muthi in Aizawl, Sairep in Lunglei, Dampui in Mamit, Surtlang in Champhai, Thingsai in N. Vanlaiphai, Darngawn in Thenzawl, Lungrang in Tlabung etc. on Government land as well as community lands including wetlands are rich in biodiversity therefore, preservation and management of these resources is essential and thus, proposed under APO 2022-23.
	5(2)(m)	Creation of Herbal Garden at suitable sites	2 sites	0.20	Not Approved	Herbal garden is proposed for education and awareness creation on medicinal plants, their conservation and uses

S.No	CAF Act/Rules	Activity	Proposed outlay		Decision of 16 th & 17 th Meetings of EC	Justification
			Physical Target (in ha.)	Financial Target (Rs. in Crore)		
		viz. Lengpui, etc.				
	5(2)(m)	Development of Orchids	1 site	0.10	Not Approved	Endemic orchid species are dwindling in Mizoram and thus for its conservation and promotion, the proposal is submitted under APO 2022-23.
2.	Activities as per Rule 5 (3) of CAF Rules, 2018 (20%)					
	5(3)(f)	Engagement of local casual staff/ labours to assist regular staff of State Forest Department in various works for protection of forests and wildlife including anti-poaching squad.	As per APO	0.60	Not Approved	There is acute shortage of regular forest field staff, therefore, casual engagement of local people to assist frontline staff in the Protected Areas & forests for smooth and effective execution of works in protection of forest, wildlife and CAMPA activities is required and hence proposed under APO 2022-23.
	5(3)(c)	Purchase/maintenance of communication devices viz. cell phones, laptops, etc. used for monitoring and protection of forests.	As per APO	0.10	Not Approved	Due to remote and difficult hilly terrain of Mizoram, the communication with forest field staff in various forest Divisions and ranges is quite challenging job. Thus, procurement of communication devices is proposed under APO 2022-23.
		Total		2.40		

The Annual Plan of Operation of Mizoram State Authority for 2022-23 for the remaining activities is placed for consideration of the Executive committee of the National Authority.

Agenda Item No.10: Annual Plan of Operation (APO) for the year 2022-23 of Odisha State Authority

The Chief Executive Officer, CAMPA of Odisha vide letter No. State Authority/2022-23/16009 dated 17-08-2022 requested approval for the items deferred by Executive Committee during 19th EC meeting of National Authority.

2. During 19th EC meeting Executive Committee the agenda was deliberated and approved the APO of 2022-23 with an amount of **Rs.1147.33 crores** (Rs.772.92 crores in 1st Phase + Rs.371.41 crores in 2nd Phase) and deferred activities amounting to **Rs. 12.99crore**. The State Authority submitted the detailed justification for the deferred items amounting to **Rs.12.99 crore**. At the same time some activities like Plantation and Wildlife Management etc. are partly approved and an outlay of **Rs.81.08crores**. Out of which an amount of **Rs.18.8 crores** are yet to be approved by the National Authority for the plantation activities

3. The State Authority of Odisha has informed that till date an amount of **Rs 773.72 crore** is released by State department.

4. Odisha State Authority has submitted the details along with justification:

Sl. No.	CAF Rule	Detail Activity	Physical Target	Financial Outlay as per APO (Rs. in crores)	Outlay Deferred	Compliance
A.	Activity proposed under (80% NPV)					
Management of biological diversity and biological resource						
1.	Rule 5(2)(i)	Augmentation of food and water resources	As per APO	11.03	Not approved	The activities are permissible under CAF Rule, 2018 as mentioned which is a continuous activity since last APOs. Under augmentation of food and water sources the activities like creation and maintenance of water-bodies, water harvesting structures has been proposed. Further, to address food scarcity in protected area, plantation of fruit fodder species alongwith maintenance of old plantation, sowing of bamboo seed balls also proposed. All the above items have been exclusively proposed under above activity not included in any other activities proposed in APO. Barring of the activities from APO shall create serious problem for wildlife conservation in the State. Hence, the outlay proposed may be approved.
2.	Rule 5(2)(b)	Miyawaki Plantation @8000 Plant/Ha	As per APO	1.96	1.96	The activity was decided not to be taken up in 16th EC meeting. Hence, dropped.

4. The Odisha State Authority has also submitted the compliance to the partly approved activities on APO 2022-23, as under viz.:

Sl. No.	CAF Rule	Detail Activity	Physical Target	Outlay proposed in APO (in Cr)	Outlay approved (in Cr)	Outlay to be approved (in Cr)	Compliance	
1.	Rule 5(2)(a)	ANR Plantation (0th + 1st Year)						
		Vanya Silk @ 500 plant/ha	1877 Ha	11.80	5.60	6.20	The activities are permissible under CAF Rule, 2018 as mentioned. The raising of nursery and other pre-planting operations are implemented and planting at the onset of monsoon during this year is in full swing. Hence, balance funds may be approved for uninterrupted planting works during the monsoon season.	
		Fodder and Fruits @ 500 plant/ha	2760 Ha	17.35	8.68	8.67		
		RET/Medicinal @ 200 plant/ha	2452 Ha	7.67	3.74	3.93		
2.	Rule 5 (2)(d)	Protection of Forests						
		Protection of Forest through consolidation of Geo Referencing of Notified Forest Block 13046.87 KM ² and 3965.17 KM ² of Revenue and Deemed forest area	As per APO	30.00	15.00	15.00	The activity are permissible under CAF Rule, 2018 as mentioned. The documentary video on consolidation of forest block and geo-referencing as per the SoP in the field is already prepared and the same will be shared with National Authority soon. The work on geo-referencing is going on in the field. Hence, balance funds may be approved.	
		Protection of forest through provisioning of mobility by hired vehicle (whole year)	316	16.31	8.15	8.16	The activities are permissible under CAF Rule, 2018 as mentioned. The activity is a continuing activity which was taken up under previous APOs. For uninterrupted provisioning of vehicles in the field for effective protection of forests and other monitoring activities, funds are required immediately. Hence, balance funds may be approved.	
Forest Fire Prevention and control operations								
3.	Rule 5(2)(f)	Awareness Campaign in the ranges	283	1.42	1.00	0.42	The activities are permissible under CAF Rule, 2018- as mentioned. The awareness program in fire vulnerable forest fringe village is urgently required for prevention of forest fire and keeping the villagers prepared for helping the staff to take care of any emergency situation. Hence, balance funds may be approved.	
4.	Rule 5(2)(m)	Promoting conservation, sustainable use, chronicling of biological diversity		3.00	0.5	0.42	The activities are permissible under CAF Rule, 2018- as mentioned and very important	

Sl. No.	CAF Rule	Detail Activity	Physical Target	Outlay proposed in APO (in Cr)	Outlay approved (in Cr)	Outlay to be approved (in Cr)	Compliance
							in assessment and conservation of biodiversity in the State. Hence, the outlay proposed may please be approved.
Wildlife Management							
5.	Rule 5(2)(i)	Monitoring Assessment of WL Habitat	As per APO	19.45	17.00	2.45	The balance outlay is required to execute the activity effectively. Hence, the same may be approved.
6.	Rule 5(2)(m)	Biodiversity assessment in protected areas	Biodiversity Assessment in protected areas	17.91	7.00	10.91	The activities are permissible under CAF Rule, 2018 as mentioned. The activity is being carried out in protected areas as was done in previous year APOs. The local community is being engaged in surveillance of important wildlife species and to held in protection of meta population of wildlife especially outside the protected areas as was done in the previous year APOs. Hence, balance funds may be approved.
			Monitoring in 86 WL influenced areas				
Sub Total of 80% NPV (Gen + WL)				124.91	66.67	58.24	
C. Activities proposed under 20% NPV							
7.	Rule5(3)	Capacity Building of frontline forest staff and other stake holders		2.00	1.00	1.00	The activities are permissible under CAF Rule, 2018 as mentioned. The frontline forest staff are required to update their knowledge & skill for scientific management of forestry activities & WL management, prevention of forest & WL crimes, use of IT in Forest Management. Hence, balance funds may be approved.
8.	Rule 5(3)(a)	Improvement of Permanent Nursery including creation of Vermi-compost unit	600	9.00	4.50	4.50	The activities are permissible under CAF Rule, 2018 as mentioned. The activity shall facilitate to meet the requirement of vermi-compost in situ for Nursery activities and ensure the Quality Planting material for the plantation. Hence, balance funds may be approved.
9.	Rule 5(3)(c)	Up-gradation of Communication and information Technology, Geo-ICT facility-based Server infrastructure, maintenance		17.34	5.00	12.34	The forest information & Geomatic Centre has been developed in State Forest Hqrs. which play key role in Monitoring Forest and WL

Sl. No.	CAF Rule	Detail Activity	Physical Target	Outlay proposed in APO (in Cr)	Outlay approved (in Cr)	Outlay to be approved (in Cr)	Compliance
		and procurement of IT Equipment and evices					activities, Forest Fire Protection and foot patrolling inside the forests. Now 23 modules are used alongwith operation of 1363 nos. of Android mobiles at field level for Monitoring which are connected to Odisha Forest Monitoring System (OFMS). Further, it is proposed in this APO to strengthen Forest Division by establishing multi-protocol level switching connectivity with Circle Office & Forest Hqtrs. for seamless flow of information and smoothening the process of administration within the department. All the works are to take up quickly as per instructions from the Government and funds are to be ensured for the same. Hence, the EC is requested to consider the facts as above and approve balance Rs.12.34 crore to make forest IT more efficient in Monitoring Forest and WL Protection and Management of Forest.
10.	Rule 5(3)(h)	Monitoring & Evaluation		4.5	3.00	1.50	The State Authority Odisha has completed 3rd Party Evaluation of CAMPA Activities from APO 2009-10 to 2016-17. The evaluation of APO 2017-18, 2018-20 and 2020-21 is under progress and the same for APO 2021-22 shall be taken up this year. Further, the internal Monitoring by State Hqtrs. and Circle Offices are being conducted regularly to ensure execution of CAMPA activity in a transparent manner. Hence, EC is requested to approve balance outlay of Rs.1.50 Cr.
11.	Rule 5(3)(i)	Publicity Awareness (Forest Museum at Bonanical Garden, Nandanknam/Facilitation Center)		5.00	2.50	2.50	The activity has been proposed in the APO to generate awareness and interest among the general public of the State about richness of floral and faunal heritage of the Sate along with threats to them. The role of

Sl. No.	CAF Rule	Detail Activity	Physical Target	Outlay proposed in APO (in Cr)	Outlay approved (in Cr)	Outlay to be approved (in Cr)	Compliance
							CAMPA in improving forest and WL Status in the State by adopting suitable intervention shall also be highlighted. The works on designing the Museum will be started. Hence, the EC is requested to consider the objective and approve the balance outlay of Rs.2.5 crore.
Wildlife Management							
12.	Rule 5(3)(i)	Publicity, Awareness etc. in PA's and Wildlife rich areas		2.00	1.00	1.00	Odisha witnesses vast extent of man-animal conflicts every year. The role of general public in its mitigation and management is very important. So, it has been proposed in APO to create publicity platforms to garner active involvement of the public which will be beneficial to people and also to the wildlife conservation. Due to urgency in awareness programmes in this regard, EC is requested to approve balance outlay of Rs.1.0 crore for above purpose.
		20% NPV (Gen+WL)		39.84	17.00	22.84	
Grand Total (80% + 20%) NPV + CA + SSWL + Interest				164.75	83.67	81.08	

3. The Annual Plan of Operation of Odisha State Authority for 2022-23 for the deferred activities is placed for consideration for Executive Committee of the National Authority.

Agenda Item No.11: Annual Plan of Operation (APO) for the year 2022-23 of Punjab State Authority

The Chief Executive Officer, CAMPA of Punjab vide letter No. State Authority/2022-23/15137 dated 10.10.2022 requested approval for the items deferred by Executive Committee during 19th EC meeting of National Authority.

2. The agenda was deliberated in the 19th EC meeting Executive Committee and approved the APO of 2022-23 with an amount of **Rs.159.78 crore** and deferred activities amounting to **Rs.80.15 crore**. The State Authority submitted the detailed justification for the deferred items amounting to **Rs.80.15 Crore**

3. The State Authority of Punjab has informed that till date an amount of **Rs 141.05 crore** is released by State department.

4. Punjab State Authority has submitted the details along with justification:

S. No.	CAF Act/Rules	Activity	Proposed Outlay		Remarks and Page No.
			Physical Target (in ha.)	Financial Target (in Crore)	
1.	Site Specific Activities as per Section 6(a) of the CAF Act, 2016				
	5 (2)	Artificial Regeneration (By Plantation)			
	5 (2)(b)	Maintenance of Irrigated Bamboo Plantation in Forest area	Maintenance 145 ha.	0.71	
	5 (2)(c) (g)	Silvicultural operations in forest, Soil and Moisture Conservation works in the Forest	As per APO	17.20	
	5 (2)(d) (e) (f)	Protection of plantation and Forest, Forest Fire prevention, control operations and Pest and disease control in Forest	As per APO	22.87	
	5 (2)(i)	Biodiversity Management in Wildlife	As per APO	10.02	
		Sub Total Rule 5 (2)		50.80	
3	Activities as per Rule 5 (3) of CAF rules, 2018				
	5 (3) (e)	construction of residential and official buildings in forest for Frontline staff up to the rank of Range officers deployed for protection of forest and wildlife, Construction, up-gradation and maintenance of inspection paths, forest roads in forest area, fire lines, watch towers, check posts etc.	As per APO	3.02	
	5 (3) (g)	Survey and mapping of forest area for forest fire control compensatory afforestation works and wildlife management for preparing Annual Plan to be executed from State Fund, Independent concurrent monitoring and	As per APO	5.40	

S. No.	CAF Act/Rules	Activity	Proposed Outlay		Remarks and Page No.
			Physical Target (in ha.)	Financial Target (in Crore)	
		evaluation and third-party monitoring of various works under taken from State Fund			
	5 (3) (c)	Purchase and maintenance of equipment or devices used for communication and information technology for the purpose of protection of forest and wildlife	As per APO	1.78	
	5 (3) (i)	Publicity cum awareness programme and exhibition on various schemes being implemented by the State Authority from State Fund and Capacity building of personal involved in utilization of State Fund	As per APO	1.48	
	5 (3) (b)	Biodiversity Management in Wildlife	As per APO	4.27	
		Sub Total Rule 5 (3)		15.95	
		Total NPV			
4	Activities as per Rule 6 (a) and 6 (b) of CAF rules, 2018				
	6 (a) (i to v)	Activities out of 60% of interest accrued on deposit in State Fund	As per APO	5.39	
	6 (b) (i to v)	Activities out of 40% of interest accrued on deposit in State Fund	As per APO	1.60	
	6 (b) (vi)	Innovative Projects (out of interest)	As per APO	6.41	
		Sub Total Rule 6 (a) and 6 (b)		13.40	
		Grand Total of APO 2022-23		80.15	

The Annual Plan of Operation of Punjab State Authority for 2022-23 for the deferred activities is placed for consideration for Executive Committee of the National Authority.

Agenda Item No.12: Annual Plan of Operation (APO) for the year 2022-23 of Sikkim State Authority
File No.NA-15/30/2020-NA

Annual Plan of Operation for the financial year 2022-23 has been received from State CAMPA Authority, Government of Sikkim vide letter no. B-428/SCaS/F&ED/365 dated 30.06.2022 (received through e-mail dated 30.06.2022 at 05:52 PM. The State CAMPA Authority has reported that the Steering Committee of State Authority of Sikkim CAMPA has approved the Annual Plan of Operation (APO) for 2022-23 in its meeting held on 26.05.2022 under the chairmanship Chief Secretary, Sikkim over an outlay of **Rs.77.86 crore** only for the year 2022-23 and Spill-over liabilities of APO 2021-22 for **Rs.23.0382 crore**.

2 During 18th EC meeting The Sikkim State Authority proposed outlay of **Rs.77.86 crores**. The Executive Committee approved outlay of **Rs. 59.38 crores** and **Rs. 17.99** crores were deferred.

3.The State Authority of Sikkim has informed that till date an amount of **Rs 34.15 crore** is released by State department

4.Sikkim State Authority has submitted the details along with justification:

Amount in crore					
S.No.	Activity	Proposed Amount	CAF Rules section	Decision of the 18thEC of National Authority	Remarks
2. Activities as per Rule 5(2) of the CAF Rules 2018					
	i. River protection works for forest land from scouring by river Bakcha at Labi, Mangan, Sikkim	2.00	5(2)(d)	Deferred	
	ii. Brick Wall fencing of Forest Colony, Gangtok to protect forest property from encroachment	0.50		Not approved	
	iii. Landslide treatment with vegetative and engineering measures at Kit GolaiKhasmal, ChalamthangPacheykhani GPU	0.75		Not approved	
	iv. Landslide treatment under Mangan district	1.50		Not approved	
	v. Procurement of field kits for frontline staffs of Territorial Sector	0.53		Deferred	
	vi. maintenance and upgradation of eco-friendly footh path (in Barsey	0.58		Not approved	

S.No.	Activity	Proposed Amount	CAF Rules section	Decision of the 18 th EC of National Authority	Remarks
	Rhododendron Sanctuary) Soreng district				
	Supply of wood saving appliance in forest fringe villages				
	(a) Procurement of LPG connection with double barrel cylinder	0.02	5(2)(l)	Not approved	
	(b) Procurement and distribution of Unnat-Chullah with accessories	0.01		Not approved	
	Management of Biological diversity land biological resource				
	(a) Management and reclamation of degraded forest land into Nature Park/Biodiversity Park at Laboratory in North Sikkim (Phase II)	1.70		Deferred	
	(b) Upgradation and management of Saramsa Garden, Ranipool, Gangtok, Sikkim	1.00	5(2)(m)	Not approved	
	(c) River Rejuvenation Action Plan	1.90		Deferred	
	(d) Management and upgradation of water park at Hee Gaon in West Sikkim by Wildlife Division	1.50		Not approved	
4. Activities as per Rule 6(a) of the CAF Rules, 2018					
	Others (Biodiversity Conservation & Management Plan) (Cost escalation)	0.10		Not approved	
	Activities referred to in sub-rules (2) and (5) of rule 5				
	3. Conservation, management and upgradation of 7 sisters water falls area at Phensang, North Sikkim	1.50	6(a)(vi)	Not approved	

S.No.	Activity	Proposed Amount	CAF Rules section	Decision of the 18 th EC of National Authority	Remarks
	4. Conservation and upgradation of KabiLungchuk Sacred Groves at Kabi, Mangan District, Sikkim	1.50		Not approved	
5. Activities as per Rule 6(b) of the CAF Rules, 2018					
	Other activities for management of forest and wildlife including upgradation/improvement etc.				
	i. Upgradation and improvement of government timber depot at Chuba, Gangtok District (Phase III)	1.00	6(b)(vi)	Not approved	
	ii. Harvesting of medicinal plants from plantation sites of North & East districts on trial basis.	0.13	6(b)(vi)	Not approved	
	iii. Others (Biodiversity Conservation Plan)	1.77	Mandatory Activities	Not approved	
	Grand Total	17.99			
Rupees seventeen crores ninety-nine lakhs only					

The Annual Plan of Operation of Sikkim State Authority for 2022-23 for the deferred activities is placed for consideration for Executive Committee of the National Authority.

Agenda Item No.13: Annual Plan of Operation (APO) for the year 2022-23 of Tripura State Authority

A reference has been received from the State CAMPA Authority, Government of Tripura vide letter no.6-419/CAMPA-4/For-2022-23/(APO)6000-003 dated 22.10.2022 [received through e-mail dated 26.10.2022 at 01:38 PM] on the subject mentioned above (page 1054-1063/ToC).

2. During the 16th meeting of Executive Committee the agenda was deliberated and approve an outlay of **Rs. 37.45 crore** and deferred **Rs 24.45 crore** out of proposed outlay of **Rs. 63.00 crore**.

3.The deferred activities of APO 2022-23 were deliberated in 17th meeting of Executive Committee of National Authority and approved financial outlay of **Rs. 15.45 crore**.

4.The State Authority of Tripura has informed that till date an amount of **Rs 27.22 crore** is released by State department.

5.Tripura State Authority has submitted the details along with justification:

S. No.	Activity	Proposed Outlay		CAF Act/ Rules	Decision of 16 th & 17 th EC
		Physical Target (in ha./km/nos.)	Financial Target (in crore)		
2.	Activities as per Rule 5 (2) of CAF Rules, 2018 (80%)				
	<u>Supply of wood-saving devices in forest:</u> Wood saving and other forest produce saving device in JFMC villages (solar lights/ pumps)	10	1.00	5(2)(l)	Explore Convergence with MNRE Funds
	<u>Management of biological diversity and biological resource:</u>				
	Conservation of Forest, Wildlife and Biodiversity thematic exhibits galleries at Vigyan Gram (Science City) through TBB.	-	3.05	5(2)(m)	Not approved
	Sub Total 5(2) Rule -		36.3077		
3.	Activities as per Rule 5 (3) of CAF Rules, 2018				
	Construction of timber depots in different forest sub-divisions	Approved 2 depots with amount of Rs.0.40 crore out of Rs.1.00crore		5(3)(d)	
	Engagement of Van Mitras through JFMC/ BMC during 2022-23		5.00	5(3)(f)	Deferred
	Grand Total		9.05		

3. The Annual Plan of Operation of Tripura State Authority for 2022-23 for the deferred activities is placed for consideration for Executive Committee of the National Authority.

Agenda Item No14.: Annual Plan of Operation (APO)for the year 2022-23 of Uttarakhand State Authority

Vide reference to the email dated 2.11.2022 @ 6:10 PM received from the Office of the Chief Executive Officer, Uttarakhand for the approval of the deferred activities.

2. During 19th meeting Executive Committee of National Authority has deliberated and approved the APO of 2022-23 with an amount of **Rs.145.49 crore** and deferred activities amounting to **Rs.273.49** crore out of proposed outlay of **Rs. 418.98 crore**.
3. The State Authority of Uttarakhand has informed that till date an amount of **Rs 117.36 crore** is released by State department.
4. Uttarakhand State Authority has submitted the details along with justification:

(Rs. in Crore)

S. No.	Act/Rule	Specific Head	Unit	Physical Target	Financial Target	Page no. of	
						APO	Add. Info
1	2	3	4	5	6	7	8
C- Other 'Specified' Works/Conditions (As per Section 6(a) of CAF Act 2016)							
2	Mandatory Activity	River Training Works	Nos.	Kosi , Dabka , Song, Gola river	7.70	160 and 401-402	ix -x & 41 to 89
F - NET PRESENT VALUE (NPV)							
Activities as per rule 5(2) - minimum 80% of NPV							
ANR & PLANTATION ACTIVITIES							
1	5(2)(a)	Assisted Natural Regeneration (ANR)	ha	1905	10.71	161 and 403-410	xi
	5(2)(b)	Plantations under NPV (Oak, Deodar, others)					
2		Advance Soil Work (ASW)	ha	698.4	6.03	162-163 and 411-413	xi
9	5(2)(g)	Treatment of Critically Polluted River Stretches (Hon. NG T OA 673/2018-More river stretches are now critically polluted) - Bhela, Dhela, Suswa, Pila khar, Nandhaur, Kalyani& Treatment of degraded forest water	Nos.	7	6.00	174 and 441	xii & 90 to 135 LIDAR xii to xiv &

S. No.	Act/Rule	Specific Head	Unit	Physical Target	Financial Target	Page no. of	
						APO	Addl. Info
1	2	3	4	5	6	7	8
		rsheds (Gagaas) using LIDAR technology.					136 to 140
10	5(2)(g)	Restoration of water bodies, ponds, plantations and artificial wetlands in Ganga Flood Plain Zones as per directions of Hon. NGT in OA no. 200/2014				175-176 and 442-448	xv & 141 to 156
i		Plantations in flood Plain Zone					
a.		Advance Soil Work (ASW)	ha	174.5	0.54		
ii		Treatment works - check dams	Nos.	1475	3.34		
11	5(2)(g)	Conservation & development of wetlands as per directions of Hon. NGT in OA no. 325/2015 (wetlands existing in forest areas of Uttarakhand)					xv - xvi 157 to 162
ii		Treatment works - cleaning etc.	Nos.	5	0.019		
iii		Treatment works - check dams in catchment	Nos.	1035	1.44		
iv		Treatment works - contour trenches in catchment	ha	5	0.15		
v		Treatment works - percolation pits in catchment	ha	50	0.12		
15	5(2)(f)	Forest Fire Prevention and Control					
i		Forest Fire Management – firefighting tools, crew station, control room maint., fire watchers, , hiring of vehicles etc.		4245	9.29	186-187 and 459-488	xviii - xiv
ii		Upgradation of State Level Forest Fire Control Room to ' Integrated Forest Fire Control and Command Centre '	No.	1	3.00		
SOIL & WATER CONSERVATION							
16	5(2)(g)	Soil and Water Conservation Works					

S. No.	Act/Rule	Specific Head	Unit	Physical Target	Financial Target	Page no. of	
						APO	Add. Info
1	2	3	4	5	6	7	8
i		Preparation of DTR for treatment and management of natural springs	Nos.	40	2.00	188-197 and 489-591	xiv & 231 to 237
ii		Springshed Management as per SMC and Rejuvenation of Rivers	Nos.	150	21.72		
iii		Plantation for Soil conservation	ha	500	5.00		
iv		Preparation and Implementation of 'State level Land Slide Treatment Plan'	No.	Identified Divisions	5.00		
WILDLIFE MANAGEMENT							
17		Habitat Improvement					
i	5(2)(i)	Eradication of Lantana & other invasive species and plantation of grassland	ha	7387	14.54	199 and 593-604	xx & 238 to 243
ii		Maintenance - Eradication of Lantana & other invasive species - Year 1, 2 & 3	ha	12852	14.05		
18		Establishment, operation and maintenance of animal rescue centre and veterinary treatment facilities for wild animals;					
i	5(2)(k)	Construction of Wildlife Rescue and Rehabilitation Centre (Corbett TR & Lansdowne FD)	Nos.	2	2.87	201 and 633	xx & 314 to 328
ii		Construction of Monkey rescue centres (Kedarnath WLD, Terai East FD) and Maintenance of Haridwar & Almora Centres.	Nos.	4	3.00	202 and 634	xxi
iii		Monkey Catching from urban / rural habitations and releasing in remote forest areas, Sterilization, post-surgery care etc.	Nos.	50000	7.54	203 & 635 to 641	xxi - xxii
iv		Food for wild animals kept at the rescue centres	No. of rescue centres	3	1.00	204 and 642	xxii

S. No.	Act/Rule	Specific Head	Unit	Physical Target	Financial Target	Page no. of		
						APO	Addl. Info	
1	2	3	4	5	6	7	8	
19	5(2)(d)	Human Wildlife Conflict Management				203 and 635-641		
i		Solar / Electric Fencing over forest boundaries	km	133.55	4.11	205 and 643-646	xxii & 329 to 336	
ii		Elephant proof Trenches	km	96.86	4.19	206 and 646A-646C	xxiii	
iii		Elephant /wildboar proof protection wall at critical boundaries	km	12.63	3.30	206A and 647-648	xxiii	
		Maintenance of protection wall	km	29.84	2.71	207 and 649-650	xxiii	
20	5(2)(d)	EDC / Village Protection Force (entry point activities, microplanning etc.)	No. of EDCs	101	1.56	208 and 651-652	xxiv	
21	5(2)(d)	Strengthening of VVWPF to Task Force on Human Wildlife Conflict Mitigation	No.	277	0.80	209 and 653-654	xxiv	
22	5(2)(d)	Anti-Poaching Activities	Nos.	288	2.40	210 and 655-658	xxv	
23	5(2)(m)	Estimation of Wildlife Populations	No. of Species	LS	1.93	211 and 659-660	xxv - xxvi	
24	5(2)(d)	Equipment for forest and Wildlife Protection	No. of Equipment	411	1.26	212 and 661-662	xxvi	
25	5(2)(d)	Construction of water holes to create drinking water facility for wild animals	No. of water holes	285	1.79	213 and 663-667	xxvi	
26	5(2)(i)	Pasture/ Chaur Development in cl maintenance	ha	1327.7	1.48	214-215 and 668-671	xxvi - xxvii	
27	5(2)(d)	Development of Wildlife Tracking Technology, Radio Collaring	Nos.	LS	0.16	216 and 672	xxvii	
28	STRENGTHENING OF VAN PANCHAYATS							
i	5(2)(a)	A.N.R in Van Panchayats	ha	648.4	3.84			

S. No.	Act/Rule	Specific Head	Unit	Physical Target	Financial Target	Page no. of		
						APO	Addl. Info	
1	2	3	4	5	6	7	8	
ii	5(2)(d)	Creation of Boundary Pillars in VP	Nos.	1141	0.59	217-219 and 673-737	xxvii to xxviii	
iii	5(2)(d)	Survey & Demarcation in VP's	ha	267.02	0.005			
iv	5(2)(i)	Management of invasive species in VP's	ha	68.8	0.17			
v	5(2)(g)	Soil & Water Conservation Works in VP	Nos.	1860	4.14			
vi	5(2)(d)	Extension and Awareness Programmes / Exposure Visits	No. of Participants	204	0.32			
vii	5(2)(d)	preparation of SahatPrabandhYojna and Microplan	Nos.	341	0.47			
viii	5(2)(d)	Publication and Training Material in VP's	Nos.	As per plan	0.12			xxvii to xxviii
ix	5(2)(d)	Strategic Planning & Strengthening of Van Panchayats	No.	1	0.11			
x	5(2)(d)	Workshops and Training in VP's (Village, district and state level trainings/workshops)	Nos.	1082	0.70			
xx	5(2)(f)	Fire Protection Activities in VP's	Nos.	110	1.48			
xxi	5(2)(d)	Other Misc activities (IGP, livelihood, HWC etc.)	No	As per plan	0.70			
29	5(2)(m)	Eco tourism related activities	Nos.	8	1.73	219 (i) and 737 (i)-(ii)	xxviii	
30		Provisioning of Biodiversity Conservation	No. of Projects	1	0.90	219(ii) and 737(ii)	xxviii - xxix & 337-354	
31	5(2)(c)	Forestry & Wildlife Research						
i		Collaborative Research	No. of Projects	12	2.41	220-225 and 738-745		
ii		Modern seed storage facility for important nurseries	No. of Projects	4	0.27			
iii		Demonstration plots & trails of need based initiatives	ha	92.48	1.87			xxix

S. No.	Act/Rule	Specific Head	Unit	Physical Target	Financial Target	Page no. of	
						APO	Addl. Info
1	2	3	4	5	6	7	8
iv		Development of nursery techniques	No. of Projects	6	0.22		& 355-372
v		Establishment/Maintenance of Seed Plots/Orchards	ha	18.9	0.65		
vi		Strengthening of Research Cell & Upgradation of laboratory	Nos.	17	2.10		
32	Additional Proposals proposed:-						
i	5(2)m	Management of Walking Trails for Conservation Awareness	Nos.	In various Forest Divisions	10.00	226 and 746	xxix - xxx
ii	5(2)m	Establishment of Snow Leopard Conservation Centre in Uttarakashi FD	Nos.	1	4.82	227 and 747-786	xxx & 372 to 411
iii	5(2)l	Provision for wood saving devices, Solar Lights, Solar Lamps in forestfringe villages	Nos.	Identified Villages	5.00	228 and 787	xxxi
ACTIVITIES AS PER RULE 5(3) OF CAF RULES, 2018 - UPTO 20% OF NPV							
33		Trainings, Workshops & Capacity Building					xxxi
i	5(3)	Strengthening of Training Institutes	Nos.	3	0.20	229 and 788	
ii		Trainings & Capacity Building	Nos.	309	1.84	230 and 789-793	xxxi
34	5(3)(g)	Survey & Demarcation					
i		Survey and Demarcation of forest boundaries (digitization of forest boundaries)	Nos.	Identified Divisions/ Blocks	5.00	231 and 794-795	xxxi - xxxii
35	5(3)(e)	Building Construction for Frontline Staff	Nos.	95	24.60	232-233 and 796-803	xxxii & 412 to 426
36	5(3)(e)	Repair of office/residence of front line staff	Nos.	249	4.31	234 and 804-815	xxxiii
37	5(3)(d)	Construction of watch towers (installation of prefabricated structures only)	Nos.	27	1.82	235 and 816-817	xxxiii
38	5(3)(d)	Construction of high altitude patrolling shelters	Nos.	11	1.31	236 and 818	xxxiii

S. No.	Act/Rule	Specific Head	Unit	Physical Target	Financial Target	Page no. of	
						APO	Addl. Info
1	2	3	4	5	6	7	8
39	5(3)(d)	Modernization of forest barriers	Nos.	59	1.98	237 and 819-822	xxxiii
40	5(3)(d)	Repair of forest roads / bridle paths	Km	3722.17	11.58	238-239 and 823-853	xxxiii - xxxiv
41	5(3)(c)	Communication & Information Technology -Software licence fees, lease line charges etc	1 No.		0.68	240 and 854	xxxiv
42	5(3)(i)	Publicity, awareness and extension -Trainings/ workshops etc	Nos		3.00	241 and 855-857	xxxiv
43	5(3)(d)	Maintenance of Fire Lines	km	4627.91	1.33	242-243 and 858-867	xxxiv
G - CAMPA INTEREST COMPONENT							
1	6(a)(vi)	Monitoring and Evaluation of CAMPA works	No.	1	4.00	244 and 868	xxxv & 427 - 456
2	6(a)(iv), (v); 6(b)(i), (ii), (iii), (iv), (v)	CAMPA Office Management	No.	1	2.00		xxxv - xxxvii
3	6(b)(vi)	CAMPA State authority office building construction	No.	1	4.00		xxxvii & 457 to 494
4	6(a)(ii)	Incremental Cost of CAT plans	No.	1	1.00		
5	6(a)(i)	Incremental Cost of Compensatory Afforestation	No.	1	1.00		
GRAND TOTAL (A+B+C+D+E+F)					273.49		

The agenda is placed for consideration and approval of Executive Committee please.

Agenda Item No. 15: Update on Schemes/Pilot Project initiated under National Fund

S. No.	Scheme/Project Name	Project Period (Year)	Project Cost (Rs. in Cr.)	Implementing Agency	Starting Year	Till Now Fund Released (Rs. in crores)
1	Strengthening Forestry Research for Ecological Sustainability and Productivity Enhancement	6	313.67	ICFRE	2019-20	110.354.2
2	Monitoring Protocol for Plantations and Assets created by State Forest Departments (SFDs)	6	13.14	FSI	2019-20	4.2
3	UNESCO Category2 Centre (C2C) on Natural World Heritage Management and Training for the Asia-Pacific Region	3	18.66	WII	2018-19	15.01
4	Endangered Species Recovery Programme (ESRP)-Development of Conservation plan for Gangetic River Dolphin	5	23	WII	2015-16	13.8
5	Habitat improvement and conservation breeding of Great Indian Bustard –ESRP	5	33.85	WII	2015-16	23.04
6	Conservation of Manipur's Brow Antlered Deer (Sangai)-ESRP	5	19.95	WII	2015-16	7.71
7	Recovery of Dugongs and their Habitats in India-ESRP	5	23.58	WII	2015-16	13.05
8	Centre of Excellence on Forest Based Livelihoods in Uttarakhand–A Pilot Study” UCOST.	5	2.784	UCOST	2015-16	2.02
9	National Programme for Conservation and Development of Forest Genetic Resources (FGRs): Pilot project on ‘Creation of Centre of Excellence on Forest Genetic Resources (CoFGR)’	6	8.61	FRI	2015-16	8.008
10	Nagar Van Yojana.	5	415.00	SFDA	2020-21	151.39
11	School Nursery Yojana.	5	49.5	SFDA	2020-21	5.77
12	Establishing an FSI Cell in Each State for Strengthening Monitoring and Forest Resource Assessment.	1	4.33	FSI	2019-20	2.56
13	Implementing The Central Asian Flyway National Action Plan with Special Focus on Preparation of Site-Specific Activity Plan, Capacity Building, Developing Bird Sensitivity Map for Setting up of Wind Energy and Species Action Plans	3	3.754	BNHS	2019-20	0.97
14	Estimation of Economic Losses in Real Term Per Hectare Basis Due to Forest Fire in Uttarakhand and Madhya Pradesh.	2	3.79	ICFRE	2020-21	1.89

S. No.	Scheme/Project Name	Project Period (Year)	Project Cost (Rs. in Cr.)	Implementing Agency	Starting Year	Till Now Fund Released (Rs. in crores)
15	Execution of Readiness Activities for Implementation of REDD+ in India	1.8	1.20	ICFRE	2020-21	0.72
16	Enhanced Capacity Building of Stakeholders and State Government on Forest Landscape Restoration and Reporting Mechanism on Bonn Challenge	3.5	5.90	IUCN	2020-21	2.95
17	Proposal for preparation of detailed project report for Rejuvenation of Damodar and Suvernalekha rivers through forestry Interventions	2	1.17	ICFRE	2021-2022	0.47
18	Range-wide enumeration of River Dolphin populations in India	1	10.15	WII, Dehradun	2021-22	6.09
19	PAN India assessment and monitoring of endangered species covered under the 'Integrated Development of Wildlife Habitats'(IDWH) scheme of MoEFCC Government of India	2	19.05	ICFRE	2021-2022	11.43
20	Setting up national referral centre for wildlife disease monitoring and prevention-CZA	5	3.00	CZA	2022-2025	0.25
21	PARIVESH 2.0	5	95.59	Impact Assessment Division, MoEFCC	2021-2022	12.63
22	Preparation of DPR with LiDAR Survey for one pilot watershed in forest area of each State/UT	0.9	18.38	Water & Power Consultancy Services (India) Ltd. (WAPCOS)	2020-2021	11.22
23	Project proposal for the yearly maintenance, Up-gradation and FC module and Hand holding support of PARIVESH- NICSI	Ongoing scheme		NICSI	Ongoing scheme	6.81
24	Implementation of Management Effectiveness Evaluation (MEE) of the Tiger Reserves" submitted by National Tiger Conservation Authority (NTCA)	1	9.93	NTCA	2022-23	0.76
25	Assessment of Population Status of Tigers, Co-predators, Prey and their habitats in India	1	9.93	NTCA	2022-23	10.8
26	Nationwide Census of Elephant Population in the country	1	3.0019	Project Elephant Division MOEFCC	2022-23	1.50
27	Establishing Meta population of Cheetahs in India	1	29.47	NTCA	2022-23	20.00
28	Development of Sandalwood and Rosewood Estates and Management of Sandalwood Reserves in Karnataka"	7	25.65	Karnataka State Authority	2022-23	0.47

S. No.	Scheme/Project Name	Project Period (Year)	Project Cost (Rs. in Cr.)	Implementing Agency	Starting Year	Till Now Fund Released (Rs. in crores)
29	National Collaborative Scheme on Forest Fire Management	4	22.31	FRI Dehradun	2022-23	Not released
30	Study of short- and long-term impact of Climate Change on Biodiversity of Protected area in Goa by setting up of Automatic Weather Stations	1	0.65	Goa State Authority	2022-23	Not yet released because EAT module has not mapped in the PFMS Portal

Agenda item No 16: Project Proposal of Nagaland State CAMPA for Transitioning from Shifting to Settled Land Use seeking support from National Fund.

The proposal was placed in the 9th Meeting of Executive Committee of National Authority held on 12th January, 2021 and its decision of the Committee is as follows:

The Executive committee considered the proposal of the State Forestry Department Govt. of Nagaland for its implementation in one pilot village in each of 6 districts of the State at an estimated cost of Rs.40.01 crore and a duration of five years for funding from the National Authority. The project was examined by NAEB. The EC accorded in-principal approval to recommend the proposal to the Governing Body with condition that IG, NAEB will examine cost estimates in order to further lower the Unit cost and economise total cost, ensure that the land status of the project does not violate the existing laws and revise the proposal for its implementation in only six pilot villages.

The EC recommended the revised proposal for the approval of the Governing Body of the National Authority. Monitoring the progress and implementation of the project will be the responsibilities of NAEB, the revised proposals received from NAEB.

The CEO, State Authority has submitted revised proposal with year wise breakup to national Authority for kind consideration and approval.

Introduction:

Shifting cultivation or Jhum is the major agricultural system for food production in Nagaland, practiced by all its tribal communities. The basic principle of Jhum cultivation is the alternation of short cropping phases (usually one or two years) with fallow phases of natural (or slightly modified) vegetation. In most of the Naga tribes, the major proportion of land is held as common village land, which is either Jhum land or community forestland. The land earmarked as Jhum land, does not belong to any individual but to the entire community and the land is regulated by the Village Councils. Requirements for other nutrients like Phosphorus, Sulphur and micronutrients are met with local and preferably renewable resources. Likewise, Alder (*Alnus nepalensis*), a non-leguminous tree which fixes 150 kg atmospheric N/ ha (Sharma et al. 2002), is also grown in many fields under shifting cultivation of Nagaland.

Nagaland Forest Management Project

The Forest Department Nagaland is implementing an Externally Aided Project called Nagaland Forest Management Project under ODA loan from JICA. The project period is from 1st April 2017 – 31st March 2027, and divided into three phases:

- Preparatory Phase (2 years)
- Implementation Phase (6 years)
- Consolidation Phase (2 years)

The project is spread across all eleven districts of the state covering 185 villages in four Batches. The Project aims to cover 79096 ha under Forestry Intervention with five models being implemented under the project namely:

- i. Jhum Agro Forestry model
- ii. Jhum Fallow Forestry model
- iii. Jhum Conversion to Forestry model
- iv. Jhum Conversion to Community Conservation Area
- v. Protection & expansion of Community Conservation Area

1. PROJECT IMPLEMENTATION STRUCTURE

For the purpose of implementing of the project for Enhancing Sustainability of Jhum it is proposed that the implementing agency at the grassroots level will be the Joint Forest Management Committees under the aegis of the Village Council. At the state level, Nagaland CAMPA Project Management Society shall be the Project Management Unit. The society shall be the apex authority for supervision and execution of the project. The organisational structure of the Nagaland CAMPA Project Management Society is enclosed in the annexure.

PROJECT COST: The proposed cost of the Project is Rupees Six crore fifty-four lakh and fifty- one thousand only.

Budget Estimate: Transitioning from Shifting to Settled Land Use

Name Of State: Nagaland									
Sl. No	Intervention	Category/Activity	Admissible Rate	Physical Target (In Ha.)	Financial Target Rs.In Lakh)				Total
					Year 1	Year 2	Year 3	Year 4	
1	Creation Of Woodlots (Phy. Targets In Hectares)	Artificial Regeneration (National Afforestation Programme)	38076	300	35.41	47.98	12.57	18.28	114.23
2	Adoption Of Economic Crops For Livelihood Security (Phy. Targets In Hectares)	Mixed Plantation (National Afforestation Programme)	38076	300	35.41	47.98	12.57	18.28	114.23
3	Land Development For Settled Land Use (Phy. Targets In Hectares)	Stoned Pitched Earthen Bunds (NABARD)	135500	40	54.20				54.20
		Strip Terraces (NABARD)	400785	40	120.24	40.08			160.31
4	Soil Moisture Conservation (Phy. Targets In Numbers)	Drainage Line Treatments (NABARD)	25500	8	2.04				2.04
		Check Dams (NABARD)	62500	8	5.00				5.00
5	Establishment Of Common Processing Infrastructure	Lump Sum	2500000	2		25	25		50.00

Name Of State: Nagaland									
Sl. No	Intervention	Category/Activity	Admissible Rate	Physical Target (In Ha.)	Financial Target Rs.In Lakh)				Total
					Year 1	Year 2	Year 3	Year 4	
	(Phy. Targets In Numbers)								
6	Installation Of Energy Source (Phy. Targets In Numbers)	Hydrogers (Neped)	500000	6	15.00	15.00			30.00
		Biomass Gasifiers (Market Rate)	1500000	2	15.00	15.00			30.00
7	Marketing Linkages (Phy. Targets In Numbers)	Lump Sum	1000000	2			10	10	20.00
8	Skill Development & Capacity Building (Phy. Targets In Numbers)	Lump Sum	500000	2	5	5			10.00
9	Institutional Strengthening (Phy. Targets In Numbers)	Lump Sum	250000	2	2.5	2.5			5.00
A. Sub-Total					289.80	198.53	60.13	46.55	595.01
10	B. Overhead(5% Of A)				7.44	7.44	7.44	7.44	29.75
Grand Total (A+B)					297.23	205.97	67.57	53.99	624.76
Rupees (Six Crore Twenty-Four Lakh Seventy-Six Thousand)									

The agenda is placed for consideration and approval of Executive Committee please.

Agenda Item No. 17: Project proposal on submitted by ICFRE

Research and Training division of MoEF&CC has forwarded different proposals submitted by Indian Council of Forest Research and Education (ICFRE) to National Authority for funding under National fund.

- a. Component A: Multilingual Mobile Application for Enhancing Agroforestry
- b. Component B: Operationalization of Centre of excellence on Sustainable land management
- c. Infrastructural Up-gradation of Capital Assets of the Indian Council of Forestry Research & Education (ICFRE)
- d. Component C: Proposal for & Implementation of Human Resource and Financial Management System
- e. Component D: Livelihood improvement of forest dependent communities through resource survey, sustainable harvesting & market linkages of commercially important NTFPs.

Project budget Details:

SI No.	Name of the Component	Budget (Rs. In Crore)
A	Multilingual Mobile Application for Enhancing Agroforestry (Annexure-I)	0.35
B	Operationalization of Centre of excellence on Sustainable land management	3.60
C	Proposal for & Implementation of Human Resource and Financial Management System (Annexure-II)	8.29
D	Infrastructural Up-gradation of Capital Assets of the Indian Council of Forestry Research & Education (ICFRE) (Annexure-III)	16.84
E	Livelihood improvement of forest dependent communities through resource survey, sustainable harvesting & market linkages of commercially important NTFP (Annexure-IV)	9.93
	Total (A+B+C+D)	Rs.39.02

The agenda item is placed for consideration and approval of the Executive Committee of the National Authority

Agenda Item No.18: Project proposal submitted by Forest Survey of India, MoEF&CC

1. Climate Changes Studies and Monitoring of Incremental Carbon stock
2. E-Green Watch
3. WEB GIS based Decision Support System (DSS) for Forest Clearance
4. Forest Fire Monitoring Including burnt area assessment
5. Above Ground Biomass (AGB) estimation using Synthetic Aperture Radar (SAR) data
6. Deforestation Alert System
7. LiDAR for Forestry Applications

Project budget Details:

SI No.	Name of the Component	Budget (Rs. In Crore)
1.	Climate Changes Studies and Monitoring of Incremental Carbon stock (Annexure-V)	108.50
2.	E-Green Watch (Annexure-VI)	3.82
3.	WEB GIS based Decision Support System (DSS) for Forest Clearance (Annexure-VII)	5.00
4.	Forest Fire Monitoring Including burnt area assessment (Annexure-VIII)	3.00
5.	Above Ground Biomass (AGB) estimation using Synthetic Aperture Radar (SAR) data (Annexure-IX)	3.00
6.	Deforestation Alert System	4.00
7.	LiDAR for Forestry Applications	2.00
	Total (A+B+C+D)	Rs.129.32

The agenda item is placed for consideration and approval of the Executive Committee of the National Authority

Agenda Item No.19: Roll Out and preparedness of states for using National Transit Pass System (NTPS) Submitted by Institute of Wood Science and Technology, Bangalore In collaboration with National Informatics Centre Forest & Climate Change Informatics Division for a period of 3 years.

Forest Policy division of MoEF&CC has submitted a funding proposal amounting to Rs. Rs.4,66,99,488/ for “Roll Out and preparedness of states for using National Transit Pass System (NTPS)” implemented by Institute of Wood Science and Technology, Bangalore In collaboration with National Informatics Centre Forest & Climate Change Informatics Division for a period of 3 years.

A National Portal on Pan India Transit System for timber, bamboo, and other forest produce was launched on 23.07.2020 for piloting in two states viz. Madhya Pradesh and Telangana. The objective of National Transit Pass System (NTPS) is seamless movement of forest produce across all states thereby resulting in enhancing the income of rural people and also facilitating the ease of doing business in the country.

After the successful implementation of NTPS in Madhya Pradesh, MoEF&CC desires to expand the implementation of NTPS across the country. Accordingly, the MoEF&CC desires that NIC is to be engaged for further development, implementation and maintenance of the next version of the web application of NTPS which will be customized for each state and submit the proposal through IWST (Institute of Wood Science & Technology) to ensure smooth roll out of the NTPS across the country under CAMPA scheme. Hence, the proposal has been received from IWST developed in collaboration with NIC is being forwarded to CAMPA/NA for necessary funding under CAMPA scheme.

The project aims to set up the project management unit/ manpower and development /customisation of the NTPS portal as per requirement of each state, providing training, feeding of all requisite data for each state on NTPS and its implementation and maintenance for a period of 3 years. The project cost is Rs. 4,66,99,488/.

Objective

- Roll out of National Transit Pass system (NTPS) in the states for issuing, monitoring, and keeping records of Pan India Transit Permit for inter-state and intra state transportation of bamboo and other timber produce.
- Effective support and Assistance will be provided to the states Forest Officers and Applicant through mails and Query-Response module of the portal.
- NTPS will be enriched as per the requirements being emerged during the roll out.
- 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

- Preparing the other states for on boarding on NTPS in terms of data preparation for exempted species and not exempted species, login activation and other details.
- 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.
- Portal will remove the hardship being faced by transporters, Growers and farmers while moving the bamboo/ bamboo products including timber obtained from non- forest lands across the country.
- API integration for bringing the data of local Transit Permit Management System being developed and run by the states to NTPS.

Agenda Item No.20: Any other matter with the permission of chair

ICFRE Proposals

Annexure-I

Project Proposal

on

DEVELOPMENT OF MULTILINGUAL MOBILE APPLICATION FOR ENHANCING AGROFORESTRY TO BENEFIT TREE GROWERS

PREPARED BY

INSTITUTE OF FOREST GENETICS & TREE BREEDING, COIMBATORE

Project Summary

The Government of India has taken several measures to increase farm income, stabilize production and consequently improve small farm productivity. Farm forestry / Agroforestry is one of the viable alternatives for augmenting increased farm income. It is a well known fact that farmers tend to allocate their resources for production based on market pulse. Allocation of area for various crops by the farmer is largely influenced by the relative profitability of different crops. Growing of trees on farms in many regions of India is more profitable than field crops. However, in spite of the relatively higher profit to farmers and several concerted efforts made by the government, adoption of agroforestry has not yet reached the expected desired level. One of the perceived barriers for adoption of agroforestry is lack of an enabling mechanism integrating information of forestry research, quality planting material supply, processing units and wood based industries. Existing inadequacy of information on market rates for wood procurement of various tree species also leads to lesser planting of trees outside forests.

India is blessed with diversity. Not only in social and cultural aspects, also in agro climatic zones, sources of irrigation, cropping patterns and choices of species. The technology should be made available in farmers' own language. Hence, this project attempts to explore the immense possibilities of integrating multilingual Information, Communication and Technology (m-ICT) for popularizing trees outside forests, particularly in farm lands with a dual objective of increasing farm income and area under tree cover.

Importance of the Proposed Project

Tree growers and other stakeholders of agroforestry based systems need a significant amount of information. Currently the information on plantation forestry is available in multiple platforms and in varying forms. There exists an imperative need to integrate information and make it more accessible. Information and Communication Technologies (ICTs) play a key role in knowledge exchange, targeted recommendations, market integration and probable access to finance institutions to make tree farming a profitable and tantalizing enterprise especially for youth. Integration of multiple stakeholders on a common virtual platform would pave the way to bring about a positive attitude

towards tree farming among all stakeholders. Research is indispensable, both for generating information and for developing an appropriate analytical framework. Free flowing market information on supply and demand of wood and its procurement would certainly help in addressing the gaps in the process. It is significant to mention that, ICFRE's vision document 2040 prioritizes the use of information technology for transferring research findings from land to end users (ICFRE, 2013).

In line with the Digital India initiatives of the Government, this project aims to harness ICT and data ecosystems to support timely delivery of targeted information and services to make tree farming sustainable. The proposed ICT platform connecting tree growers with research organizations and other stakeholders will be a pioneer initiative where the tree growers would be the primary users.

Objectives

1. To upgrade a multilingual ICT platform with pan India utilities and functionalities to benefit tree growers and industries.
2. To provide real time solutions to farmers queries on tree farming.
3. To integrate forestry research and extension to enable farm income maximization through information sharing and market analysis.
4. To accelerate planting of high yielding tree clones in Trees Outside Forests program.

Overall Solution Approach

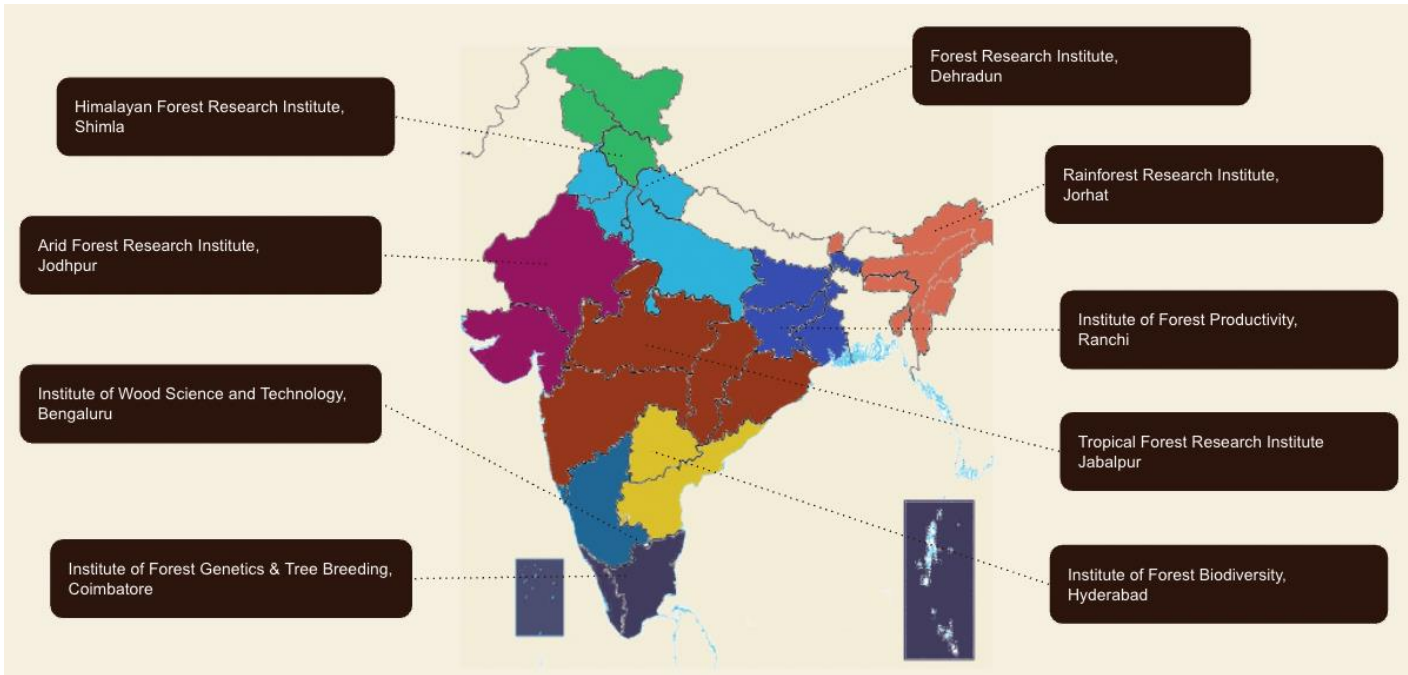
Our software platform has the following

- **Mobile Applications**
 - General & specific information to tree ecosystem stakeholders.
 - Authorized stakeholders can access stakeholder specific contents
 - Authorized stakeholders can publish relevant information, for example QPM propagators can publish Cultivation protocol, Research Institutes can publish Breeder Material availability etc
- **Web Portal**
 - Admin system for IFGTB to manage contents, generate reports, do data visualization.

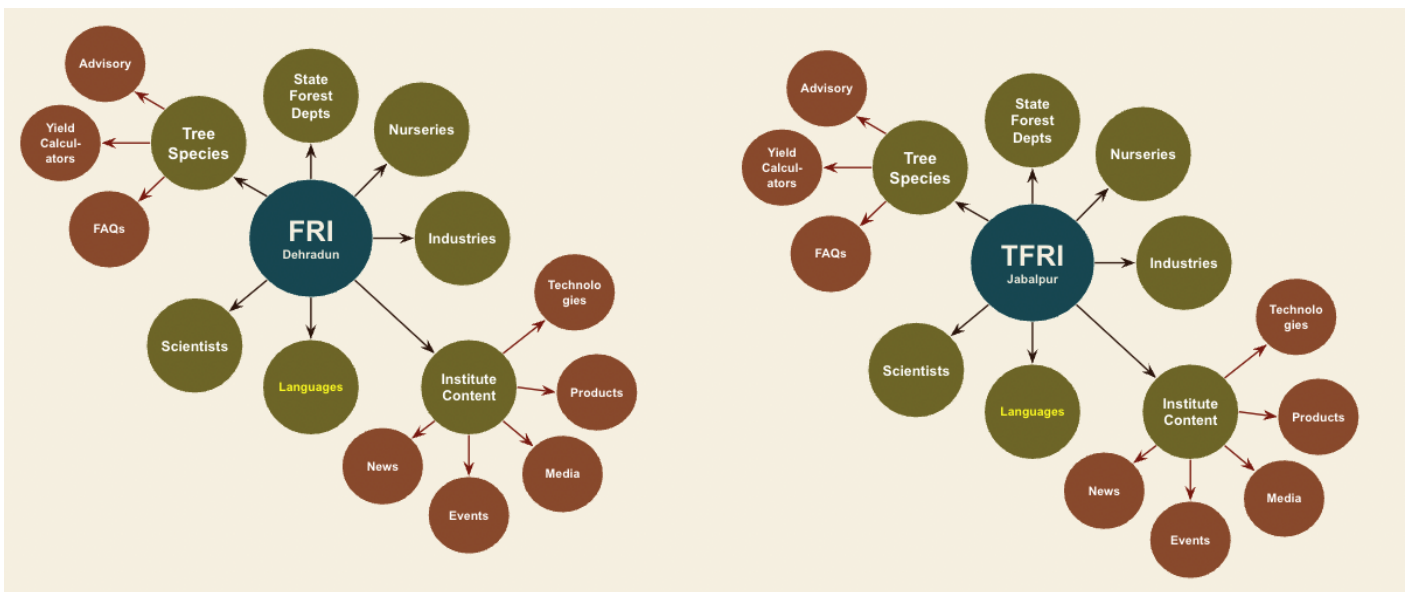
This platform includes a mobile application and admin portal; facilitating data gathering and uploading as well as sharing of information with farmers. One part of the application will be an android app, which will be designed as a mobile data collection tool as well as an information dissemination tool. Farmer facilitators or field assistants will facilitate registration of farmers and collection of farm-level data using the application. They can also facilitate targeted information to farmers such as; soil based choice of species/clones, crop wise improved package of practices. This information provided will be customized for a particular farm based on the specific farm details available in the database. The other part will be the admin portal, used by research institutions, government officials and others for monitoring and report generation. Users can generate reports based on data collected at field level.

Currently this platform is hosting IFGTB cluster data. This proposal is to convert the existing single-tenant platform to multi-tenant platform so that it can cater pan India.

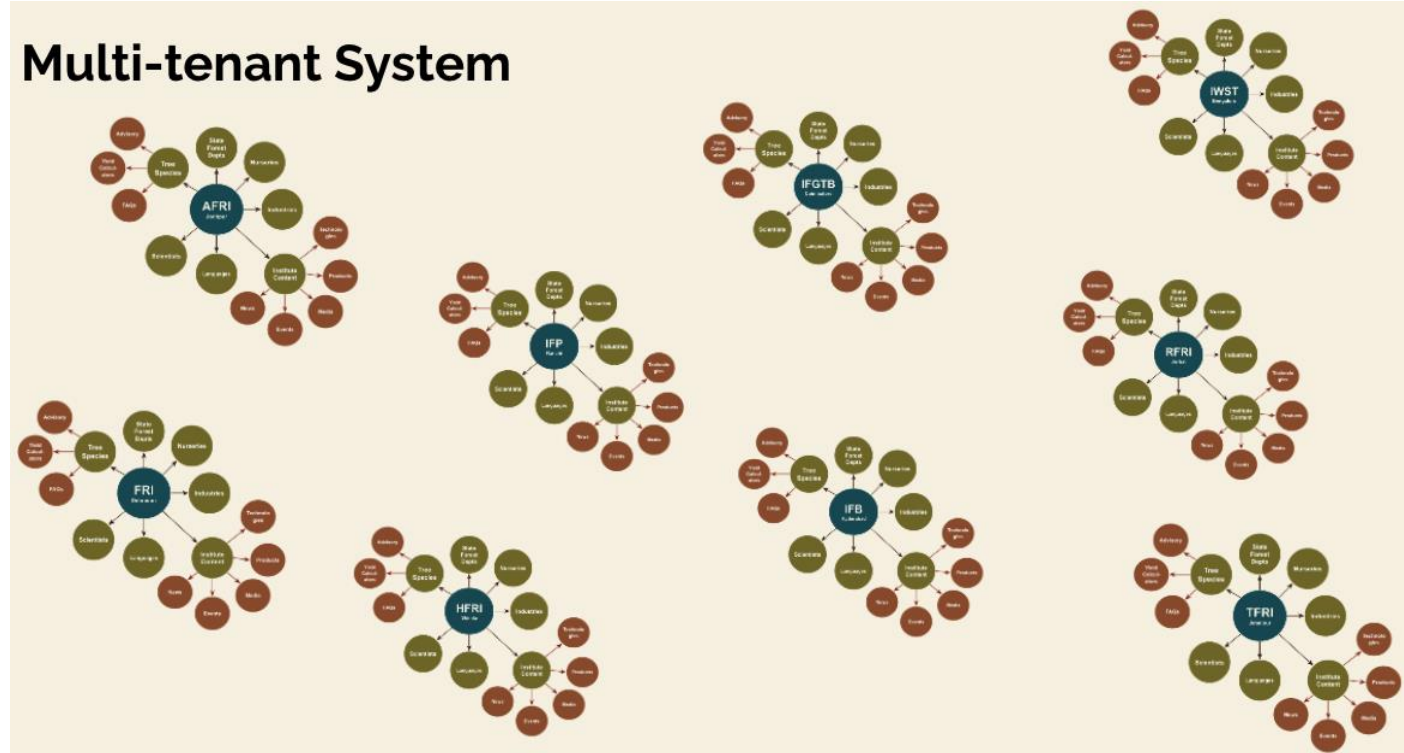
Instead of having one cluster for each state, the states are grouped as per their associated institution; each institution becomes a cluster in this platform (as depicted in the below figure)



Each Cluster (Institution) will have their own set of Stakeholders, Species and Content as explained in the below figure.



In a similar way, all nine institutions will co-exist in the same platform catering their respective stakeholders.



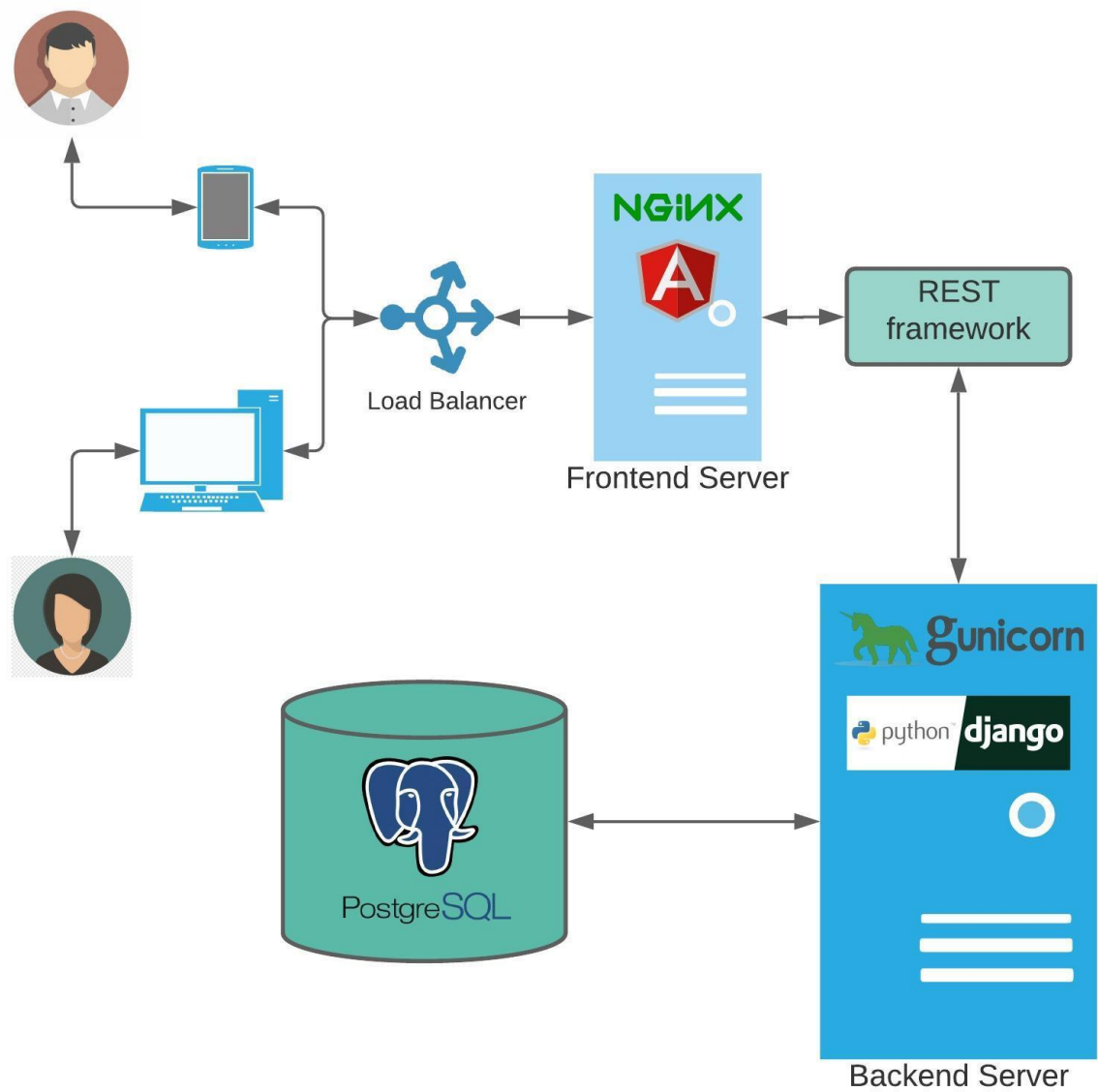
Multilingual Support

Each cluster will have two languages; one local/regional language and English. For example, IFGTB currently supports Tamil and English language. Similarly FRI can support both Hindi and English language.

The platform allows each cluster to have additional languages. Each cluster can add more languages post production of Phase 1a.

Technical Architecture

This section provides a high level overview of all major application software components. Our architecture is compatible with industry standards cloud deployment systems like AWS, Google Cloud and Digital Ocean. This can be adopted for deployment of the resource in on-premise systems as well.



Technical Stack

At the core of our system sits a Server. This server structures all data and stores them into an **RDBMS system** (Postgres/MySQL). We use an **MVC framework, Django**, built on the top of the most popular open source **language Python**. We go further and use the most popular **CMS** for Django, **Django-CMS**. This section provides an overview of the technologies used for the application development.

Hybrid Mobile Apps Development: enables us to create one code base and create apps for different platforms. Cordova based hybrid mobile application development systems are pioneers in this arena.

At Kultivate we use, **Ionic**, true version of Cordova in developing mobile applications. **Microsoft supported TypeScript** also enables us to program faster.

Angular for Portal: Our portal systems are developed in Angular language developed by Google. Angular gives the best possible flexibility while giving us the ability to do developments in a much faster way. Interestingly, ionic uses angular as well.

Loosely Coupled Modules: We use RESTful webservice to publish the data from the server. This enables us to develop loose coupling between Server, Mobile app, Web Portal and admin CMS. This loose coupling helps managing, scaling up, and upgrading servers easily. In case of failures, we will be able to quickly replace affected modules and bring the system backup in no time.

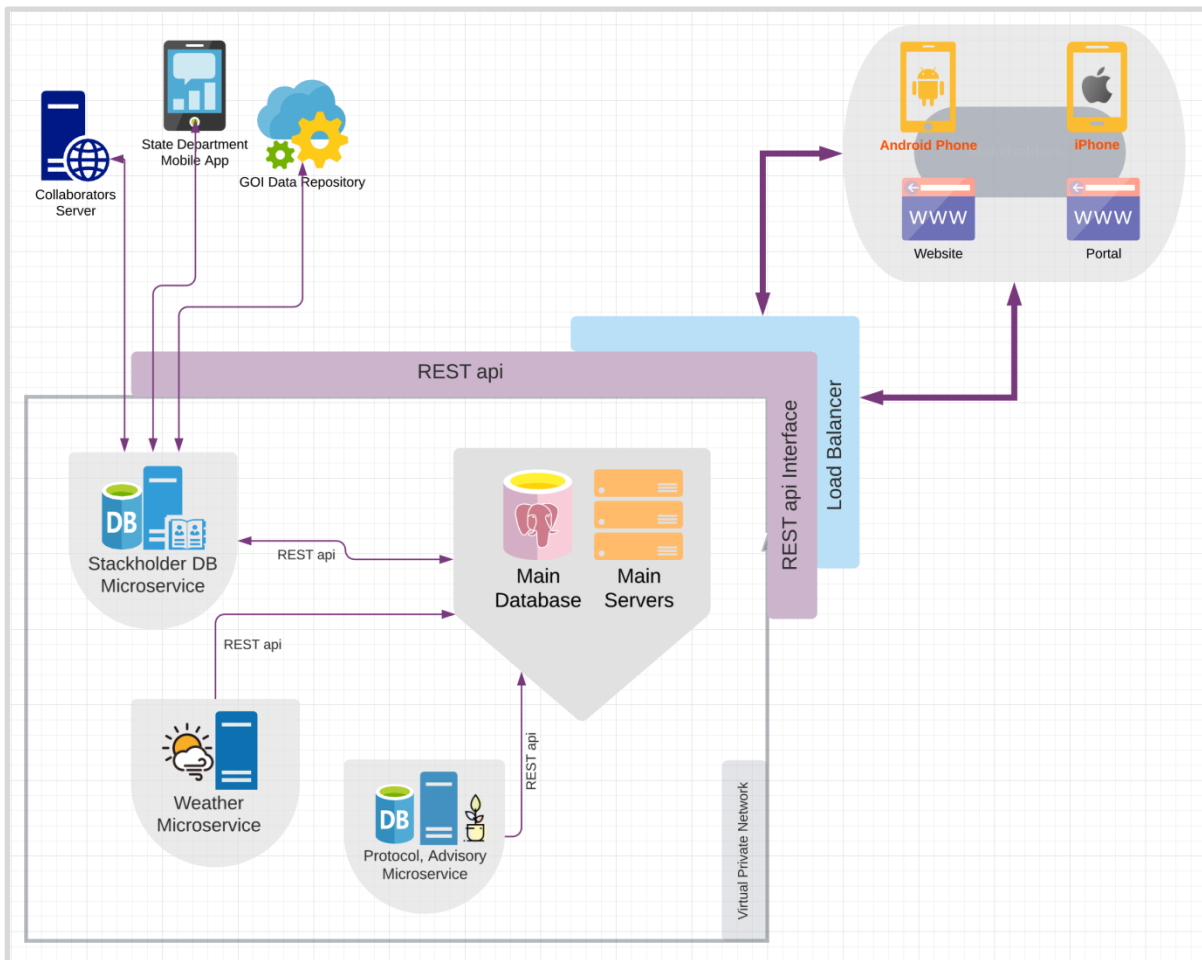
Below table summarizes the technology stack we use for application development.

UI Technology	Angular, Typescript, Ionic5, JQuery, Bootstrap, HTML5, CSS, Javascript,
Server Technology	Nginx, gunicorn
Backend Technology	Python 3, Django, Django CMS, Pandas, ORM
Database	PostgreSQL, FireBase
Data Security	https, TLS, SSL encryption, firewall

Deployment Strategy

Cloud Computation is the way the world is going to be. We as a company have very good experience in deploying our solution in the cloud. This assures us the best performance, easily scalable, accessible to more than one admins. We also use server-less computing whenever possible, to really make this system future ready. We can exploit Amazon Web Services, Digital Ocean, Google Cloud for such purposes.

For Phase 1 & 1a, we **highly recommend** deploying this software platform in the **cloud**. This will be moved to IFGTB servers during Phase 2 implementation.



Functionalities in the Platform

Existing Key Functionalities

User Registration - Robust user registration with the ability for farmers to register themselves using the mobile app. Rest of the stakeholders will be registered by the Institution.

Advisory - Providing advisory services to tree growers and QPM propagators is the core functionality of this application. The crop growing protocols are stored in a structured way to facilitate easy retrieval.

Ask Expert - Kultivate is a two-way communication platform. Questions can be raised by any of the stakeholders (Tree grower, QPM propagator), and will be answered by experts identified by IFGTB.

Stakeholder Directory - The product collects, organizes and displays details about the stakeholders. It holds a very strong database of individuals, enterprises and organizations involved in the wood based industry.

Yield Calculator - Digitized formula to estimate potential yield from the population and girth of the plantation in question.

FAQ / RAQ - FAQ and RAQ (Recently Answered Questions) sections can be constructed with Sections and subsections. Admin portal will have a content management system for content creators to add/edit content related to FAQ & RAQ.

New Functionalities (As part of this proposal)

Multi-tenant Platform

The existing Treegenie platform will be converted to a multi-tenant system to accommodate all nine institutions across India. Each Institution and their associated states will be an independent cluster; having their own ability to manage stakeholders, species related content and general content for that particular cluster.

The Mobile Application will have an additional screen during registration, which allows the farmer to choose the cluster before providing all the information. Once the registration is completed, the cluster cannot be changed by the user and if change is required, it has to be handled by the admin team.

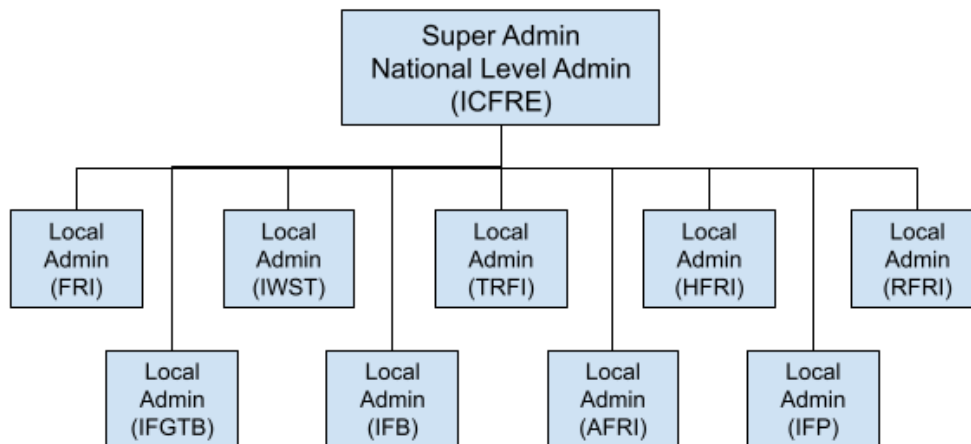
Every stakeholder will be part of only one cluster and will not be allowed to access multiple clusters. If for any reason a stakeholder (farmer, research scientist etc) needs to be part of more than one cluster, he needs to register separately with each cluster. However if needed, the stakeholder can be moved between the clusters by national-level admin or system administrator.

Cluster Management Module

The existing admin module will be used by local admins at cluster (Institute) level to manage the institute level contents. This local admin will be able to manage users and generate MIS reports for their institution. This local admin will have visibility to only their institution and will not be able to manage/view data belonging to other institutions.

A new admin module will be developed for the platform to manage the clusters at national level (**Super Admin**) by **DDG (Extension) ICFRE**. This module will manage the cluster administrators and generate MIS reports at national level or by individual cluster level.

The below diagram explains the hierarchical structure of the proposed system.



Inter-Cluster Interface

The platform will have the ability to communicate between clusters, where important content can be shared across clusters among research scientists or other stakeholders.

Below is the list of a few scenarios that would be part of the proposed system. The final list of functionalities will be decided after the consultation meeting.

- The ability for local administrators to forward Ask Expert queries to research scientists in other Institutions.
- The ability for research scientists to view content published by research scientists in other Institutions.
- The ability for tree growers to view content published by other Institutions (in Guest Mode).

Assumptions

Here are a few of standard and not so standard assumptions about implementation of this proposed solution.

1. Content of the software must be provided by the nodal officer of the respective institution.
2. Translations of content must be provided by the nodal officer of the respective institution.
3. Project management shall support the development team with liberal amount of their insights and objectives. Such discussions are vital in bringing out the best possible product given the resources and timeline.

4. If there is any licensing requirement for the project it might fall under the purview of project management. Kultivate will however provide all the necessary support in obtaining and getting implemented.
5. Online or offline marketing and **promotional activities** are not part of this proposal.
6. While we help provide all the necessary support for popularizing the software platform, Kultivate will not take the responsibility of a certain number of accesses or downloads.

Project Phases & Schedule

This project will be implemented in multiple phases as given below.

Phase 1 - *Convert existing platform to multi-tenant platform and add a new cluster on top of IFGTB.*

This phase will be prioritized to quickly deliver the software. Following are the activities in this phase

- Development - convert existing platform to multi-tenant platform
- Migration of Cluster Data and Testing - for IFGTB
- Load FRI Cluster Data and Testing

Deliverables:

1. Android Mobile Application
2. Independent Admin Portal for IFGTB & FRI Clusters
3. Document -> Updated Mobile App User Guide (existing document)

Phase 1a - *Add all remaining clusters into the platform.*

Following are the activities in this phase

- Load all remaining Cluster Data into the platform
- Testing of all remaining Clusters

Deliverables:

1. Android Mobile Application (*update*)
2. Independent Admin Portal for all Clusters
3. iOS Mobile Application
4. Document -> User Guide for Cluster Admin

Phase 2 - *Develop Inter-Cluster Functionality and Cluster Admin Module*

Following are the activities in this phase

- Development - cluster management and inter-cluster functionality
- Testing of Cluster Management & Inter-Cluster Functionalities.
- Setup on-premises Server and Installation activities.

Deliverables:

1. National level admin portal

2. Android Mobile Application (*update*)
3. iOS Mobile Application (*update*)
4. Document -> User Guide for National level Admin
5. Document -> Updated SRS Document (existing document)

Phase 3 - *Post production support (after Phase #2 go live)*

Following are the activities in this phase

- Hand-holding consultancy support after Phase #2 launch for a period of 6 months.

Deliverables:

1. Regular updates of Android Mobile App
2. Regular updates of iOS Mobile App
3. Regular updates of Cluster & National-level admin portal

Flow of Logical Activities

1. Processing of Papers
2. Work allotment to developer firm
3. Appointment of National Coordinator and Nodal Officers for all the ICFRE institutes preferable from Silviculture divisions
4. Orientation meeting to all Nodal officers about their roles and responsibilities
5. Identify stakeholders viz. QPM producers, wood based industries, progressive farmers, farmers associations, SFDs etc.
6. Inception workshop to Nodal officers (in person for 2 days at IFGTB) on the use of digital platforms and its requirements.
7. Shortlisting of priority species by each institute.
8. Collection of information in the required languages/format and pooling
9. Periodical monitoring and feedback by individual experts/institutes for content validation
10. Testing with functionalities with apk files in Android and iOS platforms
11. Release of Application
12. Popularization and facilitation of application

Project Schedule

#	Task	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12
Phase #1													
1	Development (Multi-tenant platform)	█	█										
2	IFGTB & FRI Content Loading & Testing		█	█									
3	Phase #1 Launch (Android App & Admin Portal)			★									
Phase #1a													
1	Migration of remaining 7 clusters			█	█	█	█						
2	Phase #1a Launch (Android App & Admin Portal)						★						
3	Phase #1a Launch (iOS App)							★					
Phase #2													
1	Development (Cluster Admin)							█	█				
2	Development (Inter-Cluster Interface)							█	█	█			
3	On-premises Server Setup & Installation							█	█				
4	Phase #2 Launch (Android App & Admin Portal)									★			
5	Phase #2 Launch (iOS App)										★		

***Phase 3 will commence from 11th month (M-11) for a period of six months*

Budget

S.No	Activity	Amount (in lakhs)
Phase #1		14.00
A. Development Cost		9.00
1	Development of multi-tenant platform & testing with two clusters	9.00
B. Operational Cost		5.00
2	Conducting meeting with Nodal Officers of ICFRE Institutions	1.00
3	Travel	4.00
Phase #1a		10.00
A. Development Cost		8.00
1	Development of iOS app (convert to multi-tenant platform)	1.00
2	Migration of remaining 7 clusters	7.00
B. Operational Cost		2.00
3	Contingency	2.00
Phase #2		7.00
A. Development Cost		7.00
1	Development of Cluster Admin and Inter-Cluster Interface	5.00
2	Server Setup, Installation & Maintenance	2.00
B. Operational Cost		0.00
		0.00
Phase #3		3.50
A. Development Cost		3.50
1	Post Production Support (6 months)	3.50
B. Operational Cost		0.00
		0.00
Grand Total		34.50

Budget Release Plan

S. No	Deliverable	Payment	Timeline
Phase #1			
1	Project Start	35% (dev cost of the phase)	T
2	Android Mobile Application	-	-
3	Independent Admin Portal for IFGTB & FRI Clusters	65% (dev cost of the phase)	T + 2 months
4	Document -> Updated Mobile App User Guide	-	-
Phase #1a			
1	Phase Start	20% (dev cost of the phase)	T + 3 months
2	Android Mobile Application (update)	-	-
3	Independent Admin Portal for all Clusters	-	-
4	iOS Mobile Application	80% (dev cost of the phase)	T + 6 months
5	Document -> User Guide for Cluster Admin	-	-
Phase #2			
1	Phase Start	20% (dev cost of the phase)	T + 7 months
2	Server Installation Completion	25% (dev cost of the phase)	T + 8 months
2	Android Mobile Application (update)	-	-
3	Independent Admin Portal for all Clusters	-	-
4	iOS Mobile Application (update)	55% (dev cost of the phase)	T + 10 months
5	Document -> User Guide for Cluster Admin	-	-
Phase #3			
1	Post Production Support - First Half	50% (dev cost of the phase)	T + 13 months
2	Post Production Support - Second Half	50% (dev cost of the phase)	T + 16 months

DECLARATION

This is to certify that

- to the best of my knowledge the research work proposed in the project does not duplicate the work already done by any institute or individual.
- The project has been developed with full consultation among the project leader and the associates.

1. Project Leader:

Signatures

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2. Co-Principal Investigator:

3. Associates:
1. Shri. P. Chandrasekharan, ACTO
 2. Smt. R. G. Anitha, TO, IFGTB

[Handwritten signatures]

Signature & comments of the Head of division:

In line with the Digital India initiatives of the Government, this project aims to harness ICT and data ecosystems to support timely delivery of targeted information and services to make tree farming sustainable. The proposed ICT platform project connecting tree growers with research organizations and other stakeholders will be a pioneer initiative where the tree growers would be the primary users. The outcome of the proposal will help the farmers to access the technical knowhow and real time solutions for tree cultivation aspects. Moreover, it is a single platform connecting all the stakeholders. Hence, the proposal may be considered for funding.

Signature & comments of the Director of the institute:

This proposal is an extension phase of already developed Digital Interactive platform in English and Tamil, for the benefit of farmers and other stakeholders of various states in India. The App is a multilingual one which can connect the people in Pan India. Through this mode research results can be easily taken to the people of India.

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 प्रधान, Head
 विस्तार प्रयाग
 Extension Division
 वन आनुवंशिकी एवं वृक्ष प्रजनन संस्थान
 Institute of Forest Genetics & Tree Breeding
 कोयंबटूर - 431002 / Coimbatore - 641002

[Handwritten signature]
 17/10/2022
 निदेशक / Dr. C. KUNHIKANNAN
 DIRECTOR
 वन आनुवंशिकी एवं वृक्ष प्रजनन संस्थान
 Institute of Forest Genetics & Tree Breeding
 कोयंबटूर - 641002 / Coimbatore - 641002

Project Title: Implementation of Human Resource and Financial Management System (HFMS) at
ICFRE Dehradun

Duration: 5 years

Budget: Rs 829.84 Lakh

Justification for the proposal:

National Authority, CAMPA has been a dedicated funding source to various organizations addressing the issues related to restoration and improvement of ecosystem services. ICFRE being a specialized scientific organization, was entrusted with the responsibility to utilize its scientific and technological inputs to restore the ecosystem services by implementing National Authority CAMPA funded schemes like “Strengthening Forestry Research for ecological sustainability and productivity enhancement” and “Estimation of economic losses in real term per hectare basis due to forest fire in Uttarakhand and Madhya Pradesh”. The council has necessary research infrastructure and dedicated scientific human resources to provide scientific and technical support in recouping and improving the ecosystem services lost/compromised. But in this era of digitization and modernization it has become essential for ICFRE to work and adapt itself to these platforms. Information and Communication Technologies (ICTs) play a key role in knowledge exchange, targeted recommendations, market integration and probable access to finance institutions to make tree farming a profitable and tantalizing enterprise especially for youth in the fields of Forestry.

ICFRE is also looking for improving its work efficiency in order to meet the working pace with other national and international organizations. In scientific field ICFRE has upgrade its scientific setup with financial supports under schemes by NA, CAMPA, MoEF&CC. Further it is required to also upgrade its Human Resources and financial accounting to assist the implementation of various projects and schemes. The automation can have a positive impact at every level of organization. Digitization and modernization of infrastructure is considered as complimentary support for enabling Departments/ Institutes to pursue research activities more effectively and efficiently.

ICFRE is having Personal Information Management System (PIMS), Payroll Management System (PMS) and Financial Accounting System (FAS) part of Indian Forestry Research Information System (IFRIS) developed 14 year back. IFRIS was developed using different technologies, which are obsolete/out of support. The hardware used for IFRIS has also become obsolete. It is not possible to make any changes in the source code for any modification or any new requirement as resources are not available. Due to all above, the system has started behaving inconsistent and issues cannot be rectified.

Therefore, ICFRE, Dehradun is proposing the project “Implementation of Human Resource and Financial Management System (HFMS) at ICFRE Dehradun” for duration of 5 years and budget Rs 829.84 Lakh.

Component	Name of the component	Year 1	Year 2	Year 3	Year 4	Year 5	Budget (Rs. in lakhs)
C1	Proposal for & Implementation of Human Resource and Financial Management System	204.88	137.63	149.88	162.28	175.17	829.84

Project Proposal on Livelihood improvement of Forest Dependent communities through resource survey, sustainable harvesting and market linkages of commercially important NTFPs. -regarding.

The use of Non-Timber Forest Products (NTFPs) such as medicinal and aromatic plants, leaves, fruits, seeds, resins, gums, bamboos, and canes etc constitutes an important source of livelihood for millions of people from forest fringe communities across the world. The role of NTFP in rural and forest economies of India is immense. In India, NTFPs contribute an income equivalent to US\$ 2.7 billion per year and absorb 55% of the total employment in forestry sector. Moreover, 50% of forest revenues and 75% of forest-based export income come from such resources (MoEF, 2010). They provide 50% of the household income for approximately one third of India's rural population particularly tribals (Pandey *et al .*, 2016).The contribution of these daily net resources to livelihoods typically ranges from 10-60% of total household income. The NTFPs also provide many households with a means of income generation, either as supplementary income to other livelihood activities, or as the primary means of cash generation. It was noticed that collection of NTFPs is more the by the people of forest villages than those of revenue villages. While nearly 400 million people living in and around forests in India depend on NTFP for sustenance and supplemental income, about 70% of the NTFPs collection takes place in the tribal belt (Mitchell *et al .*, 2003). In certain areas, NTFP have been reported to contribute up to 40 per cent of the household income. Collection of NTFPs comprises the main source of wage labour for 17 per cent of land less labour, and 39 per cent are involved in NTFP collection as a subsidiary occupation. Annually around rupees two lakh crore worth of NTFPs are gathered by the tribals and traded in the haat bazars. The potential of this huge capital, grossly under-managed, is yet to be fully appreciated by the Government and planning agencies (*concept note Pradhan Mantri Van Dhan Yojana launched by GoI in 2018*).

The NTFPs create high economic value and large-scale employment. The NTFPs have attracted global interest due to the increasing recognition of the fact that they can provide important community needs for improved rural livelihood (FAO, 1995; World Bank, 2006). Although, the forest-based communities are involved in the trade of various commercially important NTFPs viz. Myrobalans, Arjun, Baividung, Malkangni, Shatavari, Aonla, Mahua, Moringa leaves, Hathzod, Beal, Nagarmotha, Chakoda seeds, Gudmar, Giloy, Gums, Honey, Lac, essential oils and many other commercially important NTFPs but lack of primary processing, value addition and capacity building activities have resulted in lesser economic gains. Improper collection/ harvesting and processing of

NTFPs affect the quality of the produce on one side and the unsustainable collection/ harvesting of forest produce leads the depletion of these valuable resources from forest on the other.

Aim of the Project: Non-Timber Forest Produce (NTFPs) play a crucial role in securing livelihoods of millions of people worldwide living in and around forests. The aim of this all-India project is to enhance the livelihood of the stakeholders especially forest dependent communities through the resource survey and quantification, promotion of sustainable harvesting practices, value addition and processing technologies, efficient marketing and possibilities of buy-back arrangements and capacity building of stakeholders. The sustainable approach for extraction of NTFPs from the forests, their value addition and effective marketing will provide benefits to the stakeholders across the country in terms of livelihood support and conservation of forest resources as well.

Budget estimate:

S. No.	Institutes/ SAUs	Budget for 4 years (in lakh)
1	Tropical Forest Research Institute, Jabalpur (M.P.) 1. Guru Ghasidas University, Bilaspur, Chhattisgarh 2. Dr. Balasahebsawant Konkan Krishi Vidyapeeth, Dapoli, Dist Ratnagiri, Maharashtra	181.98
2	Institute of Forest Genetics and Tree Breeding, Coimbatore (Tamil Nadu). (1) Kerala Agricultural University, KAU, P.O. – Vellanikkara, Thrissur, Kerala - 680656	130.80
3	Institute of Forest Biodiversity, Hyderabad (1) Forest College and Research Institute, Mulugu, Hyderabad	73.27
4	Rain Forest Research Institute, Jorhat (Assam) (1) Central Agricultural University, Pasighat -791102, Arunachal Pradesh	70.04
5	Forest Research Centre for Eco-rehabilitation (FRCER), Prayagraj (U.P.) (1)Sam Higginbottom University of Agriculture, Technology and Sciences (SHUATS), Prayagraj (U.P.)	66.75
6	Institute of Wood Science and Technology Bengaluru (1) KeladiShivappa Nayaka University of Agriculture and Horticultural Sceicnes, Shivamogga, Karnataka	51.54

7	Arid Forest Research Institute, Jodhpur (Rajasthan) (1) Navsari Agricultural University, Navsari (Gujrat)	79.84
8	Institute of Forest Productivity, Ranchi Uttar Banga Krishi Vishwavidyalaya, Pundibari, Coochbehar, WB 2. Birsa Agricultural University, Ranchi	153.12
9	Himalayan Forest Research Institute, Shimla (1) Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan, H.P.	83.08
10	Forest Research Institute, Dehradun (1)University of Horticulture & Forestry, College of Forestry, Ranichauri	103.08
	Total Budget of the project (Rs. in lakh)	993.50

Proposal of Forest Survey of India

Annexure- V

1. Proposal for Establishment of Centre of Excellence in Forest Survey of India

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 of 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 imagery / 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. 5
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.

Such parameters and modalities of data collection will be finalised after discussion with BSI and ZSI under the NIRANTAR Framework.

Requirements of funds for five years

S. No	Budget heads	Amount (in Rs lakhs)
1	Survey & Mapping	8000
2	Capacity Building	50
3	Climate Change studies	200
4	Analysis of the field data including procurement of hardware and software	2,500
5	Report writing and publication	50
6	Miscellaneous expenditure	50
	Total	10,850

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

2. e-Greenwatch

e-Greenwatch Introduction: As per the guidelines on the State CAMPA issued by the MoEFCC on July 2nd 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.

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.

Requirements of funds for five years for e-green watch is:

Sl.No.	Item	Person	Amount (lakhs)
1	Wages currently- Data Entry Operator (DEO) @ Rs. 31,878 (inclusive PF@ 13%, ESI @ 3.25, Service charges and GST@ 18%, etc)	7	2,23,146/-
2	Wages currently- Casual Daily Labour (CDL) (1) @ Rs 21,854 (inclusive PF@ 13%, ESI @ 3.25, Service charges and GST @ 18%, etc)	1	21,854/-
3.	Wages for additional 5 DEO @ Rs. 31,878 (inclusive PF@ 13%, ESI @ 3.25, Service charges and GST @ 18%, etc) is required (interview conducted and joining is pending due to funding issue)	5	1,59,390/-
4.	Total Amount required during Current financial year (2022-2023) for 5 months	13	20,21,950/-

Sl.No.	Item	Person	Amount (lakhs)
5.	Total amount required for 1 st years (2023-2024) with 10% annual increment including PF@ 13%, ESI @ 3.25, Service charges and GST @ 18%, etc)	13	54,00,000/-
6.	Total amount required for 2 nd years (2024-2025) with 10% annual increment including PF@ 13%, ESI @ 3.25, Service charges and GST @ 18%, etc)	13	60,00,000/-
7.	Total amount required for 3 rd years (2025-2026) with 10% annual increment including PF@ 13%, ESI @ 3.25, Service charges and GST @ 18%, etc)	13	65,00,000/-
8.	Total amount required for 4 th years (2026-2027) with 10% annual increment including PF@ 13%, ESI @ 3.25, Service charges and GST @ 18%, etc)	13	70,00,000/-
9.	Total amount required for 5 th years (2027-2028) with 10% annual increment including PF@ 13%, ESI @ 3.25, Service charges and GST @ 18%, etc)	13	75,00,000/-
10.	Printer (cartridge- Black and white @ Rs. 5,000)	10	2,50,000/-
11.	Printer (cartridge- Colour set @ Rs. 50,000)	5	12,50,000/-
12.	High end PCs (in Nos.)	15	22,50,000/-
	For current financial year and for next 5 years budget requirement		381.71

Total amount required for 5 years is Rs. 381.71 lakhs.

3. WEB GIS based Decision Support System (DSS) for Forest Clearance 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.

Requirements of funds for five years

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 5year = 5 Crores (including escalation)	15	5 Cr
	For current financial year and for next 5 years budget requirement	5 Cr.	

4. Forest fire monitoring including burnt area assessment

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.

Requirements of funds for five years

S. No.	Particulars	Total Amount
1	Wages of 2 Project Associate	85,00,000
2	Wages of 4 Sr. Technical Associate	1,00,00,000
3	Wages of 1 anticipated Programmer	50,00,000
4	2 Anticipated Trainings/workshops each year	25,00,000
5	Software/Hardware including AMC cost	40,00,000
	Total	3,00,00,000

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

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.

Requirements of funds for five years

S. No.	Particulars	Total (in Rs.)
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
	Total	3,00,000,00

6 Deforestation Alert System

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.

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.

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

Requirements of funds for five years

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
	Budget requirement for next 3 years		400 lakhs

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

7. LiDAR for Forestry Applications

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 a plot to plot basis. The present 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 an incredibly accurate and consistent result.

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.

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.

Knowledge of Growing Stock, or the volume of all living trees 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

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.

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.

Funds Required:

Requirements of funds for five years

Particulars	Total
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
TOTAL	2,00,000,00