



AGENDA NOTES

**26th meeting
of
Executive Committee of
National Compensatory Afforestation Fund
Management & Planning Authority
(National CAMPA)**

on

08.12.2023



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

**AGENDA ITEMS FOR 26th MEETING OF THE EXECUTIVE COMMITTEE OF
THE NATIONAL AUTHORITY**

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AGENDA ITEM NO. 1

AGENDA ITEM NO. 1: CONFIRMATION OF MINUTES OF 25th MEETING OF EXECUTIVE COMMITTEE OF NATIONAL AUTHORITY

The Minutes of the 25th Meeting of Executive Committee of National Authority circulated on 10th November 2023. The minutes are placed for perusal and confirmation of the Executive Committee at **Annexure I**.

AGENDA ITEM NO. 2.

AGENDA ITEM NO. 2: ACTION TAKEN ON 25TH MEETING OF THE EXECUTIVE COMMITTEE OF THE NATIONAL AUTHORITY.

| Sl. No | DECISIONS | ACTION TAKEN |
|--------|--|--|
| 1 | The 25 th meeting of the Executive Committee (EC) of the National Authority was held on the 02.11.2023 under the chairmanship of the Director General of Forests & Special Secretary (DGF&SS), MoEF&CC, and Chairperson, Executive Committee of the National Authority. | Directions/ Minutes of meetings were communicated to all States/UTs vide OM dated 10.11.2023. Also Sanction orders to respective States/UTs and Institutions issued accordingly. |
| 2 | AS&FA's suggestion for use of CSS Funds by the States/UTs under the CSS of Project Tiger to the maximum possible extent and accordingly reduce their dependence on CAMPA funds for forestry and wildlife activities. | This has been included in the minutes for appropriate action by the States/UTs. |
| 3. | The DGF&SS directed all Heads of Integrated Regional Offices to complete the reconciliation of compensatory afforestation data against each proposal of forest land diversion since 1980 and inform National Authority at the earliest. | Directions/Minutes of meetings were communicated to all States/UTs vide OM dated 10.11.2023. The States/UTs have been requested to provide the IRO vetted information on the project wise compensatory afforestation against the forest land diversion since 1980. So far, the States/UTs of Karnataka and Rajasthan has provided the project wise compensatory afforestation against FC proposals since 1980. |
| 4. | The State CAMPA are requested to clarify the gap amount if any for carrying out CA and other mandatory activities. Any additional funds if required must be provided from the interest accrued. | Directions/Minutes of meetings were communicated to all States/UTs vide OM dated 10.11.2023. |

| | | |
|--|--|--|
| 5. | DGF&SS mentioned that the cost of CA and other CAMPA activities were realised from the user agencies as per the then prevailing scheduled rates. Since the cost of wages and materials increases over the period of implementation of CAMPA activities, the increased cost due to enhancement of rates is to be adjusted from the interest component of the State CAMPA funds. He asked the State Governments to deposit annual interest accrued on State CAMPA funds which is provided in the CAF Act, 2016. | Directions/Minutes of meetings were communicated to all States/UTs vide OM dated 10.11.2023. |
| 6. | Arunachal Pradesh | Sanction order dated 24.11.2023 has been communicated to concerned State. |
| PART B: APPROVAL OF ADDITIONAL ANNUAL PLAN OF OPERATIONS OF STATES FOR 2023-2024 | | |
| 7. | Karnataka | Sanction order dated 24.11.2023 has been communicated to concerned States/UTs. |
| | Mizoram | Sanction order dated 30.11.2023 has been communicated to concerned States/UTs. |
| PART C: APPROVAL OF ANNUAL PLAN OF OPERATION 2023-24 OF DEFERRED ITEMS | | |
| 8. | Jharkhand | Sanction order dated 24.11.2023 has been communicated to concerned States/UTs. |
| | Maharashtra | Sanction order dated 23.11.2023 has been communicated to concerned States/UTs. |
| | Telangana | Sanction order dated 30.11.2023 has been communicated to concerned States/UTs. |
| | West Bengal | Sanction order dated 30.11.2023 has been communicated to concerned States/UTs. |
| | Uttarakhand | Sanction order dated 23.11.2023 has been communicated to concerned States/UTs. |
| PART D: APPROVAL/ DECISION ON SCHEMES AND OTHER ITEMS SEEKING FINANCIAL SUPPORT FROM THE NATIONAL FUND OF CAMPA | | |
| 9. | Proposal for establishment of climate change study cell at FSI-Dehradun-Finance assistant from NA-CAMPA Decision: The scheme will be taken up for discussion in the next meeting. | The scheme will be discussed as Agenda Item no. 5 of the 26 th EC meeting of National Authority. |
| PART E: ANY OTHER MATTER WITH THE PERMISSION OF THE CHAIR | | |
| 1. | Financial matters of National Authority: Procedure for approval of schemes and release of funds from the National Fund Decision: The concerned divisional head of the Ministry should make their DIG/AIG/Director responsible or review of the progress in implementation of the scheme and visit the concerned Institutions/ Organisations as and when | Directions/Minutes of meetings were communicated to all States/UTs vide OM dated 10.11.2023. Sanction orders to respective States/UTs and Institutions issued. |

| | | |
|----|--|---|
| | required and apprise their findings to the Divisional Head. The AIG/DIG will also certify and accept the UC submitted by the implementing agency before making the recommendation to the National Authority for next release. The EC also approved the format proposed for submission of schemes/ pilot projects for financial support from National fund. | |
| 2. | <p>Release of share of State CAMPA funds to State Government</p> <p>Decision:</p> <p>(i) The State share of CAMPA funds reconciled with the States/UTs upto 31.10.2022 may be transferred to all States/UTs.</p> <p>(ii) The transfer of funds reconciled upto 31.03.2023 shall be made to those States/UTs, where there is timely release of funds by State Governments and the State Government/ UT Administration has deposited the accrued interest earned on the State CAMPA fund for the years 2019-20 to 2022-23.</p> | <p>Out of the funds Rs. 13,016.22 crore deposited with National Authority from all the States/UTs till 31.03.2022, Rs. 12,484.69 crore has been reconciled of which the 90 per cent of State share comes to Rs. 11,236.22 crore that is required to be transferred to the Public Account of respective States/UTs and 10 percent share comes to Rs. 1,248.47 which will remain in the National Fund</p> <p>Out of 33 States/UTs, the funds of 22 States/UTs has been reconciled from the period 01.04.2022 to 31.03.2023</p> <p>The action has been initiated.</p> |
| 3. | The present system of depositing the compensatory levies by User Agencies in the State specific bank accounts maintained in the Union Bank of India by National CAMPA may be continued in view of the functioning of online digital portal PARIVESH 2.0 for transparency and effectiveness in forest clearances. | Noted for compliance. |

AGENDA ITEM NO. 3

ADDITIONAL APO FOR THE YEAR 2023-24

3.1 Jammu & Kashmir UT

The Principal Chief Conservator of Forests & Chief Executive Officer, Jammu & Kashmir vide their letter no. PCCF/CAMPA/2023-24/422-23 dated 2.11.2023 has submitted additional APO of **Rs.83.02 crore** under CAMPA in respect of J&K Forest Department and J&K Wildlife Protection Department as per CAF Rule, 2018 for approval of National Authority.

2. The National Authority has sanctioned APO of J&K CAMPA for Rs. 272.65 crore in the 21st meeting of Executive Committee. Additional amount of Rs. 14.88 crore in the 24th meeting of Executive Committee of National Authority. Total amount approved under NPV component is Rs. 266.48 crore, which is 47.66% percent of total NPV Funds available with the UT CAMPA.

3. The J&K CAMPA has submitted Additional APO for the proposal for Rs. 81.28 crores required for digitization and demarcation of boundaries of vulnerable forests in the UT. They have proposed for meeting the expenditure of Rs. 53.94 crores from Interest component under Rule 6 (a)(vi) of CAF Rules, 2018 and remaining Rs. 27.34 crores is proposed to be utilised from the savings attributed to reduced fund requirement from the estimated amount after completion of e-tendering process under NPV component of State CAMPA fund during the current F.Y. 2023-24.

4. The minutes of Steering Committee meeting held on 02.11.2023 have been received.

5. The J&K CAMPA has Rs. 97.00 crores in their interest head and an amount of Rs. 3.60 crore has been approved during current APO. The information about accrual of interest on the UT CAMPA fund is being reconciled by the CEO, J&K, CAMPA.

Details of activities proposed under additional APO for FY 2023-24

| Activities under Forest management under rule 5 (2) and rule 6 (a) (vi) of the CAF Rules, 2018 | | Proposed outlay for additional APO 2023-24 (Rs in crore) | Proposed Physical Target under additional APO 2023-24 | Remark |
|--|--|--|---|--------|
| Rule 5(2) (a,b) | Assisted natural/Artificial regeneration and Management of biodiversity proposed under rule 5 (2) against savings accrued due to e-tendering of works under APO 2023-24 | 4.69 | Plantation of 8.50 Lakh plants | |
| Rule 5(2) (d) | Protection of Plantation and Forests A. Proposal under Rule 5(2) - Rs. 22.65 Crore (Against savings accrued due to e-tendering of works under APO 2023-24) B. Proposal under Rule 6 (a) (vii)- Rs. 47.17 Crore Interest accrued on CAMPA levies in State Fund (Activities referred to in sub-rules (2) and (3)) | 69.82 | Digitization of forest boundaries and fixing of 89237 BPs | |
| Total under rule 5(2) and 6 a(vii) of the CAF Rules, 2018 | | 74.51 | | |

| | | | | |
|--|--|--|---|--|
| Rule 6(a)(vii) interest accrued on CAMPA levies in State Fund (Activities referred to under rule 5(3) of the CAF Rules, 2018) | | | | |
| Rule 5(3)(c) | Equipment and devices for communication and information technology | 6.24 | Purchase of 137 Hi-tech DGPS & GPS etc. | |
| Rule 5(3)(g) | Survey & mapping | 0.03 | Survey works | |
| Total under Rule 6(a) (vi) of the CAF Rules, 2018 | | 6.27 | | |
| Grand Total of proposed activities under rule 5(2) and 6 (a)(vi) of the CAF Rules, 2018 | | 80.78 | | |
| Other activities for management of the forests and wildlife not referred to in sub rule (2) and (3) of rule 5 of CAF Rules, 2018 | | | | |
| Rule 6(b)(vi) | Activities under rule 6(b) (vi) of CAF rules (Hiring of vehicle for forest protection) | 0.50 | | |
| Grand Total | | 81.28 | | |
| B) Wildlife Department | | | | |
| Additional activities proposed under NPV Wildlife Management for FY 2023-24 under CAMPA against savings accrued due to e-tendering of works under APO for 2023-24 | | | | |
| Proposed Wildlife Management Activities under rule 5 (2) of the CAF Rules, 2018 | | Proposed outlay for additional 2023-24 (Rs. in crore) | | |
| Rule 5 (2) (d) | Activities under rule 5 (2) (d) (savings) Installation of boundary Pillars for protection of protected Areas (PAs) | 0.46 | | |
| Rule 5 (2) (g) | Activities under rule 5 (2) (g) (savings) Soil & Moisture Conservation Works to strengthen the vulnerable areas of Co.4/R Jammu 383 Crates, 1819 Cum DRSM | 1.00 | | |
| Rule 5 (2) (i) | Activities under rule 5 (2) (d) (savings) Improvement of Wildlife Habitat in Shalibagh Wetland Conservation Reserve by way of: (i) Raising of new Embankment in order to ensure adequate water level during lean season-1667 Cum. | 0.10 | | |
| | ii) Maintaining of Adequate water level in wetland by mechanical means and installation of water regulatory Gates | 0.18 | | |
| Total | | 1.74 | | |
| Grand Total | | Rs. 83.02 crore | | |

The Executive Committee may like to consider and take appropriate decision (**Annexure II**).

AGENDA ITEM NO. 4

DEFERRED APO OF THE YEAR 2023-24

4.1 Haryana State Authority

The Principal Chief Conservator of Forests & HoFF, Haryana, vide their letter No. 721, dated 02.11.2023, received via e-mail, on 03.11.2023, has submitted explanation/justification of deferred, partly approved and not approved activities in APO of financial year 2023-24.

The APO of Haryana was deliberated in 24th meeting of Executive Committee (EC) of National Authority. The EC has approved an amount of **Rs. 49.43 crore** out of proposed outlay of **Rs. 252.66 crore** and some activities were deferred, partially approved and not approved.

It was noticed that there are changes in CA sites covering an area 3965.78 ha. from the area approved to be brought under CA in accordance with the approvals accorded by the Central Government under Forest (Conservation) Act, 1980. Therefore, the EC did not approve maintenance of compensatory afforestation carried out during previous years. The EC also directed the State Government to reconcile the CA sites with the project specific approvals and compensatory levies deposited by user agencies. The approval of Competent Authority should be obtained in all cases where sites of compensatory afforestation have been/ are changed. Further, the state was asked to give actual requirement of funds for maintenance of existing plantations (Artificial Regeneration) after assessment by the concern CCF/CF alongwith the survival percentage.

Haryana State Authority has now submitted the details along with justification/clarification of deferred and partially approved activities for consideration of National Authority. The details of the activities are given below:

(Area in Ha & Rs. in Crore)

| CAF Act/Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 21.09.2023. | | Amount proposed | Remark |
|--|---|---|------------------|--|------------------|------------------------|--------|
| | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| Site-specific activities as per Section 6(a) of the CAF Act, 2016 | | | | | | | |
| Mandatory Activities | Compensatory Afforestation | | | | | | |
| | iv. Maintenance of existing/ older plantation | 6115.66 | 29.89 | Approved as per actual and limited to proposed outlay. Further excluding the area which were approved by Central Government in accordance with FCA, 1980. | | 20.60 | |
| Activities as per Rule 5(2) of the CAF Rules, 2018 | | | | | | | |
| 5(2)b | Artificial Regeneration | | | | | | |
| | iii. Maintenance | 4696.80 | 15.19 | Not approved for new plantations. Maintenance for existing plantations may be done as per actual requirements after assessment by concerned CCF for an outlay of Rs. 2.00 crore. Details to be provided for reconsideration alongwith survival percentage of plantation. | | 15.19 | |
| | Total | | | | | Rs. 35.79 Crore | |

The Executive Committee may take appropriate decision (**Annexure III**).

AGENGA NO. 5

PROJECTS/SCHEMES REQUIRING SUPPORT FROM THE NATIONAL AUTHORITY

5.1 Project Proposal by FSI: Establishment of Climate Change Study Cell at FSI, Dehradun – Financial Assistance from NA-CAMPA

The Scheme was in principal approved in the 23rd meeting of Executive Committee with the Project outlay of Rs. 90.90 crore. The Scheme was re visited by the Forest Survey of India and a revised scheme with the project outlay of Rs. 69.71 crore have been submitted/ the summary of the scheme is furnished as under -

| | |
|--|--|
| Name of Scheme | Establishment of Climate Change Study Cell at FSI, Dehradun – Financial Assistance from NA-CAMPA |
| Implementing Agency | FSI |
| Project Duration/Period | 05 Years |
| Project Outlay | 69.71 crore |
| Objectives of the Project <ul style="list-style-type: none">• To Perform Detailed Survey of “Tree Outside Forests Inventory for Assessing Carbon Stock of all five carbon pools”.• To Establish “Permanent Sample Plots for Periodic Assessment of the Effect of Climate Change in Biodiversity”.• To Study the “Shifting of Tree Line or Timber Line with Existing Data and Periodic Mapping of Timber Line Over a time period for Assessing Its Effect on Climate”.• To study “Indicator Species of Climate change”• To Study the “Assessment & monitoring Lichens as climate change indicators in sample plots of FSI”.• To study the “Effect of climate change on habitats of Orchids (Himalayan, NE Region, Western & Eastern Ghats)”.• To Study the “Effect of Climate Change in the Carbon Sequestration of Mangrove Ecosystem”. | |
| Recommendation of Program Division | Program Division has already recommended before the 23 rd meeting of the Executive Committee of National Authority. |

The DG, FSI has been requested to make a presentation to elaborate the various aspects of the scheme. The Executive Committee may take appropriate decision. **(Annexure IV)**

5.2 Project Proposal by ICFRE: “Measurement of Carbon Fluxes in Tropical Dry Deciduous Forests of Madhya Pradesh and Chhattisgarh through Eddy Covariance-based Carbon Flux Towers”- New Scheme/ Project.

The scheme has been received from the Green India Mission Directorate with a project outlay of Rs. 4.30 crore for the duration of 5 years. The summary of the scheme is furnished as under

| | |
|--|---|
| Name of Scheme | Measurement of Carbon Fluxes in Tropical Dry Deciduous Forests of Madhya Pradesh and Chhattisgarh through Eddy Covariance-based Carbon Flux Towers |
| Implementing Agency | Indian Council of Forestry Research and Education, Dehradun |
| Project Duration/Period | 5 Years |
| Project Outlay | Rs. 4.30 crore |
| Programme Division | Green India Mission Directorate Ministry of Environment, Forest and Climate Change Government of India |
| Objectives of the Project | |
| <ol style="list-style-type: none"> i. To study the gross primary productivity and net ecosystem exchange of the Northern mixed deciduous forest of Madhya Pradesh and Southern mixed deciduous forest of Chhattisgarh through carbon flux towers established by ICFRE under the Ecosystem Services Improvement Project. ii. To build capacity of the State Forest Departments and other forestry training institutions on measurement and monitoring of the forest carbon stocks’ through using eddy covariance-based techniques and modelling approaches. iii. To devise suitable strategies for enhancing the carbon sequestration potential of Northern Dry Mixed Deciduous Forest and Southern Dry Mixed Deciduous Forest in the states of Madhya Pradesh and Chhattisgarh. | |
| Project Outcomes | |
| <ol style="list-style-type: none"> i. Quantification of the carbon sequestration potential/ carbon exchange between the atmosphere and vegetation of the northern and southern mixed deciduous forests ii. Climate change mitigation and adaptation strategies for sustainable management of above-mentioned forest types iii. Development of knowledge products on measurement of forest carbon exchange, and knowledge sharing and dissemination iv. Trained forestry professionals from State Forest Departments and other forestry training institutions on forest carbon stock measurement through application of the latest methods and techniques | |
| Recommendation of Program Division | The Green India Mission Directorate of the MoEFCC implemented the World Bank funded Ecosystem Services Improvement Project (ESIP) in the states of Madhya Pradesh and Chhattisgarh, and established two eddy covariance based carbon flux towers for measurement and monitoring of carbon exchange in the forests. ESIP is completed on 30 July 2023 and prepared the Scheme/Pilot Project of Measurement of Carbon Fluxes in Tropical Dry Deciduous Forests of Madhya Pradesh and Chhattisgarh through Eddy Covariance-based Carbon Flux Towers. Comprehensive long-term data collection, analysis, and action are needed for understanding global climate change and its mitigation. Long-term accurate measurements of carbon sink and storage helps in predicting the CO ₂ absorption potential of the forests. Therefore, for continuation of the study, a project proposal for seeking financial |

| | |
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| | support from National fund as per the section 5(b)(iii) of the CAF Act, 2016 is being submitted. The Green India Mission Directorate will function as Program Division for the Scheme/Pilot Project which will be implemented through Indian Council of Forestry Research and Education, Dehradun as Implementing Agency and monitor the physical and financial progress of the Scheme/Pilot Project as required under CAF Act 2016 and CAF Rules 2018 and submit the quarterly progress report and annual progress report to National CAMPA. The Program Division will ensure forwarding of Utilization Certificate as and when required. |
|--|--|

The Executive Committee may take appropriate decision. (**Annexure V**)

AGENDA NO. 6

Any other item with the permission of the chair

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

Room no. A-232, 2nd Floor
Agni Wing, Indira Paryavaran Bhawan
Aliganj Road, Jor Bagh, New Delhi-110003.
Dated: 10th November, 2023

OFFICE MEMORANDUM

Please find enclosed the minutes of 25th Meeting of the **Executive Committee of the National Authority** held on 02.11.2023 under the Chairmanship of Director General of Forests & Special Secretary for information and necessary action.

Encl:

1. Minutes of the 25th Meeting



(V.L. Roui Kullai)
Deputy Chief Executive Officer
National Authority.

Distribution:

1. The Director General of Forests and Special Secretary, MoEF&CC- Chairman, Executive Committee of National Authority
2. Additional Secretary & Financial Advisor, MoEF&CC, Member;
3. Additional Director General of Forests (Forest Conservation), MoEF&CC, Member;
4. Additional Director General of Forests (Wildlife), MoEF&CC, Member;
5. Additional Director General of Forests, NTCA, MoEF&CC, Special Invitee
6. Mission Director, National Mission of Green India, MoEF&CC, Member;
7. Inspector General of Forests, FC Division, MoEF&CC, Member;
8. Shri Anil Kumar Ganeriwala, Expert Member of the Executive Committee
9. Shri Ashwani Kumar, Expert Member of Executive Committee
10. Shri Girish Kuber, Expert Member of Executive Committee.
11. Shri Kailash Chandra Sharma, Expert Member of Executive Committee
12. Concerned Head of Integrated Regional Officers (IROs), Ministry of Environment, Forest and Climate Change, Government of India, Member;
13. The PCCF & HoFFs States of Arunachal Pradesh, Karnataka, Mizoram, Jharkhand, Maharashtra, Telangana, West Bengal, Uttarakhand.
14. The CEOs of State CAMPA of Arunachal Pradesh, Karnataka, Mizoram, Jharkhand, Maharashtra, Telangana, West Bengal, Uttarakhand.

Copy to:

1. The DIG (RT/ROHQ), MoEF&CC, GoI.

THE MINUTES OF THE 25TH MEETING OF THE EXECUTIVE COMMITTEE OF THE NATIONAL AUTHORITY

The 25th meeting of the Executive Committee (EC) of the National Authority was held in Krishna Conference Room, Indira Paryavaran Bhawan, New Delhi on 2nd November, 2023 under the chairmanship of the Director General of Forests & Special Secretary (DGF&SS), MoEF&CC, and Chairman, Executive Committee of the National Authority. The list of members and other participants is attached at **Annexure I**.

2. The proceedings of the meeting are given hereunder:

General Discussion and Directions of Executive Committee:

- 1) The Chief Executive Officer (CEO), National Authority and Member Secretary, EC welcomed DGF&SS, the Chairman of the Executive Committee, the members and officers present in the meeting. He extended warm welcome to the IROs and other officers who attended the meeting.
- 2) The DGF&SS welcomed all members and officers present in the meeting.
- 3) The CEO, National Authority apprised all the members present in the meeting that National Authority is in the process of development of digital Annual Plan of Operation (APO) which is under trial for the proposals of approval for smooth and quick approvals from National Authority
- 4) On the two proposed schemes for support from the National Fund for which approval of HMEF&CC has been obtained, the Additional Secretary & Financial Advisor, MoEF&CC mentioned that:
 - i. Rehabilitation and retrofitting of FRI Heritage building has a similar proposal for funding support from Government of India. He suggested that FRI should either get financial support from the national CAMPA or from GoI.
 - ii. There appears to be two PMUs working on Green Credit Scheme. A PMU is supported from CAMPA funds and implemented by ICFRE on the proposal of HSM Division. Another PMU is functioning from GoI funds in which E & Y is associated. Whether both PMUs are same or different needs to be clarified by the concerned Program (HSM) Division(s).
- 5) AS&FA further informed the executive committee that under the CSS Project Tiger, the Government of India has allotted Rs. 490 crore initially, out of which only Rs. 63 crore had been released till date and Rs. 90 crore in the SNA accounts of the State Authorities is lying unutilized. The major reason of non-utilisation of Central Sponsored Schemes of Project Tiger and Integrated Development of Wildlife Habitat is that the State APOs are not proposed timely for approval of the Ministry. Considering the severity of the situation, the Finance Ministry has deducted Rs. 150 crore from the sanctioned amount



of the CSS of Project Tiger. AS&FA advised State/ UT Forest Departments to utilize CSS to the maximum possible extent and accordingly reduce their dependence on CAMPA funds for forestry and wildlife activities.

- 6) The DGF&SS raised the concern on the huge backlog of area of compensatory afforestation in Arunachal Pradesh and also in other States. He urged States to notify compensatory afforestation as protected/ reserved forests at the earliest.
- 7) DGF & SS directed the PCCF & HoFF of Arunachal Pradesh to reconcile the project-wise Compensatory Afforestation against each proposal of forest Land diversion since 1980 within 15 days. The State should work out project wise compensatory levies collected at the time of diversion and whether the same amount is considered while proposing for taking afforestation in the present APO and must clarify how much is the gap amount for carrying out CA and other mandatory activities. Any additional funds if required must be provided from the interest accrued.
- 8) The DGF&SS directed all Heads of Integrated Regional Offices to complete the reconciliation of compensatory afforestation data against each proposal of forest land diversion since 1980 and inform the National Authority at the earliest. It is to be noted that only Karnataka and Rajasthan have submitted the CA data reconciled against each forest land diversion since 1980 which are yet to be vetted by IRO Bengaluru and Jaipur.
- 9) Further, DGF&SS clarified that vehicles for operational requirements of field forest officials can be purchased if there is a provision under the cost of CA or other mandatory activities.
- 10) DGF &SS further mentioned that the cost of CA and other CAMPA activities were realised from the user agencies as per the then prevailing scheduled rates. Since cost of wages and materials increases over the period of implementation of CAMPA activities, the increased cost due to enhancement of rates is to be adjusted from the interest component of the State CAMPA funds. Hence, the interest component is very important as per the Compensatory Afforestation Fund Rules, 2018 and should not be used for carrying out CAMPA activities and paying wages. He asked the State Forest Departments to take up with the concerned State Governments for deposit of annual interest accrued on State CAMPA funds which is provided in the CAF Act, 2016.



PART A: General

3.1 AGENDA ITEM NO 1. CONFIRMATION OF MINUTES OF 24TH MEETING OF EXECUTIVE COMMITTEE OF NATIONAL AUTHORITY

The Executive Committee confirmed the minutes of 24th meeting of EC held on 31.08.2023.

3.2 AGENDA ITEM NO. 2: ACTION TAKEN REPORT ON 24TH MEETING OF THE EC:

The CEO, NA, CAMPA presented the action taken report on the decision of the 23rd Executive Committee before the EC. The Action Taken Report on the decision of the 23rd meeting of the EC of the National Authority was perused and noted by the Executive Committee.

PART B- APPROVAL OF STATES ANNUAL PLAN OF OPERATIONS 2023-24

AGENDA ITEM NO. 3: ANNUAL PLAN OF OPERATION (APO) OF ARUNACHAL PRADESH STATE CAMPA FOR THE FINANCIAL YEAR 2023-24:

1. Date of Receipt in National Authority : 31.08.2023
2. Date of approval of EC of State / UT : 27.07.2023
3. Date of approval of the Steering Committee : 24.08.2023
4. Total Amount / Outlay proposed : Rs. 192.2031 crore
5. Amount approved by the National Authority: Rs. 189.14 crore
6. Fund status with the State/UT along with outlay proposed

(Rs. in Crore)

| S. No. | CAMPA Activity | Fund Available with the State / UT | |
|--------|-------------------------------------|------------------------------------|-----------------|
| | | Fund Available with State/UT | Outlay Proposed |
| 1 | Mandatory Activity | | |
| | CA/PCA/Additional CA | 292.7836633 | 70.0684 |
| | Catchment Area Treatment Plan | 119.77316 | 20.144 |
| | Integrated Wildlife Management Plan | 19.39767 | 6.0638 |
| | Others | | |
| 2 | Net Present Value | 927.309671 | 92.04679 |
| 3 | Interest | 49.836933 | 3.88 |
| 4 | Other Components | | |
| | Total | 1409.101 | 192.2031 |

6. Status of Compensatory Afforestation

(Area in Ha)

| Afforestation required as per site specific scheme submitted along with approved proposal for diversion of forest land under FC Act, 1980 till 02.02.2022S | Afforestation carried out in the State as per site specific scheme till 2022-23 | Afforestation to be carried out 2023-24 | Afforestation carried out percentage | Total Balance upto 2024-25 |
|--|---|---|--------------------------------------|----------------------------|
| (CA+PCA) | (CA+PCA) | (CA+PCA) | (CA+PCA) | (CA+PCA) |
| 41366.07 | 36606.67 | 1737.14 | 88.50% | 4759.40 |

7. Balance afforestation Status

(Area in Ha)

| Balance Afforestation required as per FC Act (in ha) | Balance Afforestation to be completed in Financial Year (in Ha) | | |
|--|---|----------|----------|
| | 2023-24 | 2024-25 | 2025-26 |
| 4759.40 | 1737.14 | 1813.356 | 1208.904 |

8. Details of APO are as under

(Area in ha & Rs. in crore)

| Sl. No | CAF Act/Rules | Activity | Proposed outlay | | Remarks |
|---|--------------------|---|-------------------|------------|--|
| | | | Phy.Target | Fin.Target | |
| 1 Site-specific activities as per Section 6 (a) of the CAF Act, 2016 | | | | | |
| | Mandatory Activity | Compensatory Afforestation | | | |
| | | i. Advance work | 1737.14 | 3.72 | Approved with the remark that clarity on the proposed year and the user agency fund is requested. Balance money is to be adjusted from the interest amount due to increase of rates in subsequent years. The State CAMPA is requested to furnish details within 15 days. |
| | | ii. Creation of plantation work | 3001.348 | 21.06 | Approved |
| | | iii. Maintenance of existing/older plantation | 28794.81 | 43.29 | Approved subject to discrepancy in change of rates and reconciliation of CA land since 1980 is requested to be furnished within 15 days by State CAMPA to National Authority. |
| | | iv. Monitoring & Supervision | LS | 2.00 | Approved |
| | | Catchment Area Treatment Plan | | | |
| | | Afforestation: Creation of Plantation (1000 Ha) | 1000 ha. | 12.60 | Approved |
| | | Maintenance of Plantation. (6000 Ha) | 6000 ha. | | |
| | | Enrichment of Plantation; Creation of Plantation including nursery (200 Ha) | 200 Ha | 0.81 | |
| | | Maintenance of Plantation – 2nd year & 3rd year operation. (1200 Ha) | 1200 ha. | | |
| | | Distribution of seedling (100 ha. each year) | 100 ha. each year | 0.10 | Approved Number of seedlings required to be mentioned in progress report |
| | | <i>Alternative Land Use Programme to Control Shifting Cultivation</i> | | | |
| | | (Strip Plantation – 1895.11 Ha, Staggered Trenches -113.90 Ha, Cover Crop Strips – 1981.60 Ha, Vegetative Hedge – 27.40 Ha, Mixed Strip Crop – 2009 Ha, vegetative Hedge -12.19 ha., Silvicultural Strips – 4018 Ha, Bench Terracing – 70 Ha) | | 4.36 | Approved |
| | | Soil & Water Conservation Engineering/Mechanical Measures (DRPBD -358 Nos., LBCF- 235 Nos., Staggered trenches - 159112 Nos., Planting Development of pasture & fodder - 631 ha.) | | 1.52 | Approved |
| | | Treatment of Pilot Areas (Intensive Afforestation/Reforestation – 83.60 Ha. | | 0.05 | Approved |

| Sl. No | CAF Act/Rules | Activity | Proposed outlay | | Remarks |
|--------|---------------|---|------------------|------|---|
| | | Enrichment Plantation – 31 Ha., permanent cultivation - 6.46 ha.) | | | |
| | | Erosion Control through Vegetative Barriers (vetiver grass -1385212 Nos.) | | 0.70 | Approved |
| | | Integrated Wildlife Management Plan | | | |
| | | Maintenance Of check Gate with hut. | 8 Nos. | 0.04 | Approved |
| | | Const. of check gate with hut | 6 Nos. | 0.30 | Approved |
| | | Patrolling squad/wages | 53 Nos. | 0.57 | Approved |
| | | Erection of night vision vinyl signage with Ms angle iron post @ 1 no/km. | 60 Nos./30 km | 0.15 | Approved |
| | | POL & Maintenance of M/cycle & vehicle | 23 Nos. | 0.15 | Approved |
| | | Awareness camp in school/Printing of brochure/Maintenance of signage | 12 Nos. | 0.34 | Approved |
| | | Monitoring & Evaluation | LS | 0.09 | Not Approved |
| | | Tending operation, Maintenance. of fence | 7700 rmt /14 ha. | 0.04 | Approved |
| | | Creation of plantation | 12 ha. | 0.02 | Approved |
| | | Erection of watch tower | 9 Nos. | 0.33 | Approved |
| | | Waste management plan | 3 Nos. | 0.03 | Approved |
| | | Identification of rich wildlife habitat and corridors | 3015 Nos. | 0.22 | Approved |
| | | Canopy connectivity for animal crossing by plantation of tall saplings | 2400 Nos. | 0.06 | Approved |
| | | Hexagonal awareness shed | 1 No. | 0.06 | Approved |
| | | Rescue & Treatment | Ls | 0.06 | Approved Subject to compliance of CZA guidelines |
| | | C/o Rescue Treatment Centre including medicine & equipment | 1 No. | 1.00 | Not Approved |
| | | Speed Breaker | 12 Nos. | 0.02 | Approved |
| | | Construction of interpretation centre | 1 No. | 1.00 | Approved |
| | | Vehicle | 8 Nos. | 0.77 | Included in CA & mandatory activity |
| | | Motor cycle | 2 Nos. | 0.01 | Approved |
| | | Employment generation | 45 beneficiaries | 0.14 | Approved |
| | | Avenue plantation | 3 km | 0.06 | Approved |
| | | Contingency driver | 4 Nos. | 0.08 | Approved |
| | | Contingency charge | LS | 0.04 | Approved |
| | | Renovation of animal enclosure | LS | 0.41 | Not Approved |
| | | Maintenance of animal shed | 6 Nos. | 0.03 | Not Approved |
| | | Ex situ conservation | LS | 0.03 | Not Approved |
| | | Hiring of veterinarian | LS | 0.04 | Approved |

| Sl. No | CAF Act/Rules | Activity | Proposed outlay | | Remarks |
|---|---------------|--|-------------------|-------|--------------|
| | | Sub- Total Site specific activities under CAMPA (CA, CAT & IMWP components) | | 96.28 | |
| | | Note- Details as per FC proposal as Annexure | | | |
| 2. Activity as per Rule 5 (2) of CAF Rules, 2018 under NPV component | | | | | |
| | 5(2)a | ANR | | | |
| | | (i) Advance work including creation | 2149.87 Ha. | 3.82 | Approved |
| | | ii. Maintenance | 12882.305 Ha. | 7.13 | Approved |
| | | iii. Nursery raising | 7500 Nos | 0.01 | Approved |
| | 5(2)b | Artificial Regeneration | | | |
| | | i. Advance soil work including creation | 4565.51 Ha | 28.30 | Approved |
| | | ii. Maintenance | 16760.63 ha. | 16.80 | Approved |
| | | iii. Nursery raising | 165001 Nos | 0.38 | Approved |
| | 5(2)c | Silvicultural operations | | | |
| | | i. Tending operations (Weeding, cleaning, thinning, pruning & Climber cutting) | 335 ha. | 0.20 | Approved |
| | | ii. Creation of Hollong seed orchard | 2 ha. | 0.02 | Approved |
| | | iii. Collection of sub-tropical seed & transportation to centre | 100 kg/12000 Nos. | 0.07 | Approved |
| | | iv. Mass production of orchid through micropropagation in tissue culture | 2000 Nos. | 0.04 | Approved |
| | | v. Raising of seedlings | 25000 Nos. | 0.05 | Approved |
| | 5(2)d | Protections of plantations and forests | | | |
| | | i. Cost of POL & maintenance of vehicle/motorcycle | LS | 0.03 | Approved |
| | | ii. Stacking of river boulders to divert the course of river | 7 ha. | 0.02 | Approved |
| | | iii. Purchase of equipments relevant for patrolling | 5 sets | 0.47 | Approved |
| | | iv. Const. of seasonal bamboo bridge | 3 Nos. | 0.05 | Approved |
| | | v. Const. of green house | 1 No. | 0.04 | Approved |
| | | vi. Installation/maint. of water sprinkler, water reservoir, making of permanent beds and hardening unit | 6 Nos. | 0.12 | Approved |
| | | vii. Collection of seeds, orchids & other Germplasm | 250 kg/1800 Nos. | 0.06 | Approved |
| | | viii. Bio fencing at critical elephant location | 3 ha. | 0.02 | Not Approved |
| | 5(2)e | Pest and disease control in forests | | | |
| | | Pest and disease control in forest like purchase of weedicide etc. | APR | 0.01 | Not Approved |
| | 5(2)f | Forest fire prevention and control operations | | | |
| | | i. Purchase of fire equipment | 125 Nos. | 0.27 | Approved |
| | | ii. Control Burning at river bank | 80 ha. | 0.05 | Approved |
| | 5(2)g | Soil and moisture conservation works | | | |

| Sl. No | CAF Act/Rules | Activity | Proposed outlay | | Remarks |
|---|---------------|--|-----------------------|------|--|
| | | | | | |
| | | i. Check Dam | 792 Nos. | 6.99 | Approved |
| | | ii. Dredging of ponds | 5 Nos. | 0.31 | Approved |
| | | iii. Jungle bellies | 739 Nos. | 2.94 | Approved Considering it as slope protection measure along streams |
| | 5(2)i | Improvement of wildlife habitat | | | |
| | | i. Habitat improvement by ANR plantation | 302 Ha. | 0.52 | Approved |
| | | ii. Water holes | 40 Nos. | 0.17 | Approved |
| | | iii. Improvement of salt licks | 13 Nos. | 0.06 | Approved |
| | | iv. Making of signage | 5 Nos. | 0.01 | Approved |
| | | v. Training and workshops | 3 Nos. | 0.06 | Approved |
| | | vi. Open hall kitchen | 1 No. | 0.03 | Not Approved |
| | | vii. Anti-poaching protection camp including purchase of machinery | 3 Nos. | 0.45 | Approved |
| | | viii. Bamboo bridge | 3 Nos. | 0.05 | Approved |
| | | ix. Creation of fruit bearing species nursery | 1 No. | 0.05 | Approved |
| | | x. Maintenance of habitat improvement | 2867.08 ha. / 39 Nos. | 1.79 | Approved |
| | 5(2)j | Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors | 0 | 0.00 | |
| | 5(2)k | Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals | | | |
| | | Improvement of rescue centre i) Hog Deer-1nos (ii)Slowloris-1nos | 2 Nos. | 0.15 | Approved Subject to compliance of CZA guidelines |
| | | Animal rescue treatment | 2 Nos. | 0.02 | |
| | | Veterinary medicine and treatment | 2 Nos. | 0.02 | |
| | 5(2)m | Management of biological diversity and biological resource | | | |
| | | i. Digitization of herbal garden | 1 no. | 0.05 | Approved |
| | | ii. Maintenance of botanical garden | 3 Nos. | 0.36 | Approved |
| 3.Activities as per Rule 5(3) of the CAF Rule, 2018 | | | | | |
| | 5(3)a | Establishment, maintenance of modern nurseries | | | |
| | | i. Modern nursery | 12 Nos. | 5.77 | Approved |
| | | maintenance of modern nursery | 13 Nos. | 0.76 | Approved |
| | | ii. Nursery for medicinal plant | 1 No. | 0.03 | Approved |
| | 5(3)c | Purchase and maintenance of equipment of devices for communication, information and technology | | | |
| | | i. Wireless/GPS/Binooculars | 39 Nos. | 0.18 | Approved |
| | | Maintenance of wireless set | 1 No. | 0.01 | Approved |

| Sl. No | CAF Act/Rules | Activity | Proposed outlay | | Remarks |
|---|---------------|---|-----------------|--------------|--------------|
| | | | | | |
| | | ii. Purchase/Maint. of office equipment/Accessories/Stationery | 19 Nos. | 0.30 | Approved |
| | | iii. Computers & Printer | 41 Nos. | 0.35 | Approved |
| | | iv. Purchase of speed/Engine boat | 2 Nos. | 0.27 | Approved |
| | 5(3)d | Construction, upgradation and maintenance of inspection paths, forest roads in forest area, fire line, watch towers, check posts and timber post | | | |
| | | i. Patrolling path | 459.3 km | 0.14 | Approved |
| | | Maint. of patrolling path | 133 km | 0.04 | Approved |
| | | ii. Watch towers | 11 Nos. | 0.42 | Approved |
| | | Maint. of watch towers | 2 Nos. | 0.02 | Approved |
| | | iii. Check gate | 7 Nos. | 0.38 | Approved |
| | | Maint. of check gate | 16 Nos. | 0.09 | Approved |
| | | iv. Fireline cutting | 455 km | 0.38 | Approved |
| | 5(3)e | Construction of residential and official buildings | 25 Nos. | 5.40 | Approved |
| | | Maint. of buildings of frontline staff | 224 Nos. | 1.46 | Not Approved |
| | 5(3)f | Casual engagement of local people of labours to assists regular staff of state forest department | 269 Nos. | 3.56 | Approved |
| | 5(3)h | Independent concurrent monitoring and evaluation and third-party monitoring | | | |
| | | i. Independent concurrent monitoring | LS | 0.49 | Approved |
| | | Sub-Total of NPV Component | | 92.05 | |
| 4.Activities as per Rule 6(a) of CAF Rules, 2018 | | | | | |
| | 6(a)iv | For disbursement of salary and allowance to nominated members and staff | 60 Nos. | 0.98 | Approved |
| | 6(a)v | For disbursement of sitting fees and allowances to nominated members | LS | 0.12 | Approved |
| | 6(a)vi | Activities referred to in sub-(2) and (3) of Rule 5 | | | |
| | | (i) Professional service for compilation and preparation of annual accounts including capacity building of staff engaged in preparation of accounts. | LS | 0.57 | Approved |
| | | (ii) Third Party Monitoring & Evaluation of CAMPA Activities from 2014-15 to 2018-19 | LS | 0.64 | Approved |
| 5.Activities as per Rule 6(b) of CAF Rules, 2018 | | | | | |
| | 6(b)i | Management of office establishment State CAMPA CEO with detail | LS | 0.32 | Approved |
| | 6(b)ii | office equipment including computers and peripherals and its maintenance | LS | 0.33 | Approved |
| | 6(b)iii | Hiring staff cars for the use of officers and officials | on need based | 0.20 | Approved |
| | | POI & Maintenance of vehicle under State Authority | 7 Nos. | 0.09 | Approved |
| | 6(b)vi | Maintenance and renovation of buildings of frontline staffs | 60 Nos. | 0.45 | Approved |

| Sl. No | CAF Act/Rules | Activity | Proposed outlay | | Remarks |
|--------|---------------|---|-----------------|----------------------|----------|
| | | Development of website of State Authority and e-Plantation Journal. | LS | 0.18 | Approved |
| | | Sub-Total of Interest Component | | 3.88 | |
| | | Total approved | | 189.14 crore* | |

Decision of the EC: EC approved the APO of Arunachal Pradesh State CAMPA for Rs 189.14 crore subject to the condition that the State will reconcile CA area project-wise with compensatory levies realized from User Agencies against the forest diversion proposals. The State will work out the amount required for afforestation in the present APO based on current SoR and difference of amount from CA levies realized from concerned User agencies. It should be clarified how the gap funding would be made available. This information should be submitted within next 15 days to National Authority. Any change in the sites/ location of CA and other mandatory activities should be got approved from the competent authority before starting the work.

Further, EC directed that all maintenance activities of CA, other plantations and other activities should only be undertaken after the satisfactory survival status of plantation and the extent of afforestation area is certified by concerned Chief Conservator of Forests/ Conservator of Forests.

**PART C- APPROVAL OF STATES ADDITIONAL ANNUAL PLAN OF OPERATIONS
2023-24**

**AGENDA ITEM NO. 4.1: ANNUAL PLAN OF OPERATION (APO) OF KARNATAKA
STATE CAMPA FOR THE FINANCIAL YEAR 2023-24:**

1. Date of Receipt by NA : 30.10.2023
2. Date of approval of EC of State/UT : 23.08.2023
3. Date of approval of the Steering Committee : 24.08.2023
4. Total Amount/Outlay : Rs. 80.49 crore
5. Amount approved by the National Authority : Rs. 52.95 crore
6. The details of Additional APO are as under: -

(Area in Ha. & Rs. in Crore)

| Sl No | CAF Act/ Rules | Activity | Proposed Outlay | | Remarks |
|-----------|--------------------|--|----------------------------------|--------------|---|
| | | | Phy. Target | Fin. Target | |
| 1. | | Site Specific activity as per Section 6(a) of the CAF Act, 2016 | | | |
| | Mandatory Activity | Compensatory Afforestation | 8872.21 | 6.24 | Approved |
| | | Other works | | | |
| | | i. Survey & Demarcation and preparation of RF/PF notification for NFL CA areas | | 5.00 | Approved |
| | | ii. Pending Payment of 2022-23 | | 1.13 | Approved |
| | | Total of CA | | 12.37 | |
| 1. | | Activity as per Rule 5 (2) of CAF Rules, 2018 | | | |
| | 5(2) | ANR & AR | | 0.22 | Not approved due to inadequate funds under NPV component. |
| | 5 (3)(i) | Training and capacity building for staff and others | | 1.00 | Not approved due to inadequate funds under NPV component. |
| | | Pending payment 2022-23 under NPV | | 2.58 | Not approved due to inadequate funds under NPV component. However, being committed liabilities of previous year, the unpaid bills related with activities carried out during the FY 2022-23 can be settled under Rule 6(a) (vi) utilizing the interest accrued on State CAMPA fund. |
| 3. | | Activity as per Rule 6 (a) of CAF Rules, 2018 | | | |
| | 6(a) (vi) | Improvement of wildlife habitat (Maintenance of road network/grassland MAC mitigation/ Anti-poaching | 1. Maint. of road network- 500km | 33.00* | Approved as a one-time measure from the interest component (in respect of the interest accrued on NPV |

| | | | | | |
|--|---------|---|---|--------------------|--|
| | | camp (APC)/ Marine rescue center/ Elephant barricades | 2. MAC-368.70km 3. Grass land-1485.14ha 4. APC-500Nos | | component of State CAMPA fund only). Further, the approval is also subject to keeping sufficient balance of funds under the head 'interest' amount for meeting committed expenditure on account of enhanced cost of wages and other escalations CAMPA activities. Rail barricade provision, if any, is not approved. |
| | 6(a) vi | Establishment and maintenance of Animal rescue centers by State | 1 No. | 5.00* | Approved in respect of the interest earned on NPV component of State CAMPA fund. Approval of CZA should be obtained before the establishment of animal rescue center. |
| | 6(a) vi | Project Tiger 2022-23 Pending payment | | 26.32* | Not approved as there is no provision in the CAF Rules. The State may explore funding from the CSS of the Project Tiger. |
| | | Total of Interest | | 40.58 | |
| | | Total approved | | 52.95 crore | |

Decision of the EC: The EC approved the additional APO for Rs. 52.95 crore with modifications.

In this regard, the explanation given below the Rule 6 of the Compensatory Afforestation Fund Rule, 2018 should be followed.

* Explanation -Under no circumstance mixing of the interest accrued on the monies in the State Fund shall be allowed with any other State budget either for capital or spill over works and the works undertaken under this rule shall be on standalone basis and there shall not be any duplication of permitted works under different components.

AGENDA ITEM NO. 4.2: ANNUAL PLAN OF OPERATION (APO) OF MIZORAM STATE CAMPA FOR THE FINANCIAL YEAR 2023-24:

1. Date of Receipt by NA : 21.09.2023 & 09.10.2023
2. Date of approval by EC of State/UT : 20.04.2023
3. Date of approval of the Steering Committee : 31.05.2023
4. Total Amount/Outlay : Rs. 0.4284 crore
5. The amount approved by National Authority : Rs. 0.4284 crore
6. Details of Additional APO are as under: -

(Area in Ha. & Rs. in Crore)

| S. No. | CAF Act/Rules | Activity | Physical Target | Amount already approved (Rs. in cr.) | Amount required due to increase in wage rate (Rs. in cr.) | Additional fund requirement | Remarks | |
|--------|--------------------------|---|-----------------|--------------------------------------|---|-----------------------------|----------|--|
| 1 | Mandatory Activity | Compensatory Afforestation | | | | | | |
| | | Maintenance of plantation | 866.3004 ha | 0.6077 | 0.6717 | 0.064 | Approved | |
| 2 | Net Present Value | | | | | | | |
| | 5(2)a | Advance Work of Aide Natural Regeneration | 1800 ha | 2.052 | 2.268 | 0.216 | Approved | |
| | 5(2)f | Engagement of fire watchers for 3 months | 93 nos. | 0.3181 | 0.3516 | 0.0335 | Approved | |
| | 5(3)f | Engagement of local casual staff/labours to assist regular staff of State Forest Department in various works for protection of forest and wildlife including anti-poaching squad (including liabilities of APO 2022-23) | 44 nos. | 1.204 | 1.267 | 0.0632 | Approved | |
| | Interest | | | | | | | |
| 3 | 6 (a)j | Amount of offset the incremental cost of CA | - | 0.0163 | 0.018 | 0.0017 | Approved | |
| | 6(a)iv | Disbursement of wages/allowances to contractual staff engaged to assist State CAMPA | 24 | 0.48 | 0.53 | 0.05 | Approved | |
| | | Total approved | | | | 0.4284 crore | Approved | |

Decision of the EC: The EC approved the additional APO of State CAMPA Mizoram for Rs. 0.4284 crore.

PART D- APPROVAL OF STATES DEFFERED ANNUAL PLAN OF OPERATIONS 2023-24

AGENDA ITEM NO. 5.1: ANNUAL PLAN OF OPERATION (APO) OF JHARKHAND STATE CAMPA FOR THE FINANCIAL YEAR 2023-24:

1. Date of Receipt by NA : 06.10.2023 & 30.10.2023
2. Date of approval by EC of State/UT : 23.03.2023
3. Date of approval of the Steering Committee : 03.05.2023
4. Total Amount/Outlay : Rs. 498.68 crore
5. The amount approved by the National Authority : Rs. 129.35 crore
6. The details of deferred activities are given below;

(Area in Ha. & Rs. in Crore)

| CAF Act/Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 21 st September 2023 | | Amount proposed by State | Remark |
|---|---|---|------------------|---|------------------|--------------------------|------------------------------|
| | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| Site-specific activities as per Section 6(a) of the CAF Act,2016 | | | | | | | |
| Mandatory Activities | Compensatory Afforestation | | | | | | |
| | i. Advance work | | | | | | |
| | Eco-development of Village (Dalma wildlife Sanctuary) | 1 No. | 10.00 | Not Approved. Details required. | | 10.00 | Approved for Rs. 5.00 crore |
| | Catchment Area Treatment Plan | 7 Div. | 29.979 | Not Approved. Details required | | 5.00 | Approved |
| | Integrated Wildlife Management Plan | | | | | | |
| | i.Habitat management for flora and fauna (Food/cover/water management) | 24 Div. | 85.171 | Not Approved. Details required. | | 85.171 | Approved for Rs. 35.17 crore |
| | Other (Site Specific activities in accordance with FC proposal) | 625.832 | 16.161 | Not Approved. Details required. | | 16.161 | Approved |
| Activities as per Rule 5(2) of the CAF Rules,2018 | | | | | | | |
| 5(2)a | ANR | | | | | | |
| | i. Advance soil work | 5525.00Ha. | 39.638 | Not Approved | | 39.638 | Not approved |
| 5(2)b | AR | | | | | | |
| | i. Advance work | | | | | | |
| | b.Advance work (1stYearwork) for RDF/MFP block plantations(Forest Land) | 4100Ha. | 37.922 | Not Approved | | 37.922 | Not approved |
| | c. Advance work for Bamboo Plantation(Forest Land) | 4200Ha. | 40.544 | Not Approved | | 40.544 | Not approved |
| | d.Advance work for Sisal Plantation (Forest Land) | 100Ha. | 1.584 | Not Approved | | 1.584 | Not approved |
| 5(2)c | Silvicultural Operation | | | | | | |
| | i. Advance work | | | | | | |
| | a. Advance Work (1stYear works) Silviculture operation | 5525Ha. | 39.638 | Not Approved | | 39.638 | Not approved |
| 5(2)d | Protection of Plantations and forests | | | | | | |

| CAF Act/Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 21 st September 2023 | | Amount proposed by State | Remark |
|--------------|--|---|------------------|---|------------------|--------------------------|------------------------------|
| | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| | a. Consolidation of Forest Boundary Pillar with digitization/DGPS of Forest boundary | 8570no. | 4.714 | Not Approved. Details required. | | 4.714 | Not approved |
| | b. Integrated work for forest and wildlife protection | 36Div. | 7.200 | Not Approved. Details required. | | 7.200 | Approved |
| 5(2)e | Pest and disease control in Forests | 2Div. | 0.100 | Not Approved | | 0.100 | Not approved |
| 5(2)f | Forest fire prevention and control operations | 36no. | 4.816 | Not Approved | | 4.816 | Approved |
| 5(2)g | Soil and Moisture conservation works | | | | | | |
| | f. Construction of Checkdam | 565no. | 47.560 | Deferred. Details required | | 47.560 | Approved for Rs. 23.78 crore |
| | g. Renovation of Traditional Water Sources | 615no. | 4.920 | Deferred. Details required | | 4.920 | Approved for Rs. 2.46 crore |
| | h. Treatment of some important Nala on the concept of Watershed and CAT | 31no. | 7.750 | Deferred. Details required | | 7.750 | Approved for Rs. 3.87 crore |
| | a. Advance work(1st Year work) for Miscellaneous interventions using LiDAR Technology as per DPR of NAEB | 1 Div. Plantation and SMC works, Anicut, Gully Plugging, Mini Percolation Tank, Percolation Tank etc. | 5.000 | Deferred. Details required | | 5.000 | Approved for Rs. 2.50 crore |
| 5(2)i | Improvement of wildlife habitat | | | | | | |
| | iv. Any other relevant activities | | | | | | |
| | Bamboo culm cleaning | 1000Ha. | 4.490 | Not Approved. Relevant working plan prescriptions required | | 4.490 | Approved |
| | Weed eradication | 1625Ha. | 2.194 | Not Approved | | 2.194 | Not approved |
| | Soil & Moisture conservation work | 750Ha. | 3.243 | Not Approved | | 3.243 | Approved |
| | Other Activities | 2889no. | 37.616 | Not Approved | | 37.616 | Approved for Rs. 15 crore |
| 5(2)j | Planting and re juvenation of forest cover on non-forestland Falling in wildlife corridors | | | | | | |
| | Advance work(1st year work) for RDF block plantations on non-forest land falling in wildlife corridors | 2300Ha. | 18.485 | Not Approved | | 18.485 | Not approved |

| CAF Act/Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 21 st September 2023 | | Amount proposed by State | Remark |
|--|--|---|------------------|---|------------------|--------------------------|--------------|
| | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| 5(2)k | Establishment, maintenance of animal rescue centre and Veterinary treatment facilities for wild animals; | 1no. | 5.000 | Not Approved. Details required | | 5.000 | Not approved |
| 5(2)l | Supply of wood-saving cooking appliances and other forest produce saving devices | 3500no. | 1.400 | Not Approved | | 1.400 | Not approved |
| Activities as per Rule 5(3) of the CAF Rules,2018 | | | | | | | |
| 5(3)a | Establishment, Maintenance of modern nurseries | | | | | | |
| | d. Establishment of Tissue culture Lab.for planting Stock | 1no. | 0.490 | Not Approved | | 0.490 | Not approved |
| 5(3)b | Promoting conservation, sustainable use and documentation of Biological diversity through Study on ethnobotany/ethnoforestry | | | | | | |
| | i.Publicity | 1no. | 0.010 | Not Approved | | 0.010 | Approved |
| | ii.Documentation | 1no. | 0.150 | Not Approved | | 0.150 | Approved |
| | iii. Conference/ workshop | 1no. | 0.040 | Not Approved | | 0.040 | Approved |
| 5(3)c | Purchase & maintenance of equipment or devices for communication and information technology | | | | | | |
| | iv. Purchase of Dragon Torch | 1205no. | 1.024 | Not Approved | | 1.024 | Not approved |
| | v. Maint. of Dragon Torch | 161no. | 0.016 | Not Approved | | 0.016 | Not approved |
| | vi. Maint. of Old Solar Street Light | 20no. | 0.020 | Not Approved | | 0.020 | Approved |
| | vii Purchase of Firefighting equipment and related to man animal conflict | 46no. | 2.300 | Not Approved | | 2.300 | Not approved |
| | viii.Const. Of VHF Tower | 5no. | 1.250 | Not Approved | | 1.250 | Not approved |
| 5(3)d | Construction, up-gradation and maintenance of inspection paths, forest roads in forest area, firelines, watch towers, check posts and Timber posts | | | | | | |
| | a. Forest Road Repair | 2595.914K.m. | 8.659 | Not Approved | | 8.659 | Not approved |
| | c. Maint. of old Watch Tower | 54no. | 0.135 | Not Approved | | 0.135 | Not approved |
| | c.Const. of Watch Tower | 26no. | 1.950 | Not Approved | | 1.950 | Not approved |
| | d.Const. of Check post | 3no. | 0.300 | Not Approved | | 0.300 | Not approved |
| 5(3)e | Construction of residential and official buildings | | | | | | |
| | a. Const. of R.O.F Quarter Cum Office/Office/Residence | 18no. | 8.100 | Not Approved | | 8.100 | Not approved |
| | b. Const. of Forest Guard Quarter | 20no. | 9.900 | Not Approved | | 9.900 | Not approved |
| | c. Const. of Camp Office R.F.O/Inspection hut | 10no. | 1.560 | Not Approved | | 1.560 | Not approved |
| 5(3)g | Survey and mapping for APO monitoring | | | | | | |

| CAF Act/Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 21 st September 2023 | | Amount proposed by State | Remark |
|--------------|---|---|------------------|---|------------------|--------------------------|--------------|
| | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| | a. Survey and mapping of forest areas through LiDAR technology | 12Div. | 29.382 | Not Approved | | 29.382 | Not approved |
| 5(3)h | iv. e-Green watch Portal-Training updating and uploading of information and strengthening of respective offices | 54Div. | 0.440 | Not Approved | | 0.440 | Approved |
| 5(3)i | Publicity-cum-awareness programme | 50Div. | 2.750 | Not Approved | | 2.750 | Not approved |
| 5(3)k | Forest certification and development of certification standards: | 3Div. | 0.044 | Not Approved | | 0.044 | Not approved |
| | Total approved | | | | | 129.35 crore | |

Decision of the EC: The EC approved the deferred items of the State of Jharkhand for Rs. 129.35 crore as modified.

AGENDA ITEM NO. 5.2: ANNUAL PLAN OF OPERATION (APO) OF MAHARASHTRA STATE CAMPA FOR THE FINANCIAL YEAR 2023-24:

1. Date of Receipt by NA : 18.10.2023
2. Date of approval by EC of State/UT : 13.01.2023
3. Date of approval of the Steering Committee : 13.02.2023
4. Total Amount/Outlay : Rs. 4.51 crore
5. The amount approved by National Authority : Rs. 4.51 crore
6. The details of deferred activities are given below;

(Area in Ha & Rs in Crore)

| S.No. | CAF Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 3 rd July 2023 | | Amount proposed by State | Remark |
|-------|-----------|--|---|------------------|---|------------------|--------------------------|----------|
| | | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| 1 | 5(2)d vi | Establishment and maintenance of wireless network | 207 Nos. | 2.65 | Deferred for details | | 2.65 | Approved |
| 2 | 5(2)d vii | Improving mobility of frontline staff for forest protection & patrolling | - | 1.86 | Deferred for details | | 1.86 | Approved |
| | | Total approved | | | | | 4.51 crore | |

Decision of the EC: The EC approved the deferred items of the State of Maharashtra for Rs. 4.51 crore.



AGENDA ITEM NO. 5.3: ANNUAL PLAN OF OPERATION (APO) OF TELANGANA STATE CAMPA FOR THE FINANCIAL YEAR 2023-24:

1. Date of Receipt by NA : 27.10.2023
2. Date of approval by EC of State/UT : 13.04.2023
3. Date of approval of the Steering Committee : 26.06.2023
4. Total Amount Proposed : Rs. 16.427 crore
5. Amount approved by the National Authority : Rs. 8.99 crore
6. The details of the activities are given below:

(Area in Ha &Rs. in Crore)

| CAF Act/Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 21 st September 2023 | | Amount proposed by State | Remark |
|--|---|---|------------------|---|------------------|--------------------------|----------|
| | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| Site-specific activities as per Section 6(a) of the CAF Act, 2016 | | | | | | | |
| Mandatory Activities | Catchment Area Treatment Plan | | | | | | |
| | Peripheral trench in Km | 35 km | 0.678 | Approved for Rs. 0.3 crore | | 0.377 | Approved |
| | Rough Stone packing at canal passing through the hillocks. | 6 km | 0.668 | Approved for Rs. 0.3 crore | | 0.368 | Approved |
| | Creation of fire lines in permanent block | | 0.046 | Not approved | | 0.046 | Approved |
| | Firelines | 45 km | 0.003 | Not approved | | 0.003 | Approved |
| | Fire fighting equipment | 4 Nos. | 0.139 | Approved for Rs. 0.10 crore | | 0.039 | Approved |
| | Others | LS | 0.553 | Not approved | | 0.553 | Approved |
| Activities as per Rule 5(2) of the CAF Rules, 2018 | | | | | | | |
| 5(2)a | Assisted Natural Regeneration | | | | | | |
| | CPT | 25 km | 0.375 | Not approved | | 0.375 | Approved |
| | Firelines creation | 485.49 Km in RF Blocks | 0.484 | Not approved | | 0.484 | Approved |
| 5(2)i | Improvement of Wildlife Habitat | | | | | | Approved |
| | Maintenance of View Lines | 425.50 Km maintenance of view lines | 0.417 | Not approved | | 0.417 | Approved |
| Activities as per Rule 5(3) of the CAF Rules, 2018 | | | | | | | |
| 5(3)c | Purchase and maintenance of equipment of devices for communication, information and technology | | | | | | |
| | Maintenance of Internet Connectivity, e-Greenwatch, updation & Broad band connectivity | | 1.30 | Approved for 0.50 Cr. | | 0.80 | Approved |
| 5(3)d | Construction, up gradation and maintenance of inspection paths, forest | | | | | | |

| CAF Act/Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 21 st September 2023 | | Amount proposed by State | Remark |
|--------------|--|---|------------------|---|------------------|--------------------------|--|
| | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| | roads in forest areas, fire lines, watch towers, check posts | | | | | | |
| | Firelines | 760.58 Km creation & 3318 Km maintenance | 3.207 | Not approved | | 3.207 | Approved |
| 5(3)f | Casual engagement of local people or labours to assist regular staff of forest Department | 151 Nos-Base camps & 4 nos boat parties & 142 nos Animal Trackers | 17.434 | Approved for 10.00 Cr. | | 7.434 | Not approved. Rs. 10 cores already sanctioned. |
| 5(3)g | Survey and mapping of forest areas for forest fire control, compensatory afforestation works, soil-moisture conservation, catchment area treatment and wildlife management for preparing annual plans to be executed from the State Fund | Survey of notified & CA blocks | 0.460 | Not approved | | 0.460 | Approved |
| 5(3)h | Internal/Concurrent and Third-Party Monitoring | | | | | | |
| | Third party monitoring and evaluation of CAMPA works and maintenance of IRO | | 2.000 | Approved for 1.00 Cr. | | 1.00 | Approved |
| | Total approved | | | | | 8.129 crore | |

7. The CEO, State CAMPA informed that there were four spill over works of 2022-23 for Rs.0.864 crore (already approved from the Steering Committee), which could not be included in the State APO earlier due to oversight and are submitted to the National Authority for approval. The details are as follows.

(Area in Ha & Rs. in Crore)

| Activity | Unit | Estimate sanction details | | Expenditure incurred upto March.2023 | Proposed under spill over works APO | | Remarks |
|--|------|---------------------------|-------------|--------------------------------------|-------------------------------------|-------------|----------|
| | | Phy. Target | Fin. Target | | Phy. Target | Fin. Target | |
| Rule 5(2): 80% Core activities | | | | | | | |
| 5(2)(g): Soil Moisture Conservation Works in forests: | | | | | | | |
| Restoration of Thirumalai Kunta at Peddagudem of Wanaparthy District of Jogulamba Circle | Nos | 1 | 0.190 | 0.000 | 1.000 | 0.190 | Approved |
| Restoration of Diddi Kunta at Peddagudem of | Nos | 1 | 0.416 | 0.050 | 1.000 | 0.283 | Approved |

| | | | | | | | |
|---|-----|---|--------------|--------------|--------------|------------------------|----------|
| Wanaparthy District of Jogulamba Circle | | | | | | | |
| Rule 5(3): 20% Allied activities | | | | | | | |
| 5(3)e: Constructions of residential and officials in forests for front line staff deployed for forest protection and wild life. | | | | | | | |
| Construction of Forest Range Officer quarter Beedi leaves Mancherial at Mancherial Division and District during the year 2022-23 | Nos | 1 | 0.35026 | 0.159 | | 0.19141 | Approved |
| Construction of Forest Beat Officer quarter Mancherial beat & Section in Mancherial Range of Mancherial Division and District during the year 2022-23 | Nos | 1 | 0.317 | 0.118 | | 0.19933 | Approved |
| Total amount of additional APO | | | 1.274 | 0.327 | 1.000 | 0.864 | |
| Total approved | | | | | | 8.993 crore | |

Decision of the EC: The EC approved the deferred and additional items for Rs. 8.99 crore for Telangana State CAMPA.

AGENDA ITEM NO. 5.4: ANNUAL PLAN OF OPERATION (APO) OF WEST BENGAL STATE CAMPA FOR THE FINANCIAL YEAR 2023-24:

1. Date of Receipt by NA : 11.05.2023 & 04.09.2023
2. Date of approval of EC of State/UT : 18.01.2023
3. Date of approval of Steering Committee : 24.02.2023
4. Total Amount/Outlay : Rs. 15.13 crore Amount
5. Approved by the National Authority : Rs. 15.13 crore
6. The details of deferred activities are given below;

(Area in Ha. & Rs. in Crore)

| CAF Act/Rule | Deferred Activities | Original Proposed in APO 2023-24 by State | | Decision as per Sanction order circulated dated 4th May 2023 | | Amount proposed by State | Remark |
|---|--|---|------------------|--|------------------|--------------------------|--|
| | | Physical Target | Financial Target | Physical Target | Financial Target | | |
| Mandatory Activities (Section 6a of CAF Act, 2016) | | | | | | | |
| | Integrated Wildlife Management Plan | | | | | | |
| Section 6 | Wildlife Management Plan Sevoke-Rangpo Railway Project | LS | 15.13 | Deferred | | 15.13 | Approved subject to reconciliation of the fund deposited with CAMPA against the Sevoke-Rangpo Railway Project restricted to the amount realised from the user agencies as per approved IWMP. |
| | Total approved | | | | | 15.13 crore | |

Decision of the EC: The EC approved the deferred item for Rs. 15.13 crore for the State CAMPA West Bengal.

AGENDA ITEM NO. 5.5: ANNUAL PLAN OF OPERATION (APO) OF UTTARAKHAND STATE CAMPA FOR THE FINANCIAL YEAR 2023-24:

1. Date of Receipt by NA : 25.10.2023
2. Date of approval by EC of State/UT : 24.05.2023
3. Date of approval by Steering Committee : 08.05.2023
4. Total Amount/Outlay : Rs. 2.72crore
5. Amount approved by the National Authority : Rs. 2.72 crore
6. The details of the APO are as under :

(Area in Ha & Rs in Crore)

| S.No. | CAF Rule | Item of work | Approved amount in APO 2023-24 | Amount proposed by State | Remarks |
|-------|----------|---|--------------------------------|--------------------------|----------|
| 1 | 5(2)i | Maintenance of Lantana eradicated areas | 5.15 | 2.72 | Approved |
| | | Total approved | | 2.72 crore | |

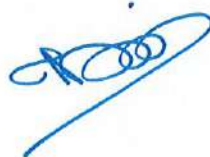
Decision of the EC: The EC approved Rs. 2.72 crore decided to consider the additional APO of State after the approval of the State Steering Committee is obtained. This will be taken up in next EC meeting.

PART E- SCHEMES PROPOSED UNDER NATIONAL FUND

AGENDA ITEM NO. 6: PROPOSAL FOR ESTABLISHMENT OF CLIMATE CHANGE STUDY CELL AT FSI-DEHRADUN-FINANCE ASSISTANCE FROM NA-CAMPA

| | |
|---|--|
| Name of Scheme | Establishment of Climate Change Study Cell at FSI, Dehradun – Financial Assistance from NA-CAMPA |
| Implementing Agency | FSI |
| Project Duration/Period | 05 Years |
| Project Outlay | 69.71 crore |
| Objectives of the Project | |
| <ul style="list-style-type: none">• To Perform Detailed Survey of “Tree Outside Forests Inventory for Assessing Carbon Stock of all five carbon pools”.• To Establish “Permanent Sample Plots for Periodic Assessment of the Effect of Climate Change in Biodiversity”.• To Study the “Shifting of Tree Line or Timber Line with Existing Data and Periodic Mapping of Timber Line Over a time period for Assessing Its Effect on Climate”.• To study “Indicator Species of Climate change”• To Study the “Assessment & monitoring Lichens as climate change indicators in sample plots of FSI”.• To study the “Effect of climate change on habitats of Orchids (Himalayan, NE Region, Western & Eastern Ghats)”.• To Study the “Effect of Climate Change in the Carbon Sequestration of Mangrove Ecosystem”. | |
| Recommendation of Program Division | Program Division has already recommended before the 24 th meeting of the Executive Committee of National Authority. |

Decision of EC: The scheme will be taken up for discussion in the next meeting.



PART F- FINANCIAL MATTERS OF NATIONAL AUTHORITY

AGENDA ITEM NO. 7: PROCEDURE FOR APPROVAL OF SCHEMES AND RELEASE OF FUNDS FROM NATIONAL FUND

1. The section 5 of the Compensatory Afforestation Fund Act, 2016 (CAF Act) provides for creation of National Fund to be administered by National CAMPA for meeting the non-recurring and recurring expenditure for the management of the National Authority, expenditure incurred on monitoring and evaluation of works and expenditure incurred on specific schemes approved by Governing Body of the National Authority.

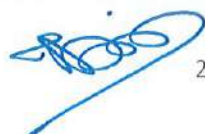
2. The National Authority approves schemes and pilot projects under section 5 (iii) (b) of the CAF Act, 2016, in the matters of national importance as set out by the Ministry pertaining to conservation of forest, wildlife, biodiversity, enhancement of ecosystem services and priority research programmes in the field of forest and wildlife conservation.

3. Procedure for approval of Scheme/ Pilot Projects:

3.1 As per the procedure being followed, an institute, society, centre of excellence in the field of forest and wildlife submits a proposal for implementation of a pilot schemes related to forestry and wildlife sector to the concerned Division (Programme Division) of the Ministry. The Programme Division forwards the proposal to National CAMPA with the specific objectives and outcomes to be achieved from the Scheme/ project, timelines, required funds, along with its recommendations for providing financial support from the National Funds in the prescribed format. The format is given below for kind perusal and approval of Executive Committee.

Format for submission of Scheme/Proposals

| | |
|---|---|
| Name of Scheme/ Project: | |
| Program Division of the Ministry | |
| Nodal Officer of Programme Division (name and designation) and contact details-email id Mobile no | |
| Nodal Officer of Implementing Agency/Institute (name and designation) and contact details-email id Mobile no | |
| Objectives | |
| Project Duration and Year wise activities | |
| Project Outlay | |
| Year wise estimated expenditure | |
| New or extension/ modification of existing scheme. | |
| Revised outlay in case of existing scheme/project | |
| In case of modification of existing scheme: The details of expenditure incurred as on date along with copy of UC indicating unutilized fund. | |
| Brief note & Justification for seeking financial support from National Fund. | |
| Outcomes | |
| Deliverables (including year wise) | |
| Recommendation of the Program Division | The (Program Division) of the MoEFCC has prepared the Scheme/Pilot Project of (name of Scheme/Pilot Project) for seeking financial support from National fund as per the section 5(b)(iii) of the |



| | |
|--|--|
| | CAF Act 2016. The (name of Program Division) will function as Program Division for the Scheme/Pilot Project which will be implemented through (name of Implementing Agency) as Implementing Agency and the program division will monitor the physical and financial progress of the Scheme/Pilot Project as required under CAF Act 2016 and CAF Rules 2018 and submit the quarterly progress report and annual progress report to National CAMPA. The Program Division will ensure forwarding of Utilization Certificate as and when required. |
| | Signature of Nodal Officer of the Program Division |

3.2 On receipts of such proposals in National Authority from the concerned Programme Division, the proposals/ schemes are scrutinized and placed in the form of Agenda Note before the Executive Committee. After obtaining the recommendation of Executive Committee, the proposal is placed before the Governing Body for its approval. The approval of Governing Body is conveyed to the Programme Division for implementation of the scheme/pilot project through the concerned institution/organization.

4. Release of Fund

4.1 After the approval of Governing Body/ competent authority, proposals are submitted to Integrated Finance Division (IFD) for according financial concurrence for release of 1st instalment to implementing agency.

As per the procedure prescribed in the GFR [Rule 238(1)] as applicable in this case, the release of the second/ next instalment of the sanctioned outlay is submitted (by the implementing institution) to the satisfaction of the Ministry/Programme Division in support of achieving the specified objectives and expenditure incurred accompanied with the Audited accounts along with the Utilization Certificates.

4.2 For the release of next instalment(s), the implementing institution/agency furnishes the Utilization Certificate (UC), Physical Progress Report and also deposit the interest earned during that financial year for releasing the funds or revalidation of unspent fund of previous instalment released for the approved activities. The concerned programme division is required to monitor the progress of the scheme/project and to recommend release of next instalment.

5. Issues:

5.1 The IFD has raised observations on various occasions on non-utilisation of funds released in previous instalments and on the acceptance of Utilization Certificate (UC) by the Programme Division (PD). Based on IFD observations, National Authority has sent communication to all the implementing agencies/ institutions and their concerned Programme Division vide letter no NA-13/30/2022-NA dated 20.07.2023 (copy enclosed) for signing/ authenticating of UCs by the Head/Director of the concerned institutions.

5.2 After release of the funds, the programme implementation divisions are expected to ensure effective utilisation of the funds and monitor its progress in accordance with the terms and conditions of the approval accorded by the competent authority. The institutions which are entrusted to implement

the approved schemes/projects are required to regularly apprise the progress to the programme division for monitoring and evaluation.

5.3 It is observed that Program Divisions are endorsing the requirement of funds without ensuring the proper utilisation of funds released to implementing agency on earlier occasions. Also, Programme Divisions are not conducting regular monitoring of the Schemes/ Projects. The institutions implementing the Schemes/ projects are directly sending proposals for release of funds to National Authority without the recommendations of the concerned Programme Division. There is a need to have proper mechanism for monitoring and evaluation of the progress of implementation by the Programme Division.

5.4 Further, as per the IFD observations, the National Authority is required to accept the expenditure (UCs) as Programme Division (PD) before processing the case for release of the next instalment for IFD concurrence. It is pertinent to mention that National Authority's role is to provide funds for undertaking approved schemes/projects on the recommendations of various programme divisions of the Ministry. However, the IFD is considering the National Authority as the programme division and insisting for acceptance of Utilisation Certificate, for which there is no provision in the GFR and also in the CAF Act and Rules. Also the format of UC does not mention any authority/ officer for accepting the UC.

5.5 The role of National Authority is to manage CAMPA Funds and sanction and provide fund on the recommendations of Programme Division for the implementation of approved schemes. Would National Authority be required to accept the UC which will mean authenticating the correctness of expenditure as per due procedure. The Program Divisions have refused to accept the UC stating that there is no provision in the GFR. This issue needs to be settled and roles and responsibility of National Authority, Programme Division and Implementing Institution/ Agency should be defined as regard to acceptance of UC.

6. Approval sought: EC may take appropriate decision.

7. Decision of the EC: AS&FA informed that huge amounts are released by the National Authority time to time to various Institutions/ Organisations for implementation of various schemes which are approved on the recommendations of the Program Division of the Ministry. However, there is no proper mechanism in place to monitor the progress of the pilot projects/schemes by the Program Division. The CEO, National Authority informed that CAMPA is only the funding agency and releases the fund required by the implementing agencies on the basis of the review of progress report submitted by the concerned Institutes/ Organisations. At the time of release of second/ subsequent instalment of funds, there is a need to certify and accept the Utilisation Certificate submitted by the Institute/ Organisation by the Program Division. The DGF&SS stressed that the schemes being implemented by the Institutions from the National Fund need to be reviewed properly by the concerned Program Divisions of the Ministry to ensure the desired objectives.

It was decided that the concerned divisional head of the Ministry should make their DIG/AIG/Director responsible for review of the progress in implementation of the scheme and visit the concerned Institutions/ Organisations as and when required and apprise their findings to the Divisional Head. The DIG/ AIG will also certify and accept the UC submitted by the implementing agency before making the recommendation to the National Authority for next release. The EC also approved the format proposed for submission of schemes/ Pilot Projects for financial support from National Fund.



AGENDA ITEM NO. 8: RELEASE OF SHARE OF STATE CAMPA FUNDS TO STATE GOVERNMENT

RELEASE OF STATE SHARE OF FUNDS TO STATE GOVERNMENT

Before the enactment of the Compensatory Afforestation Fund Act, 2016, the compensatory levies were deposited with ad-hoc CAMPA which were later transferred to the State Government for implementation of afforestation related activities as per approved Annual Plan of Operation.

As per the provisions contained in the Rule 2(6) of the Compensatory Afforestation Fund (Accounting Procedure) Rules, 2018 notified by MoEF&CC Notification dated 20.11.2018 on the accounting procedure to regulate the manner of crediting the monies to National Fund and State Fund; quoted below:

"The monies received by the State Governments from User Agencies shall be credited in 'State Compensatory Afforestation Deposits' at Minor Head level below 'Major Head 8336- Civil Deposit' in Public Account of State. Out of which 90 per cent shall be transferred to the Major Head 8121 in Public Account of State and 10 per cent credited into National Fund on yearly basis as per sub-section (4) of Section 3 of the CAF Act, 2016; provided that, the credit of 10 per cent Central Share of funds should be ensured on monthly basis so that the same is transferred to Central Fund".

However, the existing procedure of crediting of all compensatory levies of State Specific Bank accounts maintained by the National Authority in the Union Bank of India has been followed for maintaining the continuity, efficiency and ease of reconciliation during the transition period of shifting from ad-hoc CAMPA to National CAMPA. The National Authority is receiving compensatory levies from user agencies through a digital platform PARIVESH Portal which is integrated with FCA approval.

National Authority has transferred the funds of Rs. 55,292.35 crore during 2018-19 to 2022-23 after component-wise reconciliation with the States/ UTs. As on 26th October 2023, the total reconciled amount of Rs. 15,753.57 crore (18 states upto 31.3.2023 and 15 states upto 31.3.2022) is available with National Authority in Public Accounts of India. Out of this, 90 % of the fund i.e. Rs. 14,178.21 crore is the share of various States, whereas 10 % Central Share comes to Rs. 1,575.36. The State share of Rs. 14,178.21 crore is to be transferred to respective States/ UTs.

The status of funds is given below after reconciliation-

| Reconciliation status of all States/UTs as on 26.10.2023 | | | | | | |
|--|-------------------|---|---|-------------------|--------------------|----------------|
| S. No. | States/UTs | Period for which funds is to be transferred to States/UTs | Funds deposited with National Authority | Reconciled amount | (Amount in Cr.) | |
| | | | | | State' share (90%) | NA share (10%) |
| 1 | Andaman & Nicobar | 08.02.2019 to 31.03.2022 | 30.83 | 16.90 | 15.21 | 1.69 |
| 2 | Andhra Pradesh | 01.04.2020 to 31.03.2022 | 98.02 | 97.96 | 88.16 | 9.80 |
| 3 | Arunachal Pradesh | 01.04.2020 to 31.03.2023 | 824.50 | 769.24 | 692.31 | 76.92 |

| | | | | | | |
|----|----------------------------------|-----------------------------|----------|----------|----------|--------|
| 4 | Assam | 01.04.2020 to 31.03.2023 | 132.76 | 113.12 | 101.81 | 11.31 |
| 5 | Bihar | 01.04.2020 to 31.03.2023 | 319.87 | 319.40 | 287.46 | 31.94 |
| 6 | Chandigarh | 08.02.2019 to 31.03.2023 | 0.32 | 0.32 | 0.29 | 0.03 |
| 7 | Chhattisgarh | 01.04.2020 to 31.03.2023 | 963.91 | 898.70 | 808.83 | 89.87 |
| 8 | Dadar & Nagar and Daman & Diu | 08.02.2019 to 31.03.2022 | 17.76 | 17.76 | 15.99 | 1.78 |
| | | | 0.59 | - | - | - |
| 9 | Delhi | 01.04.2020 to 31.03.2022 | 159.98 | 159.98 | 143.99 | 16.00 |
| 10 | Goa | 08.02.2019 to 31.03.2023 | 235.42 | 235.40 | 211.86 | 23.54 |
| 11 | Gujarat | 08.02.2019 to 31.03.2022 | 452.96 | 430.04 | 387.04 | 43.00 |
| 12 | Haryana | 08.02.2019 to 31.03.2022 | 697.94 | 683.76 | 615.38 | 68.38 |
| 13 | Himachal Pradesh | 08.02.2019 to 31.03.2022 | 348.87 | 342.55 | 308.30 | 34.26 |
| 14 | Jammu & Kashmir | 08.02.2019 to 31.03.2022 | 47.34 | 44.50 | 40.05 | 4.45 |
| 15 | Jharkhand | 08.02.2019 to 31.03.2023 | 2,171.48 | 2,022.80 | 1,820.52 | 202.28 |
| 16 | Karnataka | 08.02.2019 to 31.03.2022 | 427.60 | 403.83 | 363.44 | 40.38 |
| 17 | Kerala | 08.02.2019 to 31.03.2022 | 21.58 | 16.07 | 14.47 | 1.61 |
| 18 | Lakshadweep | | - | - | - | - |
| 19 | Ladakh | 08.02.2019 to 31.03.2022 | 73.81 | 28.64 | 25.78 | 2.86 |
| 20 | Madhya Pradesh | 01.04.2020 to 31.03.2022 | 3,749.88 | 3,713.65 | 3,342.29 | 371.37 |
| 21 | Maharashtra | 01.04.2020 to 31.03.2023 | 716.90 | 531.94 | 478.74 | 53.19 |
| 22 | Manipur | 01.04.2020 to 31.03.2023 | 190.39 | 174.27 | 156.85 | 17.43 |
| 23 | Meghalaya | 08.02.2019 to 31.03.2023 | 57.12 | 43.61 | 39.25 | 4.36 |
| 24 | Mizoram | 08.02.2019 to 31.03.2023 | 38.29 | 36.06 | 32.46 | 3.61 |
| 25 | Nagaland | | - | - | - | - |
| 26 | Odisha | 01.04.2020 to 31.03.2023 | 2,168.40 | 2,120.74 | 1,908.67 | 212.07 |
| 27 | Puducherry | | - | - | - | - |
| 28 | Punjab | 01.04.2020 to 31.03.2023 | 391.01 | 391.01 | 351.91 | 39.10 |
| 29 | Rajasthan | 08.02.2019 to 31.03.2022 | 332.52 | 246.75 | 222.07 | 24.67 |

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| | | | | | | |
|----|---------------|-----------------------------|------------------|------------------|------------------|-----------------|
| 30 | Sikkim | 01.04.2020 to 31.03.2022 | 98.73 | 98.69 | 88.82 | 9.87 |
| 31 | Tamil Nadu | 08.02.2019 to 31.03.2023 | 43.51 | 43.45 | 39.11 | 4.35 |
| 32 | Telangana | 01.04.2020 to 31.03.2023 | 312.20 | 289.60 | 260.64 | 28.96 |
| 33 | Tripura | 01.04.2020 to 31.03.2022 | 111.08 | 93.99 | 84.59 | 9.40 |
| 34 | Uttar Pradesh | 08.02.2019 to 31.03.2023 | 718.94 | 711.64 | 640.48 | 71.16 |
| 35 | Uttarakhand | 08.02.2019 to 31.03.2023 | 528.09 | 426.78 | 384.10 | 42.68 |
| 36 | West Bengal | 01.04.2020 to 31.03.2023 | 230.69 | 230.41 | 207.37 | 23.04 |
| | Total | | 16,713.31 | 15,753.57 | 14,178.21 | 1,575.36 |

In this regard, following issues were mentioned for consideration of the Executive Committee:

1. There are issues of long delay in release of CAMPA funds by State/ UT Governments to their State/ UT Forest Departments for carrying out the activities of compensatory afforestation and compensating the loss of eco-system services. In majority of cases the release of the funds to State/UT Forest Departments was made at the fag end of financial year.
2. As per the CAF Act, the CAMPA funds are non-lapsable and interest bearing. There are delayed/ non-payment of accrued interest on the State CAMPA fund by the State Government which is mandatory as per the provisions under CAF Act and Rules. The interest amount forms an important component of State CAMPA Fund necessary for meeting the enhanced cost of afforestation and offset the increased wage rates. Further, in cases where interest has been shown as accrued, it is not clear whether State Government have actually credited the interest amount on State CAMPA fund maintained in their respective Public Accounts.
3. Credit of State Share of CAMPA Fund: The Ministry is in the process of developing upgraded PARIVESH 2.0 digital portal since 2021 for transparency and effectiveness through online processes. Before that also PARIVESH portal was functioning for approval under the Forest (Conservation) Act, 1980. Therefore, the mechanism provided in the CAF Act for realisation of compensatory levis by the State Government from the User Agency as provided in the Sub-Section (4) of Section 3 of the Act was not started and the existing systems has been provisionally continued. The online portal is very effective in proper component-wise and project -wise reconciliation of compensatory levis. The CAMPA Funds are now deposited in the State specific CAMPA accounts maintained in the Union Bank of India linked with PARIVESH 2.0 portal and operated by National Authority. It would be prudent to follow the existing practice of crediting 100 per cent of State/ UT funds in the same State specific CAMPA accounts with and transfer of 90 per cent of State/ UT share after due reconciliation of fund positions.

Decision sought: The Executive Committee of National Authority may like to advise on the following:

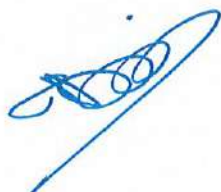
- (i) Release of State share of CAMPA Fund to States/UTs

- (ii) Continuation of the present system of crediting Compensatory levies in the State Specific Accounts maintained in the Union Bank of India by National CAMPA.

Decision of the EC: It was decided that

1. The State share of CAMPA funds reconciled with the States/UTs upto 31.03.2022 may be transferred to all States/UTs. However, the transfer of funds reconciled upto 31.03.2023 shall be made to those States/UTs, where there is timely release of funds by State Governments and the State Government/UT Administration has deposited the accrued interest earned on the State CAMPA Fund for the years 2019-20 to 2022-23.
2. Further the present system of depositing the compensatory levies by User Agencies in State specific bank accounts maintained in the Union Bank of India by National CAMPA may be continued in view of the functioning of online digital portal PARIVESH.2.0 for transparency and effectiveness in forest clearances.

The meeting ended with thanks to the chair.

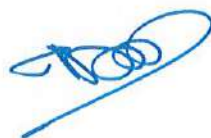


List of Participants:

1. Shri Chandra Prakash Goyal, DGF&SS, MoEF&CC
2. Shri Subhash Chandra, CEO, National Authority, MoEF&CC
3. Shri Pravir Pandey, AS&FA, MoEF&CC
4. Shri Anil K. Ganeriwala, Expert Member
5. Shri Jitendra Kumar, PCCF, Arunachal Pradesh
6. Smt. Shomita Biswas, APCCF & CEO, Maharashtra State CAMPA
7. Shri Sanjeev Kumar, APCCF & CEO, Jharkhand State CAMPA
8. Shri P.C. Ray, APCCF & CEO, Karnataka State CAMPA
9. Smt. V.L. Roui Kullai, Dy. CEO, National Authority, MoEF&CC
10. Shri Ankit Kumar, Dy. CEO, Arunachal Pradesh State CAMPA
11. Shri. B. Abhay Bhaskar, DIG/GIM/NAEB, DIGF, MoEF&CC
12. Shri. Shivanand Talawar, AIGF, National Authority, MoEF&CC
13. Shri. Nisheeth Saxena, Senior Consultant, National Authority, MoEF&CC
14. Shri Praveen Kr. Saxena, Consultant, National Authority, MoEF&CC
15. Shri. Jai Pal Sharma, Consultant, National Authority, MoEF&CC
16. Smt. Apoorva Gupta, Consultant, National Authority, MoEF&CC
17. Dr. Priyanka Tripathi, Consultant, National Authority, MoEF&CC
18. Dr. Shah Mohammed Belal, Consultant, National Authority, MoEF&CC
19. Dr. Dibyadeep Chatterjee, Consultant, National Authority, MoEF&CC
20. Smt. Pema Chhoden, RFO, Arunachal Pradesh

List of Participants joined the meeting via VC link:

1. Dr. Suvarna, PCCF & CEO, Telangana State CAMPA
2. Dr. Kana Talukdar, PCCF & CEO, West Bengal State CAMPA
3. Shri. G.S. Pandey, APCCF & CEO, Uttarakhand State CAMPA
4. CEO, Mizoram State CAMPA
5. IG FC, RO, Hyderabad
6. DIGF, RO, Bhubaneswar
7. Technical Staff, Telangana State CAMPA



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Government of Jammu & Kashmir
Office of the Pr. Chief Conservator of Forests & HoFF
Jammu & Kashmir Forest Department



The Chief Executive Officer,
National Authority,
Ministry of Environment, Forest and Climate Change,
Government of India, New Delhi.

No. PCCF/CAMPA/2023-24/422-23

Dated 02.11.2023

Subject: Request for accord of approval to the additional Annual Plan of Operation for FY 2023-24 under CAMPA.

Sir,

The Steering Committee of J&K CAMPA in its 22nd meeting held on 23-01-2023 directed the Forest department to scale up the work of digitization and demarcation of remaining Forests to ensure the protection of Forests vulnerable to encroachments. Subsequently, J&K Government vide communication No. FST-PCB/7/2021-02 dated 08.08.2023 also directed the Forest department to complete the work of Digitization, Survey and BP fixing in all vulnerable category of "Forests" by March- 2024. Accordingly, the territorial Forest divisions of J&K identified vulnerable Forests and prepared the additional APOs for accomplishing the assigned task within the stipulated time period.

2. The additional APO was placed before the Executive Committee of CAMPA in its meeting held on 4th October, 2023 for consideration and recommendation for approval of Steering Committee of J&K CAMPA.

3. The Steering Committee of J&K CAMPA approved the additional APO for FY 2023-24 amounting to Rs. 83.02 Crore in its meeting held on 02.11.2023 in respect of J&K Forest Department and Wildlife Protection Department and recommended it for approval of the National Authority, MOEFCC, Govt. of India. The minutes of the meeting will take some time to get issued. The same shall be sent to the National Authority shortly.

4. It is therefore, requested that the Executive Committee of National Authority may kindly approve the additional APO 2023-24 for amount of Rs. 83.02 Crore under CAMPA in respect of J&K Forest Department and J&K Wildlife Protection Department as per CAF, Rules 2018. Agenda of the 23rd meeting of the Steering Committee J&K CAMPA is enclosed herewith for kind information and necessary action.

Encl. Agenda

Yours faithfully,

(Asaf Mehmood Sagar) IFS
Pr. Chief Conservator of Forests/
Chief Executive Officer (CAMPA)

Copy to Private Secretary to Pr. Chief Conservator of Forests & HoFF for information of the PCCF & HoFF, J&K.

JAMMU AND KASHMIR FOREST DEPARTMENT



AGENDA

FOR

**23rd MEETING OF STEERING COMMITTEE OF
J&K COMPENSATORY AFFORESTATION FUND
MANAGEMENT AND PLANNING AUTHORITY
(CAMPA)**

ON

31st October 2023

UNDER

THE CHAIRMANSHIP OF

**DR. ARUN KUMAR MEHTA, IAS
CHIEF SECRETARY
JAMMU AND KASHMIR (UT)
Chairman Steering Committee CAMPA**

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Government of Jammu & Kashmir Office of the Pr. Chief Conservator of Forests & HoFF Jammu and Kashmir Forest Department



सर्वे भद्राणि कर्तव्यानि
ONE EARTH - ONE FAMILY - ONE FUTURE

Sub: 23rd meeting of Steering Committee of J&K Compensatory Afforestation Fund Management and Planning Authority (CAMPA).

MEETING NOTICE

A meeting of Steering Committee of J&K CAMPA is scheduled to be held under the chairmanship of worthy Chief Secretary, J&K Government (Chairman, Steering Committee of J&K CAMPA) on 31st October 2023 at 1.00 pm in the Meeting Hall, 3rd Floor, Civil Secretariat, Srinagar. In accordance with the provisions of Section 11(2) of the Compensatory Afforestation Fund Act 2016, the following members of the Steering Committee and special invitees are requested to kindly attend the meeting on the scheduled date, time and venue:

- I. Principal Secretary to Government, Forest, Environment & Ecology Department - Member, *ex officio*;
 - II. Principal Secretary to Government, Agriculture Production & Farmers Welfare Deptt. - Member, *ex officio*;
 - III. Principal Secretary to Government, Finance Department - Member, *ex officio*;
 - IV. Commissioner Secretary to the Government Science and Technology Department - Member, *ex officio*;
 - V. Commissioner/Secretary to Government, Rural Dev. & Panchayati Raj Department - Member, *ex officio*;
 - VI. Pr. Chief Conservator of Forests (Head of Forest Force), J&K Forest Department - Member, *ex officio*;
 - VII. DDG, Integrated Regional Office, Jammu (MoEF&CC) - Member, *ex officio*;
 - VIII. Administrative Secretary to the Government, Tribal Affairs Department - Member, *ex officio*;
 - IX. Administrative Secretary to the Government, Revenue Department - Member, *ex officio*;
 - X. Administrative Secretary to the Government, Planning & Monitoring Department - Member, *ex officio*;
 - XI. PCCF/Chief Wildlife Warden, Wildlife Protection Department - Member, *ex officio*;
 - XII. Addl. Pr. Chief Conservator of Forests (P&P)/Nodal Officer, SFDA - Member, *ex officio*;
 - XIII. Addl. Pr. Chief Conservator of Forests /Nodal Officer, FC Act 1980 - Member, *ex officio*;
 - XIV. Ch. Asif Iqbal (Advocate), expert on tribal matters - Member;
2. **Special Invitees:**
- I. Addl. Pr. Chief Conservator of Forests, Jammu
 - II. Addl. Pr. Chief Conservator of Forests, Kashmir
 - III. Chief Conservator of Forests, Settlement and Demarcation
 - IV. CFs, South, North, Srinagar, Chenab, West and East Circles
 - V. Chief Accounts Officer, PCCF's Office
3. Agenda of the meeting is enclosed.
4. The Jammu based members/special invitees shall attend the meeting from meeting hall, 2nd Floor, Civil Secretariat, Jammu.

(Asaf Mehmood Sagar) IFS
Pr. Chief Conservator of Forests/
Chief/Executive Officer J&K CAMPA
Member Secretary

No. PCCF/CAMPA/SC-23/2023-24/3635-66

Dated: 28.10.2023

Copy for information to the:

- 1) All Members of Steering Committee of CAMPA and Special Invitees as per the list given above .
- 2) Director, Estates Department, Civil Secretariat, Srinagar/Jammu for information with the request to kindly keep the Meeting Halls reserved for the said meeting on the scheduled date and time.
- 3) Principal Private Secretary to Chief Secretary, UT of J&K for kind information of the worthy Chief Secretary.
- 4) Private Secretary to PCCF (HoFF) for kind information of the Pr. Chief Conservator of Forests (HoFF), J&K Forest Department.
- 5) Divisional Forest Officers, Urban Forestry Division, Jammu/Srinagar to make necessary arrangements for the meeting.
- 6) Shri Arun Sharma, EDP, I/c ICT Forest with the request to take up the matter with incharge NIC for web link for the said meeting.

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Government of Jammu & Kashmir Office of the Pr. Chief Conservator of Forests & HoFF Jammu and Kashmir Forest Department



AGENDA NOTE

23rd Meeting of Steering Committee of Jammu and Kashmir Compensatory Afforestation Fund Management and Planning Authority (CAMPA)

Agenda Item No: 23.I

Part-I Brief History and past performance

23.I.a.1 Brief description of forests and forestry sector in UT of J&K

The Union Territory of Jammu & Kashmir is well known for its dense forests, snow clad mountains, valleys, meadows, fresh water lakes and springs. Jhelum, Chenab, Tawi and Ravi are the main rivers of the UT of Jammu and Kashmir. All principal Western Himalayan conifer and broad-leaved tree species grow in Jammu and Kashmir. Change in vegetation occurs with the change in latitude, elevation and aspect. Some of the main forest types found within the UT are as follows:

i) **Sub-Tropical Dry Deciduous Forests**

These forests are generally found in the lower Shiwalik formation of Jammu region. The common tree species of this zone are *Acacia catechu*, *Dalbergia sissoo*, *Albizia* species, *Grewia elastica*, *Bauhinia* species, *Acacia modesta*, *Terminalia* species, etc.

ii) **Sub-Tropical Pine Forests**

These forests are found in upper Shiwalik formation and outer Himalayas. The common species of this area are *Pinus roxburghii*, *Dalbergia sissoo*, *Mallotus philippinensis*, *Olea cuspidata*, *Cassia fistula*, *Dodonaea viscosa* and *Berberis*.

iii) **Himalayan Moist Temperate Forests**

These forests are found in moist temperate regions of J&K. The common species are *Cedrus deodara*, *Pinus wallichiana*, *Picea smithiana*, *Abies pindrow*, *Juglans regia* and *Quercus* species.

iv) **Himalayan Dry Temperate Forests**

These forests are found in drier aspects of temperate regions of J&K. The common tree species are *Cedrus deodara*, *Pinus wallichiana*, *Picea smithiana*, *Abies pindrow* and *Taxus baccata* with broad leaved species like *Juglans regia*, *Acer*, *Betula*, *Rhododendron*, *Parrotiopsis jacquemontiana*, *Chinar*, *Poplar* and *Willow*.

v) **Alpine Forests**

These forests are situated well above the main temperate zones. The common species in this zone are Juniper, Betula, Rhododendron and variety of wild flowers and grasses.

Total forest area of the UT of J&K is 20,19,459 ha which is 47.80 % of the total geographical area of the UT.

Territorial forest circle-wise forest area of the UT of J&K is as under:

| S.No. | Name of Circle | Area (ha) |
|----------|-----------------------------|----------------|
| A | Kashmir Region | |
| 1 | North Circle | 215019 |
| 2 | Srinagar Circle | 313940 |
| 3 | South Circle | 283877 |
| | Total Kashmir Region | 812836 |
| B | Jammu Region | |
| 4 | East Circle | 291430 |
| 5 | West Circle | 359795 |
| 6 | Chenab Circle | 555398 |
| | Total Jammu Region | 1206623 |
| | G. Total (A+B) | 2019459 |

As per the Working Plans of J&K, a total of 3535 Sq. Km of forest area is under various stages of degradation and has been recommended for rehabilitation under '**Rehabilitation/Reboisement Working Circle**'. Some of the forests which were earlier well-stocked have also degraded over a period of time and are being rehabilitated under CAMPA.

The assessment of degraded forest areas has revealed two categories of degradation forests i.e. 'highly degraded' and 'degraded' forests (totaling 2150 sq. km) in the UT of Jammu and Kashmir, which is 10.65% of recorded forests. The department shall be treating the 'highly degraded' forest area (1161 sq. km) and 'degraded' forest area (989 sq. km) to restore the ecological function of the forests.

In 1996, Hon'ble Supreme Court imposed a complete ban on felling of green trees from forests of Jammu and Kashmir. In compliance to the directives of the Hon'ble Supreme Court, an expert committee (Qualitative and Quantitative Norms Committee) was constituted by the department. The committee recommended 67.09 Lakh cft + 20% as availability of dry and fallen timber per annum, which can be extracted from forests of J&K. Thus, the department is mainly focused on rehabilitation of degraded forests through assisted natural regeneration and artificial regeneration by employing different plantation models. Owing to mountainous terrain of the UT, it is also necessary to carry out soil and moisture conservation measures.

Main drivers of degradation of forests in J&K

The forests of J&K are under tremendous pressure to meet increasing demands for fodder, grazing, small timber and other forest produce due to rapid increase in human and livestock population. The human population of J&K has increased from about 1.01 crore in 2001 to 1.25 crore in 2011, recording a decadal growth of 23.71%. Moreover, rearing of livestock, particularly in upper reaches of J&K, contributes significantly to the local economy. The UT has a high density of livestock population, which is estimated to be 0.93 Crore including Ladakh, as per 2012 census. A large part of this population is mainly dependent on forests for grazing, especially the livestock with nomadic population. As per an assessment, the grazing intensity in forests is much higher than the permissible level. Due to continuous unrestricted grazing, some of the forests of J&K have become deficient in natural regeneration. Therefore, fencing is essential to protect the forest areas taken up for rehabilitation and restocking under different interventions and such areas need total protection from grazing till they get established.

Management of Protected areas

The UT of Jammu and Kashmir has immense diversity of flora and fauna. During the Rule of Maharaja, a number of areas were kept as Shikargahs or Rakhs for hunting. With the enactment of Jammu and Kashmir Wildlife Protection Act 1978, conservation efforts were legalized by declaring National Parks, Sanctuaries and Game Reserves by the Government. The erstwhile Jammu & Kashmir Wildlife Protection Act 1978 was amended in the year 2002 and brought at par with Indian Wildlife Act. With the enactment of Jammu & Kashmir Reorganization Act, 2019, the Central Act i.e., Indian Wildlife Act 1972 has become applicable to Jammu and Kashmir w.e.f. 31st Oct, 2019.

At present, the Jammu & Kashmir Wildlife Department is undertaking wildlife management and conservation activities in 3 National Parks, 14 Wildlife Sanctuaries and 30 Conservation Reserves, which includes 14 Wetland Conservation Reserves. The area under wildlife protection network in UT of J&K is 4898.34 Sq. kms, which is 11.8% of geographical area (within LOC) of UT of J&K.

With the increase in human and livestock population as well as increasing developmental activities, forest as well as wildlife areas have come under

tremendous pressure. This has resulted in increase in human-animal conflict. The department has to undertake various protection and conservation activities for the wildlife management in these areas and address the issues of human-animal conflict resolution, both inside and outside Protected Areas.

23.I.a.2. Jammu and Kashmir Compensatory Afforestation Fund Management and Planning Authority (J&K CAMPA)

Transfer of forest land for non-forest purposes is being regulated since 31 October 2019 under the Forest (Conservation) Act 1980; prior to that it was regulated under the Jammu and Kashmir Forest (Conservation) Act, 1997. User agencies are required to pay cost of Compensatory Afforestation in lieu of the forest land diverted for non-forest purposes. Besides, the value of ecosystem goods and services of forests, termed 'Net Present Value' or NPV is charged from user agencies. In respect of diversion of lands in Protected Areas, additional charges, as recommended by the National Wildlife Board, are levied from the user agencies.

In accordance with the guidelines issued by *ad hoc* CAMPA, MoEF&CC on 2.7.2009, J&K CAMPA was set up vide SRO-354 dated 11.11.2009. The execution of CAMPA works in J&K started from the year 2010-11.

Later, based on the orders and directions of Hon'ble Supreme Court in the T.N. Godavarman Thirumulpad vs. Union of India and Others [Writ Petition (Civil) No. 202 of 1995] dated the 30 October 2002, the Compensatory Afforestation Fund (CAF) Act, 2016 was notified by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India on 03.08.2016 and the CAF Rules, 2018 were notified on 10.8.2018; and both came into force with effect from 30.9.2018 in the whole of India except the erstwhile State of Jammu and Kashmir.

With coming into force of the CAF Act 2016, *ad hoc* CAMPA was dissolved and National Compensatory Afforestation Fund Management and Planning Authority (National Authority) was constituted.

In order to bring J&K CAMPA rules in consonance with the CAF Act 2016 and the CAF Rules 2018, the Jammu and Kashmir Compensatory Afforestation Fund (J&K CAF) Rules, 2018, incorporating relevant provisions of the both, with some state specific modifications, were framed. These rules were notified vide SRO-628 dated 24 December 2018.

Subsequent to reorganization of the State of J&K into the UTs of J&K and Ladakh, these rules were replaced with the CAF Act 2016 and the CAF Rules 2018 with effect from 31 October 2019.

Besides, the MoEF&CC has also notified Compensatory Afforestation Fund (Accounting Procedure) Rules, 2018 vide Notification No.GSR-1133 (E) dated 20 November 2018 (under the CAF Act 2016) which are also applicable to the UT of J&K with effect from 31 October 2019.

Consequent upon extension of the CAF Act 2016 and the rules made thereunder to the UT of J&K, the Central Government has notified establishment of J&K Compensatory Afforestation Fund Management and Planning Authority (State Authority) and Ladakh Compensatory Afforestation Fund Management and Planning Authority in terms of Section-10 of the CAF Act, 2016, vide Notification dated 8 January 2020.

Further, in terms of Section-4 of the CAF Act 2016, the Union Territory of J&K has notified establishment of State Fund (Compensatory Afforestation Fund) under its interest-bearing public account vide Notification dated 29 November 2019.

Till coming into force of the CAF Act 2016 and the CAF Rules 2018, the NPV amount received by J&K CAMPA from user agencies used to be transferred to *ad hoc* CAMPA, which in turn used to release money equivalent to 10% of the principal amount lying to the credit of J&K CAMPA with that Authority for execution of works as per Annual Plan of Operations.

Since notification of the State Fund under public account, the money received from user agencies in lieu of diversion of forest lands for non-forest purpose under the Forest (Conservation) Act, 1980 and the money received from the National Authority are being deposited in the said public account. CAMPA expenditure is also being incurred from the said account.

Constitution of National Authority and State Authorities

The National Authority has been constituted to manage and utilize the National Fund for the purpose of the CAF Act, 2016. The National Authority consists of a governing body headed by Minister for Environment, Forest and Climate Change, GOI, and is assisted by an executive committee, monitoring group and support mechanism. The executive committee of the National Authority is headed by the Director General of Forests and Special Secretary, MOEF&CC, GOI.

The State Authority consists of a government body and is assisted by a steering committee and an executive committee. The Governing body is headed by the Chief Minister (or Lt Governor for the UT of J&K during the President's rule) and Ministers/officers as ex-officio members, and Principal Secretary (Forest) as Member Secretary (Composition: Section 10 (5) of the CAF Act 2016)

Governing body is assisted by the following committees:

- a. The Steering Committee headed by Chief Secretary with official (ex-officio) members from various departments, and one non-official member – an expert on tribal matters/representative of tribal communities (Composition: Section 11 (2) of the CAF Act 2016)
- b. The Executive Committee headed by the PCCF with official (ex officio) members from various departments and following non-official members (Composition: Section 11 (3) of the CAF Act 2016): two eminent NGOs, two representatives of district level Panchayati Raj Institutions, and one expert on tribal matters /representative of tribal communities

Utilization of monies in the State Fund

Procedure for utilization of funds

- **Compensatory Afforestation (CA) money**
In respect of monies received from user agencies for Compensatory Afforestation (CA) including additional & penal CA, funds are utilized as per the project-wise CA amount received and approved CA plan.
- **Procedure for utilization of Net Present Value (NPV) money for Forest & Wildlife Management**
 - I. As per the CAF Rules, 2018, **not less than 80% of the NPV money** is used for the forest and wildlife management activities covered under Rule 5 (2). The forest and wildlife management component includes assisted natural regeneration and artificial regeneration, silvicultural operations, protection and maintenance of plantations and forests, pest and disease control in forest, forest fire prevention and control operations, soil conservation works in forests, improvement of wildlife habitat, management of rescue center for wild animals and management of biological diversity & biological resources.
 - II. **Not more than 20% of the NPV money** is utilized for forest and wildlife related infrastructure and capacity building activities listed under Rule 5 (3) of the CAF Rules, 2018. The activities include purchase and maintenance of equipment or devices used for communication and information technology; construction, up-gradation and maintenance of

inspection paths, forest roads, fire lines, watch towers, check posts and timber depots; construction of residential and official buildings in forests for frontline staff (Range Officer and below); casual engagement of local people or labours to assist the regular staff for works for protection of forests and wildlife; independent monitoring and evaluation including third party monitoring; publicity and awareness of CAMPA programmes/schemes; survey and mapping for preparation of APO, and capacity building of front-line staff.

- **Site Specific – Integrated Wildlife Management Plan in respect of monies received from diversion of forest lands in Protected Areas (National Parks, Wildlife Sanctuaries)**

Wildlife Protection Department utilizes funds for wildlife conservation and related infrastructure development and capacity building in accordance with the site-specific plan approved at the time of diversion of land in Protected Areas.

- **Procedure for utilization of interest money**

Rule- 6 of CAF Rules, 2018 provide for manner in which interest accrued on the deposits in the State Fund shall be utilised. Rule 6 (a) provides that not less than 60% of the accrued interest shall be utilised on forest and wildlife conservation activities and for meeting salary and allowances of regular and contractual staff of CAMPA. Rule 6 (b) provides that not more than 40% of the interest on deposits in the State Fund shall be spent for meeting the non-recurring and recurring expenditure of the State Authority on management of office expenses, purchase of office equipment, hiring of staff car and other contingency.

23.I.b Compensatory afforestation, other forestry and related schemes (physical and financial) including catchment area treatment, wildlife management and community developed works and activities carried out thereunder in J&K utilizing CAMPA Fund.

(i) Expenditure under CAMPA

A total expenditure of Rs 1067.74 Crore has been incurred in last 13 years (from 2010-11 to end of March 2023), which includes ₹ 875.57 Crore by the Forest and allied Departments and ₹ 192.17 Crore by Wildlife Protection Department. During FY 2022-23, against the total approved outlay of ₹ 312.69 Crore, the total expenditure ending March 2023 was ₹ 177.43 Crore.

**Year-wise expenditure incurred under CAMPA by J&K Forest & Allied Departments
and Wildlife Protection Department**

(₹ In lakh)

| S.No. | Year | Expenditure | | Total |
|-------|--------------|----------------------------|--------------------------------|------------------|
| | | Forest & Allied Department | Wildlife Protection Department | |
| 1 | 2010-11 | 1875.00 | 13.97 | 1888.97 |
| 2 | 2011-12 | 3692.00 | 85.97 | 3777.97 |
| 3 | 2012-13 | 3803.00 | 377.15 | 4180.15 |
| 4 | 2013-14 | 5901.00 | 618.88 | 6519.88 |
| 5 | 2014-15 | 5204.00 | 1319.35 | 6523.35 |
| 6 | 2015-16 | 4578.00 | 417.34 | 4995.34 |
| 7 | 2016-17 | 5208.00 | 971.63 | 6179.63 |
| 8 | 2017-18 | 8734.00 | 3090.86 | 11824.86 |
| 9 | 2018-19 | 5558.41 | 2195.73 | 7754.14 |
| 10 | 2019-20 | 7420.27 | 3931.07 | 11351.34 |
| 11 | 2020-21 | 9667.22 | 1601.00 | 11261.00 |
| 12 | 2021-22 | 10566.59 | 2207.45 | 12774.05 |
| 13 | 2022-23 | 15363.57 | 2386.00 | 17743.00 |
| | Total | 87571.06 | 19216.4 | 106773.68 |

(ii) Physical achievements under CAMPA

CAMPA is playing a key role in rehabilitation of degraded forests of J&K. The year wise physical achievements during the period of implementation of J&K CAMPA from 2010-11 to 2022-23 are as shown in the following tabular statement.

| S. No. | Year | Component | | | | | | | Demarcation work (No. of Boundary Pillars installed) |
|--------|--------------|-------------------------------|--------------------------|-----------------------------------|-----------------------|-------------------------|--------------------|---------------------------|---|
| | | Area Treated (In Hectares) | Fencing (In lakh rft) | Plant Production (No. in lakh) | Planting (in lakh) | Soil Conservation Works | | | |
| | | | | | | DRSM (In Cum) | Crates (In Nos) | WHS/ Ponds (In Nos) | |
| 1 | 2010-11 | 2885 | 9.10 | 45.44 | 18.30 | 21996 | 0 | 0 | 0 |
| 2 | 2011-12 | 5196 | 15.29 | 55.36 | 37.31 | 27315 | 0 | 0 | 890 |
| 3 | 2012-13 | 5153 | 15.43 | 41.06 | 47.80 | 28206 | 0 | 0 | 1978 |
| 4 | 2013-14 | 7612 | 24.91 | 61.80 | 54.52 | 35290 | 991 | 0 | 4075 |
| 5 | 2014-15 | 5396 | 16.13 | 86.92 | 35.51 | 27726 | 279 | 0 | 5007 |
| 6 | 2015-16 | 5158 | 18.01 | 60.20 | 44.57 | 17587 | 704 | 0 | 3573 |
| 7 | 2016-17 | 4637 | 15.25 | 85.66 | 30.39 | 18680 | 436 | 0 | 3129 |
| 8 | 2017-18 | 5076 | 18.86 | 50.84 | 31.93 | 6659 | 459 | 0 | 12064 |
| 9 | 2018-19 | 4276 | 17.15 | 30.87 | 30.88 | 2478 | 187 | 7 | 3542 |
| 10 | 2019-20 | 6636 | 23.14 | 55.36 | 37.06 | 13679 | 1204 | 21 | 2879 |
| 11 | 2020-21 | 12474 | 40.58 | 79.82 | 67.78 | 48330 | 2293 | 132 | 7176 |
| 12 | 2021-22 | 9495 | 34.26 | 65.05 | 60.05 | 32227 | 2701 | 383 | 9669 |
| 13 | 2022-23 | 12349 | 47.46 | 107.66 | 68.53 | 89235 | 5483 | 417 | 12105 |
| | Total | 86343 | 295.57 | 826.04 | 564.63 | 369408 | 14737 | 960 | 66087 |

In addition, infrastructure for front line staff which includes 42 Range Offices, 56 Block Offices, 22 Check Posts, 48 Guard Huts, 12 Chowkidar Huts and 17 Inspection Huts have been constructed from CAMPA fund during 2010-11 to 2022-23.

23.I.c Forestry and other related schemes (physical and financial) and activities carried out there under in J&K in previous years utilizing the funds received under other schemes of the Government.

Statement showing physical & financial achievements under CAPEX, District Sector and NAP schemes during the last five years i.e., 2016-17 to 2022-23 is as under:

| S.No. | Year | Allocation (₹ in lakh) | Financial achievement (₹ in lakh) | Physical Achievements | |
|---------------------------|--------------|---------------------------|---|-----------------------|-----------------------------|
| | | | | Area (In ha.) | Plantation (In lakh Nos) |
| 1. CAPEX | | | | | |
| 1 | 2016-17 | 705.00 | 699.66 | 918 | 7.84 |
| 2 | 2017-18 | 975.00 | 951.92 | 777 | 6.77 |
| 3 | 2018-19 | 894.00 | 719.49 | 847 | 6.28 |
| 4 | 2019-20 | 632.00 | 454.41 | 717 | 5.00 |
| 5 | 2020-21 | 1467.00 | 1157.95 | 919 | 8.63 |
| 6 | 2021-22 | 1700.00 | 1174.18 | 488 | 12.50 |
| 7 | 2022-23 | 2500.00 | 387.36 | 465 | 10.31 |
| | Total | 8873.00 | 5544.97 | 5131 | 57.33 |
| 2. District Sector | | | | | |
| 1 | 2016-17 | 308.42 | 293.15 | 825.00 | 4.33 |
| 2 | 2017-18 | 299.90 | 278.35 | 825.00 | 4.33 |
| 3 | 2018-19 | 308.56 | 287.20 | 557.00 | 2.30 |
| 4 | 2019-20 | 223.55 | 198.76 | 469.00 | 2.45 |
| 5 | 2020-21 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | 2021-22 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | 2022-23 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total | 1140.43 | 1057.46 | 2676 | 13.41 |
| 3. NAP | | | | | |
| 1 | 2016-17 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 2017-18 | 782.35 | 159.14 | 2894.00 | 0.00 |
| 3 | 2018-19 | | 466.30 | 3509.00 | 6.08 |
| 4 | 2019-20 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 2020-21 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | 2021-22 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | 2022-23 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Total | 782.35 | 625.44 | 6403 | 6.08 |
| 4. GIM | | | | | |
| 1 | 2016-17 | 0 | 0 | 0 | 0 |
| 2 | 2017-18 | 0 | 0 | 0 | 0 |
| 3 | 2018-19 | 0 | 0 | 0 | 0 |
| 4 | 2019-20 | 0 | 0 | 0 | 0 |
| 5 | 2020-21 | 0 | 0 | 0 | 0 |
| 6 | 2021-22 | 2605.50 | 1368.315 | 2386 | 4.40 |
| 7 | 2022-23 | | 463.01 | 357 | 3.10 |
| | Total | 2605.50 | 1831.325 | 2743 | 7.50 |

23.I.d&e Year-wise total forest area diverted and compensatory afforestation carried out in various forest divisions of the UT of Jammu and Kashmir

A total of 13903 ha of forest land have been diverted for non-forest purposes during the period from 1990 till 30 October 2019 under J&K Forest (Conservation) Act, 1997. Further, in-principle (Stage-I) approval for diversion of a total of 1374.69 ha has been granted (ending March 2023) under the Forest (Conservation) Act 1980 after its coming into force in the UT of J&K w.e.f. 31 October 2019. Out of this, final (Stage-II) approval has been accorded for 266.86 ha. The Forest Department is required to carry out afforestation over equivalent non-forest land or treat double in extent the degraded forest areas, as per the approval condition in each case. As per records, non-forest land has not been made available for compensatory afforestation so far, except in case of hydroelectric projects of Ujh and Shahpur Kandi, which has received only Stage-I approval as yet. Hence compensatory afforestation is carried out on degraded forest lands, twice in extent of the land diverted. Thus, against the target of **30,555.38 ha (double the diverted area of 15277.69 ha)**, a total of **86,001 ha** area of degraded forests has been rehabilitated till 31 March 2023 with planting of **564.60** lakh plants.

Year-wise total forest area diverted and compensatory afforestation carried out in the UT of Jammu and Kashmir, since inception of CAMPA, is as under:

| Year | Forest land diverted (in ha) | Area Treated (in Ha) | Plants planted (in lakh) |
|--------------|------------------------------|----------------------|--------------------------|
| 1990-2010 | 8696.04 | - | - |
| 2010-11 | 696.12 | 2885 | 18.30 |
| 2011-12 | 252.65 | 5196 | 37.31 |
| 2012-13 | 437.30 | 5153 | 47.80 |
| 2013-14 | 594.73 | 7612 | 54.52 |
| 2014-15 | 132.02 | 5396 | 35.51 |
| 2015-16 | 717.78 | 5158 | 44.57 |
| 2016-17 | 568.92 | 4637 | 30.39 |
| 2017-18 | 419.65 | 5076 | 31.93 |
| 2018-19 | 568.17 | 4276 | 30.88 |
| 2019-20 | 794.33 | 6636 | 37.06 |
| 2020-21 | 884.13 | 12474 | 67.78 |
| 2021-22 | 298.87 | 9495 | 60.05 |
| 2022-23 | 216.98 | 12007 | 68.50 |
| Total | 15277.69 | 86001 | 564.60 |

23.I.f Brief description and abstract of the monitoring work done by the Monitoring and Evaluation Wing of the State Forest Department

As per the CAMPA guidelines issued in pursuance of SRO 354 dated 11.11.2019, and vide CAMPA Secretariat Order No.639/FORESTS dated 13.11.2019, the following norms have been fixed for internal verification and inspection of works at field level by the field functionaries: Forester-100%; Range Officer-at least 80%; Divisional Forest Officer-at least 50%; Conservator of Forests-at least 20%; Chief Conservator of Forests-at least 10%. The internal monitoring report for FY 2022-23 is being compiled.

Besides, CAMPA works of the period 2013-14 to 2017-18 were monitored by the specifically constituted committees of senior officers, in pursuance of the State Administrative Council's (SAC's) decision No.4/1/2018 dated 28.06.2018 and the report stands submitted to the SAC.

Details of works executed under CAMPA in public domain in order to promote transparency:

The works executed under CAMPA have been placed on the website of the Forest Department. Besides, a total of 6500 coordinates/polygons of works executed under CAMPA have been placed on the e-green watch portal of MOEF&CC, a link of which has also been given on the website of the J&K Forest Department (www.jkforest.gov.in).

23.I.g Brief description and abstract of the monitoring work done by the independent monitor (Third Party Monitoring) in the UT.

The independent third-party monitoring of CAMPA works for the period 2012-13 to 2018-19, separately for Jammu and Kashmir regions, have been carried out by M/s N.H Consultancy Pvt. Ltd. and the reports have been placed before the Executive and the Steering Committees of CAMPA. Overall survival of 50.05% for Jammu region and 51.84% for Kashmir region, for the said period, have been reported by the agency.

Further, AFC India Ltd. carried out third-party monitoring of CAMPA works executed during FY 2019-20, 2020-21 and 2021-22. A minimum of 30% of all works of each financial year of each implementing agency were evaluated by the Agency.

The agency carried out field evaluation on 851 randomly selected plantation sites and 89 infrastructure works, and has submitted its final report. As per the report, the overall survival is 62.70% (65.40% in Kashmir region and 60.0% in

Jammu region) for the period 2019-20 to 2021-22. The works on intervention sites (fencing, soil and moisture conservation, patch sowing/dibbling) have led to augmentation of natural regeneration, improvement in soil moisture and rejuvenation of water sources, and increased availability of fodder/grass. The overall impact, in terms of availability of number of plants at intervention sites, including natural regeneration and planted saplings that survived, have been rated by the agency as “**very good**”.

The initial report of the agency was placed before the Steering Committee in its 22nd meeting held on 23.01.2023. The agency submitted its final report for the said period after 22nd meeting of the Steering Committee, which is now placed before the Steering Committee for kind information.

Further, for the third-party monitoring of CAMPA works executed during FY 2022-23, process has been initiated. RFP has been invited and the assignment shall be given to the successful bidder after completing the entire process.

23.I.h Fund Position of CAMPA (State Fund)

The State Fund was established in public account of J&K Government vide Notification dated 29 November 2019. Prior to that, the CAMPA fund was maintained in J&K Bank. With establishment of State Fund in public account, the balance CAMPA money available in the J&K bank account (**a total of ₹ 370.75 Crore**) was credited to the State Fund. Further, *ad hoc* CAMPA (Now National Authority) has transferred back share of UT of J&K amounting to ₹ **408.35 Crore** vide their communication dated 07.02.2020 and ₹ **356.20 Crore** vide communication dated 01.10.2020 to J&K Government. Besides, ₹ **114.37 Crore** have been received in the State Fund from various user agencies towards pending compensatory levies.

Thus, the total money deposited in the State Fund as on **31 March 2023 is ₹ 1249.66 Crore** (yet to be reconciled with the Finance Department).

After debiting of expenditure incurred during FY 2020-21, FY 2021-22 and FY 2022-23 on implementation of CAMPA APOs, and crediting (deemed) accrual of interest on the balance fund, a total of ₹ **930.32 Crore** is estimated to available in the State Fund. The Finance Department has been requested to reconcile the figures and share the updated status of the State Fund including interest.

Further, payment towards compensatory levies in respect of proposals approved under the Forest (Conservation) Act 1980 (since extension of the Act to UT of J&K w.e.f. 31 October 2019) is being received online through PARIVESH portal,

which is getting credited into the account of the National Authority, MoEF&CC, maintained in Union Bank of India. A total of ₹ 97.49 Crore has been received in that account by the end of August 2023. 90% of this amount is share of the UT of J&K, which is yet to be received in the State Fund.

23.I.i Audit of CAMPA accounts

A CAG empanelled Chartered Accountancy firm, M/s GK Sureka & Co., was hired w.e.f. 24 January 2020 for financial audit of CAMPA accounts of headquarter and all Implementing Agencies (IAs) for the period 2010-11 to 2019-20 (except for the period 2014-15, which was already audited by another CA firm). Progress of the audit was slow due to disruptions caused by COVID-19 pandemic. Moreover, since the audit involved large number of implementing agencies and a long period of ten years, the compilation of report took time. The reports of the agency for the said period have been approved by the Executive and the Steering Committees in their meetings held on September 28, 2022 and January 23, 2023 respectively and the same was submitted to the Principal Accountant General, (Audit) J&K, Jammu vide communication dated March 31, 2023.

23.I.j Annual Report

In accordance with rule-38 of the Compensatory Afforestation Fund Rules 2018, J&K CAMPA is required to prepare the annual report giving brief description of all activities and summary of works undertaken in accordance with approved Annual Plan of Operations (APOs) from the State Fund. Accordingly, CAMPA Secretariat has prepared Annual Reports, based on inputs received from implementing agencies, for the financial years 2019-20, 2020-21 and 2021-22. The reports have been approved by the Executive and the Steering Committees in their meetings held on September 28, 2022 and January 23, 2023 respectively. Preparation of Annual Report for FY 2022-23 is under process.

23.I.k CAMPA Meetings

32 meetings of Executive Committee, 22 meetings of Steering Committee and 2 meetings of Governing Body of CAMPA have been held till date. The last meetings of Executive and Steering Committees of CAMPA were held on 04.10.2023 and 23.01.2023 to consider and approve additional APO for FY 2023-24 and APO for FY 2023-24 respectively.

After approval of APO 2023-24 by the Executive and Steering Committees in the said meetings, the APO was submitted to the National Authority, Ministry of Environment, Forest & Climate Change, Government of India for final approval.

Subsequently, the Executive Committee of National Authority discussed APO 2023-24 of J&K CAMPA in its meeting held 02.02.2023 and conveyed approval of the APO totalling to ₹ 272.65 Crore vide its communication dated 21 March 2023.

During the current financial year, two meetings of Executive Committee of CAMPA have been held – one on 25 July 2023 and the other on 4 October 2023. In the 31st meeting of the Executive Committee of CAMPA held on 25 July 2023, implementation of the approved APO for FY 2022-23 was reviewed and the supplementary APO for FY 2023-24 for a total amount of ₹ 14.88 Crore to clear the liabilities/spill over works against the approved APO of FY 2022-23 was considered and recommended for approval. The minutes of the meeting are placed at **Annexure-A**.

In the 32nd meeting of the Executive Committee of CAMPA held on 4 October 2023, implementation of the approved APO for 2023-24 was reviewed and the proposed additional APO for 2023-24 was discussed. The committee recommended the additional APO 2023-24 for approval of the Steering Committee of CAMPA. The minutes of the meeting are placed at **Annexure-B**.

23.I.L Implementation of APO in 2023-24

APO 2023-24 is being implemented in accordance with approval accorded by the National Authority and in consonance with the CAF Act 2016 and the CAF Rules 2018. All Implementing Agencies were directed vide communication dated 04.03.2023 to immediately start according AA/TS, floating of tenders of works and awarding contracts. They were directed to ensure that fencing and planting works in Monsoon zone were carried out well in time to achieve the targets. Besides, the implementing agencies have been directed to ensure execution of all activities that are not dependent on soil & moisture/weather conditions from the beginning of the financial year so that the targets are achieved.

An indicative timeline given to implementing agencies for execution of APO 2023-24 is as follows.

- a) Accord of Administrative Approval/Technical Sanction for all works in the APOs by the Competent Authority latest by 30 April 2023.
- b) Floating of Tenders latest by 15 May 2023.
- c) Evaluation of bids and award of contract by 15 June 2023.
- d) Completion of all fencing works by 15 July 2023.

- e) Completion of monsoon planting by end of August 2023.
- f) Completion of Autumn/Winter Planting by 31 December 2023 (subject to favorable soil-moisture and weather conditions).
- g) Completion of infrastructure works by end of February 2024. Efforts shall be made to get these works completed by end of December 2023.

The IAs have also been directed to adhere to the conditions of approval imposed by National Authority, such as consultation with Panchayats before starting the works and uploading of coordinates/polygons and relevant details of works on e-green watch portal. Funds under various heads totaling **₹ 59.79 Crore and ₹ 87.87 Crore** have been released by the Administrative Department (Forest) vide order dated 06.04.2023 and 27.07.2023 respectively, which have been further transferred to IAs for execution of approved APOs.

APO 2023-24, 5496 works accorded TS/AA for amount of ₹ 22753.76 Lakh, 4286 works (cost of each work exceeding ₹ 1.00 lakh) have been tendered against an amount of ₹ 19031.85 Lakh and for 4182 works (against an amount of ₹ 15177.44 Lakh) contracts stand accorded as on date. Remaining tenders are being finalized. Fencing, planting, low-cost interventions and silvicultural operations in monsoon zone have been completed.

| Name of Division | Total no. of Works (No.) | No. of works for which AA/TS accorded | Works Requiring Tendering (No.) | No. of works Tendered | No. of Works allotted and started as on date (No.) | Allotted cost of the tendered works in lakhs |
|--------------------------------------|--------------------------|---------------------------------------|---------------------------------|-----------------------|--|--|
| IAs of CCF Jammu | 3025 | 3020 | 2677 | 2654 | 2589 | 6225.38 |
| IAs of CCF Kashmir | 501 | 495 | 450 | 447 | 430 | 3629.75 |
| IAs of NT Divisions | 226 | 223 | 120 | 116 | 116 | 834.78 |
| Social Forestry Department | 936 | 913 | 387 | 380 | 380 | 1108.90 |
| Forest Protection Force | 45 | 44 | 21 | 20 | 20 | 386.17 |
| Soil & Water Conservation Department | 350 | 350 | 289 | 257 | 235 | 1552.80 |
| JK Forest Research Institute | 45 | 45 | 33 | 32 | 32 | 178.75 |
| Wildlife Protection Department | 429 | 406 | 380 | 380 | 380 | 1260.91 |
| Grand Total | 5557 | 5496 | 4406 | 4286 | 4182 | 15177.44 |

- The above given information has been taken from google sheet.

Financial/physical achievements against approved APO 2023-24 (as on date)

(a) Financial

(₹ in Lakh)

| S.No | Name of the Department | Approved Outlay | Funds released to IAs | Expenditure | Bills pending in treasury | Works executed but bills yet to be raised | Total expenditure booked/to be booked |
|------|--------------------------------------|-----------------|-----------------------|----------------|---------------------------|---|---------------------------------------|
| 1 | JK Forest Department (T) | | | | | | |
| A | CCF Jammu | 9310.80 | 5084.29 | 1192.33 | 147.71 | 978.86 | 2318.90 |
| B | CCF Kashmir | 5466.58 | 2874.98 | 581.89 | 67.87 | 602.08 | 1251.84 |
| C | Agrostology Circle | 399.36 | 216.50 | 194.03 | 0.00 | 23.00 | 217.03 |
| D | Central Circle | 85.57 | 42.09 | 8.88 | 2.62 | 2.32 | 13.82 |
| E | Settlement and Demarcation | 708.28 | 375.00 | 124.08 | 0.00 | 26.16 | 150.24 |
| F | Working Plan Circle | 194.50 | 69.02 | 39.17 | 11.61 | 0.00 | 50.78 |
| G | CAMPA/CAO/FCA | 1282.41 | 87.67 | 87.67 | 0.00 | 6.00 | 93.67 |
| 2 | Social Forestry Department | 2419.51 | 1348.74 | 448.17 | 94.20 | 612.64 | 1155.01 |
| 3 | Soil Conservation Department | 2583.38 | 1388.09 | 254.45 | 52.00 | 250.00 | 556.45 |
| 4 | J&K Forest Research Institute | 251.70 | 143.36 | 20.12 | 0.00 | 0.00 | 20.12 |
| 5 | Forest Protection Force | 251.50 | 140.00 | 23.18 | 0.00 | 0.00 | 23.18 |
| 6 | Ecology Env. & Remote Sensing Deptt. | 60.00 | 41.00 | 2.92 | 0.00 | 0.00 | 2.92 |
| 7 | WUCMA | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Wildlife Protection Department | 4251.32 | 1941.28 | 332.94 | 0.00 | 119.35 | 452.29 |
| | Grand Total | 27265.00 | 13752.02 | 3309.83 | 376.01 | 2620.41 | 6306.25 |

- The above given information has been taken from google sheet.

(b) Physical achievements for FY 2023-24:

| S.No. | Component | Targets FY2023-24 | Achievements (as on date) |
|-------|--|-------------------|---------------------------|
| 1 | Area to be Treated (In Hectares) | 13719 | 5509 |
| 2 | Planting/Sowing | | |
| (i) | No. of plants/BUC (in lakh nos) | 89.89 | 21.20 |
| (ii) | Patch Sowing (in lakh nos) | 45.11 | 17.50 |
| (iii) | Dibbling (in lakh nos) | 6.83 | 1.00 |
| (iv) | Seed balls (in lakh nos) | 18.54 | 11.50 |
| 3 | Soil Conservation Works | | |
| (i) | DRSM works (In Cubic Meter) | 100805 | 25944 |
| (ii) | Crates (In Nos) | 6022 | 2122 |
| (iii) | WHS/Ponds (In Nos) | 484 | 153 |
| 4 | Demarcation work (No. of Boundary Pillars to be installed) | 25580 | 9334 |

- The above given information has been taken from google sheet.

The progress of implementation of APO 2023-24 is being reviewed, from time to time, in the meetings held under the chairmanship of Principal Secretary to Government (Forests) on monthly basis and Pr. Chief Conservator of Forests & HoFF, J&K on weekly basis.

23.1.m Decisions taken in the 22nd meeting of Steering Committee of CAMPA

The 22nd meeting of Steering Committee held on 23 January 2023, while approving the APOs of current financial year i.e. 2023-24, gave certain directions to the Department. The agenda point-wise discussion and observations/directions of the Committee and Action Taken Report are summarized as under:

| S.No | Agenda item | Observations/directions | Action Taken |
|------|---|--|---|
| | Agenda item No. 22.I Brief History and past performance | | |
| 1. | The Committee was apprised about the status of forests, extent of area under degraded/highly degraded forests, physical and financial achievements under CAMPA since inception (2010-11 to 2021-22), internal and third-party monitoring works and CAMPA fund position. | <p>The Committee took note.</p> <ul style="list-style-type: none"> The Committee directed that highly degraded forests should be prioritised for treatment. The Committee directed that the time-series change matrix showing data of forest cover and density should be prepared to show the impact of treatment carried out under CAMPA, which should be presented before the committee in the next meeting. | <ul style="list-style-type: none"> As directed by the committee, priority is being given to highly degraded forests for treatment. Under CA and NPV, Forest areas with less than 40% canopy density are classified as degraded forests and such areas have also been taken for rehabilitation under CAMPA. <p><u>The Time-Series Change Matrix</u></p> <ul style="list-style-type: none"> Such type of exercise is being attempted for the first time at national level and its SOP is not yet standardised. The matter has been taken up with department of Environment, Ecology, and Remote Sensing (DEERS) for providing technical advice to accomplish this task. It would involve procurement of satellite imageries for areas where small forest patches have been treated under CAMPA and request has been made to DEERS to advise on the technical viability of the exercise and its financial implications. Meanwhile Photo Interpretation Division of Forest department has been carrying out the impact analysis of treated areas based on the visual interpretation of Google Earth, till the "time series change matrix" methodology is finally adopted. |
| 2. | The Committee was apprised about completion of the Statutory Audit of CAMPA accounts for the period 2010-11 to 2019-20 by the CA Firms. | The Committee took note that the statutory audit of CAMPA accounts, which was pending for long, is complete now, and approved the reports for submission to the office of Accountant General, J&K. | The audit shall be got completed for remaining financial years and process is under way. |

| S.No | Agenda item | Observations/directions | Action Taken |
|------|---|---|--|
| 3. | The Annual Reports of CAMPA for FY 2019-20, 2020-21 and 2021-22 were presented before the Committee for approval. | The Committee approved the Annual Reports. | The Annual Report for the year 2022-23 is being prepared. The same shall be ready very soon and shall be placed in the next meeting of S.C of J&K CAMPA |
| 4. | Regarding the status of implementation of APO 2022-23, it was informed that against the afforestation target of 15000 ha, 8108 ha with 59.70 lakh plants have been covered. Winter planting in temperate zone is in progress and targets for the year are likely to be achieved in full. | The Committee took note of the physical and financial progress of implementation, and expressed satisfaction. | During 2022-23 against the afforestation target of 15277 ha, 12349 ha area had been treated with planting of 68.53 lakh plants. Some of the unexecuted targets are now being taken up during current financial year after getting approval of National Executive Committee. |
| 5. | The Committee was apprised about the implementation of the decisions of the last meeting of the Steering Committee including eco-restoration of vulnerable areas around Patnitop-Nathatop road and DKG (Rajouri). The efforts made towards preparation of scientific and output oriented APO 2023-24 through J&K CAMPA Portal were explained. | The Committee took note and appreciated the efforts of J&K CAMPA Secretariat in development of its own Portal which facilitates online preparation of APO, scrutiny at senior levels, reporting of progress and time-series monitoring of the status of closures through KML files and photographs. | <p>(5) 1</p> <ul style="list-style-type: none"> Natha-Top-Patnitop areas are ecologically fragile and have undergone degradation due to heavy grazing and other types of biotic interference. Both these areas form catchments of River Chenab and River Tawi. Eco-restoration has been taken up under CAMPA funding over 602 hectare degraded area by fencing the area to ward off biotic interference, followed by planting, patch sowing, tending of natural rootstocks, soil and moisture Conservation to ecologically restore these catchments. During current year fencing of entire 602 hectare has been completed and other interventions shall start from current winter season. 17 lakh plants shall be planted in next 02 years and the project shall be continued for 10 years till area is fully restored ecologically. <p>(5) 2</p> <ul style="list-style-type: none"> DKG- Rajouri is another ecologically fragile catchment which has undergone degradation due to heavy grazing pressure and absence of natural regeneration. 120 hectare degraded forest area is being treated since 2022-23 by making interventions like fencing, planting, tending and other silvicultural operations, soil and moisture conservation measures. The area shall be managed intensively for next 05 years till it is fully restored ecologically |

| S.No | Agenda item | Observations/directions | Action Taken |
|------|--|---|---|
| 6. | <p>Agenda Item No: 22 - III: Activities to be undertaken from Net Present Value (NPV) and Interest component referred in rule 5 and rule 6:</p> <p>a. The proposed works under NPV (Forest) The Committee was apprised about the proposed forest management and related infrastructure development activities under NPV (Forest), covered under rule 5 (2) & (3) of the CAF Rules, 2018 in FY 2023-24. A total of 13,014 ha degraded forest area is proposed to be rehabilitated through assisted natural and artificial regeneration with a total of 61.54 lakh plants. Besides, 20.00 lakh plants are proposed to be planted in closures formed in earlier years for beating up of casualties. Suitable provision for forest fire prevention & control operations and protection of forest lands through installation of 26165 in-situ RCC boundary pillars has been made. Stress has been laid on soil & water conservation measures including construction/restoration of 451 ponds and works relating to DRSM, crates and water harvesting structures to improve ground water recharge. The APO also includes infrastructure development for frontline staff like check posts, guard huts, B.O. huts and Range offices. Proposal for modernization of the department includes use of remote sensing and GIS for preparation of digital maps and provision of latest equipment/</p> | <p>The Committee took note.</p> <ul style="list-style-type: none"> • The Committee directed the Forest Department to complete digitalization of boundaries of all forests within a year. • A joint team should be constituted comprising officers from Revenue, Forest, Tourism, RDD, PRI representatives and other stake holders to facilitate this process. • The Committee directed the Forest Department to install the boundary pillars demarcating the forest lands in the next five years. • For utilization of biomass from forests, like lantana and pine needles, the Committee directed the department to involve Self Help Groups in collaboration with J&K RLM. | <p>6 (i)</p> <ul style="list-style-type: none"> • In pursuance to the decision of S.C of J&K CAMPA, the Govt. issued directions for completing the digitization Survey and Renovation of the Forest boundaries by installing in-situ BPs for all vulnerable Forests in all the Forest Divisions of Jammu and Kashmir regions by March-2024. • The J&K Forest Department with the help of Department of Environment, Ecology & Remote Sensing (DEERS) has initiated the process in this regard. • The SoPs for various categories of Forests (depending upon the availability of old demarcation records of these forests) have been issued on the basis of inputs of the experts of NRSC, IIRS & DEERS. • The training to field teams in all 18 territorial Forest Divisions falling in Jammu region have been imparted. The teams have started the field work, prioritising snow-zone areas. The similar process for Kashmir region has also been taken up. • The activities are being closely monitored for time-bound accomplishment of targets at senior level. • To meet additional requirement of funds in this regard, National authority of CAMPA is being approached. • For completing the task of remaining Forests budgetary demand is being raised in the CAMPA and CAPEX budget of 2024-25 (FY), so that entire demarcation and digitization work is completed in 2024-25. • To accomplish the task, coordination is being maintained between the senior officers of forest and revenue departments and wherever required dedicated joint teams shall be deployed. • In order to promote Forest based biomass to generate energy and wealth following initiatives have been taken in Nowshera, Rajouri, Udhampur, Kathua and Reasi Forest Divisions. • 31 Self Help Groups (SHGs) have been constituted which are functional in Nowshera, Udhampur and Reasi Forest |

| | | | |
|----|--|--|--|
| | <p>gadgets like computers, GPS and CCTV to improve forest and wildlife protection. Trust has been laid on generation of livelihood from forests.</p> | <ul style="list-style-type: none"> The Committee stressed on involvement of Panchayats in all afforestation works. Meeting the demands of the forest dependent communities for water, fodder and non-timber forest produce should be the main objective of all afforestation works. | <p>Divisions to convert the dry pine needles lying in forest area into saleable handicraft items.</p> <ul style="list-style-type: none"> so far 348 women members have been trained by organizing 36 training sessions in various villages. The trainees are provided hand holding by providing raw-material by engaging local unemployed youth. 6 SHGs involving 30 women members have been trained by organizing 6 trainings in Kathua Division. These SHGs are being involved in Pine needle-based bio-briquette manufacturing. Similarly, 2 SHGs having 20 women members are functioning in Nowshera area making Dona Pattal from leaves of Bauhinia/Palas. These women members have been trained by organizing 6 trainings in their villages. Lantana infested areas in forest and non-forest land have been identified. Lantana eradication will be done in 98 villages wherein 50 VFCs will be benefited by way of utilizing Lantana biomass for charcoal making. In 98 villages, through 50 VFCs, the beneficiaries are being given training to convert lantana into charcoal. The VFCs are being linked with industrial units for selling the charcoal. All CAMPA areas are being identified in consultation with Gram Panchayat members. The micro planning including type of plant species are selected in a consultative works like mode. Water harvesting structures and ponds are getting good appreciation from reps of Gram Panchayats. |
| 6. | <p>b. The proposed works under NPV (Protected Areas) The Committee was apprised about the proposed wildlife management and related infrastructure development activities under NPV (Protected Areas), covered under rule 5 (2) & (3) of the CAF Rules, 2018 in FY 2023-24. It was informed that the</p> | <p>The Committee took note.</p> <ul style="list-style-type: none"> While reviewing the work proposals relating to Gharana Wetland Reserve, the Committee directed the Wildlife Protection Department to make it one of the most important tourist attractions of Jammu. | <ul style="list-style-type: none"> To make Gharana one of the most important tourist attractions of Jammu, the Department of Wildlife Protection J&K has taken following measures: <ul style="list-style-type: none"> Chain link fencing of the entire wetland to provide birds an inviolate zone. Extension of the water body through pumping of ground water to accommodate more birds and other species. Construction of independent approach road to Gharana |

| | | | |
|--|---|---|--|
| | <p>Wildlife Protection Department has proposed a number of protection and conservation measures which include improvement of wildlife habitat, soil and water conservation works, construction/maintenance of animal rescue centres, eco-development activities and development of wildlife related infrastructure.</p> | <ul style="list-style-type: none"> • A comprehensive study should be carried out about the habitat and avifauna of Gharana wetland for its better protection and development. The study shall be completed by March, 2024. • Arrangements should be made for wide publicity and dissemination of information with visitors and nature lovers, so that the visits happen to be a source of infotainment. This process should begin immediately and completed by March, 2024. • The Committee advised the Department to look into the potential of developing a cluster with the Border village of Suchetgarh so that both are offered as package to the visitors. | <p>(out of village habitations) and separate parking area for the visitors.</p> <ul style="list-style-type: none"> - Providing of public utilities like benches, spotting scopes, chairs, mobile toilets etc. - DPR for construction of eco-stop (which includes Natural Interpretation Centre having sitting capacity of more than 100 people, Visitors cafeteria with indoor as well as outdoor sitting, bird viewing gallery, development of butterfly park in the area to add new attraction, walking trail, watch towers) has been prepared through an out-sourced agency. - The attractive signages and hoardings placed along the roads and prominent tourist places in and around Jammu. <ul style="list-style-type: none"> • Department is granting permissions for species specific studies to different educational institutions of GOI as well as Govt. of UT of J&K. The J&K Pollution Control Committee is monitoring the water quality of the wetland on regular basis. The Asian Water Fowl census has been carried out during Nov to March. Five-year management plan for Gharana has been prepared in collaboration with WWF after detailed study of the area and habitat. • A number of awareness drives on all platforms carried out in collaboration with Tourism Department. A documentary on Gharana Wetland developed and circulated on social media platforms. A number of hoardings placed on the prominent tourist destinations and on the National highways. Information brochures and posters printed and distributed among the tourists as well as students. • Department is working with the J&K Tourism Department in organizing bird festivals. |
|--|---|---|--|

23.I.n Supplementary APO for FY 2023-24 (Liabilities/Spill-over works against the approved APO of FY 2022-23)

Some of the works approved in the APO 2022-23 could not be completed by the end of March-2023. Besides, in respect of certain completed works in the APO 2022-23, bills could not be cleared by the treasuries due to ceiling imposed by the Finance Department on booking of expenditure in last quarter of FY 2022-23 i.e. upto 30% of the budgeted amount.

All such works were compiled and included in the Supplementary APO 2022-23 for a total amount of ₹ 14.88 Crore. The proposal was considered and recommended in the Executive Committee meeting held on 25 July 2023. Thereafter, the proposal was submitted to the National Authority which approved the same vide communication dated 21 September 2023. All the HoDs stand requested to ensure payment of bills in respect of completed works and execution of ongoing works/booking of expenditure well in time. Hence for kind information of the house.

23.I.o Preparation of APO 2024-25

Preparation of APO 2024-25 commenced with the communication dated 08.08.2023 requesting the IAs to estimate the requirement of funds for FY 2024-25. Thereafter, IA-wise outlay along with a set of guidelines was circulated by CAMPA Secretariat vide communication dated 05.10.2023.

Stress was laid on preparation of APOs in consultation with Panchayats and inclusion of such activities in the APO that meet the requirement of grass/fodder, medicinal plants and timber, and promote livelihood from forests. The IAs were advised to give highest priority to activities leading to improvement of soil-moisture/ground water recharge, construction/restoration of ponds and stabilization of slopes.

A one-day technical workshop was organized on 17.10.2023 for implementing agencies of Jammu and Kashmir Regions to deliberate on preparation of APOs for 2024-25. The IAs were advised to follow the guidelines issued by the National Authority, MOEF&CC, GOI while formulating the APOs for FY 2024-25.

The National Authority, MoEF&CC, GOI has directed all the IAs to upload their APOs for FY 2024-25 on National CAMPA Portal and they conducted training programme for the IAs in this regard.

23.1.p Proposed Budget Estimates for FY 2024-25 under CAMPA

In accordance with the CAF Act, 2016, the expenditure on implementation of approved APOs has to be incurred from State Fund. It may be mentioned here that at the time of preparation of BE 2024-25, APO has not been prepared. However, based on requirement of funds for APO 2024-25 assessed by implementing agencies, the outlay of Rs. 265.86 Crore has been proposed in the BE 2024-25.

The account head-wise break up of BE 2024-25 is as under:

| Major Head | Sub Major Head | Minor Head | Scheme | Code | Object of Expenditure | Sub Head of CAMPA Account | Proposed CAMPA outlay for FY 2024-25 (₹ in lakh) |
|--|----------------|---|--------|--------------|--|---------------------------|--|
| 8336- Civil Deposit-MH-103 State Compensatory Afforestation Deposits (3) | 103 | 8121- General and other Reserve Funds- 129- State Compensatory Afforestation Fund | CAMPA | 2900 | Compensatory Afforestation | 2900 | 577.29 |
| | | | | 2901 | Additional Compensatory Afforestation | 2901 | 123.30 |
| | | | | 2902 | Penal Compensatory Afforestation | 2902 | 0 |
| | | | | 2903 | Net Present Value of Forest Land (NPV) | 2903 | 21757.78 |
| | | | | 2904 | Protected Areas (National Parks Wild Life Sanctuaries) | 2904 | 2793.92 |
| | | | | 2905 | Catchment Area Treatment Plan | 2905 | 20.00 |
| | | | | 2906 | Interest | 2906 | 410.0 |
| | | | | 2907 | Integrated Wildlife Management Plan | 2907 | 903.62 |
| | | | | 2908 | Others | 2908 | 0 |
| | | | | TOTAL | | | |

It is further added here that as per the recently adopted policy of the National Authority, MoEF&CC, GOI, only 20 to 25% of the NPV money shall be allowed to be included in the APO every year. This was shared by Chief Executive Officer, National Authority during his visit to Jammu and Kashmir on 17.10.2023. Therefore, the outlay proposed under NPV may decrease and the total outlay of the APO for FY 2024-25 may also decrease consequently.

Agenda Item No: 23.II

Part-II Additional Annual Plan of Operation 2023-24:

23.II.a Additional APO 2023-24 for taking up the works of Digitization and Demarcation of Forest Boundaries in a time bound manner as per directions issued by the Steering Committee and the Government of J&K.

1. In J&K, recorded Forest area in **20194 sq km** which is administered and managed by 32 territorial Forest Divisions and area under PAs is managed by Wildlife Divisions.

The Forest land has been delineated and demarcated. Initially this process was taken up in 1920s which continued thereafter also. The Forest land is delineated on ground in the form of large parcels of land based on topographic features. Each such parcel of land is named as “**Forest**” and its periphery is demarcated by using boundary pillars (BPs).

2. Boundary Pillars initially comprised of heaps of stones or similar structures, but subsequently, department took steps to replace them with precast cement concrete BPs to strengthen the boundary lines. Subsequently, in 2013-14 it was decided to fix in-situ large size RCC BPs to have effective and strong boundary lines which could withstand the vulnerabilities of breaking/displacement. Each forest has a main boundary line and within the “Forest” in some cases, small parcels of proprietary lands called “**Chaks**” also exist which are delineated by Chak boundary lines. The process of digitization and demarcation envisaged to be taken up in the proposed APO involves digitization of old Forest land records, convert them into Geospatial form, Survey of BPs to ascertain their correct position on ground and preparing shape files by recording Geo-Coordinates of the BPs.
3. Once the survey and digitization work is completed, the process of fixing RCC BPs, as per notified specifications shall be taken up on ground.
4. Keeping in view the factor of vulnerability of the boundary lines of many “**Forests**” and slow pace of boundary line reconstruction work, Steering Committee of CAMPA in its meeting held on 23-1-2023 directed the department to scale up the work of demarcation of remaining forests to ensure the protection of Forests vulnerable to encroachments and additional APOs under CAMPA be prepared to take up the work of fixing BPs within one year in all remaining vulnerable

Forests. Subsequently J&K Government vide its directions issued vide No.FST-PCB/7/2021-02 dated 08.08.2023 has directed the Forest department to complete the work of Digitization, Survey and BP fixing in all vulnerable category of “**Forests**” by March-2024. Accordingly, the territorial Forest divisions have identified vulnerable Forests and prepared the APOs for taking up the assigned task.

5. As per APO approved for 2023-24, **26697 BPs** (26165 BPs of Territorial Forest areas and 532 of Wildlife areas) are to be installed to renovate/strengthen the boundary line of Forests. The work in this regard is under progress.
6. However as per latest decision of J&K Government and as follow up of the decision/direction of SC of CAMPA as cited above, the target of digitization and fixing of BPs has been enhanced to 1,16,266 BPs which is to be completed during current financial year itself.

Apart from this, Government of UT of J&K has also approved enhanced targets of plantation under **Green J&K Drive 2023-24** which is being executed by Forest department by taking up plantations as well as distribution of saplings to local people through Gram Panchayats. The afforestation target has been enhanced to 175 lakhs from 150 lakh approved earlier for 2023-24 FY.

It has therefore, necessitated the submission of additional APO under NPV/ Interest accrued on CA/Addl.CA/NPV/NPV(PAs) component. The availability of funds and financial implications of additional targets as mentioned above are given below:

| Activity | Approved targets for 2023-24 | | Additional targets for 2023-24 | | Funds availability (₹ In lakh) | Funds required (₹ In lakh) |
|--|------------------------------|------------------|--------------------------------|------------------|---|----------------------------|
| | Phy. (in No.) | Fin. (₹ In lakh) | Phy. (in No.) | Fin. (₹ In lakh) | Savings accrued due to e-tendering of works under NPV component | |
| Digitization and demarcation of Forest boundary lines by Erecting of BPs (including PAs) | 26697 BPs | 2207.00 | 89569 BPs | 7655.00 | 2311.00 | 5344.00 |
| Plantation | - | - | 850000 plants | 469.00 | 469.00 | 0.00 |
| Total | - | 2207.00 | - | 8124.00 | 2780.00 | 5344.00 |

The financial targets for additional works under digitization and demarcation activities come to ₹ 7655.00 Lakh. The available funds are ₹ 2311.00 Lakh (savings accrued due to e-tendering of works under NPV component under approved APO for FY 2023-24). There is requirement of additional amount of ₹

5344.00 Lakh to meet the revised targets under digitization and demarcation works.

Due to enhanced targets of plantation, additional plantation of 8.50 Lakh plants has been proposed with financial implication of ₹ 469.00 Lakh. The funds required for this additional activity are available under savings accrued due to e-tendering of works under NPV component under approved APO for FY 2023-24 as given in the above table.

23.II.b Details of Savings accrued due to e-tendering against the approved APO for FY 2023-24 (NPV) under CAMPA.

A) IAs of Jammu Region of JK Forest Department.

| S.No | Activity | sub head/ detailed | SAVINGS ON E-TENDERING FOR FY 2023-24 UNDER CAMPA OF SUB HEAD: 2903- NPV | | | | |
|--|-------------------------------------|---------------------------|---|-----------------------------------|------------------|----------------|----------------|
| | | | Approved outlay | Saving in e-tendering (₹ in Lakh) | | | |
| 2903- Net Present Value of Forest Land | | | Estimated cost | advertised cost | allotted cost | savings | |
| 1 | Fencing | 115- Works | 3127.50 | 3126.78 | 3126.77 | 2517.02 | 609.75 |
| 2 | Planting | 010-M&S | 753.20 | 750.53 | 750.53 | 556.43 | 194.10 |
| 3 | BUC | 010-M&S | 296.67 | 285.17 | 285.17 | 222.24 | 62.94 |
| 4 | SMC works (DRSM/ Crates/ WHS) | 115- Works | 1084.40 | 1084.22 | 1082.96 | 869.08 | 215.14 |
| 5 | Patch Sowing | 010- M&S | 110.64 | 107.35 | 107.35 | 84.61 | 22.75 |
| 6 | Grass Slips | 010-M&S | 92.21 | 90.28 | 90.28 | 72.50 | 17.77 |
| 7 | Dibbling | 010-M&S | 12.10 | 12.10 | 12.09 | 10.21 | 1.87 |
| 8 | Seed Ball | 010-M&S | 11.98 | 8.45 | 8.45 | 2.86 | 0.89 |
| 9 | Plant Production | 010-M&S | 403.72 | 402.74 | 402.74 | 269.11 | 78.73 |
| 10 | Plant Maintenance | 010-M&S | 126.87 | 122.32 | 120.34 | 67.82 | 23.31 |
| 11 | Removal of Biomass | 010-M&S | 30.12 | 30.12 | 30.12 | 19.42 | 6.89 |
| 12 | Lantana Clearing | 010-M&S | 86.02 | 80.75 | 80.75 | 48.56 | 32.19 |
| 13 | Boundary Pillars | 115- Works | 539.21 | 535.43 | 532.62 | 345.81 | 177.49 |
| 14 | Maintenance of old closures | 023 Maintt & Rep. | 44.55 | 41.87 | 41.87 | 20.67 | 3.03 |
| 15 | Nursery Upgradation | 010-M&S | 269.43 | 269.43 | 268.37 | 199.42 | 45.64 |
| 16 | Construction of Buildings | 115- Works | 595.43 | 563.81 | 526.74 | 415.92 | 84.33 |
| 17 | Inspection Paths | 115-works | 82.44 | 81.54 | 81.54 | 51.97 | 18.91 |
| 18 | Machinery & Equipment's | 020-M&E | 38.19 | 33.13 | 23.25 | 16.70 | 3.00 |
| 19 | Trainings | 021- Trainings | 12.80 | 10.29 | 8.20 | 5.20 | 3.00 |
| 20 | Survey | 320-Res. & Survey | 10.05 | 10.05 | 10.05 | 1.55 | 4.90 |
| 21 | Modern Nurseries | 010-M&S | 90.86 | 86.32 | 86.32 | 56.08 | 11.24 |
| 22 | Building repair & fencing repair | 023- Maintt. & Rep. | 56.19 | 56.19 | 56.19 | 26.29 | 10.43 |
| Total | | | 7874.58 | 7788.85 | 7732.68 | 5879.44 | 1628.30 |

B) IAs of Kashmir Region of JK Forest Department.

| Savings on e-tendering under component Afforestation works (Fencing /Planting) under CAMPA for FY 2023-24 | | | | | | |
|--|--------------------------------|--|---------------------------------------|--|--------------------------------------|--|
| S.No. | Name of Forest Division | Total Approved amount (₹ in Lakh) | Estimated cost (₹ in Lakh) | Advertised cost (₹ in Lakh) | Allotted cost (₹ in Lakh) | Total savings (₹ in Lakh) (6+9) |
| 1 | Ananthenag | 227.69 | 154.39 | 154.39 | 128.97 | 98.72 |
| 2 | Lidder | 123.47 | 114.05 | 114.05 | 97.17 | 26.30 |
| 3 | Shopian | 210.41 | 197.63 | 197.63 | 167.3 | 43.11 |
| 4 | Kulgam | 251.11 | 231.56 | 231.56 | 210.03 | 41.08 |
| 5 | Awantipora | 140.51 | 127.75 | 127.75 | 120.37 | 20.14 |
| Total South Circle | | 953.19 | 825.38 | 825.38 | 723.84 | 229.35 |
| 6 | Urban | 3.18 | 3.18 | 3.18 | 2.17 | 1.01 |
| 7 | Tangmarg | 119.79 | 115.26 | 115.26 | 88.91 | 30.88 |
| 8 | Sindh | 87.53 | 87.53 | 87.53 | 76.99 | 10.55 |
| 9 | Bandipora | 72.33 | 72.33 | 72.33 | 55.28 | 17.05 |
| 10 | Pirpanjal | 27.92 | 27.92 | 27.92 | 25.27 | 2.65 |
| Total Srinagar Circle | | 310.75 | 306.22 | 306.22 | 248.62 | 62.14 |
| 11 | Kehmil | 319.4 | 217.82 | 201.96 | 155.37 | 148.17 |
| 12 | Langate | 271.87 | 241.96 | 236.75 | 216.16 | 39.25 |
| 13 | Kamraj | 368.87 | 346.83 | 346.83 | 304.77 | 64.11 |
| 14 | J.V. | 222.88 | 213.04 | 197.96 | 186.29 | 21.51 |
| Total North Circle | | 1183.02 | 1019.65 | 983.50 | 862.59 | 273.04 |
| Grand Total | | 2446.96 | 2151.25 | 2115.10 | 1835.05 | 564.52 |

**C) Savings due to e-tendering under Component of digitization and Demarcation
under CAMPA for the FY 2023-24**

| S.No. | Name of Forest Division | Total Approved amount (₹ in Lakh) | Estimated cost (₹ in Lakh) | Advertised cost (₹ in Lakh) | Allotted cost (₹ in Lakh) | Total savings (₹ in Lakh) |
|------------------------------|--------------------------------|--|---------------------------------------|--|--------------------------------------|--------------------------------------|
| 1 | Ananthenag | 99.19 | 95.22 | 95.22 | 69.65 | 29.54 |
| 2 | Lidder | 13.75 | 12.92 | 12.92 | 10.67 | 3.08 |
| 3 | Shopian | 5.78 | 5.76 | 5.76 | 5.61 | 0.17 |
| 4 | Kulgam | 51.07 | 50.57 | 50.57 | 44.97 | 6.10 |
| 5 | Awantipora | 14.00 | 13.56 | 13.56 | 13.13 | 0.87 |
| Total South Circle | | 183.79 | 178.03 | 178.03 | 144.03 | 39.76 |
| 6 | Tangmarg | 18.53 | 18.53 | 18.53 | 18.34 | 0.19 |
| 7 | Sindh | 9.37 | 9.37 | 9.37 | 7.03 | 2.34 |
| 8 | Bandipora | 33.7 | 33.7 | 33.7 | 29.12 | 4.58 |
| 9 | Pirpanjal | 24.05 | 24.05 | 24.05 | 21.2 | 2.85 |
| Total Srinagar Circle | | 85.65 | 85.65 | 85.65 | 75.69 | 9.96 |
| 10 | Kehmil | 30.6 | 29.57 | 29.57 | 26.31 | 4.29 |
| 11 | Langate | 34.95 | 35.8 | 34.28 | 27.62 | 6.66 |
| 12 | Kamraj | 77.32 | 68.76 | 68.76 | 60.5 | 16.81 |
| 13 | J.V. | 164.97 | 178.69 | 172.38 | 146.08 | 12.57 |
| Total North Circle | | 307.84 | 312.82 | 304.99 | 260.51 | 40.33 |
| Grand Total | | 577.28 | 576.50 | 568.67 | 480.23 | 90.05 |

D) Savings due to e-tendering under Component of Soil & Moisture Conservation under CAMPA for the FY 2023-24

| 2903 - Net Present Value of Forest Land (NPV) | Amount (₹ in lakh) |
|--|-------------------------------|
| 010 - Material and Supplies | 38.69 |
| 020 - Machinery & Equipment's | 0.00 |
| 021- Trainings | 0.00 |
| 023 - Maintenance and Repairs | 0.68 |
| 115 – Works | 408.76 |
| 320- Research and Survey | 0.00 |
| Settlement and Demarcation/installation of BPs | 0.00 |
| Total | 448.13 |

E) Savings on e-tendering of works under Protected Areas (Wildlife Protection) under CAMPA for the FY 2023-24 as on 26.09.2023

| Head | Amount (₹ in lakh) |
|--|-------------------------------|
| 2904-Protected Areas (National Parks Wildlife Sanctuaries) | 374.00 |

ABSTRACT OF SAVINGS

1. J&K Forest Department = ₹ 2286.04 Lakh
 2. Soil and Water Conservation Department = ₹ 448.13 Lakh
 3. Wildlife Protection Department = ₹ 374.00 Lakh
- Total = ₹ 3108.17 Lakh**

23.II.c Activities proposed under additional APO for FY 2023-24:

A) Forest Department.

| Activities under Forest Management under rule 5 (2) and rule 6 (a) (vi) of the CAF Rules, 2018 | | Proposed outlay for additional APO 2023-24 (₹ in crore) | Proposed Physical Targets under Additional APO 2023-24 |
|--|---|---|---|
| Rule 5(2)(a,b) | Assisted natural/Artificial regeneration and Management of biodiversity proposed under rule 5 (2) against savings accrued due to e-tendering of works under APO 2023-24 | 4.69 | Plantation of 8.50 Lakh plants |
| Rule 5(2)(d) | Protection of plantations and forests A. Proposal under Rule 5 (2) = ₹ 22.65 Crore (Against savings accrued due to e-tendering of works under APO 2023-24) B. Proposal under Rule 6 (a) (vi) = ₹ 47.17 Crore Interest accrued on CAMPA levies in State Fund (Activities referred to in sub-rules (2) and (3) of rule 5) | 69.82 | Digitization of forest boundaries and fixing of 89237 BPs |
| Total under rule 5 (2) and 6 (a) (vi) of the CAF Rules, 2018 | | 74.51 | |
| Rule 6 (a) (vi) Interest accrued on CAMPA levies in State Fund (Activities referred to under rule 5 (3) of the CAF Rules, 2018) | | | |
| Rule 5(3)(c) | Equipment and devices for communication and information technology | 6.24 | Purchase of 137 Hi-tech DGPS & GPS etc. |
| Rule 5(3)(g) | Survey and mapping | 0.03 | Survey works |
| Total under Rule 6 (a) (vi) of the CAF Rules, 2018 | | 6.27 | |
| Grand Total of proposed activities under rule 5 (2) and 6 (a) (vi) of the CAF Rules, 2018 | | 80.78 | |
| Other activities for management of the forests and wildlife not referred to in sub rule (2) and (3) of rule 5 of CAF Rules 2018 | | | |
| Rule 6 (b) (vi) | Activities under rule 6 (b) (vi) of CAF rules (Hiring of vehicle for forest protection) | 0.50 | |
| Grand Total | | 81.28 | |

B) Wildlife Department

Additional activities proposed under NPV Wildlife Management for FY 2023-24 under CAMPA against savings accrued due to e-tendering of works under APO for 2023-24


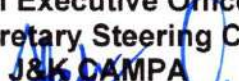
| Proposed Wildlife Management Activities under rule 5 (2) of the CAF Rules, 2018 | | Proposed outlay for additional APO 2023-24 (₹ in crore) |
|---|--|---|
| Rule 5 (2) (d) | Activities under rule 5 (2) (d) (savings) Installation of boundary Pillars for protection of Protected Areas (PAs) | 0.46 |
| Rule 5 (2) (g) | Activities under rule 5 (2) (g) (savings) Soil & Moisture Conservation Works to strengthen the vulnerable areas of Co.4/R Jammu 383 Crates, 1819 Cum DRSM | 1.00 |
| Rule 5 (2) (i) | Activities under rule 5 (2) (i) (savings) Improvement of Wildlife Habitat in Shalibugh Wetland Conservation Reserve by way of: (i) Raising of new Embankment in order to ensure adequate water level during lean season – 1667 Cum. (ii) Maintaining of Adequate water level in the wetland by Mechanical Means and installation of water regulatory Gates. | 0.10 0.18 |
| Total | | 1.74 |

Agenda Item No: 23-III

23.III Approval of the Steering Committee of CAMPA sought:

The Steering Committee of CAMPA is requested to kindly consider and recommend as per the following breakup/proposals for placing before the National Authority, Ministry of Environment, Forest and Climate Change, Government of India for accord of final approval.

- (i) Approval of the additional APO for FY 2023-24 amounting to ₹ 5344.00 lakh under "Interest Component under Rule 6 (a) (vi) of CAF Rules, 2018" required for digitization and demarcation of boundaries of vulnerable forests in pursuance to the decision of Steering Committee dated 23.01.2023 followed by the directions given by the Government dated 08.08.2023 in this regard.
- (ii) Approval for utilizing an amount of ₹ 2734.00 lakh accrued as saving due to e-tendering of works being executed under approved APO of CAMPA for the year 2023-24 to achieve the increased targets of Digitization and demarcation of Forest boundaries and to carry out additional plantation during 2023-24 FY.
- (iii) Approval for hiring of vehicles by utilizing an amount of ₹ 50.00 lakh out of the interest component for enhancing the mobility of field staff associated in carrying out the activities as mentioned above under rule 6 (b) (vi) of CAF Rules, 2018.
- (iv) Approval for utilization of savings accrued due to e-tendering of works (in PAs) being executed by Wildlife Protection Department under approved APO of CAMPA for FY 2023-24 to undertake some additional works of urgent nature amounting to ₹ 174.00 lakh in favour of Wildlife Protection Department.
- (v) Any other issue with permission of the Chair.


(Asaf Mehmood Sagar) IFS
Pr. Chief Conservator of Forests/
Chief Executive Officer
(Member Secretary Steering Committee)
J&K CAMPA




Jammu and Kashmir Compensatory Afforestation Fund
Management and Planning Authority
(CAMPA)



JAMMU AND KASHMIR FOREST DEPARTMENT
Government of Jammu and Kashmir

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Government of Jammu & Kashmir
Office of the Pr. Chief Conservator of Forests & HoFF
Jammu & Kashmir Forest Department



Minutes of the 31st Meeting of Executive Committee of Jammu and Kashmir Compensatory Afforestation Fund Management and Planning Authority (J&K CAMPA), held on 25 July 2023.

The 31st meeting of Executive Committee of J&K CAMPA was held on 25 July 2023 in Banquet Hall, Srinagar under the Chairmanship of Shri Roshan Jaggi, Pr. Chief Conservator of Forests (HoFF), J&K Forest Department to review the physical and financial achievements under APO 2022-23, implementation of APO FY 2023-24 and supplementary APO 2023-24. **List of participants is annexed.**

2. At the outset, PCCF (HoFF), Shri Roshan Jaggi, PCCF & HoFF gave an overview of execution of CAMPA works. He highlighted the works, in particular, along highways for stabilisation of slopes, building of infrastructure for frontline staff and provision of equipment like GPS and installation of CCTV to enhance forest protection. He also referred to the works being undertaken for protection of forest lands through installation of boundary pillars and fencing of vulnerable forests. He stressed on consultation with panchayats in planning of CAMPA works to enhance livelihood opportunities for local people.

3. Chief Executive Officer, CAMPA, Shri Sarvesh Rai, made a detailed presentation. He informed the participants about the physical & financial achievements in FY 2022-23 and progress of implementation of approved activities in APO of the current financial year. He also presented details of supplementary APO 2023-24. Shri T. Rabi Kumar, APCCF Kashmir made a detailed presentation about the works carried out in the Divisions in FY 2022-23 and proposed for execution in FY 2023-24. The works related to livelihood creation and establishment of biodiversity parks executed in Kashmir region were appreciated by the committee.

4. The agenda point-wise discussion and observations/directions of the Committee are summarised as under:

| Agenda Item and discussion | Decision of the Committee |
|--|---|
| <p>31.I (a, b, c) Brief History and past performance A brief account of regulatory framework of CAMPA and past performance was presented before the committee covering the following points:</p> <ul style="list-style-type: none"> • Compensatory afforestation, other forestry and related works undertaken (physical and financial) from the State Fund • Total forest area diverted and compensatory afforestation carried out in the UT of Jammu and Kashmir | The Committee took note. |
| <p>31.I (d & e) Brief description and abstract of the monitoring work Summary of third-party monitoring of CAMPA works for the period 2019-20 to 2021-22 by AFC India Ltd. was presented before the Committee.</p> | The Committee noted very good rate of survival percentage achieved in these years (62.70%). |
| <p>31.I (f & g) Fund Position of CAMPA and audit of CAMPA accounts: The committee was apprised a total of ₹ 930.33 Crore is estimated to be available in the State Fund.</p> | The Committee took note |
| <p>31.I.h Annual Reports of CAMPA for FY 2019-20, 2020-21 and 2021-22 The Annual Reports of CAMPA for the said period were presented before the Committee.</p> | The Committee took note |
| <p>31.II.a Implementation of APO 2022-23 Regarding the review of implementation of APO 2022-23, the committee was apprised that against the target of 15000 ha, a total of 12349 ha of degraded forest area was rehabilitated with planting of 68.53 lakh plants.</p> | The Committee took note |
| <p>31.II.b Special Projects executed under CAMPA The committee was apprised about several Special Projects executed under CAMPA to address the specific requirements of the intervention sites. In particular, these projects relate to eco-restoration of critically degraded forest areas, securing of forest lands vulnerable to encroachment, stabilisation of landslide prone areas, conservation of Rare, Endangered and Threatened (RET) plant species, construction of city forests & biodiversity conservation parks, and catchment area treatment.</p> | The Committee took note and appreciated these special projects. |
| <p>31.III.a CAMPA Meetings The Committee was apprised about the previous CAMPA meetings held till date.</p> | The Committee took note |
| <p>31.III.b Approval of the National Authority for APO 2023-24 The Committee was apprised that National Authority has approved the CAMPA APO for FY 2023-24 for a total amount of Rs 272.65 Crore.</p> | The Committee took note |
| <p>31.III.c Implementation of APO 2023-24 The committee was apprised that Implementing Agencies have been directed to grant AA/TS, float tenders of works and award contracts in the shortest possible time. A timeline for execution of approved APO 2023-24 has been prescribed to Implementing Agencies. They have been directed to ensure that fencing and planting works in Monsoon zone were carried out, well in time, to achieve the targets. Besides, the implementing agencies have been directed to ensure execution of all activities that are not</p> | The Committee took note |

| | |
|---|---|
| dependent on soil & moisture/weather conditions from the beginning of the financial year so that the targets are achieved. | |
| 31.IV. & 31.V. Supplementary APO for FY 2023-24 For completion of spill-over works of approved APO 2022-23 and clearance of pending bills of the last financial year, a supplementary APO of Rs 14.88 Crore was presented before the committee. | The committee considered the proposal and approved. |

5. The NGO Member, Sh. Nazir-be-Nazir suggested to organize a multi stakeholder workshop to discuss greening of wastelands in Kashmir. The chairperson agreed to the suggestion and assured to hold a workshop to deliberate on the issue soon.

The meeting ended with vote of thanks to the Chair.


(Sarvesh Rai)
Pr. Chief Conservator of Forests/
Chief Executive Officer
Member Secretary
Executive Committee J&K CAMPA

No: PCCF/CAMPA/2023-24/31EC/ 2002-2023

Dated: 28.07.2023

Copy for information to the:

- 1) Principal Secretary to Government, Forest, Environment & Ecology Department, J&K.
- 2) Principal Secretary to Government, Agriculture Production & Farmer Welfare, J&K.
- 3) Principal Secretary to Government, Finance Department, J&K.
- 4) Commissioner Secretary to Government, Science & Technology Department, J&K.
- 5) Commissioner/Secretary to Government, Rural Development & Panchayati Raj, J&K.
- 6) Secretary to Government, Tribal Affair Department, J&K.
- 7) Administrative Secretary to Government, Planning & Monitoring Department, J&K.
- 8) Administrative Commissioner to Government, Revenue Department, J&K.
- 9) PCCF/Director, Social Forestry Department, J&K.
- 10) PCCF/Chief Wildlife Warden, Wildlife Protection Department, J&K.
- 11) PCCF/Director, Soil & Water Conservation Department, J&K.
- 12) PCCF/Director, J&K Forest Research Institute, J&K.
- 13) Addl. Pr. Chief Conservator of Forests, Jammu/Kashmir/CED, WUCMA.
- 14) Addl. Pr. Chief Conservator of Forests, WPR&T/Central.
- 15) Addl. Pr. Chief Conservator of Forests/Nodal Officer, FC Act/Nodal Officer, SFDA.
- 16) Director, Environment, Ecology and Remote Sensing Department.
- 17) Chief Conservator of Forests, Settlement and Demarcation.
- 18) All Conservator of Forests Territorial.
- 19) Chief Accounts Officer o/o Pr. Chief Conservator of Forests (HoFF), J&K.
- 20) Private Secretary to Pr. Chief Conservator of Forests (HoFF), J&K Forest Department for information.
- 21) Shri Nazir-be-Nazir, NGO Member.
- 22) Ch. Asaf (Member) Expert, Tribal Affairs.

List of Participants

1. Sh. Roshan Jaggi, IFS, Pr. Chief Conservator of Forests (HoFF), J&K Forest Department (Chairman)
2. Sh. Suresh Kumar Gupta, IFS, Chief Wildlife Warden, Wildlife Protection Department, J&K (Member)
3. Sh. Sarvesh Rai, IFS, APCCF/Chief Executive Officer, CAMPA (Member Secretary)
4. Sh. S. Senthil Kumar IFS, Chief Conservator of Forests, Planning & Projects/Nodal Officer, SFDA/Nodal Officer, FCA (Member) (Member)
5. Sh. Mohammad Harun, Special Secretary to Government, Representative of Tribal Affairs Department (Member)
6. Sh. Parvaiz Ahmad Handoo, KAS, Director Planning (Forest), Representative of Forest, Ecology and Environment Department (Member)
7. Sh. Shafaat Yehya, KAS, Joint Director (Budget), Representative of Finance Department (Member)
8. Sh. Sudershan Kumar, KAS, Additional Secretary to Government, Revenue Department, J&K.
9. Sh. Waseem Raja, KAS, Additional Secretary to Government, Representative of Rural Development & Panchayati Raj Department (Member)
10. Sh. Feroz Ahmed, Under Secretary, Representative of Science & Technology Department (Member)
11. Sh. Rashi Naqash, Regional Wildlife Warden, Kashmir, Representative of Wildlife Protection Department
12. Sh. Jatinder Pandita, KAS, Chief Accounts Officer o/o PCCF (HoFF) (Member)
13. Sh. Nazir-Be-Nazir, NGO (Member)
14. Ch. Asif Iqbal (Expert) Tribal Affairs (Member)

Special Invitees

1. Sh. Asaf Mehmood, IFS, APCCF/Director, J&K Forest Research Institute
2. Sh. J. Frankoi, IFS, APCCF/Director, Forest Protection Force
3. Sh. B.M. Sharma, IFS, Addl. Pr. Chief Conservator of Forests, Jammu
4. Sh. T. Rabi Kumar, IFS, Addl. Pr. Chief Conservator of Forests, Kashmir (attended online)
5. Sh. S. Rakesh Kumar, IFS, Director, Environment, Ecology and Remote Sensing Department
6. Sh. Irfan Rasool Wani, IFS, Conservator of Forests, North Circle
7. Sh. Irfan Ali Shah, IFS, Conservator of Forests, South Circle
8. Sh. Zubair Ahmad, Conservator of Forests, Srinagar Circle
9. Sh. Zuhaib Choudhary, Dy. Conservator of Forests (HQ), Representative of Social Forestry Department
10. Sh. Abid Nazir, ACF, Divisional Forest Officer, U.F. Division, Srinagar
11. Sh. Mohinder Singh, Assistant Conservator of Forests, CAMPA
12. Sh. Abid Lone, Assistant Conservator of Forests
13. Sh. Danish Khan, Assistant Conservator of Forests
14. Sh. Faisal Farooq, Assistant Conservator of Forests
15. Sh. Mohammad Ismail Wani, Section Officer, J&K CAMPA
16. Sh. Ashish I/c Range Officer, CAMPA
17. Sh. Hilal Ahmad, Photographer
18. Sh. Zahid Ahmad, Computer Operator
19. Sh. Tahir Munir, Computer Operator, J&K CAMPA
20. Sh. Sanjay Kr. Dass, Computer Operator, J&K CAMPA
21. Sh. Nazir Ahmed Ganie, Record Keeper, J&K CAMPA
22. Sh. Shabir Ahmad Baskhi, Computer Operator, J&K CAMPA
23. Sh. Imtiyaz Ahmad Rather, Telephone Operator

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Government of Jammu & Kashmir
Office of the Pr. Chief Conservator of Forests & HoFF
Jammu & Kashmir Forest Department



Minutes of the 32nd Meeting of Executive Committee of J&K Compensatory Afforestation Fund Management and Planning Authority (J&K CAMPA), held on 4th October, 2023.

The 32nd meeting of Executive Committee of J&K CAMPA was held on 4th October 2023 at Banquet Hall, Srinagar under the Chairmanship of Shri Roshan Jaggi, IFS, PCCF & HoFF, J&K Forest Department/Chairman, Executive Committee of CAMPA to review the implementation of APO 2023-24 and approval for additional APO 2023-24. **List of participants is annexed.**

2. At the outset, Shri Asaf Mehmood Sagar, Chief Executive Officer, J&K CAMPA welcomed the participants. Thereafter Shri Roshan Jaggi, Pr. Chief Conservator of Forests & HoFF, J&K Forest Department/Chairman, Executive Committee of CAMPA in his opening remarks gave an overview of the main activities of CAMPA. He informed that under "Green Jammu and Kashmir Drive/Green India Mission", a record number of plants is being planted with the people's participation. In the current year, the department has enhanced the target of planting from 1.50 to 1.75 Crore plants. He explained the importance of digitization of old demarcation record and need for strengthening the boundary lines of vulnerable forests by erecting robust boundary pillars.

3. He made a reference to the decision taken by the Steering Committee in its meeting held on 23.01.2023 to scale up the work of demarcation of remaining forests to secure the vulnerable forest land from encroachment. He informed that recently the J&K Government has issued directions vide No.FST-PCB/7/2021-02 dated 08.08.2023 to the forest department to complete the work of Digitization, Survey and BP fixing in all vulnerable category of "Forests" by end of March 2024.

4. The Chief Executive Officer, CAMPA, Shri Asaf Mehmood Sagar made a presentation on the progress of implementation of the approved Annual Plan of Operation (APO) of 2023-24 and the additional APO for 2023-24 under CAMPA. He informed that against the current years' afforestation target of 13719 ha area, 4461 ha area stood planted with 18.50 lakh plants. He presented agenda of the meeting before the Committee. After a thorough discussion on the agenda points following decisions were taken.

| Agenda Item and discussion | Decision of the Committee |
|---|--------------------------------|
| <p>32.1 a, b & c Brief History and past performance: A brief account of regulatory framework of CAMPA and past performance was presented before the committee covering the following points:</p> <p>a. Compensatory afforestation, other forestry and related works undertaken (physical and financial) against the funds out of the State Fund.</p> <p>b. Total forest area diverted and compensatory afforestation carried out in the UT of Jammu and Kashmir.</p> | The Committee took note of it. |

| | |
|---|--|
| <p>32.I d & e Brief description and abstract of the monitoring work: Summary of third-party monitoring of CAMPA works for the period 2019-20 to 2021-22 by AFC India Ltd. (approved by the EC and SC of CAMPA) was again shared with the Committee.</p> | The Committee took note of it. |
| <p>32.I.f & g Fund Position of CAMPA and audit of CAMPA accounts: The committee was apprised of the amount available under CAMPA in the State Fund.</p> | The Committee took note of it. |
| <p>32.I.h Annual Reports of CAMPA for FY 2019-20,2020-21 and 2021-22: The Annual Reports of CAMPA for the said period (approved by the EC and SC of CAMPA) were again shared with the Committee. It was further informed that annual report for the year 2022-23 would be completed shortly.</p> | The Committee took note of it. |
| <p>32.II.a CAMPA Meetings: The Committee was apprised that 31 meetings of Executive Committee, 22 meetings of Steering Committee and 2 meetings of Governing Body of CAMPA have been held till date. The last meetings of Executive and Steering Committees of CAMPA were held on 11.01.2023 and 23.01.2023, respectively, to consider and approve APO for FY 2023-24.</p> | The Committee took note of it. |
| <p>32.II. B Approval of the National Authority for APO 2023-24: The Committee was apprised that the Executive Committee of National Authority, MoEF&CC Government of India discussed the APO 2023-24 of J&K CAMPA in its meeting held on 02.02.2023 and conveyed approval of APO for an amount of ₹ 272.65 Crore vide its communication dated 21 March 2023.</p> | The Committee took note of it. |
| <p>32.II.c & d Implementation of APO 2023-24: The physical and financial progress of works executed under CAMPA during 2023-24 upto September 2023 was shared with the Executive Committee.</p> | The Committee took note of it. |
| <p>32.II.e Supplementary APO for FY 2023-24: The Committee was apprised that the Executive Committee of National Authority discussed the Supplementary APO for FY 2023-24 of J&K CAMPA and conveyed its approval for completion of spill-over works of approved APO 2022-23 as well as clearance of pending bills of the works executed last financial year against an amount of Rs. 14.88 Crore.</p> | The Committee took note of it and directed for completion of all spill-over works during 2023-24 |
| <p>32.II.f Monitoring by the NGO member: The Committee was apprised that the NGO Member (who is also non-official member of the Executive Committee), Shri Nazir-be-Nazir toured various plantation units, nurseries and closures established under CAMPA, particularly areas of Spl. Forest Division Tangmarg. He made certain observations and suggestions as follows.</p> <ol style="list-style-type: none"> 1. Maintenance of closures may be increased from three years to six years. 2. Improve irrigation facilities by means of new scientific methods like sprinkle irrigation etc. 3. Watch and ward manpower may be increased from one person per 15 ha to 3 persons per 15 Ha, particularly for the first six years of plantation. 4. Repairing of damaged fencing be looked into regularly. | The Committee took note of it. |
| <p>32.III(a) Additional APO 2023-24 for taking up the works of Digitization and Demarcation of Forest Boundaries in a time bound manner as per directions issued by Government of J&K: The Committee was informed that:-</p> <ol style="list-style-type: none"> 1. In J&K, recorded Forest area in 20194 sq.km. Which is administered and managed by 32 territorial Forest Divisions and area under PAs is managed by Wildlife Divisions. 2. The Forest land has been delineated and demarcated. Initially this process was taken up in 1920s which continued thereafter too. The Forest land is delineated on ground in the form of large parcels of land based on topographic features. Each such parcel of land is named as "Forest" and its periphery is demarcated by using boundary pillars (BPs). | The Committee took note of it. |

3. Boundary Pillars initially comprised of heaps of stones or similar structures, but subsequently department took steps to replace them with precast cement concrete BPs to strengthen the boundary lines. Subsequently in 2013-14 it was decided to fix in-situ large size RCC BPs to have effective and strong boundary lines which could withstand the vulnerabilities of breaking/displacement. Each forest has a main boundary line and within the "Forest" in some cases, small parcels of proprietary lands called "Chaks" also exist which are delineated by Chak boundary lines. The process of digitization and demarcation envisaged to be taken up in the proposed APOs involves digitization of old Forest land records, convert them into Geospatial form, Survey of BPs to ascertain their correct position on ground and preparing shape files by recording Geo-Coordinates of the BPs.
4. Once the survey and digitization work is completed, the process of fixing RCC/BPs, as per notified specifications is taken up on ground.
5. Keeping in view the factor of vulnerability of the boundary lines of many "Forests" and slow pace of boundary line reconstruction work, Steering Committee of CAMPA in its meeting on 23-1-2023 directed the department to scale up the work of demarcation of remaining Forests to ensure the protection of Forests vulnerable to encroachments and additional APOs under CAMPA may be prepared to take up the work of fixing BPs within one year in all remaining vulnerable Forests. Subsequently J&K Government vide its directions issued vide No. FST-PCB/7/2021-02 dated: 08.08.2023 has directed the Forest department to complete the work of Digitization, Survey and BP fixing in all vulnerable category of "Forests" by March- 2024. Accordingly, the territorial Forest divisions have identified vulnerable Forests and prepared the APOs for taking up the assigned task by due date.
6. As per APOs approved for 2023-24, a target of 26697 BPs has been fixed for J&K Forest Department and Wildlife Department and the execution of works has been underway.
7. However as per latest decision of J&K Government as follow up of the decision of SC of CAMPA as cited above, additional targets of digitization and fixing of BPs have been fixed as 89,569 BPs which is to be completed during current financial year itself.

Apart from this, Government of UT of J&K has also approved enhanced targets of plantation under Green India Mission which is being executed by Forest department by taking up plantations as well as distributing saplings to local people through Gram Panchayats. The afforestation target has been enhanced to 175 lakhs from 150 lakh approved earlier.

It has therefore necessitated the submission of additional APOs under NPV component. The availability of Funds and Financial implications of additional targets as mentioned above are given below:

(i) The additional financial targets under digitization and Demarcation activities come to Rs. 7655.00 lakh. The funds availability (savings accrued due to e-tendering of the works approved under APO of 2023-24) is Rs. 2780.00 Lakh. There is requirement of additional amount of Rs. 5344.00 Lakh to meet the additional targets under digitization and Demarcation works.

(ii) Due to enhanced targets of plantation, additional plantation of 8.50 Lakh plants has been proposed with financial implication of Rs. 469.00 Lakh. The funds required for this additional activity are available under savings accrued due to e-tendering of works under CAMPA(NPV).

32.III.b Details of Savings:

The Committee was apprised that savings accrued due to e-tendering of works during 2023-24 amount to Rs. 2780.00 Lakh.

The Committee took note of it.

33.III.c Activities proposed under additional APO for FY 2023-24:

The committee was apprised that the proposed activities under additional APO for 2023-24 under CAMPA are as follows.

| Activities under Forest Management under rule 5 (2) of the CAF Rules, 2018 | | Proposed Physical Targets under Additional APO 2023-24 | Proposed outlay for additional APO 2023-24 (Rs in crore) |
|--|---|--|--|
| a, b & m | Assisted natural/Artificial regeneration and Management of biodiversity | 8.50 Lakh plants | 4.69 |
| d | Protection of plantations and forests | Digitization and fixing of 89569 BPs | 69.81 |
| Total under rule 5 (2) of the CAF Rules, 2018 | | | 75.50 |

| Activities under Forest Infrastructure and Capacity Building under rule 5 (3) of the CAF Rules, 2018 | | | |
|--|---|-------------------------------------|-------|
| d | Equipment and devices for communication and information technology | 137 Nos. of Hi tech DGPS & GPS etc. | 6.24 |
| f | Survey and mapping | | 0.03 |
| Total under rule 5 (3) of the CAF Rules, 2018 | | | 6.24 |
| Grand Total of proposed activities under rule 5 (2) & (3) of the CAF Rules, 2018 | | | 80.74 |
| Other activities for management of the forests and wildlife not referred to in sub rule (2) and (3) of rule 5 of CAF Rules 2018. | | | |
| Activities under rule 6 (a) & (b) of the CAF rules | | | |
| C | Activities under rule 6 (b) (vi) of CAF rules-Hiring of vehicle for forest protection | | 0.50 |
| Total under Interest Component | | | 0.50 |
| Grand Total | | | 81.24 |

A) Wildlife Department

Approved Activities and revised proposed activities and outlay under NPV Wildlife Management for FY 2023-24 under CAMPA

| Proposed Wildlife Management Activities under rule 5 (2) of the CAF Rules, 2018 | | Proposed Physical Targets under Additional APO 2023-24 | Proposed outlay for additional APO 2023-24 (Rs in crore) |
|---|-------------------------------------|--|--|
| d | Protection of protected areas (PAs) | 332 BPs | 0.46 (included above) |

32-IV Approval of the Executive Committee of CAMPA sought:

The Executive of CAMPA was requested to kindly consider and recommend for approval of the Steering Committee the following proposals:

(i) Approval of the additional APO for FY 2023-24 amounting to ₹ 5344.00 lakh required for digitization and demarcation of boundaries of vulnerable Forests in pursuance to the decision of Steering Committee dated 23-1-2023 followed by the directions given by the Government dated 8-8-2023 in this regard.

(ii) Approval for utilizing an amount of Rs. 2780.00 lakh accrued as saving due to e-tendering of works being executed under approved APO of CAMPA for the year 2023-24 to achieve the increased targets of Digitization and demarcation of Forest boundaries and to carry out additional plantation during 2023-24 FY.

(iii) Approval for hiring of vehicles by utilizing an amount of Rs. 50.00 lakh out of the interest component for enhancing the mobility of field staff associated in carrying out the activities as mentioned under (i) & (ii) above under rule 6(b)(vi) of CAF rules-2018.

32-IV(iv) Supplementary Agenda items of the Additional APO:

(i). The budgetary allocation under CAMPA for execution of various works in Forest and allied wings constitutes about 70% of the budgetary allocation of J&K Forest Department and allied wings. The works being executed against the CAMPA-Plan involve a sizeable component that requires support of engineering/technical staff for implementation and ensuring optimal quality and quantity of such works. Lack of adequate engineering/technical staff in the department is a limiting factor for execution of works timely and to have a robust mechanism for monitoring thereof. Skeltal engineering Staff working on deputation in the department has now been withdrawn by PWD (R&B), which is adversely impacting the progress of designing/estimation, execution and monitoring aspects of works approved under CAMPA APOs 2023-24.

The Committee took note of it.

(i) The Committee considered and recommended the additional Annual Plan of Operation of J&K CAMPA for an amount of Rs. 5344.00 lakh to the Steering Committee for approval for onward submission to the National Authority for accord of final approval.

(ii) The Committee considered and recommended the utilization of an amount of Rs. 2780.00 lakh accrued as saving due to e-tendering of works being executed under approved APO of CAMPA for the year 2023-24 to the Steering Committee of CAMPA for accord of approval for onward submission to the National Authority for final approval.

(iii) The Committee considered and recommended the hiring of vehicles by utilizing an amount of Rs. 50.00 lakh out of the interest component for enhancing the mobility of field staff to the Steering Committee of CAMPA for accord of approval for onward submission to the National Authority for final approval.

The Committee considered and recommended for constitution of two project implementation units (one for Jammu Region and one for Kashmir Region) to the Steering Committee of CAMPA for accord of approval for onward submission to the National Authority for final approval.

Sensing the ensuing difficulty, a meeting was convened by the Principal Secretary to Government Forest, Ecology and Environment Department J&K on 04-09-2023 wherein among other discussions it was decided that PCCF & HoFF in consultation with other HoDs will workout an alternate arrangement suitable for the department to execute works in absence of the engineering staff from PW(R&B) Department. Constitution of a Project Implementation Unit (PIU) instead of entrusting the works to PW(R&B) engineers also emerged as one of the viable options.

It is relevant to mention here that DGF&SS and CEO National Authority CAMPA, Gol, while reviewing the CAMPA activities at Bhopal on 19-08-2023, drew attention of PCCF & HoFFs of various States/UTs present in the meeting, towards various aspects of implementation of CAMPA activities. One of the important points discussed in the meeting pertained to strengthening of State/UT CAMPAs with adequate officers and professional manpower for carrying out the functions mandated in the CAF Act.

The Regional Addl PCCF Jammu/Kashmir and HoDs of the allied wings of Forest Ecology and Environment Department have expressed deep concern for timely achieving the physical/financial targets under CAMPA/CAPEX and other schemes in absence of adequate technical supporting staff, which ultimately may seriously hinder the full achievement of targets.

As stated above, and to facilitate smooth and timely execution of various works approved under CAMPA and other related schemes of Forest and allied wings, it is proposed to have two project implementation units - one for Jammu region and one for Kashmir region - by way of hiring engineers/technical professionals following laid down procedure in this regard for implementing the approved APOs under CAMPA/CAPEX during the remaining months of 2023-24. The proposed arrangement for current financial year will involve a financial implication of Rs. 25.00 lakh which would be provided out of the funds available under the head "Professional & Special Service Charges" under CAMPA APOs approved for 2023-24.

The Executive Committee is requested to approve the proposal.

(II). Chief Wildlife Warden reported vide communication dated 03-10-2023 about savings of Rs. 3.45 Crore (under 115-work component) on account of e-tendering of works approved under CAMPA APO 2023-24 under head 2904-Protected Areas (National Parks & Wildlife Sanctuaries).

Against these savings, the Chief Wildlife Warden proposed to undertake some additional works of urgent nature for an amount of Rs. 1.28 Crore. Details of these works are as under:

Rule 5(2)(g)-Soil & Moisture Conservation works

Protection works of urgent nature to strengthen the vulnerable areas of Co. 4/R Jammu.

| S. No. | Name of the work | Unit | Total Cost (Rs. in lakhs) |
|--------|------------------|-------------------|---------------------------|
| 1. | Crate work | 383 No. of Crates | 80.00 |
| 2. | DRSM | 1819 Cum | 20.00 |
| Total | | | 100.00 |

Rule 5(2)(i)-Improvement of Wildlife Habitat

Urgent works to be undertaken in Shallbugh Wetland Conservation Reserve.

| S. No. | Name of the Activity | Unit | Rate | Total Cost (Rs. in lakhs) |
|--------|--|----------|-------|---------------------------|
| 1. | Habitat Improvement by way of Raising of new Embankment in order to ensure adequate water level during lean season | 1667 Cum | 600/- | 10.00 |
| 2. | Maintenance of Adequate water level in the wetland by Mechanical Means and installation of water regularity Gates | 2 No. | APE | 18.00 |
| Total | | | | 28.00 |

The Executive Committee is requested to kindly consider and recommend for approval of Steering Committee for utilization of

The Executive Committee considered and recommended for approval of Steering Committee for utilization of savings accrued due to e-tendering of works being executed under approved APO of CAMPA for FY 2023-24 to undertake some additional works of urgent nature amounting to Rs. 1.28 Crore

savings accrued due to e-tendering of works being executed under approved APO of CAMPA for FY 2023-24 to undertake some additional works of urgent nature amounting to Rs. 1.28 Crore.

The meeting ended with vote of thanks to the Chair.

(Asaf Mehmood Sagar) IFS
Pr. Chief Conservator of Forests/
Chief Executive Officer (CAMPA)
Member Secretary

No: PCCF/CAMPA/32EC/2023-24/FNo. 1376/3087-3109 6/11 Dated: 06.10.2023

Copy for information to the:

- 1) Principal Secretary to Government, Forest, Environment & Ecology Department
- 2) Principal Secretary to Government, Agriculture Production & Farmers Welfare Department
- 3) Principal Secretary to Government, Finance Department, J&K Civil Secretariat, Srinagar.
- 4) Commissioner Secretary to Government, Science & Technology Department
- 5) Commissioner/Secretary to Government, Rural Dev. & Panchayati Raj Department
- 6) Administrative Secretary to Government, Tribal Affairs Department
- 7) Administrative Secretary to Government, Planning & Monitoring Department
- 8) PCCF/Director, Social Forestry Department
- 9) PCCF/Chief Wildlife Warden, Wildlife Protection Department
- 10) PCCF/Director, Soil & Water Conservation Department
- 11) APCCF/Director, J&K Forest Research Institute
- 12) APCCF/Director, Forest Protection Force
- 13) Addl. Pr. Chief Conservator of Forests, Jammu
- 14) Addl. Pr. Chief Conservator of Forests, Kashmir
- 15) Chief Executive Director, Wular Conservation and Management Authority
- 16) Addl. Pr. Chief Conservator of Forests, WPR&T
- 17) Addl. Pr. Chief Conservator of Forests, Central
- 18) Addl. Pr. Chief Conservator of Forests/Nodal Officer, FC Act, 1980
- 19) Addl. Pr. Chief Conservator of Forests (P&P)/Nodal Officer, SFDA
- 20) Director, Environment, Ecology and Remote Sensing Department
- 21) Chief Conservator of Forests (Settlement and Demarcation)
- 22) Shri .Nazir-Be-Nazir, (NGO Member) President, National Society for Protection of Water Resources, Wetlands and Forests, Kashmir.
- 23) Private Secretary to PCCF & HoFF for kind information of the Pr. Chief Conservator of Forests & HoFF, J&K Forest Department.

List of Participants

1. Shri Roshan Jaggi, IFS, Pr. Chief Conservator of Forests & HoFF, J&K Forest Department (Chairman)
2. Sh. Sarvesh Rai, IFS, PCCF/Chief Wildlife Warden, Wildlife Protection Department (Member)
3. Sh. Asaf Mehmood Sagar, IFS, PCCF/Chief Executive Officer, CAMPA (Member Secretary)
4. Shri S. Senthil Kumar, IFS, Addl.Pr. Chief Conservator of Forests, P&P/Nodal Officer, SFDA (Member)
5. Sh. S. Senthil Kumar, Addl.Pr. Chief Conservator of Forests, Nodal Officer, FCA (Member).
6. Sh. Mohammad Haroon, Secretary, Tribal Affairs Department, J&K (Member)
7. Sh. Tariq Ahmad Zargar, KAS, Secretary, Rural Dev. & Panchayati Raj Department (Member).
8. Sh. Parvez Ahmad Handoo, KAS, Director Planning (Forest), representative of Forest, Ecology & Environment Department (Member).
9. S. Madan Gopal Singh, KAS, Director, Agriculture Production & Farmers Welfare Department (Member).
10. Sh. Shafaat Yehya, KAS, Joint Director (Budget) representative of Finance Department (Member),
11. Shri Suyeel Pandita, KAS, Joint Director, Planning and Monitoring Department (Member)
12. Sh. Sudarshan Kumar, KAS, Addl. Secretary to Government, Revenue Department (Member)
13. Smt. Fatima, Under Secretary to Government, Science & Technology Department (Member)
14. Shri Jatinder Pandita, KAS, Chief Accounts Officer o/o PCCF HoFF (Member)
15. Shri Nazir-Be-Nazir, (NGO Member) President, National Society for Protection of Water Resources, Wetlands and Forests, Kashmir.

Special Invitees

1. Sh. J. Frankoi, IFS, Addl. Pr. Chief Conservator of Forests, Jammu. (attended on line)
2. Sh. T. Rabi Kumar, IFS, Addl. Pr. Chief Conservator of Forests, Kashmir
3. Sh. S. Rakesh Kumar, IFS, Chief Conservator of Forests (Settlement and Demarcation) (attended on line)
4. Sh. Irfan Rasool Wani, IFS, Conservator of Forests, North Circle, Sopore.
5. Sh. Zubair Ahmad Shah, IFS, Conservator of Forests, Srinagar Circle, Srinagar.
6. Sh. Irfan Ali Shah, IFS, Conservator of Forests, South Circle, Bejbiara. (attended on line)
7. Sh. B. Mohandass, IFS, Conservator of Forests, East Circle, Jammu. (attended on line)
8. Sh. Vivek Verma, IFS, Conservator of Forests, West Circle, Rajouri. (attended on line)
9. Dr. Jetinder Kumar Singh, IFS, Conservator of Forests, Chenab Circle, Doda. (attended on line)
10. Sh. Abid Nazir, Divisional Forest Officer, UF Division, Srinagar.
11. Sh. Mohinder Singh, ACF CAMPA. (attended on line)
12. Sh. Mohammad Ashraf Sheikh, Range Officer, Estate Range, Srinagar.
13. Sh. Mohammad Ismail Wani, Section Officer (J&K CAMPA)
14. Sh. Arun Sharma, Web Administrator I/c J&K Forest Department Website. (attended on line)
15. Sh. Zahid Ahmad Wani, Computer Operator.
16. Sh. Imtiyaz Ahmad Rather, Forester, I/c. Meeting Hall.
17. Sh. Hilal Ahmad, Photographer.
18. Sh. Shabir Ahmed Bakshi, MTS, (Computer Operator) CAMPA Secretariat.
19. Sh. Tahir Munir, MTS, (Computer Operator) CAMPA Secretariat.
20. Sh. Sanjay Kr. Dass, Record Keeper (Computer knowing) CAMPA Secretariat
21. Sh. Nazir Ahmed Ganie, Record Keeper, CAMPA Secretariat, Srinagar.
22. Sh. Zia Ahmed Naik, Rej (Fgd) CAMPA Secretariat
23. Sh. Kuldeep Kr. Sahah, Record Keeper/Computer Operator.

Office Address

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Government of Jammu & Kashmir
Office of the Pr. Chief Conservator of Forests & HoFF
Jammu & Kashmir Forest Department



The Chief Executive Officer,
National Compensatory Afforestation Fund Management
and Planning Authority,
Ministry of Environment Forest and Climate Change,
Government of India, New Delhi-110003.

No.PCCF/CAMPA/APO-2023-24/1399/3957-59

Dated: 01.12.2023

Sub: Additional Annual Plan of Operations (APOs) 2023-24 of Jammu and Kashmir CAMPA.

Sir,

In continuation to this office communication No.PCCF/CAMPA/2023-24/422-23 dated 02.11.2023 on the subject, a copy of the minutes of the meeting of the 23rd Steering Committee of J&K CAMPA held on 02 November, 2023 approved by the Chief Secretary, UT of Jammu and Kashmir (Chairman Steering Committee, J&K CAMPA) is enclosed for kind information.

It is therefore, requested that the Executive Committee of National Authority may kindly approve the additional APO 2023-24 for amount of Rs 83.02 Crore under CAMPA in respect of J&K Forest Department and J&K Wildlife Protection Department as per the Compensatory Afforestation Fund, Rules 2018.

Yours faithfully,

(Asaf Mehmood Sagar) IFS
PCCF/Chief Executive Officer
J&K CAMPA

Copy to the:

- 1) Private Secretary to Principal Secretary to Government, Forest, Ecology and Environment Department for kind information of the Principal Secretary.
- 2) Private Secretary to PCCF & HoFF, J&K Forest Department for kind information of the Pr. Chief Conservator of Forests and HoFF.

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May to October: Forest Complex, ShiekhBagh,
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Government of Jammu & Kashmir
Office of the Pr. Chief Conservator of Forests & HoFF
Jammu & Kashmir Forest Department



Minutes of the 23rd Meeting of Steering Committee of Jammu and Kashmir Compensatory Afforestation Fund Management and Planning Authority (J&K CAMPA), held on 2nd November, 2023.

The 23rd meeting of Steering Committee of J&K CAMPA was held on **2nd November, 2023** in Civil Secretariat, Jammu/Srinagar under the Chairmanship of Dr. Arun Kumar Mehta, IAS Chief Secretary J&K Government (Chairman, Steering Committee of J&K CAMPA) to review the implementation of Annual Plan of Operation (APO) for FY 2023-24 and consider the additional Annual Plan of Operation (APO) for FY 2023-24. **List of participants is annexed.**

2. At the outset, Principal Secretary to Government, Forest, Ecology and Environment Department, Shri Dheeraj Gupta, IAS welcomed the Chairman and participants of the Steering Committee of J&K CAMPA. He apprised the Committee about the main activities of the Department and achievements made in respect of important deliverables. The Principal Secretary Forests informed the committee that the department was going to complete the digitization, survey and installation of boundary pillars of all the vulnerable forest areas of Jammu & Kashmir during the current financial year.

3. CEO, J&K CAMPA, Shri Asaf Mehmood Sagar made a detailed presentation on progress of implementation of the approved APO of FY 2023-24 and proposed additional APO for FY 2023-24. The agenda wise discussion held and decisions taken by the Steering Committee are summarized as under:

| Agenda item No. 23.I Brief History and past performance | Observations/directions |
|---|---|
| The Committee was apprised about the status of forests, extent of area under degraded/highly degraded forests, physical and financial achievements under CAMPA since inception (2010-11 to 2021-23), internal and third-party monitoring works and CAMPA fund position, Audit of CAMPA accounts, Annual Reports of CAMPA for FY 2019-20, 2020-21 and 2021-22. | The Committee took note. |
| The Committee was apprised that the 32 meetings of Executive Committee, 22 meetings of Steering Committee and 2 meetings of Governing Body of CAMPA have been held till date. The last meetings of Executive and Steering Committees of CAMPA were held on 04.10.2023 and 23.01.2023, respectively. | The Committee took note. The Chairman directed the CAMPA Secretariat to hold the meetings of the Steering Committee of J&K CAMPA as frequent as required under the CAF Rules, 2018. |

| | |
|--|---|
| <p>Regarding the status of implementation of APO 2023-24, it was informed that against the afforestation target of 13719 ha, 5509 hectares degraded forest area has been covered with planting of 21.20 lakh plants. Winter planting in temperate zone is in progress and targets for the year 2023-24 are likely to be achieved.</p> | <p>The Committee took note of the physical and financial progress of implementation and expressed satisfaction. While reiterating his earlier directions, the Chief Secretary emphasized that all works should be tendered strictly as per the GFR.</p> |
| <p>The Committee was apprised about the implementation of the decisions of the last meeting of the Steering Committee</p> | <p>The Committee took note and expressed satisfaction.</p> |
| <p>The Committee was apprised about some spillover works approved in the APO of FY 2022-23. It was informed that supplementary APO prepared by the Department for spillover works stood approved by National Authority and IAs stood informed about the approval besides directions to book the expenditure accordingly.</p> | <p>The Committee took note.</p> |
| <p>The Committee was apprised about preparation of APO for FY 2024-25. It was informed that APOs were being prepared by the IAs in consultation with the PRIs. The APOs for FY 2024-25 shall be uploaded on CAMPA National Portal. The Committee was also informed that the National Authority has restricted the amount under NPV for APO to 25% of the NPV funds available with the UT of Jammu and Kashmir.</p> | <p>The Committee took note.</p> |
| <p>Agenda item No. 23.II Additional APO 2023-24 for taking up the works of Digitization and Demarcation of Forest Boundaries in a time bound manner as per directions issued by the Steering Committee and the Government of J&K.</p> <p>The Committee was apprised about directions of the Steering Committee of CAMPA given in its 22nd meeting as well as directions of the Government to complete the work of Digitization, Survey and BP installation in all vulnerable Forests by March-2024. Accordingly, the territorial Forest divisions have identified vulnerable Forests and prepared the APOs for taking up the assigned task by due date. The additional targets of digitization and installation of 89,569 BPs and Planting of 8.50 lakh plants besides habitat development activities of urgent nature in PAs constitute the additional APO.</p> <p>Enhancement of targets of BP installation from 26,697 to 1,16,266 BPs and plantation targets from 150 lakh to 175 lakh plants necessitated preparation of additional APO for FY 2023-24. The financial implications of the activities proposed in the additional APO work out to Rs.83.02 crores (Rs.76.55 crore for digitization and BP installation, Rs. 4.69 crore for planting of 8.50 lakh plants, Rs. 0.50 crore for hiring of vehicles and Rs. 1.28 crore for habitat development activities in PAs).</p> | <p>The Committee took note.</p> |

| | |
|---|---|
| <p>The Committee was apprised that savings of Rs.31.08 crore have accrued due to e-tendering of the works approved in APO for FY 2023-24. It was informed that Rs. 29.08 crores out of the aforesaid savings have been included in Rs. 83.02 crores (financial outlay of the additional APO) and the remaining amount of the outlay has been proposed under the Interest component available in the state fund.</p> | <p>The Committee took note.</p> |
| <p>Agenda item No. 23.III Approval of the Steering Committee of CAMPA The Steering Committee was requested to approve and recommend the additional APO for FY 2023-24 for an amount of Rs 83.02 Crore to the National Authority for accord of final approval.</p> | <p>The Committee approved and recommended the additional APO for the financial year 2023-24 with an outlay of Rs. 83.02 Crore for placing before the National Authority, MoEF&CC, Government of India for accord of final approval as per the following breakup:</p> <ol style="list-style-type: none"> i. Additional APO for FY 2023-24 amounting to ₹ 5344.00 lakh under “Interest Component” under Rule 6 (a) (vi) of CAF Rules, 2018 required for digitization and demarcation of boundaries of vulnerable forests in Jammu & Kashmir in pursuance to the decision of the Steering Committee dated 23.01.2023 followed by the directions given by the Government dated 08.08.2023 in this regard. ii. Utilization of an amount of ₹ 2734.00 lakh accrued as saving due to e-tendering of works being executed under approved APO of CAMPA for the year 2023-24 to achieve the enhanced targets of Digitization and demarcation of Forest boundaries and plantation for FY 2023-24. iii. Hiring of vehicles by utilizing an amount of ₹ 50.00 lakh out of the interest component under Rule 6 (b) (vi) of CAF Rules, 2018 for enhancing the mobility of field staff associated with carrying out the activities as mentioned under (i) & (ii) above. iv. Utilization of an amount of ₹ 174.00 lakh out of the savings accrued due to e-tendering of works being executed in PAs under approved APO of CAMPA for FY 2023-24 to undertake some habitat development works of urgent nature in PAs. |

During the deliberations, the Chief Secretary UT of J&K (Chairman, Steering Committee of J&K CAMPA) directed the department to follow the below given directions in letter and spirit.

- a. Geo-referencing and digitization of boundaries in all vulnerable Forests of Jammu & Kashmir be completed by December 15th, 2023 and BP installation be completed by March 2024. Geo-referencing/digitization/installation of BPs in remaining forests be completed by 30th June 2024. It was decided that Forest and Revenue Department shall collaborate actively to resolve the issues related to reconciliation of Forest boundary lines in a time bound manner.

- b. Effective efforts should be made to achieve the targets fixed for removal of encroachments, developing green slopes for stable roads and undertaking tree Aadhar programme during the current financial year.
- c. Livelihood generation schemes like One Division One Product/Van Dhan Kendras should be promoted in collaboration with Rural Development & Panchayati Raj Department / Tribal Affairs Department. The targets fixed under One Division One Product Scheme for the current financial year be achieved fully.
- d. Geo-referencing and BP installation shall be carried out in all Protected Areas as well to demarcate the boundaries of Protected Areas. Eco-sensitive zones be also delineated on ground. The entire exercise shall be completed within a period of three months.
- e. Geo-referencing of the important wetlands in Forest and Wildlife areas shall be completed on priority followed by preparing the comprehensive preservation plans as per guidelines of MoEF&CC for all such water bodies.

Targets fixed for conserving and promoting clean wetlands in forest/protected areas during the current financial year be achieved.

- f. The process of settlement of rights under FRA be taken to finality by following the due process as laid down in FRA-2006 and rules thereunder.
- g. It was emphasized that target of planting 175 lakh plants (focussing on propagation/distribution of Poplars, Neem, Walnut, Bamboo, Willows/other species of economic importance/promotion of trees of local medicinal importance like Amla, Jamun, Reetha, Baheda and Harad etc.) and 90 lakh low-cost greening interventions be completed timely under Green J&K Drive.
- h. The targets of preparation of proposals for Nagar Vans in all ULBs be achieved.
- i. The targets fixed for the deliverables for 2023-24 under schemes/programmes like Har Gaon Haryali, One beat guard one village should be achieved fully covering the targeted Panchayats/Villages/Wards.
- j. The annual targets fixed under the scheme Van se jal, jal se Jeevan should be achieved and impact analysis of the scheme should be done.
- k. To move towards the goal of net-zero target by 2070 as part of revised INDCs, Panchayat level carbon neutral plans need to be pursued in time bound manner. In this regard, measures taken to make **Palli Panchayat** of District Samba carbon neutral last year, should be replicated in other Gram Panchayats of Jammu & Kashmir and roadmap needs to be firmed up in this regard. Preparation of State Action Plan on Climate Change, Carbon Neutrality and Carbon Credits should be undertaken.
- l. The expanse of water in Gharana wetland needs to be maintained at optimum level by taking all required measures. Entry of untreated sewage into the water body be restricted. A committee be constituted to address the issues of local people.
- m. Adequate publicity be given to places of attraction like National Parks, Wildlife sanctuaries and Jambu Zoo as such places have huge potential to attract visitors. Visiting hours of Jambu Zoo need to be kept flexible and basic amenities like canteen/toilets be properly maintained for the convenience of visitors.

Similarly, targets of Trek Routes maintained/opened during the year 2023-24 be achieved.

- n. Targets fixed for IEC activities, hoardings, banners regarding good air quality be achieved.

- o. Concerted efforts need to be made to ensure that all forest areas especially receiving tourists, are kept Single Use Plastic (SUP) free. The targets fixed for number of drives to be conducted during current financial year be achieved.

The Chairman released a report prepared by the Wildlife Protection Department on restoration plan for the Gharana Wetland.

The meeting ended with vote of thanks to the Chair.

(Asaf Mehmood Sagar) IFS
**Pr. Chief Conservator of Forests/
Chief Executive Officer (CAMPA)
Member Secretary**

No: PCCF/CAMPA/APO/2023-24/1399/3939-56

Dated 01.12.2023

Copy for information to the:

1. Principal Secretary to Government, Forest, Environment & Ecology Department.
2. Principal Secretary to Government, Agriculture Production & Farmers Welfare Deptt.
3. Principal Secretary to Government, Finance Department
4. Commissioner Secretary to the Government Science and Technology Department.
5. Commissioner/Secretary to Government, Rural Dev. & Panchayati Raj Department
6. Pr. Chief Conservator of Forests (Head of Forest Force), J&K Forest Deptt.
7. DDG, Integrated Regional Office, Jammu (MoEF&CC).
8. Administrative Secretary to the Government, Tribal Affairs Department,
9. Administrative Secretary to the Govt. Revenue Department, Civil Secretariat
10. Administrative Secretary to the Government, Planning & Monitoring Department.
11. Pr. Chief Conservator of Forests/Chief Wildlife Warden.
12. Addl.Pr. Chief Conservator of Forests (P&P)/Nodal Officer, SFDA
13. Addl. Pr. Chief Conservator of Forests /Nodal Officer, FC Act 1980
14. Addl. Pr. Chief Conservator of Forests, Jammu.
15. Addl. Pr. Chief Conservator of Forests, Kashmir.
16. Chief Conservator of Forests, Settlement and Demarcation.
17. Private Secretary to Chief Secretary, J&K Government for kind information of worthy Chief Secretary (Chairman, Steering Committee of CAMPA).
18. Ch. Asaf (Member) Expert, Tribal Affairs.

List of Participants

1. Dr. Arun Kumar Mehta IAS, Chief Secretary, UT J&K Government (Chairman)
2. Sh. Dheeraj Gupta, IAS, Principal Secretary to Government, Forest, Environment & Ecology Department, Civil Secretariat, (Member)
3. Sh. Santosh D. Vaiya IAS, Principal Secretary to Government, Finance Department.
4. Sh. Roshan Jaggi IFS, Pr. Chief Conservator of Forests & HoFF, J&K Forest Department (Member)
5. Sh. Sarvesh Rai IFS, PCCF/Chief Wildlife Warden, Wildlife Protection Department, J&K (Member)
6. Sh. Asaf Mehmood Sagar IFS, PCCF/Chief Executive Officer, CAMPA (Member Secretary)
7. Sh. S. Senthil Kumar IFS, Addl. Pr. Chief Conservator of Forests, Planning & Projects/ Nodal Officer, SFDA (Member)
8. Sh. S. Senthil Kumar IFS, Addl. Pr. Chief Conservator of Forests/Nodal Officer, FCA (Member).
9. Sh. Tariq Ahmed Zargar JKAS, Secretary in Rural Dev. & Panchayati Raj Department.
10. Sh. Shafiq Ahmed, JKAS, Addl. Secretary, Representative of Science & Technology Department, Civil Secretariat, Jammu (Member)
11. Sh. Bilal Ahmed, DG Planning representative of Planning & Monitoring Department.
12. Sh. T. K. Bhat JKAS, Addl. Secretary Agriculture Production & Farmers Welfare Deptt. Civil Secretariat (Representative)
13. Sh. Sudershan Kumar, JKAS, Addl. Secretary to Government, representative of Revenue Department, Civil Secretariat.
14. Sh. Mir Tajuamul, Under Secretary to Government, O/o Chief Secretary, J&K.
15. Ms. Fahtima, Under Secretary to Government, Representative of Science & Technology Department, Civil Secretariat, Jammu (Member).
16. Ch. Asif Iqbal (Expert) Tribal Affairs (Member)

Special Invitees

1. Sh. J. Frankoi IFS, APCCF/Chief Conservator of Forests, Jammu.
2. Sh. T. Rabi Kumar IFS, Addl. Pr. Chief Conservator of Forests, Kashmir.
3. Sh. S. Rakesh Kumar IFS, CCF (S&D)/Director, Environment, Ecology and Remote Sensing Department
4. Sh. M. K. Kumar IFS, Regional Wildlife Warden, Jammu
5. Sh. B. Mohandas IFS, CF East Circle.
6. Sh. Irfan Rasool Wani IFS, CF North Circle.
7. Sh. Irfan Ali Shah IFS, CF South Circle.
8. Sh. Vivek Verma IFS, CF West Circle.
9. Sh. Jitender Singh IFS, CF Chenab Circle.
10. Sh. Zubair Ahmad Shah, CF Srinagar Circle.
11. Sh. Rashid Naqash Regional Wildlife Warden, Kashmir
12. Sh. Mohammad Ismail Wani, Section Officer, J&K CAMPA
13. Sh. Zahid Ahmed Wani, Computer Operator.
14. Sh. Shabir Ahmed Bakshi, Computer Operator, CAMPA
15. Sh. Sanjay Kumar Dass, Computer Operator/Record Keeper, CAMPA
16. Sh. Nazir Ahmed Ganie, Record Keeper, CAMPA
17. Sh. Kuldeep Kumar Shah, Record Keeper, CAMPA

File No. NA-15/14/2020-NA
Government of India
Ministry of Environment, Forest and Climate Change
National Compensatory Afforestation Fund Management & Planning Authority
(National Authority)
E-mail: adhoc-campa-mef@nic.in

Hall No. 1, 4th Floor
Block No. 3, CGO Complex
Lodhi Road, New Delhi-110003
Dated 21st September, 2023

To,

The Principal Secretary to Govt. of UT of Jammu & Kashmir,
Forests, Environment and Wildlife Management Department
Government of Jammu and Kashmir

Sub: Approval of Additional Annual Plan of Operation for the financial year 2023-24 of Jammu and Kashmir State CAMPA-reg.

Ref: The letter no. PCCF/CAMPA/1374/2054-56 dated 01.08.2023 of Government of Jammu & Kashmir

Sir,

With reference to the above-mentioned letter, it is to convey the approval of the Executive Committee of the National Authority under section 15 (1) (i) of the Compensatory Afforestation Fund Act, 2016 for the State Additional Annual Plan of Operation –2023-24 received on 01.08.2023 for an outlay of **Rs. 14.88 crores** (Rupees Fourteen crores and eighty eight lakh only) against the proposed outlay of **Rs. 14.88 crores** (Rupees Fourteen crores and eighty eight lakh only) for carrying out mandatory and time bound CAMPA activities. The amount under NPV has been restricted to 25% of the NPV funds available with the State.

2. The Jammu & Kashmir Additional Annual Plan of Operation 2023-24 was discussed in detail by the Executive Committee of the National Authority during the 24th Executive Committee meeting of the National Authority.

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

(Area in ha. & Rs. in Crores)

| S. No. | CAF Act/Rules | Activity | Fund Requirement of funds for 2023-24 | Remarks |
|--------|--|--|---------------------------------------|----------|
| 1 | Site specific activities as per Section 6 (a) of the CAF Act, 2016 | | | |
| | Mandatory Activity | Compensatory Afforestation | 0.833 | Approved |
| | | Additional CA | 0.065 | Approved |
| | | Integrated wildlife Management Plan | 0.87 | Approved |
| | | Total site specific activities under CA | 1.77 | |
| 2 | Activities as per Rule 5 (2) of CAF Rules, 2018 | | | |
| | 5 (2) a & b | ANR/AR | 2.183 | Approved |
| | 5 (2) c | Silvicultural operations | 0.030 | Approved |
| | 5 (2) d | Protection of Plantation and forests | 3.03 | Approved |

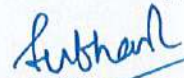


| | | | | |
|----------|---|--|-------------------------|----------|
| | 5 (2) f | Forest fire prevention and control operations | 0.007 | Approved |
| | 5 (2) g | Soil and moisture conservation works | 1.45 | Approved |
| | | Sub Total | 6.69 | |
| 3 | Activities as per Rule 5(3) of CAF Rules, 2018 | | | |
| | 5 (3) a | Establishment, Maintenance of modern nurseries | 0.83 | Approved |
| | 5 (3) c | Purchase and maintenance of equipment of devices for communication, information and technology | 0.13 | Approved |
| | 5 (3) d | Construction, upgradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber posts | 0.31 | Approved |
| | 5 (3) e | Construction of residential and official buildings | 4.95 | Approved |
| | 5 (3) f | Casual engagement of local people or labourers to assist regular staff of State Forest Department | 0.21 | Approved |
| | | Sub Total | 6.42 | |
| | | Grand total of supplementary APO 2023-24 | Rs. 14.88 crore* | |

4. The approval is subject to the same terms & conditions as mentioned in the sanction letter issued by National Authority, CAMPA vide no. NA-15/14/2020-NA dated 21st March 2023.

5. All wage payments should be made through Direct Benefit Transfer (DBT).

Yours faithfully,



(Subhash Chandra)
Chief Executive Officer

Copy to:

1. The PCCF & (HoFF)-cum-Chairperson, the Executive Committee of the UT of Jammu & Kashmir CAMPA, Department of Forests, Government of Jammu and Kashmir, Srinagar
2. The Chief Executive Officer, Jammu and Kashmir CAMPA, Srinagar
3. The Principal Secretary, Department of Finance, Government of Jammu & Kashmir, Srinagar
4. The Principal Secretary, Department of Planning, Government of Jammu and Kashmir, Srinagar
5. The Accountant General, Jammu and Kashmir, Srinagar

Copy also forwarded through email to:

1. The DGF&SS, MoEF&CC, New Delhi for kind information
2. The Additional Secretary & Financial Advisor, MOEF&CC, New Delhi
3. The Mission Director, National Mission for Green India, MOEF&CC, New Delhi
4. The Deputy Director General of Forests/IGF, Integrated Regional Office, Ministry of Environment, Forest and Climate Change, Jammu
5. The Principal Director (Audit), Scientific Department, AGCR Building, New Delhi
6. IFD/Sanction Folder/ Guard File
7. NIC Cell with a request to upload the sanction order on the official website of MoEF&CC.

File No. 15/14/2020-NA
Government of India
Ministry of Environment, Forest and Climate Change
National Compensatory Afforestation Fund Management & Planning Authority
E-mail: adhoc-campa-mef@nic.in

Hall No.1, 4th Floor
Block No. 3, CGO Complex
Lodhi Road, New Delhi-110003
Dated the 21st March, 2023

To,
The Principal Secretary to Government of UT of Jammu and Kashmir,
Forests, Environment and Wildlife Management Department

Sub: Annual Plan of Operation for the financial year 2023-24 of Jammu and Kashmir State CAMPA.

Sir,

With reference to the letter no. PCCF/CAMPA/APO-2023-24/1329/3293-94 dated 28.01.2023 of Government of Jammu and Kashmir on the above-mentioned subject, it is to convey the approval of the Executive Committee of the National Authority under Section 15 (1) (i) of the Compensatory Afforestation Fund (CAF) Act, 2016 for the mandatory and time bound activities of the Annual Plan of Operation of 2023-24 at total outlay of **Rs. 274.05 crore** [Rupees two hundred seventy four crore and five lakhs only]. During 21st meeting of Executive Committee (EC) of the National Authority, EC has approved an amount of **Rs. 272.65 crore** [Rupees two hundred seventy two crore and sixty five lakhs only]

2. The detail of APO by Jammu and Kashmir during the 21st Executive Committee meeting of the National Authority is given below.

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

3. The details of component-wise activities approved in the APO are as follows:

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

| S. No | CAF ACT/Rules | Activity | Proposed outlay | | Green Employment to be generated (in Man days) | Page No. | Remarks |
|-------|---------------|--|-----------------|------------------|--|----------|----------|
| | | | Physical Target | Financial Target | | | |
| 1 | | Site-specific activities as per Section 6 (a) of the CAF Act, 2016 | | | | | |
| | Mandatory | Compensatory Afforestation | 311 | 5.99 | 77014 | 20-21 | Approved |

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| | | | | | | | |
|----------|-----------------------|---|----------------|---------------|---------|---------------|--------------|
| | Activity | Catchment Area Treatment Plan | 0.00 | 0.00 | | | |
| | | Integrated Wildlife Management Plan | 0.00 | 9.69 | 124585 | 22 | Approved |
| | | Other | 0.00 | 0.00 | | | |
| | | Total site specific activities under CA | 311 | 15.68 | | | Approved |
| 2 | | Activity as per Rule 5(2) of CAF Rules, 2018 | | | | | |
| | 5(2) a & b | ANR/AR | 13014 | 110.37 | 1419042 | 24-25 | Approved |
| | 5(2)c | Silvicultural Operations | | 2.54 | | 25 | Approved |
| | 5(2)d | Protection of Plantations and forests | | 22.07 | 283757 | 25&34 | Approved |
| | 5(2)e | Pest and disease control in forests | | 0.40 | | 25&34 | Not approved |
| | 5(2)f | Forest Fire Prevention and Control Operations | | 5.97 | 74962 | 25&34 | Approved |
| | 5(2)g | Soil and moisture conservation works | | 48.59 | 624728 | 25&34 | Approved |
| | 5(2)h | Voluntary relocation of villages from protected areas | | 0.00 | | | |
| | 5(2)i | Improvement of wildlife habitat | 394 | 8.65 | 111214 | 33-34 | Approved |
| | 5(2)j | Planting and rejuvenation of forest cover on non-forest land falling in wildlife corridors | | 0.00 | | | |
| | 5(2)k | Establishment, maintenance of animal rescue centre and veterinary treatment facilities for wild animals | | 6.20 | | 34 | Approved |
| | 5(2)l | Supply of wood saving, cooking appliances and other forest produce saving devices. | | 0.00 | | | |
| | 5(2) m | Management of biological diversity and biological resources. | | 1.21 | | 25&34 | Approved |
| | | Approved subtotal under 80% NPV | 13408 | 205.60 | | | Approved |
| 3 | | Activity as per Rule 5 (3) of the CAF Rules, 2018 | | | | | |
| | 5 (3)a | Establishment, Maintenance of modern nurseries | As per details | 3.97 | 51042 | 25&34 | Approved |
| | 5 (3)b | Promoting conservation, sustainable use and documentation of biological diversity | | 0.00 | | | |
| | 5 (3) c | Purchase and maintenance of equipment devices for communication, information and technology | | 3.22 | | 25,26,34 & 35 | Approved |
| | 5 (3)d | Construction, up-gradation and maintenance of inspection paths, forest roads in forest areas, fire line, watch towers, check posts and timber depots. | | 3.69 | 47442 | 26&35 | Approved |
| | 5 (3)e | Construction of residential and official buildings. | | 20.40 | 262285 | 26&35 | Approved |
| | 5 (3)f | Casual engagement of local people or labours to assist regular staff of | | 11.48 | 374159 | 26&35 | Approved |

| | | | | | | | |
|----------|----------|--|------------------|---------------|----------------|-----------|-------------------------|
| | | State Forest Department | | | | | |
| | 5 (3)g | Survey and mapping | LS | 1.21 | | 26&3 5 | Approved |
| | 5 (3)h | Independent concurrent monitoring and evaluation and third party monitoring. | LS | 1.06 | | 26&3 4 | Approved |
| | 5 (3)i | Publicity cum awareness programme | LS | 2.74 | | 26&3 5 | Approved |
| | 5 (3)j | Production and distribution of quality planting material | | 0.00 | | | |
| | 5 (3)k | Forest certification and development of certification standards. | | 0.00 | | | |
| | | Approved subtotal under 20% NPV | Sub total | 47.77 | | | Approved |
| 4 | | Activities as per Rule 6(a) of CAF Rules, 2018 | | | | | |
| | 6 (a)i | To offset incremental cost of CA/PCA at increased wage rate. | | 0.00 | | | |
| | 6 (a)ii | To offset increment cost of CAT at increased wage rate | | 0.00 | | | |
| | 6 (a)iii | To offset incremental cost of IWMP at increased wage rate. | | 0.00 | | | |
| | 6 (a)iv | For disbursement of salary and allowances and staff | | 0.90 | | 37 | Approved |
| | 6 (a)v | For disbursement of sitting fees and allowances to nominated members. | | 0.05 | | 37 | Approved |
| | 6 (a)vi | Activities referred to in sub rule-(2) and (3) of Rule 5 | | 0.00 | | | |
| | | Approved subtotal under 60% Interest Component | | 0.95 | | 37 | Approved |
| 5 | | Activities as per Rule 6(b) of CAF Rules, 2018 | | | | | |
| | 6 (b)i | Management of office establishment. | | 1.95 | | 37 | Approved |
| | 6 (b)ii | Office equipment including computers and peripherals and its maintenance. | | 0.20 | | 37 | Approved |
| | 6 (b)iii | Hiring of buildings on lease for office establishment and residences of the officials | | 0.00 | | | |
| | 6 (b)iv | Hiring of buildings on lease for office establishment and residences of the officers | | 0.00 | | | |
| | 6 (b)vi | Any other activity for management of forests and Wildlife with the approval of Steering Committee and included in the APO. | | 1.50 | | 37 | Rs. 0.50 crore approved |
| | | Approved subtotal under 40% Interest Component | | 2.65 | | | Approved |
| | | Approved total of Interest Component | | 3.60 | | | Approved |
| | | Approved Grand Total of APO 2023-24 | | 272.65 | 3450230 | | Approved |

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4. The approval is subject to the following conditions:

- i. The approved activities shall be carried out as per Rule- 4, 5 & 6 of the Compensatory Afforestation Fund (CAF) Rules, 2018 and as per the provisions of the State Financial Rules or any such rules applicable from time to time in the State.
- ii. Utilization of State Compensatory Afforestation Fund (CAF) shall be done in such a manner that at least 80% is used for afforestation, forest development and wildlife habitat improvement and up to a maximum 20% amount is to be used for infrastructure/capacity building related items.
- iii. All the records of CAMPA activities including amount sanctioned and expenditure incurred should be maintained by State CAMPA since its inception. The records should be properly maintained with Range, Division office and CEO State CAMPA in prescribed formats and placed on their websites.
- iv. The construction and maintenance of Rescue Centre should only be taken up after vetting of Central Zoo Authority (CZA) and when funds.
- v. A website of the State CAMPA should be properly developed, if not done earlier. It should have all relevant data, information, plantation maps, KML files of other assets and photographs of various activities carried out under CAMPA. In respect of CA, plantations/ regeneration activities before and after photographs should be uploaded.
- vi. If required and approved by National Authority, casual engagement of only local people may be hired to assist regular staff of State Forest Department for works for protection of forest and wildlife to be undertaken from State fund as per rule 5(3)(f).
- vii. Monitoring and evaluation of the works undertaken shall be the highest priority for the State Authorities. Executive Committee and Steering Committee of all the State/UT Authorities should ensure adequate measures for regular internal and third-party monitoring and evaluation of CAMPA activities on regular basis. For third party monitoring, State should engage agencies, who are professionally/ technically competent and independent State Government.
- viii. The monitoring and evaluation report of the works done up to the year 2021-22 must be made available to National Authority (NA). Similarly report on CAMPA activities taken up in 2022-23 should be made available to the NA.
- ix. A statement that the Annual Report, Annual accounts and the Audit Report together with a memorandum of action taken on recommendations contained therein has been laid in each house of the State legislature as per requirements of section 29 of the CAF Act 2016, shall be invariably submitted with the proposal for approval of the APO by the EC of NA.
- x. Prior to implementation of approved APOs, the EC of the State Authority shall ensure that a certificate is available with them to the effect that the proposed activities are being taken up after due consultation with Gram Sabha and are as per provisions of FRA 2006. Activities proposed in forest areas are in consonance with approved working plan; and activities proposed in protected areas (PAs) are in consonance with approved State Wildlife Management Plan, whereas activities proposed in forest fire prevention and control operations should be as per Integrated Fire Management Plan of the state.
- xi. Soil and Moisture Conservation works should be carried out in an integrated manner from ridge to valley approach in degraded forests. This shall focus on rejuvenation of rivers and achievements should be placed as per the DPRs for 13 major rivers released by MoEF&CC recently. APOs in future should indicate the reference of DPRs being implemented. The data of afforestation, aided forest regeneration and efforts for increasing tree cover outside should be shared with FSI for continuous assessment of green cover and evaluation. If not part of the above mentioned DPR, then state should take it up as per planned activity approved by State Government or in working plan.

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- xii. The State /UTs Authorities should make a detail record of total forest land transferred and compensatory afforestation carried out/ compensated the loss of green cover/ecosystem services.
- xiii. The State EC shall also ensure that there is no overlapping of activities / funding with other schemes and may provide a certificate to that effect.
- xiv. Local and indigenous species, especially fruit and fodder species should be given preference in afforestation/ regeneration to be carried out; monoculture and planting of exotic species should be avoided.
- xv. Compensating the loss of ecological services due to forest diversion for non-forestry purposes is the main objective of Compensatory Afforestation Fund. Regeneration and development of forests should, therefore, be given priority in degraded forests as well as non-forest lands. Priority should also be accorded to labour intensive activities for regeneration and development of forests and wildlife habitat.
- xvi. The Executive Committee of the State shall also ensure that proposed activities have adequate forward and backward linkages and are being taken up as per prevailing approved minimum wage rate, schedule of rates, model estimates etc.
- xvii. There should not be any reduction in allocation for forestry sector in the regular State Budget due to flow of CAMPA funds to the states. In addition, the State Government shall also make timely and adequate budget provision as per approved APO and release money so that approved activities could be implemented in time.
- xviii. Works related to Eco-tourism and Eco-development should be taken up following relevant rules and guidelines after taking necessary approvals.
- xix. Purchase of vehicles is not permitted. Vehicles are to be hired as per approved APO. The repair/ maintenance of vehicles shall be limited to the vehicles purchased from the CAMPA funds previously.
- xx. IRO shall also monitor and evaluate CAMPA activities. The State CAMPA Authority shall keep sufficient budgetary provisions for monitoring by IRO, in the State APOs under monitoring head. IRO should submit the Monitoring and Evaluation reports within three to four months to National Authority.
- xxi. The States/UTs CAMPA Authority shall complete for completing the works approved in APO within the year and avoid any spill over for the next year. It is important to complete mandatory activities first and utilise the released funds for maintenance of CAMPA activities under NPV & Interest components before starting new activities.
- xxii. The States/UTs Authority are proposing engagement of Casual labours for protection of Forests for the entire State. It clarified that such item can be considered only for around the forest areas where the land transfer has taken place and need special protection owing to the developmental activities.
- xxiii. The validity of APO (2023-24) shall expire on 31.03.2024. Further continuation of the incomplete activities shall be permissible only if they are included in the APO (2024-25) and are approved by NA.
- xxiv. The States/UTs Authorities shall work out details of funds available with the State CAMPA head-wise under CA/ CAT Plan/ Wildlife Mitigation Plan, NPV and interest components etc. after deducting the expenditure incurred and prepare Annual Plan of operation for next year based on CAMPA funds available with the State/UT. Priority shall be given to the mandatory activities including commitment on maintenance of previous years.

Yours faithfully


(Subhash Chandra)
Chief Executive Officer

Copy to:

1. The PCCF & HoFF-cum-Chairperson, the Executive Committee of UT of Jammu & Kashmir CAMPA, Department of Forests, Government of Jammu and Kashmir, Srinagar
2. The Chief Executive Officer, Jammu and Kashmir CAMPA, Srinagar
3. Principal Secretary, Department of Finance, Government of Jammu and Kashmir, Srinagar
4. Principal Secretary, Department of Planning, Government of Jammu and Kashmir, Srinagar
5. Accountant General, Jammu and Kashmir, Srinagar

Copy also forwarded through email to:

1. DGF&SS, MoEF&CC, New Delhi for kind information
2. Additional Secretary & Financial Advisor, MOEF&CC, New Delhi
3. Mission Director, National Mission for Green India, MOEF&CC, New Delhi
4. Deputy Director General of Forests/ IGF, Integrated Regional Office, Ministry of Environment, Forest and Climate Change, Jammu
5. Principal Director (Audit), Scientific Department, AGCR Building, New Delhi
6. IFD/Sanction Folder/ Guard File;
7. NIC Cell with a request to upload the sanction order on the official website of MoEF&CC.

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FOREST DEPARTMENT

Annexure III

PRINCIPAL CHIEF CONSERVATOR OF FORESTS, HARYANA

VAN BHAWAN, C-18, SECTOR-6, PANCHKULA (HARYANA)

Telephone No: 0172-2563988, Fax No: 0172-2583158, e-mail: papccf@gmail.com

No. 721

Dated:- 02/11/2023

To

Chief Executive Officer (National Authority),
National Compensatory Afforestation Fund Management and Planning Authority
Lodhi Road, New Delhi-110003

Sub: Annual Plan of Operation for the financial year 2023-24 of Haryana State CAMPA- Providing of requisite information, demanding the release of funds conditionally approved - Reg.

Ref: Your office letter No. NA-15/6/2020-NA dated 21.09.2023.

Please refer to the above cited subjected and reference communication through which the National CAMPA has conveyed its approval for an amount of Rs.49.43 Cr against the proposed outlay of Rs.252.66 Cr, wherein certain approvals have been granted with specific conditions for reporting back. Accordingly, the details have been collected and the following details are given for kind information, as demanded.

| S No | CAF Act/ Rules | Activity | Proposed Outlay | | Remarks of National CAMPA | Remarks / Proposal of State CAMPA |
|------|--------------------|--|-----------------|--------------|---|--|
| | | | Phy Tgt (Ha) | Fin Tgt (Rs) | | |
| 1 | Mandatory Activity | Compensatory Afforestation | | | | |
| | | iv. Maintenance of existing/older plantation | 6115.66 | 29.89 | Approved as per actual and limited to proposed outlay. Further excluding the area which have not been approved by the Central Government in accordance with FCA 1980. | 1. An amount of Rs.8.88 Cr has been released towards Maintenance of 2310.82 Ha plantation in the approved sites, as per the approval granted. 2. Details of all the unapproved sites, where plantation has been done previously (in an area of 3965.78 Ha) for which maintenance is required, have been collected and enclosed as Annex II. Accordingly, it is requested that an amount of Rs.20.60 Cr for the maintenance of 3965.78 ha. is sought. In this regard, it is also informed that such change of sites has been done in the past due to the fact that the approved sites have been already planted through other Schemes in many places and that in some cases, the proposed sites have also been diverted later for other purposes, leaving the Department with no other |


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1053466/2023/NA

| | | | | | | |
|---|---------|--|---------|-------|---|---|
| | | | | | | choice. However, cases are being sent to IRO for ex-post facto sanction of change of these sites. Considering the fact that the plantations have already been done on field and the maintenance is necessary for the survival of the plantation, it is requested the same be granted on the condition that in future the same will be taken into account before plantation. |
| 2 | 5.2 (b) | Artificial Regeneration (including Maintenance) | | | | |
| | | iii. Maintenance | 4696.80 | 15.19 | Not approved for new plantations. Maintenance for existing plantations may be done as per actual requirements after assessment by concerned CCF for an outlay of Rs.2.00 Cr. Details to be provided for reconsideration along with survival percentage of plantation. | Details of survival percentage of all the plantations, as received from the Territorial Circles, have been enclosed along. It is requested that the amount towards the maintenance of plantation (Rs.15.19 Cr) may be released towards the maintenance of 4996.80 Ha of ANR. |

Accordingly, in view of the information and clarifications provided above, as advised by National CAMPA, you are kindly requested to grant Rs. 35.79 Cr. towards the activities indicated above. Since these activities have already been carried out and the payment is already pending long due, this may kindly be treated on top priority. Reconciliation of project-wise Compensatory Afforestation against each proposal of Forest Land diversion since 1980 is under process which is likely to be completed within two weeks.

Encl: As above.



2.11.23
Principal Chief Conservator of Forests (HoFF),
Haryana, Panchkula

Endst. No. 722-723

Dated:- 02/11/2023

A copy is forwarded to the following for information:-

1. Additional Chief Secretary, Govt. of Haryana, Environment, Forest & Wildlife Department, Chandigarh.
2. Chief Executive Officer, CAMPA (State Authority), Haryana, Panchkula.


2.11.23
Principal Chief Conservator of Forests (HoFF),
Haryana, Panchkula

File No. NA-15/6/2020-NA
Government of India
Ministry of Environment, Forest and Climate Change
National Compensatory Afforestation Fund Management & Planning Authority
E-mail: adhoc-campa-mef@nic.in

Hall No.1, 4th Floor
Block No. 3, CGO Complex
Lodhi Road, New Delhi-110003
Dated 21st, September, 2023

To,

Additional Chief Secretary,
Forest & Wildlife Department
Government of Haryana,
Panchkula

Sub: Annual Plan of Operation for the financial year 2023-24 of Haryana State CAMPA – regarding.

Ref: The CEO, Haryana CAMPA State Authority's Letter No. CAMPA/2023-24/271, dated, 09.06.2023

Sir,

With reference to the above-mentioned letter, it is to convey the approval of the Executive Committee of the National Authority under section 15 (1) (i) of the Compensatory Afforestation Fund Act, 2016 for the State Annual Plan of Operation 2023-24 received on 09.06.2023 for an amount of **Rs. 49.43 crore** (Rupees Forty nine crore and forty three lakh only) against the proposed outlay of **Rs. 252.66** (Rupees Two hundred fifty two crore and sixty six lakh only) for carrying out CAMPA activities including the mandatory and time bound. The amount under NPV has been restricted to 25% of the NPV funds available with the State.

2. As per the decision taken in the Executive Committee meeting, the NPV component of CAMPA fund has been rationalized to less than 25% for continuation and sustainability of CAMPA activities aimed for improvement of quality of forest and wildlife habitat and essential measures required for forest fire prevention and control.

3. The Annual Plan of Operation 2023-24 was discussed in detail by the Executive Committee of the National Authority during the 24th Executive Committee meeting of the National Authority.

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

| Sr. No. | CAF Act/Rules | Activity | Proposed Outlay | | Remarks |
|----------|--------------------|---|-----------------|-----------------------|---|
| | | | Phy. Target | Fin. Target | |
| 1 | Mandatory Activity | Site Specific activities as per Section 6(a) of the CAF Act, 2016 | | | |
| | | Compensatory Afforestation | <i>In ha.</i> | <i>In Rs. Crores.</i> | |
| | | iii. New Plantation | 1197.73 | 111.58 | Not Approved for want of site-wise information sought. |
| | | iv. Maintenance of existing /older Plantation | 6115.66 | 29.89 | Approved as per actual and limited to proposed outlay. Further excluding the area which have not been approved by the central Government in accordance with FCA, 1980. |
| | | Total Site specific activities under CA | | 141.47 | |
| | | Activity as per Rule 5(2) of CAF Rules, 2018 | | | |
| | 5.2.(a) | Assisted Natural Regeneration; | | | |
| | | iii. Maintenance | 1327.80 | 1.85 | Approved |
| | 5.2.(b) | Artificial Regeneration; (including Maintenance) | | | |
| | | iii. Maintenance | 4696.80 | 15.19 | Not Approved for new plantations. Maintenance for existing plantations may be done as per actual requirements after assessment by concerned CCF for an outlay of Rs. 2.00 crore. Details to be provided for reconsideration alongwith survival percentage of plantations. |
| | | iv. Any other relevant activities (Enumeration of trees on strips) | - | 12.87 | Deferred |
| | 5.2.(g) | soil and moisture conservation works in the forest; | | | Not approved |
| | | i. Water Bodies a. Crate Wire Structures/spur/abutment wall - 8.78 crore | - | 20.00 | |

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| Sr. No. | CAF Act/Rules | Activity | Proposed Outlay | | Remarks |
|----------|--|---|-----------------|-------------|--------------|
| | | | Phy. Target | Fin. Target | |
| | | b. Pond - 0.60 crore c. Check Dams - 1.71 crore d. WHS - 4.70 crore e. CSMS/SDD/CC Stud - 4.16 Crore g. Vegetative Measures - 0.06 Crore Total: 20.00 Crores | | | |
| | 5.2.(i) | Improvement of wildlife habitat as provided in the approved wildlife management plan or working plan; | | | |
| | | i. Habitat management for flora and Fauna pertaining to a. Food - 0.10 Crore b. Cover - 0.96 Crore c. Water management - 2.23 Crore d. Weed removal - 1.10 Crore Total: 4.39 Crores | - | 4.39 | Not approved |
| | | ii. Human wildlife conflict | - | - | |
| | | iii. Protection activities a. Patrolling b. Prevention of Illicit felling c. Eco-development work in surrounding village to reduce conflict | - | - | Not approved |
| | | iv. Any other relevant activities Vulture conservation and breeding centers - 5.61Crores | - | 5.61 | |
| 3 | Activities as per Rule 5(3) of the CAF Rule, 2018 | | | | |
| | 5.3.(a) | establishment, up-gradation and maintenance of modern nurseries and other planting stock production facilities | | | Not approved |

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| Sr. No. | CAF Act/Rules | Activity | Proposed Outlay | | Remarks |
|----------|--|---|-----------------|-------------|---|
| | | | Phy. Target | Fin. Target | |
| | | for production of quality planting materials; | | | |
| | | i. Detailed estimate nursery | - | 20.00 | Not approved |
| | 5.3.(h) | independent concurrent monitoring and evaluation and third party monitoring of various works undertaken from State Fund; | | | |
| | | i. Independent concurrent monitoring | - | - | |
| | | ii. Third Party Monitoring and evaluation | - | 0.75 | Approved for Rs. 0.25 crores as per actuals |
| | 5.3.(i) | Publicity-cum-awareness programme and exhibition on the various schemes being implemented by the State Authority from State Fund; | | | Not approved |
| | | i. Publicity for common people | - | 1.00 | |
| | 5.3.(j) | production and distribution of quality planting material through certified nurseries at subsidized price for promotion of trees outside forests on Government lands promoted by State Government; | | | Not approved |
| 4 | Activities as per Rule 6(a) of the CAF Rule, 2018 | | | | |
| | 6.a.(i) | to offset the incremental cost of compensatory afforestation and penal compensatory afforestation at the increased wage rates; | 1197.73 | 10.00 | Not Approved for want of information sought |
| | 6.a.(iv) | for disbursement of salary and allowances of members and staffs, both regular and contractual, of the State Authority; | - | 1.94 | Approved Rs. 1.00 crore as per actuals |
| 5 | Activities as per Rule 6(b) of the CAF Rule, 2018 | | | | |

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| Sr. No. | CAF Act/Rules | Activity | Proposed Outlay | | Remarks |
|-----------------------|---|---|------------------------|-------------|--------------|
| | | | Phy. Target | Fin. Target | |
| | 6.b.(ii) | office equipment including computers and peripherals and its maintenance for the State Authority; | - | 1.15 | Not approved |
| | Deferment of certain activities under APO 2022-23 to the next financial year (Left over/ spill over works). | | - | 16.44 | Approved |
| Total Approved | | | Rs. 49.43 crore | | |

5. State Government is requested to release the CAMPA fund to the CEO, State CAMPA/State Forest Department immediately for carrying out approved activities in accordance with the APO 2023-24 approved by the National Authority.

6. The approval is subject to the following conditions:

- i. The approved activities shall be carried out as per Rule- 4 of the Compensatory Afforestation Fund (CAF) Rules, 2018 i.e. as per the provisions of the State Financial Rules or any such rules applicable from time to time in the State.
- ii. Utilization of State Compensatory Afforestation Fund (CAF) shall be done in such a manner that at least 80% is used for afforestation, forest development and wildlife habitat improvement and up to a maximum 20% amount is to be used for infrastructure/capacity building related items.
- iii. All the records of CAMPA activities including amount sanctioned and expenditure incurred should be maintained by State CAMPA since its inception. The records should be properly maintained with Range, Division office and CEO State CAMPA in prescribed formats and placed on their websites.
- iv. A website of the State CAMPA should be properly developed, if not done earlier. It should have all relevant data, information, plantation maps, KML files of other assets and photographs of various activities carried out under CAMPA. In respect of CA, plantations/ regeneration activities before and after photographs should be uploaded.
- v. If required and approved by National Authority, casual engagement of only local people or local labours may be hired to assist regular staff of State Forest Department for works for protection of forest and wildlife to be undertaken from State fund as per rule 5(3)(f).
- vi. Monitoring and evaluation of the works undertaken shall be the highest priority for the State Authorities. Executive Committee and Steering Committee of all the State/UT Authorities should ensure adequate measures for regular internal and third-party monitoring and evaluation of CAMPA activities on regular basis. For third party monitoring, State should engage agencies, who are professionally/ technically competent and independent of the State Government.
- vii. The monitoring and evaluation report of the works done up to the year 2021-22 must be available to National Authority (NA). Similarly report on CAMPA activities taken up in 2022-23 should be made available to the NA.
- viii. A statement that the Annual Report, Annual accounts and the Audit Report together with a memorandum of action taken on recommendations contained therein has been laid in each house of the State legislature as per requirements of section 29 of the CAF Act 2016, shall be invariably submitted with the proposal for approval of the APO by the EC of NA.
- ix. Prior to implementation of approved APOs, the EC of the State Authority shall ensure that a certificate is available with them to the effect that the proposed activities are being taken up after

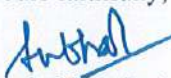
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- due consultation with Gram Sabha and are as per provisions of FRA 2006. Activities proposed in forest areas are in consonance with approved working plan; and activities proposed in protected areas (PAs) are in consonance with approved State Wildlife Management Plan, whereas activities proposed in forest fire prevention and control operations should be as per Integrated Fire Management Plan of the state.
- x. Soil and Moisture Conservation works should be carried out in an integrated manner from ridge to valley approach in degraded forests. This shall focus on rejuvenation of rivers and achievements should be placed as per the DPRs for 13 major rivers released by MoEF&CC recently. APOs in future should indicate the reference of DPRs being implemented. The data of afforestation, aided forest regeneration and efforts for increasing tree cover outside should be shared with FSI for continuous assessment of green cover and evaluation. If not part of the above mentioned DPR, then state should take it up as per planned activity approved by State Government or in working plan.
 - xi. The State /UTs Authorities should make a detail record of total forest land transferred and compensatory afforestation carried out/ compensated the loss of green cover/ecosystem services.
 - xii. The State EC shall also ensure that there is no overlapping of activities / funding with other schemes and may provide a certificate to that effect.
 - xiii. Local and indigenous species, especially fruit and fodder species should be given preference in afforestation/ regeneration to be carried out; monoculture and planting of exotic species should be avoided.
 - xiv. Compensating the loss of ecological services due to forest diversion for non-forestry purposes is the main objective of Compensatory Afforestation Fund. Regeneration and development of forests should, therefore, be given priority in degraded forests as well as non-forest lands. Priority should also be accorded to labour intensive activities for regeneration and development of forests and wildlife habitat.
 - xv. The Executive Committee of the State shall also ensure that proposed activities have adequate forward and backward linkages and are being taken up as per prevailing approved minimum wage rate, schedule of rates, model estimates etc.
 - xvi. There should not be any reduction in allocation for forestry sector in the regular State Budget due to flow of CAMPA funds to the states. In addition, the State Government shall also make timely and adequate budget provision as per approved APO and release money so that approved activities could be implemented in time.
 - xvii. Works related to Eco-tourism and Eco-development should be taken up following relevant rules and guidelines after taking necessary approvals.
 - xviii. Purchase of vehicles is not permitted. Vehicles are to be hired as per approved APO. The repair/ maintenance of vehicles shall be limited to the vehicles purchased from the CAMPA funds previously.
 - xix. IRO shall also monitor and evaluate CAMPA activities. The State CAMPA Authority shall keep sufficient budgetary provisions for monitoring by IRO, in the State APOs under monitoring head. IRO should submit the Monitoring and Evaluation reports within three to four months to National Authority.
 - xx. The States/UTs CAMPA Authority shall complete the works approved in APO within the year and avoid any spill over for the next year. It is important to complete mandatory activities first and utilize the released funds for maintenance of CAMPA activities under NPV & Interest components before starting new activities.
 - xxi. The States/UTs Authority are proposing engagement of casual labours for protection of Forests for the entire State. It clarified that such item can be considered only for around the forest areas where the land transfer has taken place and need special protection owing to the developmental activities.
 - xxii. The validity of APO (2023-24) shall expire on 31.03.2024. Further continuation of the incomplete activities shall be permissible only if they are included in the APO (2024-25) and are approved by NA.

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- xxiii. The States/UTs Authorities shall work out details of funds available with the State CAMPA head-wise under CA/ CAT Plan/ Wildlife Mitigation Plan, NPV and interest components etc. after deducting the expenditure incurred and prepare Annual Plan of operation for next year based on CAMPA funds available with the State/UT. Priority shall be given to the mandatory activities including commitment on maintenance of previous years.
- xxiv. All wage payments should be made through direct Benefit Transfer (DBT).

Yours faithfully,



(Subhash Chandra)
Chief Executive Officer

Copy to:

1. The Principal Chief Conservator of Forest and (HoFF)-cum Chairperson, The Executive Committee of the State CAMPA, Department of Forest, Government of Haryana.
2. The Chief Executive Officer, Haryana State CAMPA.
3. The Secretary, Department of Finance, Government of Haryana.
4. The Secretary, Department of Planning, Government of Haryana.
5. Accountant General, Haryana, Panchkula.

Copy also forwarded through email to:

1. DGF&SS, Ministry of Environment, Forest and Climate Change, for kind information.
2. Deputy Director General of Forest (Central), Regional Office, Ministry of Environment, Forest and Climate Change, Chandigarh.
3. IFD/Sanction Folder/ Guard File.
4. NIC Cell with a request to upload the sanction order on the official website of MoEF&CC.


(Subhash Chandra)
Chief Executive Officer
National Authority



**Proposal for Establishment of
CLIMATE CHANGE STUDIES CELL
At
Forest Survey of India**



Forest Survey of India

(Ministry of Environment, Forest & Climate Change)

Dehradun



Proposal for Establishment of
CLIMATE CHANGE STUDIES CELL

At

Forest Survey of India



Forest Survey of India

Ministry of Environment, Forest & Climate Change

Dehradun

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Introduction

Climate Change

Climate change is one of the key risks facing the world today. Climate Change is posing a serious threat to the entire ecosystems, which in turn has put serious questions about the survival of life on the planet. The atmospheric carbon di-oxide concentration is steadily increasing and it has increased rapidly during pre-industrial times (mid 1700s) to till date (**Lenssen et al. 2019**)¹. As a consequence, the global mean temperatures have already risen by a little more than 1°C compared to pre-industrial times (**Susskind et al. 2019**)². This continuous rise in the temperature of earth over the years is called “Global Warming”.

Global Warming and Green House Effect

Fossil fuels are being continuously used for various purposes, like, automobiles, industry, power generation etc. The burning of these fuels produces gases like carbon dioxide (CO₂), methane (CH₄) and oxides of nitrogen. These gases are termed as “Green House Gases” (GHG) and the major factor in causing “Green House Effects”. The greenhouse effect is closely related to global warming (**Shahzad, 2015**)³.

The naturally produced greenhouse gases primarily from the respiration of living organisms easily get dissipated and compensated by the photosynthesis of earth’s floral ecosystem in harmless manner, keeping our mother earth safe. On contrary, the human induced greenhouse effect occurs due to enormously higher quantity of fossil fuel burning. The generated greenhouse gases by anthropogenic causes cannot get compensated by decreasing floral reserve of earth. Therefore, uncompensated excess greenhouse gases get trapped by the upper atmospheric layers of globe along with its heat content and making earth warmer, is commonly called as “Green House Effect”. This causes the rise of global temperature and creates “Global Warming”.

¹ Lenssen N., Schmidt G., Hansen J., Menne M., Persin A., Ruedy R., Zyss D. (2019). Improvements in the GISTEMP uncertainty model. *Journal of Geophysical Research: Atmospheres*. **124** (12): 6307-6326.

² Susskind J., Schmidt GA, Lee J.N. and Iredell L. (2019). Recent global warming as confirmed by AIRS. *Environmental Research Letters*. **14** (4):044030.

³ Shahzad, Umair. (2015). Global Warming: Causes, Effects and Solutions. *Durreesamin Journal*. Vol 1 (4). ISSN: 2204 – 9827.

Importance of Forest as Vast Floral Reserve

It is therefore, a proven fact that raising and protecting floral ecosystem of the earth is the most primary as well as efficient shield against adverse climate change by removing and storing Carbon from atmospheric CO₂.

The process of capturing and storing atmospheric carbon dioxide, is known as Carbon sequestration. It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change. Forests occupy a central place in the mitigation actions of climate change as they play a significant role in relation to climate change. Floral ecosystem of forests sequesters most of the atmospheric CO₂. Forests are the biggest sink or the biggest terrestrial reservoir of carbon on the planet earth. Forestry based interventions are also recognized as effective and sustainable climate change adaptation strategies (Ashutosh *et al.*, 2020)⁴.

Nationally Determined Contribution Commitment of India

India has submitted its Nationally Determined Contribution (NDC) to the UNFCCC (United Nations Framework Convention on Climate Change) in October 2015, which outlines the post-2020 climate actions of the country intends to take under a new international agreement. One of the important salient commitment made by India is **to create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030** (Ashutosh *et al.*, 2020)⁵.

As per ISFR 2021, India has achieved to reach 1.97 Billion Tonnes (Bt) of CO₂ equivalent, since the year 2005 taken as a baseline (ISFR, 2021)⁶. It is therefore, expected from the established trend that India could achieve remaining 0.53 Bt plus of CO₂ equivalent, by the target year of 2030.

⁴ Ashutosh S., Sharma S., Lakhchaura P., Joshi M., Sourav Ghosh, Rao V and Chaturvedi R. (2020). Mapping Climate Change Hotspots in Indian Forests, Based on Observed Climate Change and High Resolution Climate Model Projections. *FSI Technical Information Series. Vol 2 (5): 1-62.*

⁵ Ashutosh S., Sharma S., Lakhchaura P., Sourav Ghosh, Tripathi S. and Uniyal M. (2019). India's Nationally Determined Contribution of Creating an Additional Carbon Sink of 2.5 to 3 billion tonnes of CO₂ eq through Additional Forest & Tree Cover: Possibilities, Scale & Costs for Formulating Strategy. *FSI Technical Information Series. Vol 1 (3): 1-54.*

⁶ ISFR (2021). India State of Forest Report. Forest Survey of India. Ministry of Environment, Forest and Climate Change, Govt. of India. ISBN: 978-81-950073-1-8.

Role of Forest Survey of India

Forest Survey of India, in tune of its mandate, is carrying out carbon estimation biennially of India in the five carbon pools like: i) Above Ground Biomass, ii) Below Ground Biomass, iii) Litter, iv) Dead wood and v) Soil since the year 2011. The brief description of pools is given below (ISFR, 2019)⁷.

- i) **Above ground biomass (AGB):** All living biomass above the soil including stems, stumps, branches, bark, seeds and foliage.
- ii) **Below ground biomass (BGB):** All living biomass of live roots. Fine roots of less than 2mm diameter (country specific) are often excluded because these often cannot be distinguished from soil organic matter or litter.
- iii) **Dead wood:** Includes all non-living woody biomass not contained in the litter, either standing or lying on the ground. Dead wood also includes dead roots and stumps larger than or equal to 10cm in diameter or any other diameter used by the country.
- iv) **Litter:** Includes all non-living biomass with a diameter less than a minimum diameter chosen by the country (for FSI it is 5 cm), lying dead, in various states of decomposition above the mineral or organic soil.
- v) **Soil organic matter:** Includes organic carbon in mineral and organic soils (including peat) to a specific depth chosen by the country (for FSI 30 cm) and applied consistently through the time series.

⁷ ISFR (2019). India State of Forest Report. Forest Survey of India. Ministry of Environment, Forest and Climate Change, Govt. of India. ISBN: 978-81-941018-0-2.

Objectives of Making Climate Change Study Cell

After understanding the importance of what has been stated above, FSI is willing to open a “Climate Change Study Cell” with an aim to attain the following broad objectives and its plausible impacts on various ecosystems. This is followed by elaboration of objectives.

- 1) To Perform Detailed Survey of “Tree Outside Forests Inventory for Assessing Carbon Stock of all five carbon pools”.
- 2) To Establish “Permanent Sample Plots for Periodic Assessment of the Effect of Climate Change in Biodiversity”.
- 3) To Study the “Shifting of Tree Line or Timber Line with Existing Data and Periodic Mapping of Timber Line Over a time period for Assessing Its Effect on Climate”.
- 4) To study “Indicator Species of Climate change”
- 5) To Study the “Assessment & monitoring Lichens as climate change indicators in sample plots of FSI”.
- 6) To study the “Effect of climate change on habitats of Orchids (Himalayan, NE Region, Western & Eastern Ghats)”.
- 7) To Study the “Effect of Climate Change in the Carbon Sequestration of Mangrove Ecosystem”.

The above mentioned objectives can be expanded upto a certain extent during the progress of the study.

Elaboration of the Objectives

1. Tree Outside Forests Inventory for Assessing Carbon Stock of all five carbon pools

The National Forest Policy 1988 aims at bringing 33% of the geographical area of the country under tree cover. FSI assesses forest and tree cover of the country in biennial cycle. The forest cover assessment, which, includes all areas more than 1 hectare in extent and having tree canopy density of 10% and more irrespective of landuse, legal status and ownership, is done using satellite data. However, there are many small patches of trees which are less than 1 ha in extent, such as trees

in village woodlots, homesteads, trees along linear features such as roads, canals, bunds, trees in urban areas, scattered trees etc. These smaller patches of trees, having land-use viz. settlements, cropland, grassland, wetlands & other lands are not included in the forest cover and are required to be accounted for in LULUCF greenhouse gas inventory.

The extent of such small patches of the trees outside the RFA is estimated as tree cover, using field survey based on stratified random sampling methodology and estimated partly by using satellite imagery data. At present, the TOF survey is capturing information on woody growing stock and hence it is equipped to generate part information of Above Ground Biomass (AGB) only. Whereas, other carbon pools namely small trees (less than 5cm DBH), shrub, climbers, herbs, bark, deadwood, litter and soil organic carbon (SOC), if captured in field surveys, it would have improved the precision and estimation of carbon in TOF for all the pools of carbon. As we know Soil Organic Carbon accounts for 56% of the total assessed Carbon (ISFR, 2021). To make it complete, the deadwood, litter, herbs/shrubs/climbers & regeneration plots will be laid along with collection of soil samples in TOF plots (around 10,000 plots per year).

Therefore, periodic and extensive field based surveys (capturing all carbon pools in TOF) are needed to assess the temporal variations of all five carbon pools in the "Tree Outside Forests", in order to make the Carbon stock estimation more precise. These type of effort will be a pioneering approach by India in the field of "Tree Outside Forests" carbon assessment under global scenario.

2. Permanent Sample Plots for Periodic Assessment of the Effect of Climate Change in Biodiversity

Permanent Sample/Observational plots (PSPs/POPs) are an essential tool to understand natural ecological processes. They provide direct insights into forest development. This information lead to the idea about how forests change over time and respond to various atrocities like climate change, biotic invasions, and land management. As on date FSI is regularly surveying the plots on longer

interval of time. The plot data recorded in the first year will be treated as the baseline for the permanent sample plot.

Objective of establishing permanent observational plots along with “Forest Resource Assessment” is to provide unbiased forest statistics of the said areas for any certain period of time. The permanent plots also indicate the trend of growing stand and stock, health & productivity indicators of ecosystem, changes in land-use, biodiversity status and dynamics, carbon stock estimation etc. Interestingly, all the above-mentioned parameters like growing stock, plant and soil health, land use and biodiversity changes are influenced by the change of climate. These factors may be considered as the secondary indicators of adverse climatic impact.

In this context, uses of permanent plots may be defined as:

- First point should be establishing a base line for climate change. The plot data recorded in the first year will be treated as the baseline for the permanent sample plot. The subsequently recorded data should be compared and analyzed every time with the base data to observe any adverse climate change in the ecosystem existing permanent sample point.
- Models of forest dynamics can be developed. Such as, measurement of diameter of individual tree at periodic interval will help in developing growth model, CAI and MAI. Annual basal area increment can produce forest yield. Knowledge of basal area increment of a forest species is of paramount importance in forest management. Therefore, the study climate change impact on the growth parameters of the existing plant species within the permanent sample plot can definitely assess any retardation of plant growth.
- The adverse climate change may also impact the Morality/decay rate of existing plant species, in the permanent sample plots. These factors can also be monitored and analyzed on periodic basis.

- Carbon stored can be measured to estimate changes in stock contained in live biomass. Climate change/global warming being a global issue can be addressed by reporting the net estimation of carbon (removal as well as released carbon by forests).
- Factors showing damage (mechanical) due to pests/ diseases showing degraded health of forests due to climate change can be estimated by permanent sample plot study. Since plots are maintained and data would be reliable which may support sound forest management.
- The adverse change in the climate may augment the Invasive species to spread faster. These processes of unwanted migration can be monitored and be managed well through the data obtained from the permanent plots.
- Permanent plots are a robust approach for measuring detailed changes in the forest conditions, structure, species richness and diversity. Monitoring of such plots not only helps in detecting significant change in vegetation by the impact of climate vis-à-vis invasive species, but also helps in proper combat management through modelling tree growth, mortality assessment, forest yield, by measuring repeatedly at a fixed interval of time.
- Under the study, FSI will establish a network of 150 PSPs/POPs (without protection) of optimum size each in all forest types between 2023-24 to 2027-28, in collaboration with SFDs. These plots will be continued to be monitored permanently.

3. Shifting of Tree Line or Timber Line with Existing Data and Periodic Mapping Timber Line Over a time period for Assessing Its Effect on Climate

The vegetation of tree lines is among the most vulnerable and sensitive to the impact of global warming on earth. The movement of forest tree lines towards higher altitudes is mainly related to thermal variations and other factors such as enhanced atmospheric CO₂ and nitrogen deposition. Simultaneously, increases in these factors usually result in the migration of alpine plants to upper altitudes.

Moreover, downward shifts in tree lines and decreases in tree line stability have been reported due to harsh environmental conditions and human disturbances. Indeed, these shifts probably have a remarkable influence on plants that are a carbon sink major source. In fact, the reliable assessment of forest tree line dynamics is essential to conserve the ecological condition of biodiversity for sustainable management and forest conservation strategies (Arekhi et al. 2018)⁸. Numerous studies have reported that treelines are moving to higher elevations and higher latitudes. Most treelines are temperature limited and warmer climate expands the area in which trees are capable of growing. Hence, climate change has been assumed to be the main driver behind this treeline movement (Amanda et al., 2021)⁹. Hence establishing a baseline for tree line is extremely important in the Himalayan region. High resolution data will be analysed and tree line will be marked. Effort will also be made for studying the old aerial photos existing with FSI and Sol for studying the tree line in the past. In this study satellite data will be acquired for 3 times for establishing a reliable tree line. Then this process of mapping can be repeated every 5 – 10 years for ascertaining changes.

4. Indicator Species of Climate Change

An indicator species is an organism whose presence, absence or abundance reflects a specific environmental condition. Indicator species can signal a change in the biological condition of a particular ecosystem, and thus may be used as a proxy to diagnose the health of an ecosystem. These biological indicators are the groups of sites representing habitat types or combinations of habitat types; they are of prime interest for ecosystem conservation and management. However, a baseline/benchmark information is essential for assessment of changes in ecosystem/biodiversity. In this regard, the legacy data of FSI (1965 onwards) will be digitized and utilized for ascertaining the changes in species distribution with time and effort will be made to establish relationship between climate change

⁸ Arekhi M., Yesil A., Ozkan U.Y. and Sanli F.B. (2018). Detecting treeline dynamics in response to climate warming using forest stand maps and Landsat data in a temperate forest. *Forest Ecosystems*. Vol 5 (23): 1-24.

⁹ Amanda H., Paul D. and Jamie S. (2021). A review of modern tree line migration, the factors controlling it and the implications for carbon storage. *Journal of Mountain Science*. 18 (2): 291-306.

and distribution of these species. This topic has also been shortlisted for studying under National Institution for Research & Application of Natural Resources to Transform, Adapt & build Resilience (NIRANTAR) with BSI.

5. Assessment & monitoring Lichens as climate change indicators in sample plots of FSI

Lichens are a small group of plants of composite nature, consisting of two dissimilar organisms, an algae and a fungus living in a symbiotic association. The fungus with its root gets the water plus minerals, and algae uses its photosynthetic ability to produce food.

Lichens biodiversity or monitoring lichens communities as indicators of various climate driven ecosystem functions such as forest health, air quality, local climatic conditions, soil fertility etc. This arena of study can be performed under "Climate Change Studies Cell" of FSI. Already lichen plots are present in the sampling design of FSI, but due to paucity of budget and time this work was not started. It is intended to start this work, which is going to become a very important baseline for studying climate change in the future. This topic has also been shortlisted for studying under NIRANTAR with BSI.

6. Effect of climate change on habitats of Orchids (Himalayan, NE Region, Western & Eastern Ghats)

Orchids are very well-adapted to life in the canopy. They have roots with a large surface area for rapid absorption of nutrients and water. Their secondary stems can hold stores of water so the plant can withstand periods of drying. Therefore, these Orchid plants adapt to their environment due to necessity. Plants may also adapt by growing lower and closer to the ground to shield themselves from wind and cold. Desert environments may have some of the following adaptations, these help the plant to conserve food, energy and water and still be able to reproduce effectively. Therefore, the pattern of the orchids and visible stress on them during a specific longer time period could indicate us about the specific climatic stress that was exposed on that species. Therefore, this study in the

National level could definitely address the impact of climate change. This topic has also been shortlisted for studying under NIRANTAR with BSI.

7. Effect of Climate Change in the Carbon Sequestration of Mangrove Ecosystem

Mangroves, like other coastal wetlands, are powerful carbon sinks (**Sahu and Kathiresan, 2019**)¹⁰. **Jia et al. (2022)**¹¹, studied mangroves ecosystem, which is having the highest carbon storage efficiency, in the coastal ecosystem. **Swaminathan (2014)**¹², mentioned that Mangroves in India constitutes about 7% of the world's mangroves.

Mangrove forests have survived storms and cyclones, but not man's destructive greed. Today, the mangrove forests are among the most threatened habitats in the world, disappearing at an alarming rate of 2 to 8% per year.

Coastal ecosystems are critical in maintaining human well-being and global biodiversity. In particular, mangroves, tidal salt marshes, and seagrasses provide numerous benefits and services that contribute to people's ability to mitigate and adapt to the impacts of climate change (**Coastal Blue Carbon, 2016**)¹³. Coastal and Riverine Mangroves, tidal and salt marshes, and seagrasses – are highly productive coastal ecosystems that are particularly important for their capacity to store carbon within the plants and in the sediments below, and are thereby considered a key component of nature-based solutions to climate change. The total potential of carbon sequestered by mangrove needs to be studied more in detail, especially in the context of the national commitment for Carbon sequestration.

¹⁰ Sahu S.K. and Kathiresan K. (2019). The age and species composition of mangrove forest directly influence the net primary productivity and carbon sequestration potential. *Biocatalysis and Agricultural Biotechnology*. Vol. 20: 101235.

¹¹ Jia P., Huang W., Zhang Z., Cheng J. and Xiao Y. (2022). The Carbon Sink of Mangrove Ecological Restoration between 1988–2020 in Qinglan Bay, Hainan Island, China. *Forests*. 13: 1547.

¹² Swaminathan M.S. (2014). Heritage of Mangrove Wetlands of the East Coast of India: Conservation and Sustainable Management.

¹³ Coastal Blue Carbon (2016). COASTAL BLUE CARBON: methods for assessing carbon stocks and emissions factors in mangroves, tidal salt marshes, and seagrass meadows. Centre for International Forestry Research. The Blue Carbon Initiative.

Budget Requirement

Owing to the urgent necessities and present relevance in India's scenarios, in attaining the above-mentioned objectives under "Climate Change Studies Cell" of FSI; a budget table has been prepared and placed here under for the necessary approval please.

| Activity | Financial Requirements (Rs. In Lakh) over the Years | | | | | | Component-wise Total |
|---|---|---------|---------|---------|---------|--------------------|----------------------|
| | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | Total for 05 Years | |
| 1. Tree Outside Forests Inventory for Assessing Carbon Stock of all five carbon pools | | | | | | | 1,150.15 |
| a. 10,000 plots in a year | 200.00 | 214.00 | 228.98 | 245.01 | 262.16 | 1,150.15 | |
| 2. Permanent Sample Plots for Periodic Assessment of the Effect of Climate Change in Biodiversity | | | | | | | 896.09 |
| a. 150 plots in all FTG (one time) | 240.00 | 85.60 | 91.59 | 98.00 | 104.86 | 620.06 | |
| b. Senior Consultant (1 Nos.) | 18.00 | 19.26 | 20.61 | 22.05 | 23.59 | 103.51 | |
| c. Research Associate (5 Nos.) | 30.00 | 32.10 | 34.35 | 36.75 | 39.32 | 172.52 | |
| 3. Shifting of Tree Line or Timber Line with Existing Data and Periodic Mapping Timber Line Over a time period for Assessing Its Effect on Climate | | | | | | | 2,563.02 |
| a. Procurement of Satellite data imagery of three times during project period | 1,550.00 | | | | 775.00 | 2,325.00 | |
| b. Scientific Staff (2 Nos.) | 24.00 | 25.68 | 27.48 | 29.40 | 31.46 | 138.02 | |
| c. Procurement of Hardware & Software (One time) | 100.00 | | | | | 100.00 | |
| 4. Indicator Species of Climate Change | | | | | | | 337.54 |
| a. Legacy Data digitization | 20.00 | 21.40 | 22.90 | 24.50 | 26.22 | 115.01 | |
| b. Data entry Operators (10 Nos.) | 30.00 | 32.10 | 34.35 | 36.75 | 39.32 | 172.52 | |
| c. Procurement of Hardware & Software | 50.00 | | | | | 50.00 | |
| 5. Assessment & monitoring Lichens as climate change indicators in sample plots of FSI | | | | | | | 571.37 |
| a. 6,000 Plots in first year for identification of suitable lichen areas, thereafter 100 POPs in second year | 60.00 | 80.00 | 57.07 | 61.06 | 65.34 | 323.46 | |
| b. Senior Consultant (1 Nos.) | 18.00 | 19.80 | 21.78 | 23.96 | 26.35 | 109.89 | |
| c. Scientific Staff (1 Nos.) | 12.00 | 12.84 | 13.74 | 14.70 | 15.73 | 69.01 | |
| d. Research Associate (2 Nos.) | 12.00 | 12.84 | 13.74 | 14.70 | 15.73 | 69.01 | |
| 6. Effect of climate change on habitats of Orchids (Himalayan, NE Region, Western & Eastern Ghats) | | | | | | | 534.99 |

Proposal for Establishment of Climate Change Study Cell

| Activity | Financial Requirements (Rs. In Lakh) over the Years | | | | | | Component-wise Total |
|--|---|---------------|---------------|---------------|-----------------|--------------------|----------------------|
| | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | Total for 05 Years | |
| a. 3,000 Plots in first year for identification of suitable orchid sites, thereafter 100 POPs in second year | 30.00 | 80.00 | 57.07 | 61.06 | 65.34 | 293.46 | |
| b. Senior Consultant (1 Nos.) | 18.00 | 19.26 | 20.61 | 22.05 | 23.59 | 103.51 | |
| c. Scientific Staff (1 Nos.) | 12.00 | 12.84 | 13.74 | 14.70 | 15.73 | 69.01 | |
| d. Research Associate (2 Nos.) | 12.00 | 12.84 | 13.74 | 14.70 | 15.73 | 69.01 | |
| 7. Effect of Climate Change in the Carbon Sequestration of Mangrove Ecosystem | | | | | | | |
| a. One time procurement of Equipments (Drones+Laser Scanner) | 50.00 | | | 50.00 | | 100.00 | 500.06 |
| b. Software & maintainance (@20% in subsequent years) | 20.00 | 4.00 | 4.28 | 4.58 | 4.90 | 37.76 | |
| c. 300 Plots/year at Rs. 15,000/plot | 45.00 | 48.15 | 51.52 | 55.13 | 58.99 | 258.78 | |
| d. Scientific Staff (1 Nos.) | 12.00 | 12.84 | 13.74 | 14.70 | 15.73 | 69.01 | |
| e. Research Associate (1 Nos.) | 6.00 | 6.42 | 6.87 | 7.35 | 7.86 | 34.50 | |
| 8. Capacity Building of Field Staff | | | | | | | 57.51 |
| a. Rs. 10.00 Lakh in a year | 10.00 | 10.70 | 11.45 | 12.25 | 13.11 | 57.51 | |
| 9. Report Writing & Publication | | | | | | | 28.75 |
| a. Rs. 5.00 Lakh in a year | 5.00 | 5.35 | 5.72 | 6.13 | 6.55 | 28.75 | |
| 10. Miscellaneous Expenditure (@ 5% of total expenditure) | 129.20 | 38.40 | 38.27 | 43.48 | 82.63 | 331.97 | 331.97 |
| Total for Survey & Mapping works and Climate Change Studies | 2,713.20 | 806.42 | 803.57 | 913.01 | 1,735.25 | 6,971.45 | 6,971.45 |

It may be noted that financial estimates have been adjusted for inflation (@7%) from 2nd year onwards.

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Measurement of carbon fluxes in tropical dry deciduous forests of Madhya Pradesh and Chhattisgarh through Eddy Covariance based carbon flux towers

1. Introduction

Forests are known as the sink as well as the source of carbon dioxide. Role of forests have been increasingly recognized as most cost-effective option for climate change mitigation through carbon captured in biomass and soils. Forests are considered to provide a large climate change mitigation opportunity at relatively lower costs along with other significant co-benefits.

Forests serve an important part in regulating a region's climate by exchanging energy, water, CO₂, and other chemical components with the atmosphere (Bonan, 2008). It serves as both a carbon sink as well as a carbon source. Forests contribute to climate change mitigation by absorbing atmospheric carbon dioxide via photosynthesis (Chen *et al.*, 2009). Forests have the potential to absorb about 25 percent of the atmospheric CO₂ emitted by anthropogenic activities (Zhou *et al.*, 2022). On the other side, carbon emissions are triggered by deforestation and the use of forest products, such as burning fuel wood (Jiang *et al.*, 2022). Therefore, accurate quantification of carbon fluxes between atmosphere and canopies is required for the development of appropriate forest management practices as well as effective strategies for mitigating climate change.

Quantification of terrestrial carbon stocks and the understanding of temporal and spatial variation in carbon uptake would help in developing mitigation strategies for increasing atmospheric carbon dioxide. Terrestrial ecosystems are major carbon sinks that could play an important role in offsetting anthropogenic carbon emissions. In terrestrial ecosystems especially, the forest ecosystem plays a lead role in carbon sequestration and therefore regulates carbon dioxide fluxes. Forest ecosystem holds an integral position in global carbon cycle in terrestrial ecosystems. Forest ecosystem is affected by rising atmospheric carbon dioxide concentration in two forms the first one is the direct effects of carbon dioxide on photosynthesis, and effects of climate change on photosynthesis and respiration (Friedlingstein *et al.*, 2006). Globally, the carbon cycle plays a key role in regulating the earth's climate by controlling the concentration of carbon dioxide in the atmosphere (IPCC, 2007).

The carbon cycle is a key factor in controlling the earth's temperature by regulating the amount of carbon dioxide (CO₂) in the atmosphere. One of the primary greenhouse substances causing global warming is CO₂ (Ritchie *et al.*, 2020). Excessive emission of CO₂ and other greenhouse gases caused by anthropogenic activities such as the combustion of fossil fuels and biomass are presently one of the biggest ecological problems that communities around the world are dealing with and must be addressed (IPCC, 2021). National and international efforts are being made to mitigate CO₂ induced climate change. Understanding and precisely quantifying terrestrial carbon sinks and sources are critical for developing climate change mitigation strategies. Research on CO₂ and water vapor exchange in natural ecosystems are very necessary for quantifying their role in landscape level carbon budget.

On a global scale, forest ecosystems have been estimated to hold about 662 Gt of carbon at a density of 163 t C/ha. (FAO, 2020). In terms of worldwide forest cover, India is in 10th place. There are 16 types forests in India (Champion & Seth, 1968) covering 80.9 million hectares area, i.e. 24.62% of the total geographical area of the country (FSI, 2021). About 34.8% of India's total forest cover is composed of tropical dry deciduous forests, followed by tropical wet deciduous forest (33.19%), tropical semi-evergreen forests (7.72%), and tropical wet evergreen trees (7.54%) (Redddy *et al.*, 2015). As a result, the tropical deciduous woods have enormous potential as carbon sinks. The second-largest state in the nation, Madhya Pradesh, has 30% of its land covered by forest, primarily dry teak forest (26.4%), and southern dry mixed deciduous forest. (FSI, 2021). The ninth-largest state in the nation is Chhattisgarh. Northern Dry Mixed Deciduous Forest (13.16%) and Southern Mixed Deciduous Forest (about 27.37%) make up the majority of the Chhattisgarh's 41% forest cover (FSI, 2021). Despite having a sizable quantity of forest cover, knowledge on the carbon cycle or carbon budget in dry deciduous forests is very little (Raha *et al.*, 2020). Making forest-specific policies and strategies for CO₂ mitigation will benefit from measuring and monitoring carbon fluxes in tropical dry forests because it will not only help to close knowledge gaps in this area.

Gross primary productivity (GPP), net primary productivity (NPP), and net ecosystem exchange (NEE) are the primary variables used in assessing and monitoring carbon flow at the ecosystem level. The GPP is the overall amount of carbon that plants in the ecosystem take in through photosynthesis, while the NPP is the result of carbon losses brought on by autotrophic respiration. (Boisvenue and Running, 2006). The net ecosystem CO₂ exchange (NEE) between terrestrial ecosystems and the atmosphere is represented by the net photosynthetic uptake and release of CO₂ by respiration from autotrophs and heterotrophs. (Xiao *et al.*, 2011). The understanding of carbon flux in the atmosphere and biosphere, as well as important processes in developing mitigation strategies for climate change, are improved by precise and accurate estimates of NEE at the ecosystem level (Xiao and Moody, 2005; Waring and Running, 2007).

The conventional approach relies on inventory measures of temporal changes in biomass and the underlying soil carbon pool over a number of years to determine the carbon fluxes in a forest ecosystem. (Clark *et al.*, 2001). The measurement of precise and consistent carbon fluxes at daily, monthly, and yearly time scales using the traditional field inventories based on allometric equations is virtually impossible. An alternative approach, known as the Eddy Covariance (EC) technique, has been developed to precisely measure the net ecosystem exchange, which measures the CO₂ fluxes between the canopy and the atmosphere (Canadell *et al.*, 2000). This method is best suited for monitoring fluxes at the ecosystem level because of its underlying micrometeorological principles, continuous monitoring, minimal perturbation or damage to the system sampled and footprint (Campioli *et al.*, 2016). The CO₂, CH₄, water vapour (H₂O), sensible heat (H), latent heat (LE), and soil heat fluxes could also be measured by this technique.

A direct measurement of net carbon dioxide exchange across the canopy and atmosphere boundary is provided by the eddy covariance-based carbon flux method. The measurements arising from the covariance between vertical wind velocity and scalar concentration fluctuations are interpreted using micrometeorological theory (Baldoochi *et al.*, 1988). This method also helps in determining the relationship between CO₂ fluxes and environmental variables. Therefore, this method facilitates in answering the management-based queries that are practiced in the region and further in adopting the sustainable management practices of the forest. Policy approaches aiming towards reduction in deforestation and forest degradation can reduce the emission from forests, and sustainable management of forests has enormous potential to enhance the carbon capture and storage by forests. Reduction in deforestation and forest degradation can reduce the emission from forests, and sustainable management of forests can enhance the carbon capture and storage capacity of the forests.

Regular monitoring of carbon exchange particularly over forest ecosystems is a key to climate policy making decision due to large carbon sequestration potential of the forest ecosystems. In recent years, eddy covariance technique has emerged as promising technique to measure net carbon dioxide ecosystem exchange. Increasing number of eddy covariance-based carbon flux towers provide the best opportunity for estimating gross primary productivity of different forest types. About 10 eddy covariance tower/ carbon flux towers have been established for forest carbon measurement and monitoring in two main forest type groups namely Moist Deciduous Forest and Dry Deciduous Forest by National Remote Sensing Centre, Indian Institute of Remote Sensing, Indian Institute of Tropical Meteorology and Indian Council of Forestry Research and Education. Establishment of some more eddy covariance tower/ carbon flux towers in the major forest types of India will provide the representation in estimating the forest carbon.

Indian Council of Forestry Research and Education (ICFRE) has established two eddy covariance/ carbon flux towers targeting two forest subgroup types namely Northern Dry Mixed Deciduous Forest and Southern Dry Mixed Deciduous Forest in the states of Madhya Pradesh and Chhattisgarh under the World Bank funded Ecosystem Services Improvement Project in 2021. These towers are equipped with IRGASON (Open Path Gas Analyzer and 3D Sonic Anemometer) and other meteorological sensors for measuring air temperature, relative humidity, net radiation, photosynthetically active radiation, soil heat flux, soil moisture and temperature, wind speed as ancillary instruments for carbon flux calculations. The findings of the about two years study stated that Northern mixed deciduous forest of Madhya Pradesh and Southern mixed deciduous forest of Chhattisgarh act as net carbon sink with a net carbon uptake of 4.84 - 5.40 t C ha⁻¹ y⁻¹ in Madhya Pradesh and 4.09 - 4.45 t C ha⁻¹ y⁻¹ in Chhattisgarh. The highest sequestration of CO₂ was recorded in the month of August at Khatpura Site, Madhya Pradesh and September at Sonhat Site, Chhattisgarh. It has been estimated that, the net ecosystem exchange (NEE) were high during the late monsoon period. In the month of April to May carbon is released into the atmosphere and forest act as source of carbon. This

may be due to lower gross primary productivity (GPP) than the respiration (R_{eco}). The low GPP was recorded in this period due to leaves senescence. Data so far recorded, shows a seasonal variation in GPP, NEE and R_{eco} . The average NEE was higher in the wet season (May-September) than the dry season. This variation may be due to the monthly variation in meteorological condition (ICFRE, 2023).

Long-term regular monitoring of carbon exchange of Northern Dry Mixed Deciduous Forest and Southern Dry Mixed Deciduous Forest in the states of Madhya Pradesh and Chhattisgarh through already established carbon flux towers are required for estimating the carbon exchanges in the changing climatic conditions and devising suitable strategies for enhancing the carbon sequestration potential of the forests.

2. Objectives

1. To study the gross primary productivity and net ecosystem exchange of the Northern mixed deciduous forest of Madhya Pradesh and Southern mixed deciduous forest of Chhattisgarh through carbon flux towers established by ICFRE under the Ecosystem Services Improvement Project.
2. To build capacity of the State Forest Departments and other forestry training institutions on measurement and monitoring of the forest carbon stocks' through using eddy covariance-based techniques and modelling approaches.
3. To devise suitable strategies for enhancing the carbon sequestration potential of Northern Dry Mixed Deciduous Forest and Southern Dry Mixed Deciduous Forest in the states of Madhya Pradesh and Chhattisgarh.

3. Review of Literature

Carbon dioxide is the largest contributor among all anthropogenic greenhouse gases to global climate change (IPCC, 2007; IPCC, 2014). Over the past century, the amount of carbon dioxide in the atmosphere has increased, and this trend has accelerated in the recent years. (Friedlingstein *et al.*, 2019). Continuous increase of CO_2 levels at this rate could lead to substantial climate change in the near future. A deeper understanding of the global carbon cycle is required to forecast future climate (Zhang *et al.*, 2017). As a result, understanding the atmospheric CO_2 dynamics and their interplay with various land use and land cover types has become increasingly important (Butler and Montzka, 2023). Forest ecosystems are responsible for a significant portion of the terrestrial sink's 33.7% absorption of human-generated carbon dioxide from the atmosphere during the same period of time (Keenan and Williams, 2018). Based on the flux time series studies of 23 forests in Europe and the USA, it has been shown that net ecosystem productivity (NEP) and gross primary productivity (GPP) have increased by 1% yearly (Fernandez-Martnez *et al.*, 2017).

Quantification of carbon exchange in terms of gross primary productivity (GPP) from terrestrial ecosystems holds immense significance in carbon cycle research and climate change

mitigation (Canadell *et al.*, 2007; Beer *et al.*, 2010). GPP represents the total amount of atmospheric carbon dioxide fixed by vegetation per unit of space and time, and thus plays a critical role in quantifying the status and changes of the global carbon budget. Under the background of the rapid global change, it is of great significance to accurately quantify GPP at regional or global scales, in order to advance our understanding of the interactions between terrestrial ecosystems and changes in atmospheric carbon dioxide, temperature, and other variables. Regular monitoring of carbon exchange particularly over forest ecosystems is a key to climate change policymaking decision due to large carbon sequestration potential of these ecosystems (Gray and Whittier, 2014). GPP is a major component of ecosystem carbon budget and quantified as the amount of carbon fixed via photosynthesis by plants in a given period of time. Predicting GPP over space and time is a challenging task because the diurnal and seasonal variability in GPP is controlled by numerous meteorological and biophysical factors viz., solar radiation, temperature, vegetation type and its canopy characteristics, soil moisture, and soil substrate matter, etc. (Canadell *et al.*, 2000). In recent years, eddy covariance technique has emerged as a promising technique to directly measure net ecosystem exchange (Baldocchi *et al.*, 1996).

GPP is a key indicator of potential carbon assimilation and quantifiable on regional, continental or global scales (Prince and Goward, 1995; Running *et al.*, 1999), can be estimated from eddy covariance data by partitioning directly measured net ecosystem exchange (NEE) into GPP and ecosystem respiration (R_e). GPP exhibits daily, seasonal, annual and inter-annual difference (Falge *et al.*, 2002). GPP, net primary productivity (NPP) and NEE are the key measures of carbon flux at ecosystem level (Boisvenue and Running, 2006). Net ecosystem exchange is attributed by various variables such as physical, atmospheric, physiological and edaphic variables etc. These variables control the processes and mechanisms governing net ecosystem exchange and addresses the question whether forest will be affected by climate change or vice versa.

The eddy-covariance approach has been employed often in recent years to estimate CO_2 fluxes at the ecosystem scale (Baldocchi *et al.*, 2018). One must consider a variety of considerations when establishing an eddy covariance system, such as the region of interest's size, canopy height, and terrain topography (Burba, 2013). A global network of long-term eddy-covariance flux measurements can contribute to a better understanding of terrestrial ecosystems and the mechanisms governing GHG and energy exchange rates. Assessing the variability of carbon fluxes across the globe requires knowledge of how variation in forest structure and composition affect the net ecosystem exchange of carbon dioxide and how this exchange is influenced by climatic conditions (Law *et al.*, 2002; Shao *et al.*, 2016; Fu *et al.*, 2017; Mendes *et al.*, 2020), vegetation types (Chen *et al.*, 2019; Creevy *et al.*, 2020), and anthropogenic interventions.

In India, most of the forest productivity studies were based on field-based measurements (Baishya and Barik 2011; Chaturvedi and Singh 1987; Jangra *et al.*, 2010), and by integrating ground-based measurements with remote sensing technology (Chhabra and Dadhwal, 2004;

Ahongshangbam *et al.*, 2016; Watham *et al.*, 2017 a). Only a limited number of studies used process-based models (Nayak *et al.*, 2016; Tripathi *et al.*, 2018) for estimating productivity of Indian forests. Process-based models are those which attempt to characterize physiological process which affects growth. These models integrate biophysical as well as eco-physiological processes to model present-day carbon production (Gross Primary Productivity) and subsequent carbon storage (Net Ecosystem Exchange), and also facilitate to reconstruct past as well as future scenarios addressing climate change issues (Keeling and Phillips, 2007; Nandy *et al.*, 2019). These models are developed mainly to aid in understanding the cause and effect relationships driving the growth of forests. However, the non-availability of field measurements for calibration and validation of the model can be one of the major constraints in implementation of process-based models. In developed countries, these problems are solved by a network of well-established eddy covariance-based carbon flux towers. The eddy covariance-based carbon flux towers allow continuous measurements of net ecosystem exchange between the biosphere and the atmosphere.

Data derived from eddy covariance or carbon flux tower requires parameterization of GPP which can be done by partitioning continuous NEE measurements derived from flux tower having micrometeorological instruments and climatic data and the use of local drivers. By remote sensing technique, GPP can also be computed and extrapolated expressing spatial and temporal variability (Jung *et al.*, 2009) by using Light Use Efficiency model. Remote sensing driven process and generalized based models were found to have better potential to explain the plant growth in response to climate change by simulating the growth patterns of trees via biophysical mechanism. Satellite remote sensing is valuable and is used together with process-based models resulting into detailed maps of ecosystem distribution to accomplish the up-scaling of carbon fluxes to landscape, regional, continental and global scales. Increasing number of eddy covariance-based carbon flux towers provide the best opportunity for estimating GPP, concurrent measurements of meteorological variables provide unprecedented datasets for investigating the dynamics and driving variables of GPP and are useful information for development and calibration of light use efficiency models (Yuan *et al.*, 2007).

The direct and continuous measurements ecosystem carbon dioxide and water vapour fluxes can improve the ability in analyzing the Gross Primary Productivity and Net Primary Productivity of the forest. Measurements of the net flux of carbon dioxide between terrestrial ecosystems and atmosphere has a potential to elucidate the interpretation of CO₂ source and sink patterns, CO₂ flux responses to forcing and predictions of the future terrestrial carbon balance at a regional scale by upscaling using remote sensing and modelling. Net ecosystem exchange predicted by different terrestrial biosphere models compares favourably with flux data at diurnal and seasonal timescales. Validation of rigorous models by using remote sensing needs information which are readily available by the flux-based data and therefore helpful from providing point-based information to a large scale where same type of vegetation exists by extrapolation techniques. The integration of eddy covariance and remote sensing technologies

helps in the extrapolation of the values analyzed in the footprint area to determine whether forests are acting as a source or sink and accordingly management practices can be planned and implemented to enhance the carbon sequestration potential of forests.

The Light Use Efficiency based model elaborated by Monteith (1977) has been widely used in estimating GPP based on remote sensing. It can also assist in validation of ecosystem model outputs, optimization of model parameters and up-scaling of the model. Light-use efficiency, and regional-scale CASA (Carnegie-Ames-Stanford Approach) models (Field *et al.*, 1995 and Potter, 2014), have been evaluated to estimate GPP over terrestrial ecosystems in India (Nayak *et al.*, 2010; Patel *et al.*, 2010). In the past decades, numerous models with various complexities and structures have been developed to simulate GPP at the regional or global scale, mainly including process-based models and light use efficiency (LUE) models. Among them, LUE models are favored in many applications due to their simple model structure and input requirement, making the models easy to use relative to process-based models.

4. Materials and Method

Site Description: ICFRE has established two carbon flux towers in northern and southern mixed deciduous forest types in the states of Madhya Pradesh and Chhattisgarh under the world bank funded ESIP project representing southern dry mixed deciduous forest and northern dry mixed deciduous forests, respectively. Flux Data (CO₂, H₂O and energy) along with other meteorological parameters are being collected since April 2021. Details of the eddy covariance-based carbon flux tower sites are given in Table 1.

Table 1: Description of the eddy covariance-based carbon flux tower sites

| Site Name | Khatpura Forest Beat | Sonhat Forest Beat |
|--------------------|--|---|
| Location | Budhni, Sehore Forest Division, Madhya Pradesh | Raghunathnagar, Balrampur Forest Division, Chhattisgarh |
| Terrain type | Flat | Flat |
| Slope | <2 degree | <2 degree |
| Fetch | 500-700 m | 500-700 m |
| Vegetation type | Northern mixed deciduous forest | Southern mixed deciduous forest |
| Canopy height | 12-15 m | 25-28 m |
| Measurement height | 22 m | 32 m |
| Sampling frequency | 10 Hz | 10 Hz |
| Averaging time | 30 minutes | 30 minutes |
| Data Logger | Campbell (CR 3000) | Campbell (CR 3000) |
| Data Storage | 32 GB Data Card | 32 GB Data Card |

Khatpura Forest Beat represents the Northern mixed deciduous forest while Sonhat Forest Beat represent the Southern mixed deciduous forest. Tree species found in the Khatpura Forest Beat

are *Acacia catechu* (Khair), *Acacia leucophloea* (Rhinja), *Bauhinia retusa* (Sehra), *Bauhinia cochinchinensis* (Char), *Butea monosperma* (Palash), *Careya arborea* (Kumbhi), *Cassia fistula* (Amaltas), *Cloroxylon swietenia* (Ghiriya), *Dalbergia lanceolaria* (Fasi), *Diospyros melanoxyton* (Tendu), *Lagerstroemia parviflora* (Lendia), *Modhuka longifolia* (Mahuwa), *Phyllanthus emblica* (Aola), *Pterocarpus marsupium* (Beeja-sal), *Schlechera oleosa* (Kusum), *Terminalia bellirica* (Bohera), *Terminalia tomentosa* (Saj), etc. Similarly, tree species found in the Sonhat Forest Beat are *Bauhinia retusa* (Sehra), *Bauhinia cochinchinensis* (Char), *Brideli retusa* (Kasai), *Butea monosperma* (Palash), *Carey aarborea* (Kumbhi), *Cassia fistula* (Amaltas), *Cloroxylon swietenia* (Ghiriya), *Diospyros melanoxyton* (Tendu), *Terminalia tomentosa* (Saj), *Modhuka longifolia* (Mahuwa), etc.

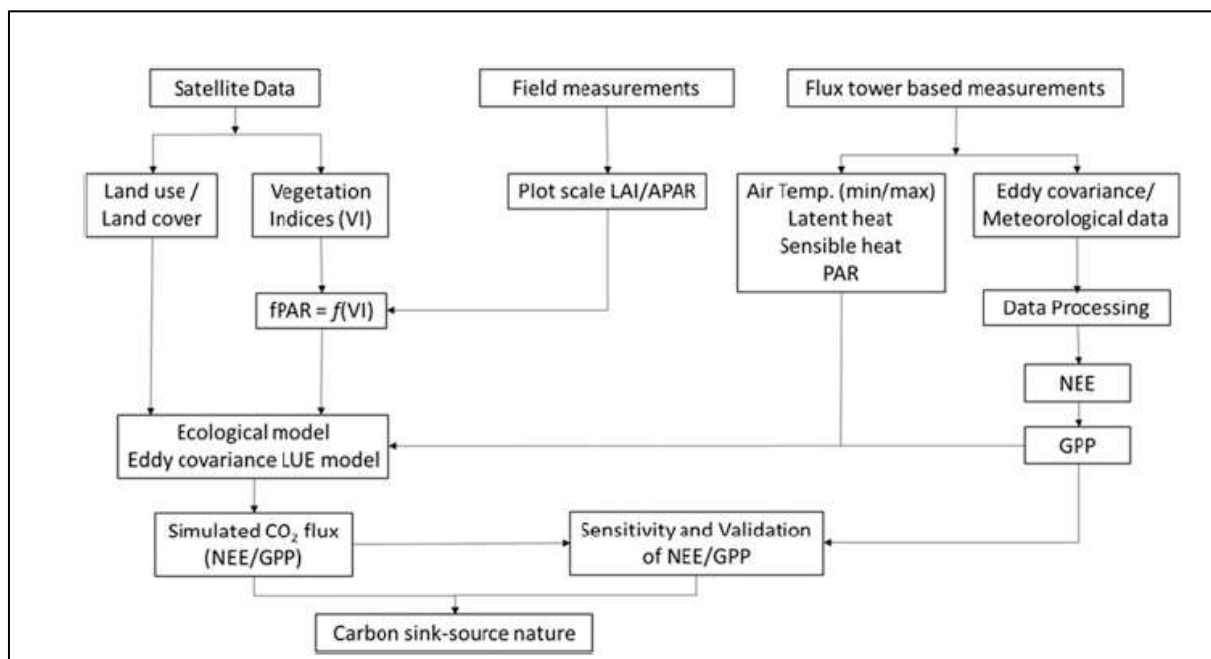
Maintenance of the Eddy Covariance-based Carbon Flux Towers: The eddy covariance-based carbon flux permits to measure, at an ecosystem scale, the atmosphere-ecosystem exchange of water, energy and carbon dioxide fluxes. It provides a reliable direct measurement of different gas compounds together with meteorological variables, at high temporal detail, making it possible to ascertain the influence of climate change at ecosystem scale. The Ecosystem Services Improvement Project will be completed on 30th July 2023. Therefore, it is proposed to maintain the carbon flux towers for long-term monitoring of the carbon fluxes of northern and southern mixed deciduous forest types in the states of Madhya Pradesh and Chhattisgarh under this project.

Collection and Analysis of Carbon Flux Data: Sensors positioned at various height of the flux tower will used to gather data on carbon fluxes and related meteorological parameters in order to meet the project's four scientific goals. The CO₂ and water fluxes will be measured by using IRGASON sensor. The data logger will record data at a frequency 10 Hz and store. Other sensors that are used to measure the meteorological parameters includes- (a) HC2AS3 model of temperature and relative humidity sensor for temperature and relative humidity, (b) Wind monitors measure horizontal wind speed and direction (c) PAR Quantum Sensor for measuring photosynthetically Active Radiation (PAR), (d) CNR4 net radiometer for measuring the net radiation (e) Soil Heat Flux Plate for soil temperature (f) Water Content Reflectometers to measure soil volumetric water content, bulk electrical conductivity, and temperature of soil, (g) Tipping Bucket Rain Gauge to measure the precipitation.

Each month, logged data from the logger will be collected and processed for analysis. Using EasyFlux PC software, collected eddy fluxes data will be computed as 30-minute block averages (McMillen, 1988). Despiking, 2D coordinate rotation, spectra correction, Webb, Pearman and Leuning (WPL) and quality control analysis will be carried out to reduce any potential uncertainties in the EC data. The cospectral analyses of CO₂, H₂O, and heat flux measurements will be done to assess the reliability of the flux data and to verify if appropriate averaging intervals have been used to capture all of the flux-carrying eddies.

The carbon flux towers directly measure net ecosystem exchange that can be separated into two major components viz. gross primary productivity and ecosystem respiration. GPP is

considered as a major component in ecosystem carbon budget and its estimation over time and space and attaining accuracy at diurnally and seasonally needs numerous meteorological and biophysical factors. Light-use efficiency (LUE) concept states that GPP is directly related to the absorbed photosynthetically active radiation and photosynthetic efficiency by photosynthetically active radiation unit. Light Use efficiency model need input from field (leaf area index, biomass and carbon stock), tower (PAR values, GPP, Maximum light use efficiency, temperature etc.) and satellite derived model (vegetation indices) to upscale gross primary productivity at a larger spatial scale to an extent where the forest composition is found similar. LUE models will be applied to extrapolate the GPP over a particular forest type. This will bring a complete understanding of the productivity of forest and carbon sequestration process in these forest types. The overall methodology is given in following flow chart:



(Source: Watham, 2016)

Validation of estimated GPP will be validated against carbon flux tower observed GPP using Root Mean Square Error (RMSE), Mean Absolute Percentage Error (MAPE) and Agreement Index (d) to assess the accuracy of the predicted GPP value (Watham *et al.*, 2017 b).

Data Processing and Analysis: Eddy fluxes (CO₂, H₂O and sensible heat) were calculated as 30-minute block averages with the help of EasyFlux PC software (McMillen, 1988). The eddy covariance method relies on the availability of energy and turbulence in the surface layer. Therefore, there may be some uncertainties in the eddy covariance measurement (Loescher *et al.*, 2006). The uncertainties of the eddy covariance measurement could be due to overestimation of available energy and underestimation of turbulent energy (McGloin *et al.*, 2018). Possible reasons for the overestimation of available energy include overestimation of Rn measurement and underestimation of energy storage items such as soil, air and vegetation (Foken, 2008).

The measure taken to reduce the possible uncertainties in EC data includes splitting it into 30 min files; despiking (Vickers and Mahrt, 1997); block averaging; 2D coordinate rotation; spectra correction (Moncrieff *et al.*, 1997, 2004); Webb, Pearman and Leuning (WPL) correction (Webb *et al.*, 1980) and conducting quality control (Burba, 2013). The WPL correction was used to estimate CO₂ and H₂O fluxes. The WPL correction is necessary because fluctuations in temperature and humidity cause fluctuations in trace gas concentrations and that can simulate a flux for instance of CO₂ or modify its size. The Cospectral analyses of CO₂, H₂O, and heat flux measurements were done to assess the reliability of the flux data and to verify if appropriate averaging intervals have been used to capture all of the flux-carrying eddies (Kaimal *et al.*, 1972).

The net ecosystem exchange (NEE) of CO₂ between the forest and the atmosphere was computed as:

$$NEE = \overline{wc'} + \frac{\partial}{\partial t} \int_0^h \overline{c(z)} dz$$

Where, the first term on the right-hand side is the covariance between vertical wind velocity fluctuations (w') and fluctuations in the concentration of the scalar (c' , CO₂). The second term is the rate of change in the canopy storage, where z is the height above the ground surface, h is the flux measurement height, t is time, and the overbar denotes a time average (Baldocchi *et al.*, 1988). The vertical coordinate for wind velocities is positive upward, thus positive values for fluxes denote emission and negative values denote uptake. Concentrations of CO₂ and H₂O were calculated using output from the IRGA's raw signal.

The post-processing included: (a) elimination of data collected during the rainy periods, (b) removal of negative NEE night-time data, (c) removal of positive data during day time (when photosynthetically active radiation (PAR) >100) and (d) outlier removal by discarding the absolute NEE values ($NEE > 50 \mu\text{mol m}^{-2} \text{s}^{-1}$ and $NEE < -50 \mu\text{mol m}^{-2} \text{s}^{-1}$) (Fei *et al.*, 2018). Data gap filling was carried out using the mean diurnal variation method (Falge *et al.*, 2002).

The NEE values were separated into the component fluxes of ecosystem respiration (R_{eco}) and gross primary production (GPP) in order to observe patterns of CO₂ exchange. The NEE measurement during the daytime is the result of both photosynthesis and respiration, but at night EC it represents only respiration (R_{eco}). Therefore, night time NEE was used to estimate the R_{eco} during well-mixed periods where the friction velocity, was greater than or equal to 0.20 m s^{-1} (Hutyra *et al.*, 2007).

$$u^* = \sqrt{-1 * w'u'}$$

An exponential equation (Eq. 1) was developed using night-time NEE and corresponding air temperature (T_{air}) for each month for partitioning of NEE (Zhang *et al.*, 2006; Wang *et al.*, 2008; Artigas *et al.*, 2015). For calculation of daytime R_{eco} , it is assumed that the temperature response of daytime R_{eco} resembles with that of night-time R_{eco} . The temporal changes in R_{eco}

is influenced by seasonal variability of environmental factors, in particular temperature, soil moisture or precipitation, photosynthesis and phenology etc. (Migliavacca *et al.*, 2015; Reichstein and Beer, 2008). Therefore, the exponential relationship between T_{air} and NEE was established for each month (Annexure I) in order to account for the change in phenology and to incorporate the effect of soil moisture to some extent.

$$NEE_{nighmt} = a \exp^{bT_{air}} \quad \text{Eq.1}$$

where NEE_{night} is night-time ecosystem respiration and T_{air} is night-time mean air temperature. The constants a and b were determined by using non-linear optimization.

The GPP is estimated using following equation (Eq.2)

$$GPP = -NEE + R \quad \text{Eq.2}$$

The sign convention used was such that CO_2 flux from the atmosphere to the surface was negative but the GPP and RE were always positive (Watham *et al.*, 2020).

Field-based Surveys for Forest Carbon Stocks Measurement: Forest carbon stocks measurement/ monitoring in the fetch areas of the carbon flux towers will be done through conducting field-based surveys by laying out of the permanent sample plots (ICFRE, 2021). All the carbon pools (aboveground biomass, belowground biomass, litter, deadwood and soil organic matter) will be considered for measurement of forest carbon stocks.

Capacity Building of the State Forest Departments and Other Forestry Training Institutions: Capacity building of the State Forest Departments and other forestry institutions on measurement and monitoring of the forest carbon stocks includes class room lectures with hands-on trainings.

3. Justification

Long-term forestry projects that included precise measurements of carbon fluxes and carbon storage have a great deal of potential for lowering net CO_2 emissions and mitigating the effects of climate change. Long-term accurate measurements of carbon sink and storage helps in predicting the CO_2 absorption potential of the forests. Comprehensive long-term data collection, analysis, and action are needed for understanding global climate change and its mitigation. India's diverse and distinctive ecosystems have a big impact on the local and global environment, but there is no extensive network system for monitoring the CO_2 and other greenhouse gas fluxes at regional or national level. India has very little representation in the global flux tower network systems like FLUXNET and AsiaFlux. This project may present an opportunity to close the gaps in the systems for flux networks by sharing the data. The project will also provide opportunity to the staffs engaged in project, young researchers and forest managers in developing their skills in measuring and quantifying the carbon fluxes.

4. Duration of the Project: 5 years

5. Work Plan of the Project:

| Activities | Timeline | | | | | | | | | | | | | | | | | | | | |
|---|----------------------|---|---|---|----------------------|---|---|---|----------------------|---|---|---|----------------------|---|---|---|----------------------|---|---|---|--|
| | 1 st Year | | | | 2 nd Year | | | | 3 rd Year | | | | 4 th Year | | | | 5 th Year | | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | |
| Calibration of IRGASON and other sensors | █ | | | | | | | █ | | | | █ | | | | | | | | | |
| Collection of EC Flux data | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | |
| Networking of Carbon Flux Towers of India (Indo Flux) | | | █ | █ | █ | █ | | | | | | | | | | | | | | | |
| Networking of Carbon Flux Towers with Asia Flux | | | | | | | █ | █ | █ | | | | | | | | | | | | |
| Estimation CO ₂ Fluxes | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | |
| Compilation and analysis of meteorological variables | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | |
| Estimation of the forest carbon stocks through permanent sample plots | █ | | | █ | | | | █ | | | | █ | | | | █ | | | | █ | |
| Estimation of carbon stocks | | | █ | | | | █ | | | | █ | | | | █ | | | | | █ | |
| Organisation of training programme | | | █ | | | | █ | | | | █ | | | | █ | | | | | █ | |
| Preparation & submission of annual progress report | | | | █ | | | | █ | | | | █ | | | | █ | | | | | |
| Preparation and submission of Project Completion Report | | | | | | | | | | | | | | | | | █ | █ | █ | █ | |

6. Estimated Budget Requirement: Estimated budget of Rs. 4.30 Crore will be required for implementation of the project activities and breakup of the estimated budget requirement is as under:

| Head of Expenditure | Budget Estimates (Rs. in Lakh) | | | | | Total (Rs. in Lakh) |
|--|--------------------------------|-------------|------------|-------------|------------|---------------------|
| | First Year | Second Year | Third Year | Fourth Year | Fifth Year | |
| A). Recurring Expenses | | | | | | |
| Consultancy fee of one Consultant | 12 | 12 | 12 | 12 | 12 | 60 |
| Wages of one Project Assistant | 3 | 3 | 3 | 3 | 3 | 15 |
| Field studies/ periodical collection of data on eddy covariance carbon flux, maintenance and security & safety of the carbon flux towers | 25 | 30 | 35 | 30 | 30 | 150 |

| | | | | | | |
|---|-----------|-----------|-------------|-------------|-------------|------------------------------|
| Organisation of trainings for capacity building of SFDs and other training institutions | 0 | 0 | 6 | 6 | 6 | 18 |
| M&S (Consumables, software and other misc. office expenses) | 25 | 20 | 15 | 20 | 15 | 95 |
| Total | 65 | 65 | 71 | 71 | 66 | 338 |
| B). Non- Recurring Expenses | | | | | | |
| Office equipment/ items | 10 | - | 5 | 5 | 0 | 20 |
| Total | 75 | 65 | 76 | 76 | 66 | 358 |
| Institutional charges (@10%) | 7.5 | 6.5 | 7.6 | 7.6 | 6.6 | 35.8 |
| Monitoring cost (@5%) | 3.75 | 3.25 | 3.55 | 3.8 | 3.3 | 17.9 |
| Overall project escalation cost (@5%) | 3.75 | 3.25 | 3.55 | 3.8 | 3.3 | 17.9 |
| Grand Total | 90 | 78 | 85.2 | 91.2 | 79.2 | 429.6 (or say 430) |

7. Outcomes of the Project

- Quantification of the carbon sequestration potential/ carbon exchange between the atmosphere and vegetation of the northern and southern mixed deciduous forests
- Climate change mitigation and adaptation strategies for sustainable management of above-mentioned forest types
- Development of knowledge products on measurement of forest carbon exchange, and knowledge sharing and dissemination
- Trained forestry professionals from State Forest Departments and other forestry training institutions on forest carbon stock measurement through application of the latest methods and techniques

8. Project Implementing Agencies

The project will be implemented under the overall guidance of the Green India Mission Directorate, National Afforestation and Eco-Development Board, Ministry of Environment, Forest and Climate Change, Govt. of India. Project will be implemented in collaboration with State Forest Departments and Madhya Pradesh and Chhattisgarh. Role and responsibilities of the project implementing agencies are as under:

| S. No. | Name of the Agencies | Role and Responsibilities |
|--------|--|---|
| 1. | Biodiversity and Climate Change Division, Indian Council of Forestry Research and Education Hqs., Dehradun | Over all guidance, supervision and coordination |
| 2. | ICFRE- Tropical Forest Research Institute, Jabalpur | Implementation of the project activities |
| 3. | Madhya Pradesh State Forest Department, Bhopal | Support in implementation of the project activities and safety and security of the carbon flux tower in the state of Madhya Pradesh |

| | | |
|----|---|---|
| 4. | Chhattisgarh State Forest and Climate Change Department, Raipur | Support in implementation of the project activities and safety and security of the carbon flux tower in the state of Chhattisgarh |
|----|---|---|

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