

## Terms of Reference for the Study

**Evaluation Of Forestry Works Under Compensatory Afforestation Fund Management & Planning Authority (CAMPA), 2013-14 To 2015-16 13<sup>th</sup> finance Commission (TFC) 2013-14 To 2014-15, National Afforestation Programme (NAP) 2013-14 To 2016-17 & National Bamboo Mission (NBM) 2013-14 To 2016-17**

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## TERMS OF REFERENCE FOR THE STUDY

### EVALUATION OF FORESTRY WORKS UNDER COMPENSATORY AFFORESTATION FUND MANAGEMENT & PLANNING AUTHORITY (CAMPA), 2013-14 to 2015-16 13<sup>TH</sup> FINANCE COMMISSION (TFC) 2013-14 to 2014-15, NATIONAL AFFORESTATION PROGRAMME (NAP) 2013-14 to 2016-17 & NATIONAL BAMBOO MISSION (NBM) 2013-14 to 2016-17

#### 1. TITLE OF THE STUDY:

The study is titled as Evaluation of Forestry Works under Compensatory Afforestation Fund Management & Planning Authority (CAMPA), 2013-14 to 2015-16 13<sup>th</sup> Finance Commission (TFC) 2013-14 to 2014-15, National Afforestation Programme (NAP) 2013-14 to 2016-17 & National Bamboo Mission (NBM) 2013-14 to 2016-17.

#### 2. DEPARTMENT IMPLEMENTING THE SCHEME

Karnataka Forest Department, Government of Karnataka

#### 3. BACKGROUND AND CONTEXT:

##### **Compensatory Afforestation Fund Management & Planning Authority (CAMPA):**

The *Forest (Conservation) Act of 1980* governs diversion or use of forest land for non-forest purposes such as industrial or developmental projects. Since forests are an important natural resource and provides us with a variety of ecological services, the *Forest (Conservation) Act of 1980* mandates that non-forest land, equal to the size of the forest being diverted be afforested. But, since afforested land cannot become a forest overnight, loss of goods and services like timber, bamboo, fuelwood, carbon sequestration, soil conservation, water recharge, and seed dispersal are still experienced. Moreover, the newly afforested land will take around 50 years to start delivering the comparable goods and services which the diverted land gave just before diversion. To compensate the losses suffered in the interim, the *Net Present Value (NPV)* of the diverted forest are computed for a period of 50 years, and recovered from the "user agency" that is diverting the forests.

As per the act, the CAMPA funds can be used for the following purposes:

- Artificial regeneration (plantation)

- Assisted natural regeneration
- Forest management
- Forest protection
- Infrastructure development
- Wildlife protection and management
- Supply of wood
- Other forest produces saving devices.

The main works taken up under State CAMPA are: -

**Project Specific Activities: -**

**A. Compensatory Afforestation (CA), Additional CA (ACA) & Penal CA (PCA):**

- i) In Forest Land
- ii) In Non-Forest Land

**B. Site Specific Activities:**

- i) Safety Zone plantation
- ii) Planting in degraded forest area (1 ½ times of safety zone)
- iii) Fencing
- iv) Catchment Area Treatment Plan (CATP)
- v) Planting Dwarf Species
- vi) Medicinal plantation
- vii) Soil & Moisture Conservation works
- viii) Providing LPG connection to local villagers etc.,

**C. Activities for Utilization of NPV:**

**I. Consolidation and protection of Forests:**

- a. Survey and demarcation of Forests
- b. Forest boundary consolidation through Cattle Proof Trench (CPT)
- c. Fire protection

- d. Creation of lung spaces by protection and consolidation of valuable forest areas in the city's urban areas and developing them as Tree Parks.

## **II. Consolidation and Regeneration of Forests:**

- a. Assisted Natural Regeneration (ANR)
- b. Promotion of Sandal Regeneration on estate management concept.
- c. Production of Quality Planting Materials, collection of quality seeds and other Research activities.
- d. Integrated plan for Conservation and Development of biodiversity, forests and ecology in the forest areas of coastal zone (HasiruKavacha)

## **III. Wildlife Protection and Management:**

- a. D-line clearance
- b. Development & maintenance of road network in protected areas.
- c. Elephant Human conflict mitigation measures (Areas outside & inside protected areas)
  - i. Elephant Proof Trench (EPT)
  - ii. Solar Fencing
  - iii. Assistance to Bannerghatta Biological Park
- d. Wildlife Habitat Improvement & Management for individual Protected Area's (PA's)
  - i. Creation of new water holes
  - ii. De-silting of tanks
  - iii. Soil &Moisture Conservation (SMC) works
  - iv. Providing Salt licks
  - v. Elephant depredation camps/ Anti-poaching camps (APC's)

#### **IV. Infrastructure Development:**

- a. Strengthening and augmenting digitization and Communication network;
  - i. Cell Phones
  - ii. Computers
  - iii. Laptop
  - iv. Xerox Machines
  - v. GPS
  - vi. Digital Cameras
  - vii. Personal Digital Assistance (PDA)
- b. New Buildings (Staff Quarters)
- c. Building maintenance
- d. Strengthening of Forest Institutes for capacity building.
- e. Purchase of vehicles (Two Wheelers for Forests and Four Wheelers for Officers)

#### **V. Forest Produce Saving devices & other activities:**

- a. Supply of energy saving devices at subsidized cost to forest fringe villages.
- b. Maintenance of WP Samples Plots
- c. Repair, Maintenance, & Office Expenditure (RMOE), Travelling Expenses (TE) etc.

#### **Other Schemes**

There are other schemes implemented by the forest Department under which the works undertaken are also of similar nature as that of CAMPA. Hence, Karnataka Forest Department (KFD) intends to appraise itself of the outcome of implementation of works under the other schemes as mentioned in the title of this Terms of Reference (ToR) for the period beside each scheme as follows;

- i. 13<sup>th</sup> Finance Commission (TFC)[2013-14 and 2014-15]**
- ii. National Afforestation Program(NAP)[2013-14 to 2014-17]**
- iii. National Bamboo Mission (NBM)[ 2013-14 to 2014-17]**

Many of the work taken up under all the above schemes are in the nature of plantations, other works like buildings, infrastructure development, soil and moisture conservation works and beneficiary-oriented works. In order to avoid the Consultants crisscrossing the whole state separately for each scheme, works under all the above schemes shall be evaluated simultaneously once the evaluation team visits a particular division. This will not only reduce the financial cost of the evaluation in respect of travel expenses, but will also cover all sampled works in a division in one visit. It also helps to make a comparative analysis across the Schemes.

Sampling of works shall be done scheme-wise. Thus, 4 State level evaluation reports i.e one for each scheme as mentioned above have to be submitted separately.

#### **4. EVALUATION SCOPE, PURPOSE AND OBJECTIVES:**

4.1 Forestry works carried out in Karnataka Forest Department under above mentioned schemes broadly fall under following categories:

1. Raising & Maintenance of plantations.
2. Seedling Distribution to Public
3. Soil moisture conservation works
4. Specialized works of Wildlife
5. Specialized works of Working Plan
- 4.Specialized works of Research & Utilization
7. Specialized works of Training wing
8. Construction and maintenance of buildings, Roads & other infrastructure
9. Providing individual/ community benefits

Generally, in any Scheme of KFD, the works may include either or all the works as listed above. Hence, the activities to be evaluated will invariably fall in one of the

above categories. The list of works and other project documents are provided by the APCCF (CAMPA) for the scheme (i), APCCF (Projects) for scheme (ii), APCCF (NAEP-BM) for schemes (iii) & (iv) through their implementing Forest Circles, Divisions and Units. The purpose of evaluation is to assess the implementation process and analyse the impact of them on environment and society.

The field data has to be analysed with respect to the scheme objectives and evaluation issues. The findings have to be reported along with recommendations for improvement as a separate chapter in the final evaluation report of each scheme. A separate evaluation report has to be submitted for each scheme.

#### **4.2 EVALUATION OBJECTIVES:**

- To evaluate the works under the above 4 schemes that were carried out by Territorial, Wildlife, Research, Working Plan and Training wings of the Karnataka Forests Department.
- To assess whether the desired impact on natural and social environment is achieved and or undesirable impact is avoided UNDER CAMPA and other schemes.
- To assess the efficiency and effectiveness of the schemes and the ability of the works executed to meet the intended objectives of the Schemes.
- To assess the performance of the works under different categories and across the divisions.
- To Examine the requirement of Works executed under all above schemes, whether these works to be continued or closed.
- To assess whether the existing arrangements of accounting and reporting are adequate and transparent.
- To analyze whether the grants under the scheme were utilized for the intended objectives/purposes.
- To examine the quality of works and the final success rates are satisfactory etc.
- To examine the impact of beneficiary schemes on the households.

## 5. EVALUATION QUESTIONS:

The Proposed evaluation has multiple objectives. Inter alia, this evaluation is expected to examine the following questions and file their succinct findings and conclusions. The Questions of Part (A) & (I) are common and should be answered for all 4 schemes as mentioned in the title of this ToR. The questions from the remaining sections (B) to (H) should be answered based of implementation of that particular component of work in a scheme.

**(A) For Raising & Maintenance of Plantations: -Under all the Schemes to be analysed from scheme perspectives and separate analysis for each scheme.**

- i. What is the success rate of departmental plantations under respective scheme in terms of the following?
  - a. Overall and Species-wise survival rates with progressing age across the regions.
  - b. Species-wise performance in terms of girth, height and vigor.
  - c. Compatibility of planted species with the local biodiversity.
  - d. Consistency in performance across Forest Divisions and Circles in the state.
  - e. Potential to contribute to the tree cover in the state in the long run?
  - f. How does the overall survival percentage compare with those observed in the evaluation of previous years?
- ii. What factors contribute to mortality of seedlings in plantations? How can they be addressed across the regions to reduce mortality?
- iii. What measures/interventions have been made to improve the survival percentage of plantations over the years since evaluation of plantations has commenced? What has been their actual impact in improving survival percentage?
- i. How can the quality and performance of departmental plantations be enhanced?



- ii. Whether plantation models differ across different schemes. Examine the sustainability of these models.
- iii. What is the existing status of forest/ plantation protection and conservation works carried out under these schemes?
- iv. What is their effectiveness in conserving the forests/plantations and enhancing the productivity?
- v. Whether the Plantation programme under CAMPA and other schemes has been able to cover the forest cover lost? If not, what is the gap?
- vi. Assess whether the desired impact on natural and social environment is achieved and or undesirable impact is avoided.
- vii. Assess the adequacy, regularity and utilisation of funds for plantation activity.

**(B) For Soil & Moisture Conservation (SMC) Works:**

- i. What is the present condition of SMC works carried out in the plantations and other forest areas? Do they exist? Make observations for each scheme separately.
- ii. In case of water harvesting structures, are they capable of holding water to the designed potential now? If not, why so?
- iii. Is there any visible impact of SMC activity on the vegetation? Assess the impact across the regions.

**(C) For Specialized works of Wildlife**

- i. What is the impact of Anti-Poaching Camps (APC) on the forests and Wildlife of the area? Assess across the circles and divisions under each scheme.
- ii. Are the APC's sufficiently equipped with staff and modern equipment's for protection activities?
- iii. What are the other infrastructures required for strengthening APC's?
- iv. What are the instances in numbers and intensity of occurrence of Forest Fires in the area? Have Fire Protection Camps (FPC) helped to prevent, contain and douse forest fires?

- v. What is the status of effectiveness of the activities taken up for mitigating man-animal conflict?

**(D) For Specialized works of Working Plan**

- i. What is the status of survey and demarcation of forest areas (RF's) in the state?
- ii. What is remaining area which needs to be demarcated? What is the amount required for a 100% survey & demarcation of RF's in the state?
- iii. What is the condition of Cairns, RCC boundary pillars and RF stones? What is the percentage of missing, not visible and damaged boundary demarcation cairns/pillars/stones?

**(E) For Specialized works of Research:**

- i. Are the research activities like collection of seeds from plus trees, raising & maintenance of Romets; Rare, Endangered & Threatened (RET) seedlings & Quality Planting material (QPM) etc being done annually in the Research Units throughout the state? Which species are commonly done under each of the above component i.e. Seed collection, Romets, RET & QPM.
- ii. To what extent the research activity has contributed to promote the broad objectives of forest policy. What are the suggestions to strengthen and improve the research activities in Karnataka Forest department?

**(F) For Specialized works of Training?**

- i. What is the kind of infrastructure developed in the training wing of KFD under these schemes? How they have been maintained? To what extent the gaps are addressed?
- ii. What kind of training is supported under these schemes in various training centers in the state?

**(G) Other Infrastructure works of KFD**

- i. What is the present condition of forest infrastructure created during the evaluation period? What are the different types of works undertaken? Whether

they are as per requirements of local conditions and are completed within the scheduled plan period?

- ii. Are they being properly utilized? If yes, to what extent and if no, why?
- iii. What is the status of maintenance of buildings, roads and other infrastructure?
- iv. Is the ICT wing of department sufficiently modernized? What are the gaps which need to be filled in order to make KFD as one of the best digital department in the state?

**(H) Providing individual/ community benefits**

- i. What kind of individual and Community benefits has been provided by KFD under the 4 schemes being evaluated?
- ii. What is the impact of the schemes on livelihood and living conditions of the beneficiaries?
- ii. What is the nature of benefits and assets provided to the beneficiaries? Examine their suitability and functional status.

**(I) General Issues:**

- i. Evaluate the quality of the Works/Assets with reference to the sanctioned estimate, utility, functionality, usage, usefulness and appropriateness etc.
- ii. Whether Third Party Monitoring is introduced under CAMPA? What are the monitoring arrangements for the scheme works?
- iii. To what extent the works undertaken under each of these schemes serve the objectives of respective schemes? Which objectives have been fully addressed, which partly and which not at all?
- iv. Evaluate specific achievements failures and gaps of each scheme.
- v. Does the works carried out in the evaluation period under each scheme collectively contribute to the objectives of forest policy?

## 6. EVALUATION METHODOLOGY:

### Sampling Design:

Forest Department in general has Territorial, Social Forestry and Wild life Divisions. Apart from this there are specialized wings like Working Plan & Research which are not divided as divisions but as units. The Training wing has a state Academy with several institutes spread across the state. A multi stage sampling method is adopted to draw the final sample.

- At first stage, the Division/unit wise work list as provided by respective APCCF for a particular scheme will be compiled for the whole state in the forest department.
- Then from this state level work list of a particular scheme, sorting of various types of works into 9 categories shall be done. This will be the second stage of clustering being done at the Department level.
- **From this, the sample work the list for evaluation will be generated for each scheme by random sampling of 10% of works from each category (type) of work in that particular scheme covering all the circles in the State. This will be done by Karnataka Evaluation Authority.**

Thus, the method followed is basically a multi stage sampling in which the first stage of cluster formation is at division/unit level and second stage is at type of work level and 10% Works are identified randomly at KEA.

**Sample across the categories of works- CAMPA**

<b>CAMPA</b>	<b>Total</b>	<b>Sample (10%)</b>
<b>Plantations</b>	578	58
<b>Other works</b>		
Boundary	730	73
Other works	92	9
Other civil works	28	3
Camp	101	11
Building	37	4
Training	93	9
Desilting	155	15
General	34	4
Road	161	16
SMC	98	10
RF Board	314	30
<b>Total</b>	<b>2412</b>	<b>242</b>

Source: Forest Department GoK

**Sample across the categories of works under 13<sup>th</sup> Finance, NAP &NBM Schemes**

Sl.no.	Particulars	13 <sup>th</sup> Finance Total	Sample (10%)	NAP FDA Total	Sample (10%)	NBM Total	Sample (10%)
1.	<b>Plantations</b>	<b>1088</b>	<b>110</b>	<b>579</b>	<b>58</b>	<b>248</b>	<b>25</b>
	<b>Other works</b>						
2.	Boundary	651	65				
3.	Inventory	151	15				
4.	Other works (including General)	44	4				
5.	Other Civil Works	109	10				
6.	Camp	281	28				
7.	Building	170	17				
8.	Training	13	2				
9.	Desilting of tanks	25	3				
10.	Other research work	13	2				
11.	Road	24	2				
12.	SMC	56	5				
13.	RF Board	07	1				
	<b>Total</b>	<b>2646</b>	<b>264</b>	<b>579</b>	<b>58</b>	<b>248</b>	<b>25</b>

Source: Forest Department GoK

- The sample to cover all the Circles and all the categories of works implemented in a circle.
- The RF Board works may be observed on the way while visiting the sample works.
- The sample of works will be randomised by KEA.

**Collection of primary data:**

- The Consultant is expected to visit all the work spots sampled and provided to them by Karnataka Evaluation Authority for CAMPA, TFC, NAP and NBM schemes. Works once selected for sampling shall not be changed. Location of each sample work should be geo-referenced using GPS (Global Positioning System).
- The Consultant is required to collect the field data on the Android Application developed by ICT wing of Karnataka Forest Department for 'Third Party Evaluation'. Training shall be provided to the successful consultant about the use of the app. The consultant is expected to use the mobile app and capture the evaluation

data through his own device (tabs/ smart phone) on the spot along with geo-referenced and annotated photos of the works and upload them to the forest Dept. and KEA website as soon as the internet connectivity is available. The Client may suggest common configuration to all the Consultants for compatibility purpose which the Consultants must reckon. The backend application software, evaluation formats, basic information about the selected samples etc., will be hosted on the web site. The Consultant will be given privileged access to the sampled data relevant to him on the website. Client will not supply the android equipment. Consultants must arrange for the same.

- **Form-1** of the app should be used if the work evaluated is a **Plantation**. The Consultant should collect all the details as required in the above format which may include the diverse species used in planting, survival percentage of the planted seedlings, their vigor, level of protection available, prospects of becoming a fully stocked plantation etc. All the fields in the above format should be filled and no field should be kept blank. The sampling intensity for plantations shall be 2% irrespective of the extent of plantation. This works out to have a sample plot for every 5 hectares of plantation, but in case where the extent of block plantation is less than 5 hectares, one sample plot shall be laid compulsorily. The size of each sample plot shall be 1000 square meters (0.1 hectares), having a measurement of 31.42 meters X 31.42 meters, laid at random intervals with a random start, in the block plantation selected for evaluation. In case of plantations like Roadside, Greening of urban areas, Institutional plantations etc. and the whole plantation has to be considered as one sample and 100% evaluation has to be done for such plantations.
- The boundaries of plantation selected for evaluation shall be geo referenced and a plantation sketch prepared. Grids of 5 hectares or 0.1 hectares (1,000 square meters) shall be plotted on this sketch and the required number of sample plots shall be selected randomly. The sampling intensity shall not be less than 2%. The sampling intensity can be a little more than 2% to round off the decimals that are likely to

arise as the plantations are of various sizes. The evaluation shall include, among other, information on suitability of species planted, survival percentage, growth conditions, health of surviving plants, species wise girth at collar region, average height of the plants, quality of the work, with reference to the sanctioned estimate, carried out, etc. The sample plots laid for assessing the performance of the plantations shall be geo referenced with the help the GPS.

- **Form-3** pertains to evaluation of 'Other works' like building & road construction, Soil and Moisture Conservation works, Boundary consolidation works, specialized works of Wildlife, Working Plan, Research & Training wings apart from purchase of equipment/ vehicles etc.
- **Form-4** relates to works of extending **individual or community benefits** to the beneficiaries under various schemes. The Consultant should examine relevant expenditure related documents, visit the work spots, examine the overall usage and its impact on the beneficiary, interact with the beneficiaries and record their satisfaction level apart from uploading details in the app.
- Sample data shall be collected in quantitative form generally. Where appropriate, it may be qualitative or mixed. No field in the digital forms of the android app should be left vacant while uploading the data.
- As per requirement Focus Group Discussions and in depth Interviews of implementing and monitoring officers at various levels are to be conducted.
- Secondary data related to different schemes may be collected from the Forest department.

## 7. DELIVERABLES AND TIMELINES:

The whole study is to be completed within 6 months from date of getting confirmed evaluation assignment. The evaluating agency is expected to adhere to the following time lines and deliverables

### **Deliverables and time schedule**

1. Work plan submission/ Inception report	: One month after signing the agreement
2. Field Data Collection	: Two - three months
3. Draft report submission	: One month after Field Data Collection
4. Final report submission	: One month after Draft report submission
5. Total Duration	: 6 Months

### **8. QUALITIES EXPECTED FROM THE REPORT:**

The evaluation report should generally confirm to the United Nations Evaluation Guidelines (UNEG) "Standards for Evaluation in the UN System" and "Ethical Standards of Evaluations".

- a) The results should correspond to the ToR. In the results chapter, each question of the ToR should be answered. The overall results to be analysed in an integrated way to draw the conclusions.
- b) The report should be complete and logically organized in a clear but simple language. Evaluation report should confirm to the standard report writing style and structure.
- c) The report should present a comprehensive review of the Scheme/ programme in terms of the content, implementation process, adequacy, information and access to beneficiaries.
- d) The Report should provide a scientific assessment of the impact of the works under the CAMPA and other schemes in Forest Department in Karnataka. It should assess the impact in terms of the increase in forest cover, Soil moisture, Infrastructure development research and training and find out as to what extent the scheme objectives are attained. The qualitative data should be used in an unbiased manner to support or for further analysis of and reflections from the quantitative data. The analysis should provide adequate space for assessing the variations across the regions and categories. Case studies to be presented to bring out the realities at the local level.
- e) With regard to recommendations, the number of recommendations is not a measure of the quality of evaluation. The report should come out with specific recommendations



based on adequate field evidence for any modifications in the programme design, content, implementing procedures, and any other modifications to improve the access and impact of the Scheme/Programme. The recommendations should be short term to bring in mid course corrections and the long term to bring about modifications/change in the policy.

### **Structure of the report:**

The following are the points, only inclusive and not exhaustive, which need to be mandatorily followed in the preparation of evaluation report:

By the very look of the evaluation report it should be evident that the study is that of Forest Department, Government of Karnataka and Karnataka Evaluation Authority (KEA) which has been done by the Evaluation Consultant Organization. The report should be complete and logically organized in a clear but simple language. Besides conforming to the qualities covered in the Terms of Reference, report should be arranged in the following order:

1. Title and Opening Page
2. Index
3. List of acronyms and abbreviations
4. Executive Summary- A stand alone section that describes the program, purpose and scope of evaluation, research design and methodology, key findings, constraints and recommendations. It should be brief and precise not exceeding 4-7 pages.
5. Background- A section that briefly covers the history or genesis of the sector under which the programme/scheme being evaluated covered. It should give recent fact sheets taken from reliable and published sources.
6. Objectives and performance of the program being evaluated- This section will include the stated objectives of the programs and the physical and financial achievements of the selected program in the period of evaluation. It should cover the description of the target group, aim of the program and method of selection of

beneficiaries.

7. Review of literature/past evaluation reports.
8. Evaluation Methodology - This should include research design, sample design and size, questionnaire design and pilot test, data collection and quality assurance plan.
9. Findings of the evaluation study.
10. Case Studies, Best Practices
11. Limitations/constraints in the evaluation study.
12. Recommendations that flow from the evaluation.

#### **Annexures-**

1. Sanctioned Terms of Reference of the study.
2. Survey tools and questionnaires
3. List of persons interviewed.
4. Place, date and number of persons covered by Focus Group Discussion.
5. Additional documents

#### **9. ADMINISTRATIVE ARRANGEMENTS:**

The Forest Department and KEA will provide the necessary information pertaining to the study and also co-operate with the consultant organization in completing the assignment task within the stipulated time period. The forest department will provide all the details of the works undertaken in four schemes at various levels till the village level and the list of beneficiaries. The concerned district and taluk officials will be instructed by the Forest Department for providing the required information/data at the taluk and GP levels.

It is expected to complete the present study in 6 months time line, excluding the time taken for approvals at KEA.

## QUALIFICATION OF THE CONSULTANTS:

Consultant Organizations are expected to have at least minimum 5 years of experience in undertaking evaluation studies in Forest/Natural Resource management area. They should have the following key professional staff in their team:

S. No	Subject Experts Requirement	Experience
1.	<b>Principal Investigator:</b> Retired Forest official (not below the rank of Chief Conservator of Forests)/ First class MSc Life Sciences/ Forestry/ . Ph. D is preferable.	With at least 05 years of field experience in evaluation of Forestry works
2.	1 <sup>st</sup> Core Team Member: B E (Civil) Engineer	With at least 3 years of field experience in related field
3	2 <sup>nd</sup> Core team member First Class Post graduate in Sociology/ Social Work/ Rural Development.	With at least 3 years of field experience in related field
4.	3 <sup>rd</sup> Core Team Member: Resource Analyst /Chartered Accountant/ Data Analyst with Post Graduate degree in Statistics/ Computer Science.	With at least 3 years of field experience

## 10. COST SCHEDULE OF BUDGET RELEASE :

Output based budget release will be as follows;

1. The first instalment of consultation fee amounting to 30% of the total fee shall be payable as advance to the consultant after the approval of the inception report, but only on execution of a bank guarantee of a scheduled nationalised bank, valid for a period of at least 12 months from the date of issuance of advance.
2. The second instalment of consultation fee amounting to 50% of the total fee shall be payable to the consultant after approval of the draft report.
3. The third and final instalment of consultation fee amounting to 20% of the total fee shall be payable to the consultant after the receipt of the hard and soft copies of the

final report in such format as prescribed in the agreement along with all original documents containing primary and secondary data, processed data outputs study report and soft copies of all literature used in the final report.

4. Taxes will be deducted from each payment as per rates in force. In addition the evaluating agency/ consultant is expected to pay service tax as their end.

**11. SELECTION OF CONSULTANT AGENCY FOR EVALUATION:**

The selection of evaluation agency shall be finalized as per provisions of KPPP Act and rules without compromising on the quality.

**12. Contact person for further details:**

- Nodal Officer, Forest Department, Government of Karnataka.
- Consultant (Evaluation) KEA

-Sd-

**Chief Evaluation Officer  
Karnataka Evaluation Authority**

*Chhambel ✓*  
ToR Prepared by  
(Dr. Chaya Degaonkar)



## **Annexure-1**

### **DETAILS OF SCHEMES TO BE EVALUATED**

#### **SCHEME-1: COMPENSATORY AFFORESTATION FUND MANAGEMENT & PLANNING AUTHORITY (CAMPA)**

##### **1. Introduction:**

CAMPA has been constituted in pursuance of the Hon'ble Supreme Court's order dated 30-10-2002 in IA No.544, in Writ Petition(Civil) No. 202 of 1995 for the purpose of management of money collected towards Compensatory Afforestation (CA), Net Present Value (NPV) and any other money recoverable in pursuance of the Hon'ble Supreme Court's Order to this regard.

Ministry of Environment, Forest and Climate Change, (MOEFCC) Government of India has issued guidelines for operating the funds under State Compensatory Afforestation Fund Management and Planning Authority (CAMPA) for preservation of natural forests, management of wildlife, infrastructure development and other allied works.

The State CAMPA would administer the amount received from the Ad-hoc CAMPA and utilize the amount collected for undertaking Compensatory Afforestation, assisted natural regeneration, conservation and protection of forests, infrastructure development, wildlife conservation and protection and other related activities and for matters connected therewith or incidental thereto.

##### **2. The Major objectives of the State CAMPA Projects:**

As per guidelines issued by the Ministry of Environment and Forests, Government of India, the State CAMPA shall seek to promote:

- (a) Conservation, Protection, Regeneration and Management of existing natural forests;
- (b) Conservation, Protection, and Management of wildlife and its habitat within and outside Protected Areas including the consolidation of the protected areas.
- (c) Compensatory Afforestation
- (d) Environmental services, which include:-

- (i) **Provision of goods** such as wood, non-timber forest products, fuel, fodder and water and provision of services such as grazing, tourism, wildlife protection and life support;
- (ii) **Regulating Services** such as climate regulation, disease control, flood moderation, detoxification, carbon sequestration and health of soils, air and water regimes;
- (iii) **Non-material benefits** obtained from ecosystems, spiritual, recreational, aesthetic, inspirational, educational, symbolic and
- (iv) **Supporting such other services** necessary for the production of ecosystem services, biodiversity, nutrient cycling and primary production.
- (v) **Research, training and capacity buildings.** The project is implemented in all districts of the State. With the release of funds from Ad-hoc CAMPA, Government of India, the State CAMPA has embarked on a mission mode to take up Project Specific Activities i.e., Compensatory Afforestation & other Site-Specific Activities and Activities for utilization of NPV amount like Consolidation, Protection, Regeneration in natural Forests Wildlife Protection and Management activities, Infrastructure Development etc.

As envisaged by the Hon'ble Supreme Court of India and as per guidelines issued by the Ministry of Environment and Forests, Government of India, the main works taken up under State CAMPA are: -

### 3. Project Specific Activities:-

#### A. Compensatory Afforestation (CA), Additional CA (ACA) & Penal CA (PCA)

- i) In Forest Land
- ii) In Non-Forest Land

#### B. Site Specific Activities:

- i) Safety Zone plantation
- ii) Planting in degraded forest area (1 ½ times of safety zone)
- iii) Fencing
- iv) Catchment Area Treatment Plan (CATP)

- v) Planting Dwarf Species
- vi) Medicinal plantation
- vii) Soil & Moisture Conservation works
- viii) Providing LPG connection to local villagers etc.,

### **C. Activities for Utilization of NPV: -**

#### **I. Consolidation and protection of Forests:**

- a. Survey and demarcation of Forests
- b. Forest boundary consolidation through Cattle Proof Trench (CPT)
- c. Fire protection
- d. Creation of lung spaces by protection and consolidation of valuable forest areas in the city's urban areas and developing them as Tree Parks.

#### **II. Consolidation and Regeneration of Forests:**

- a. Assisted Natural Regeneration (ANR)
- b. Promotion of Sandal Regeneration on estate management concept.
- c. Production of Quality Planting Materials, collection of quality seeds and other Research activities.
- d. Integrated plan for Conservation and Development of biodiversity, forests and ecology in the forest areas of coastal zone (HasiruKavacha)

#### **III. Wildlife Protection and Management:**

- a. D-line clearance
- b. Development & maintenance of road network in protected areas.
- c. Elephant Human conflict mitigation measures (Areas outside & inside protected areas)
- d. Elephant Proof Trench (EPT)
- e. Solar Fencing
- f. Assistance to Bannerghatta Biological Park
- g. Wildlife Habitat Improvement & Management for individual Protected Area's (PA's)

- i. Creation of new water holes
- ii. De-silting of tanks
- iii. Soil & Moisture Conservation (SMC) works
- iv. Providing Salt licks
- v. Elephant depredation camps/ Anti-poaching camps (APC's)

**IV. Infrastructure Development:**

- a. Strengthening and augmenting digitization and Communication network;
  - i. Cell Phones
  - ii. Computers
  - iii. Laptop
  - h. Xerox Machines
  - i. GPS
  - j. Digital Cameras
  - k. Personal Digital Assistance (PDA)
- b. New Buildings (Staff Quarters)
- c. Building maintenance
- d. Strengthening of Forest Institutes for capacity building.
- e. Purchase of vehicles (Two Wheelers for Forests and Four Wheelers for Officers)

**V. Forest Produce Saving devices & other activities:**

- a. Supply of energy saving devices at subsidized cost to forest fringe villages.
- b. Maintenance of WP Samples Plots
- c. Repair, Maintenance, & Office Expenditure (RMOE), Travelling Expenses (TE) etc.

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## **SCHEME- 2 : 13TH FINANCE COMMISSION (TFC)**

### **1. Introduction:**

Karnataka is pioneer in implementation of various Forestry Programs. The successful implementation of various programs with the assistance of State Government, Central Government and Externally Aided projects has added fillip to its efforts done so far in this field. Appreciating the implementation of these programs and preparation of working plan the Government of India under '13<sup>th</sup> Finance ' has come forward to support the Forest Department of Karnataka. The project is implemented in all districts of the State. With this assistance from the Government of India, the Forest Department has embarked on a mission mode to expand the Forest cover and strengthen the infrastructure of the department in all districts of the state.

### **2. The Major objectives of the 13th Finance projects:**

The broad objectives of the grant-in-aid for forests are to provide the wherewithal for preservation, so as to halt and reverse past declines in the quantum and quality of area under forest: and to provide fiscal resources by which the state can enable alternative economic activities as a substitute for economic disability imposed by forest cover.

- i. To increase the Forest Cover of the state
- ii. To improve the infrastructure of the department especially for front line staff
- iii. To improve the mobility of the Field Staff through induction of vehicles
- iv. Use of modern technology like GIS through ICT (Information, Communication & Technology) etc)
- v. Enhance protection mechanism for forest & wildlife

### **3. Project Specific Activities:**

1. Advance works for Plantation

2. Raising of Plantation
3. Maintenance of Plantation
4. Development of Central Nursery
5. Development & maintenance of Sandal & Medicinal Plant Estate
4. Habitat Improvement
7. Support to ANR to Special such as Dindiga/Caned regeneration
8. Raising/Maintenance of Seedlings of Polythene Bags (PBs)
9. Eco-Tourism Development
10. KaravaliHasiruKavachaYojane
11. Renewable Energy
12. Research & Utilization Activities
13. Training activities for forest staff
14. ICT, Mobility, Publicity & Other Infrastructure Developments in HQs
15. Building infrastructure development works (Civil Works)
14. Publicity, Awareness, Training, etc.,
17. Working Plan Activities
18. Fixing/Creating/Formations Cairns
19. Establishment & Maintenance of Protection Camps like Forest PC, Anti-Poaching Camps, Anti-Smuggling Camps, Anti-depredation camps etc
20. Boundary Consolidation including D-line clearance, CPT and Boundary Walls.
21. Vehicle Maintenance.
22. Purchase of Laptop, Desktops, related accessories and other ICT Requirements

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**SCHEME-3 :NATIONAL AFFORESTATION PROGRAM-  
FOREST DEVELOPMENT AGENCY (NAP- FDA)**

**Objectives of the Scheme**

- i. **Goal:**  
Increase and/ or improve Forest and Tree cover (FTC)
- ii. **Purpose:**  
Rehabilitation of degraded forests and other areas by institutionalizing decentralized/ participatory forest management and supplementing livelihoods improvement processes.
- iii. The activities involved and the outputs of NAP-FDA scheme are as follows;

<b>Outputs</b>	<b>Activities</b>
(a) Improved natural forest stock	Assisted natural regeneration of degraded areas
Increased and improved FTC	(a)Artificial regeneration and Enrichment planting. (b) Promotion of Non-Timber forest Products (NTFPs)
(c)Participatory forest management initiated by supporting the immediate needs of fringe-community	Entry Point Activities
(d)Long -term participation of fringe-community in forest management	(a)Participatory-micro-planning, implementation and monitoring of projects (b) Flexible project design and cost Norms
(e)Increased Soil and Moisture Conservation (SMC)	Biological SMC supplemented by physical SMC treatment as per local site condition.
(f) Improved forest/ tree productivity	Promotion and use of improved technologies and high-quality planting material.
(g)Increased capacity of fringe community and frontline staff to develop and manage natural resources	Awareness generation, training and linkage with other institutions
(h)Enhanced opportunity for local forest-based micro enterprises	Value-addition and marketing of forest produce from project area
(i) Review and independent monitoring processes internalized	Bottom-up internal monitoring of projects and independents third party concurrent and final evaluations of each project
(j)Tree cover in non-forest areas promoted	(a) Agro-forestry on bunds and farmlands (b)Coastal shelterbelt and tank foreshore plantations on public and private lands.

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## **SCHEME-4: NATIONAL BAMBOO MISSION (NBM)**

### **Mission Objectives:**

- To promote the growth of the bamboo sector through an area based regionally differentiated strategy
- To increase the coverage of area under bamboo in potential areas, with suitable species to enhance yields.
- To promote marketing of bamboo and bamboo- based handicrafts.
- To establish convergence and synergy among stakeholders for the development of bamboo.
- To promote, develop and disseminate technologies through a seamless blend of traditional wisdom and modern scientific knowledge.
- To generate employment opportunities for skilled and unskilled persons, especially unemployed youths.

### **Strategy:**

To achieve the above objectives, the mission would adopt the following strategies:

- Adopt a coordinated approach covering production and marketing to assure appropriate returns to growers/ producers.
- Promote Research and Development (R&D) of genetic superior clones of suitable species and technologies for enhanced production.
- Enhance acreage (in forest and non-forest areas) and productivity of bamboo through species change and improved cultural practices.
- Promote partnership, convergence and synergy among R&D and marketing agencies in public as well as private sectors, at all levels.
- Promote where appropriate, cooperatives and self-help groups ensure support and adequate returns to farmers.
- Facilitate capacity-building and Human Resources Development.
- Set up National, State and sub State Level Structures, to ensure adequate returns for the produce of the farmers and eliminate middlemen, to the extent possible.

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