



GOVERNMENT OF WEST BENGAL  
DIRECTORATE OF FORESTS

Office of the Principal Chief Conservator of Forests & Chief Executive Officer,  
West Bengal Compensatory Afforestation Fund Management and Planning Authority

Aranya Bhawan, Block: LA-10A, Salt Lake City, Sector – III, Kolkata: 700 106

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Visit us at: [www.westbengalforest.gov.in](http://www.westbengalforest.gov.in)



Memo. No. 686 /CAMPA/2C-203/2021-22

Dated, Kolkata, 21/02/2022

**Notice Inviting Tender: - Tender NIT No: 08/CAMPA/2C-203/2021-22(Second Call)**

The Conservator of Forests & Joint Chief Executive Officer, West Bengal Compensatory Afforestation Fund Management and Planning Authority, on behalf of the Governor, Govt. of West Bengal invites Tenders from eligible Tenderers for the following work as detailed in the table below:

**1. Schedule of Work for which the Tender is invited**

Notice Inviting Tender No.	Name of the Work	Estimated Amount (Rs)	Location of Work	Earnest Money and Tender Fee	Price of Technical & Financial Bid documents (₹)	Period of Completion of work (days)
NIT No. 08 /CAMPA/2C-203/2021-22(Second Call)	Third Party Monitoring of WB CAMPA works of the F.Y 2020-21(Second Call).	₹ 3,60,000/- (inclusive of all taxes and charges)	In O/o the PCCF & CEO, WB CAMPA, Aranya Bhawan, 3 <sup>rd</sup> Floor, Block-LA, 10A, Sector-III, Kolkata-700106 and different Forest Divisions of West Bengal.	EMD: 2% of ₹3,60,000/- = ₹ 7,200/-  Tender Fee: ₹ 500/-	Download the Tender document at free of cost. Tender document and Forms are available at <a href="http://www.wbcampa.org">www.wbcampa.org</a> & <a href="http://westbengalforest.gov.in/">http://westbengalforest.gov.in/</a>	30 days from the date of issuing of work order.

**2. Nature & Scope of Work**

Tenders are invited from eligible organisation for monitoring of WB CAMPA works of the F.Y 2020-21. Logistic support from West Bengal Compensatory Afforestation Fund Management and Planning Authority (WB CAMPA) may also be specified as field work may involve many Forest Divisions / Field Units in the entire State of West Bengal. All such interested organizations are requested to be present for discussion regarding modalities of Monitoring works and / or for financial implications in meeting with WB CAMPA Officials at WB CAMPA office on scheduled Date & Time as mentioned for **Pre-Bid meeting**.

Selection process for suitable Organization for the proposed work will be accomplished by the Tender Committee, WB CAMPA after scrutinizing the details of proposals, both technical & financial. Decision of PCCF & CEO, WB CAMPA regarding publication of result of this tender will be final and binding in this regard.

Third party monitoring report is mandatory under CAF Act, 2016, u/s 16(1) and all such report, data will be sole property of WB CAMPA authorities and not to be used for any other purpose without written approval of Competent Authority of WB CAMPA.

**Participating organization includes a wide range of private and public entities including consulting firms, engineering firms, management firms, universities, research institutions, Government agencies, non-Government organizations (NGO) and experts.**

Such Organization will have to submit Interim report of monitoring as and when desired from WB CAMPA Office.

Details of works, location (Division) for plantation & non-plantation works are attached in **Annexure - I** and the methodology of plantation, monitoring works as per guideline of IIFM Bhopal is attached in **Annexure -II**.

### **3. Methodology**

1. For plantations / afforestation related activities following format shall be adopted:-

Nature of Works	Name of Division	Range	Beat	Mouza /Block / Compt	Latitude	Longitude	Area	Weighted average survival %*	Avg. height	Date of monitoring
....										

Monitoring of plantation / afforestation works should be carried out based on guideline of IIFM Bhopal. (**Annexure-II**)

\*Performance, based on the weighted average survival percentage, the plantations (2020-21) shall be grouped as follows:-

Sl. No.	Category	Weighted average survival (%)
1	Category A	75% and above
2	Category B	74-60%
3	Category C	59-40%
4	Category D	Less than 40%

2. For non-plantations/ assets creations/ others activities, following format shall be adopted:-

Item of works	Division Range/Beat/ Geo-location (as applicable)	Physical (unit)	Financial (₹)	Secondary data (any document visited/verified) at HQ/Division/Range end	Ground truthing (visit/photography / videography/ measurement)	Information based on interaction with stake holders etc.	Work completed (fully/ partially)	Scoring (1 to 5 scale)**	Remarks

**\*\* Marking criteria:-**

- 5- Verified physically and with documents.
- 4- Verified physically but documents are not traceable.
- 3- Verified from available documents only.
- 2- Verified with other sources (Circumstantial evidences).
- 1- Could not be traced.

### **3. Preparation of draft report-**

**Draft report should be on the basis of following points:-**

- 1. Executive Summary
- 2. Introduction
- 3. Methodology adopted: (i) Plantation activities and (ii) Non Plantation activities.
- 4. Results
- 5. Discussion / Conclusion
- 6. Annexure

### **4. Timeline for the work programme-**

Sl. no.	Item of work	Timeline
1	Collection of Field data	21 days from the date of issuing of work order
2	Submission of Interim report	15 <sup>th</sup> day from the date of issuing of work order
3	Submission of draft report	25 <sup>th</sup> day from the date of issuing of work order
4	Submission of final report	30 <sup>th</sup> day from the date of issuing of work order

### **4. Terms of Reference**

- 1. List of manpower with academic background, present designation, work experience, field of specialization are required to be informed.
- 2. Details of Field Units/Divisions along with contact details to be provided.

3. Details of schedule of field visit to be intimated in advance to CF & Joint CEO, WB CAMPA prior to 5 (five) working days before the actual field visit for informing and keeping field units in full preparedness.
4. Fooding for visiting officials to be arranged at their own cost and will be part of their claim and may be included within quoted rate.
5. All incidental charges, stationary, instruments, photography, videography will be within quoted rate.
6. Honorarium/ remuneration for manpower (own or hired), technical staffs will be within quoted rate.

### **5. Man Power (Human Resource) Requirement**

Firm/Society/Trust should have persons from the field of:

- Forest/Environment
- Statistician
- Scientist
- Field Evaluator
- Team Leader

### **6. Important Point of Reference**

<b>Sl. No.</b>	<b>Item</b>	<b>Date &amp; Time</b>
1	Date of Publication of Tender – Newspaper, Online uploading of tender documents in website & Download start date	23.02.2022
2	Date of Pre Bid Meeting	24.02.2022 at 11:30 A.M.
3	Venue of Pre Bid Meeting	Office of the Principal Chief Conservator of Forests & Chief Executive Officer, WBCAMPA Aranya Bhawan, Block: LA-10A, Salt Lake City, Sector - III, Kolkata: 700106.
4	Last Date of submission of Bids	03.03.2022 up to 12 noon.
5	Office to where Tender Paper / Form to be submitted by bidders	Office of the Principal Chief Conservator of Forests & Chief Executive Officer, WBCAMPA Aranya Bhawan, Block: LA-10A, Salt Lake City, Sector - III, Kolkata: 700106.
6	Date of Opening of Technical Bid	03.03.2022 at 2 P.M.
7	Place of Opening of Technical Bids	Office of the Principal Chief Conservator of Forests & Chief Executive Officer, WBCAMPA, Aranya Bhawan, Block-LA-10A, Sector-III, Salt lake City, Kolkata-700106.
8	Declaration of the results of Evaluation of Technical Aspects	03.03.2022 at 4 P.M.

9	Date of Opening of Financial Bid	04.03.2022 at 11 A.M.
10	Declaration of Final result	Subject to Approval of the Authority.

**Note:** 1) In case of any unscheduled holiday or on days of Bandh or natural calamity on the aforesaid dates or any emergency for the officer responsible for opening bid, the next working day will be treated as scheduled / prescribed date for the same purpose.

2) The Tender Inviting Authority may change the venue of opening the Technical or Financial Bids in case of exigent circumstances like breakdown of communications link, lockdown or conditions of force majeure.

3) The Tender Inviting Authority reserves the right to defer the date of opening of either Technical or Financial Proposal or both, if required.

**Amount of Earnest Money:** ₹ 7,200/- (Rupees Seven thousand and two hundred only). EMD is to be deposited by bank draft in favour of **PCCF & CEO, WB CAMPA**.

**Amount of Security Deposit (SD):** 3% (Three Percent) of the contracted value of work.

SD is to be submitted by L1bidder under proper Head of Service along with proper format for transferring the **Security Deposit to operator code of DDO CAMPA in PAO-III** (Operator ID will be communicated to L1 bidder) or by **Demand Draft** in favour of the PCCF & CEO, WB CAMPA.

**Tender Fees:** ₹ 500/- to be deposited by all intending bidders through **GRIPS portal**. (<https://wbifms.gov.in/GRIPS/makePaymentInt.do>). Select <Forest Department> - <Receipt of Tender Fees relating to works under CAMPA>. Select 'Circle' as WB CAMPA (HQ).

## **7. General Terms and Conditions**

### **1. Earnest Money Deposit (EMD):**

- A. **Mode of Payment:** "Earnest Money Deposit (EMD)" of ₹ 7,200/- (Seven thousand and two hundred only) is to be deposited by bank draft in favour of **PCCF & CEO, WB CAMPA**. The same must be enclosed with the Tender Form in original & without it Tender Form will not be accepted by the undersigned.
- B. There is no exemption, in general, for any of the eligible tenderers towards cost of tender document fee & EMD. The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category.
- C. **Refund of EMD:** The EMD of the unsuccessful Tenderers will be refunded without any interest on receipt of application addressed to the Principal Chief Conservator of Forest & Chief Executive Officer, West Bengal Compensatory Afforestation Fund Management and Planning Authority.

- D. The Earnest Money of all other Tenderers shall be refunded after release of acceptance letter in favour of the qualified lowest bidder on receipt of application from unsuccessful Tenderers, except the bidder who is awarded with the contract work EMD shall be retained as until signing of an agreement, submission of Security Deposit and issue of work order.
2. The Tender is being floated with Administrative Approval and Financial Sanction from appropriate authority. The **PCCF & CEO, WB CAMPA** shall have the discretionary power to cancel the tender out right without assigning any reason there off.
3. **Submission of Tender Paper-** The Tender shall be required to be submitted in **sealed cover**, by official designation, i.e. **Office of the Principal Chief Conservator of Forests & Chief Executive Officer, West Bengal Compensatory Afforestation Fund Management and Planning Authority (WB CAMPA), Aranya Bhawan, Block: LA-10A, Salt Lake City, Sector-III, Kolkata- 700106**, super scribing the Tender Notice Number. Two bid system of submission of Tender shall be followed. Financial bids of the bidders shall only be opened if the intending bidders qualify in the technical bid to be decided by the Tender committee.
4. The sealed envelope should consist of another two sealed envelopes-
- A.** Technical Bids and Other Document and
- B.** Financial Bid
- A. The Technical Bid** should consist of following documents- paper related to Organization Details such as:
- (i) **Eligibility Criteria-** Bonafide organizations having valid Income Tax, PAN, GST Registration Number, having experience of similar nature of work during the last 3 financial years to any Government Department, Zilla Parishad, Government undertaking / Statutory Bodies constituted under the statute of the Government may apply for the Tender. The intending bidders must be having financial credential of similar nature as per NIT. The financial credentials thus submitted should not be more than three years' old.
- (ii) **Credential-** Intending bidders shall be required to submit financial credential of similar nature of works during the last 3 financial years to any Government Department, Zilla Parishad, Government undertaking / Statutory Bodies constituted under the statute of the Government, not more than three (3) Years old. (a) All categories of intending Organization shall have satisfactorily completed as a prime agency during the last 3 (three) years prior to the date of issue of this Tender Notice either of the following:
- (a) At least one job of similar nature with an estimated cost 50 % to or more than the estimated cost put to this NIT; or
- (b) At least two jobs of similar nature with an estimated cost of each of the works equal to at least 25% of the estimated cost put to this NIT in any one year; or
- (c) At least three jobs of similar nature with an estimated cost of each of the works equal to at least 20% of the estimated cost put to this NIT in any one year,

For the purpose of this work, 'similar works' mean monitoring, review, interim monitoring, evaluation etc. in any Government Department, Zilla Parishad, Government undertaking / Statutory Bodies constituted under the statute of the Government.

Copy of last Income tax Submission Certificate, Copy of Last GST submission certificate, Copy of PAN, GST Registration, Receipt on submission of EMD deposit (Original) and Tender Fee, Details of Financial Credentials, past credential of carrying out similar nature of works are required.

**Affidavit:** The prospective bidders or any of their constituent partner shall neither have abandoned any work nor any of their contract have been rescinded, debarred or blacklisted during the last 3 (*three*) years by any Government or PSU. Such abandonment or rescission will be considered as disqualification towards eligibility. A declaration in this respect through affidavit has to be furnished by the prospective bidders without which the Technical Bid shall be treated as non-responsive and be submitted along with technical bid. Format is enclosed.

Work credential as per schedule to any Government Department, Zilla Parishad, Government undertaking / Statutory Bodies constituted under the statute of the Government during within last three financial years are required to be submitted. The work credential should be of similar nature of work implemented in a particular financial year as mentioned in this Tender notice.

**(B) The Financial Bid** should be submitted in prescribed format (**FORM-VI**) attached with the Tender paper. The financial bid should be **inclusive of all taxes and charges. Only one rate shall be quoted for the entire work.** The Tender paper should be submitted in the Tender box specifically earmarked for the purpose. Tender paper submitted otherwise shall not be accepted under any circumstances. Further, no extension of time of submission of Tender paper shall be entertained under any circumstances and the Tender box shall be sealed after laps of due time and shall be opened on due time in presence of the bidders. Participating bidders may remain present at the time of opening of tender.

## **5. NORMS FOR FINALISATION OF THE BIDS:**

The Evaluation of the tender will be done on the principle of **Quality and Cost Based Selection (QCBS)** method.

The details of the process are described below:

The evaluation of the proposal shall be carried out in two stages.

In the first stage, evaluation of the technical proposal will be taken up. Proposals which are received unsigned or are incomplete (i.e. when the required bid formats and /or supporting documents, proof of deposit of requisite tender fees, EMD etc. have not been submitted along with Covering Letter) will be summarily rejected as non-responsive. Then technical documents of firms will be evaluated amongst qualifying bidders.

In the second stage, evaluation of the financial proposal will be taken up.

**The weightage assigned for bids is:- Technical bids: Financial Bids = 60:40. The final assessment will be based on the 60% of Technical scores + 40% of financial scores.**

Any proposal of modification subsequent to opening of bids and bids not conforming to tender conditions shall be liable to be rejected. Therefore, bidders are advised to submit their bids complete in all respects as per requirement of tender document specifying their acceptance to all the clauses of Bid Evaluation Criterion, General Terms and Conditions and compliance to the scope of work requirement etc.

## 6. Evaluation of Technical Bids

The Technical Bid will be examined by the tender committee. Evaluation will be done on the basis of evaluation criteria and scoring pattern as mentioned below:

Sl. No.	Criteria / Sub-criteria	Max. Marks	Documentary Proof to be enclosed
A	Establishment of the Firm/Society/Trust etc. relevant to the assignment. <b>Date of establishment</b> ( < 3 years = 3 marks) ( > 3 – 5 years = 6 marks) ( > 5 – 7 years = 9 marks) ( > 7 – 10 years = 12 marks) ( > 10 years = 15 marks)	15	Certificate of Practice and Constitution Profile of the Firm/Society/Trust etc. <b>Refer: Form-II</b>
B	<b>Average Annual Turnover (₹ in lakh):</b> < 10 Lakh = 2 marks >= 10 Lakh < 20 Lakh=4 marks >= 20 Lakh < 40 Lakh = 6 marks >= 40 Lakh < 50 Lakh = 8 marks >= 50 Lakh = 10 marks	10	Copy of Profit & Loss A/c / Statement of Income & Expenditure and Balance Sheet of F.Y. 2018-19, 2019-20 and 2020-21 along with. <b>Refer: Form-III</b>
C	Experience of the Firm/Society/Trust in same or similar assignments of 1) Monitoring, Survey, Research work and Inventory of Forest under Govt. of India during last 03 Years. <b>(20 Marks)</b> 2) Monitoring, Survey, Research work and Inventory of Forest under State Govt. during last 03 Years. <b>(20 Marks)</b> 3) Monitoring, Survey, Research work and Inventory of Forest under PSU (Central/State) & others Statutory body (Central /State) during last 03 Years. <b>(20 Marks)</b>	60	Statement of Experience along with Copies of Work Orders / Work Completion Certificates and other related documents. <b>Refer: Form-IV</b>
D	List of team members having experience in Monitoring, Survey & Research works with respect to Forestry & allied activities.  <b>[5 marks for each member having more than 3 years of experience (Max. 15 marks)]</b>	15	List with details of name, age, academic & professional qualifications and experience in working in Monitoring, Survey & Research works with respect to Forestry & allied activities. (in years) <b>Refer: Form-V</b>
	<b>TOTAL</b>	<b>100</b>	

## 7. Uploading of summary list of technically qualified Tenderer (1<sup>st</sup> round)

Pursuant to scrutiny and decision of the **Tender Committee**, the summary list of eligible tenderers for which their Financial Proposals will be considered, may be uploaded in the web portals. While evaluation, the



Committee may summon the tenderers and seek clarification / information or additional documents or original hard copy of any of the documents already submitted and if these cannot be produced within the stipulated time frame, their proposals will be liable for rejection.

## 8. Opening and Evaluation of Financial Proposal:

Financial proposals of the Tenderer declared technically eligible by the Tender Committee will be opened on the prescribed date, but may vary as per the time requirement for procedural formalities.

## 9. Evaluation of Financial bids

The Financial Bids of the technically qualified bidders will be evaluated as per the evaluation criteria mentioned below:

- The total financial score for evaluation of financial bids is 100
- The list of Bidder will be ranked in ascending order, i.e. the Bidder who quoted the lowest amount (L1) will be ranked first and so on. For the purpose of this tender the participating bidder who would quote the lowest gross amount as financial quote, will be ranked L1 and will be assigned 100 points. Other bidders, viz: L2, L3 etc. will be compared against the financial quote of the L1 and points assigned accordingly. For example, if the quote of L1 is ₹ 200/- and that of L2 is ₹ 400/-, then L1 will be awarded 100 points (maximum) and L2 will be awarded  $(200/400) \times 100 = 50$  points.

**Total Score Secured = 60 % of Technical Score (achieved) + 40 % of Financial Score (achieved).**

## 10. Uploading of summary list of finally qualified Tenderer (2<sup>nd</sup> round)-

After evaluation of Financial Proposal, may publish the final summary result containing inter-alia, name of tenderers and the rates quoted by them provided Tender evaluation committee is satisfied that the rate obtained is fair and reasonable and there is no scope of further lowering down of rate. **Quality and Cost Based Selection (QCBS)** method will be applied for determining L1 bidder.

## 11. Time to complete the work-

Third party Monitoring of WB CAMPA works for the F.Y. 2020-21 within 30 days after issue of work order & letter by the L1 bidder. Allowing time extension shall be the discretionary power of the Tender issuing authority. In case of delay penalty may be imposed after initiating other legal means like forfeiting the security etc, if undersigned deems fit.

## 12. Security Deposit:

- a) The successful Tenderer to whom a Letter of Acceptance will be issued shall submit **Security Deposit which is 3 % (Three Percent)** of the contracted value of work, within 10 (ten) days from the date of Letter of Acceptance through Treasury Challan under **Head of Service: '8443-00-109-003-07- Security Deposits'** (Operator ID will be communicated to L1 bidder) **in PAO-III or by depositing Demand Draft in favour of PCCF & CEO, WB CAMPA.** Failure in depositing this amount shall render the contract liable to termination without reference to the organisation. After submission of Security Deposit an agreement as per given format shall have to be signed on Stamp Paper (cost of Stamp Paper shall be borne by Tenderer) and signed agreement shall have to be notarized from Public Notary. After that formal work order will be issued.
- b) Security Deposit will be released without any interest on receipt of application from Organisation addressed to the PCCF & Chief Executive Officer, WB CAMPA, after lapse of Security Period i.e., two (02) months after completion of the work or three (3) months from the date of final payment to the successful Tenderer.

- c) The Security Deposit in respect to this Tender will be refunded to the executing organization at the end of the contract period subject to submission of final report in required norms and subject to satisfactory performance.
- d) In case of any irregularity or violation of the terms and conditions of the contract agreement, the Security Deposit will be forfeited in addition to any legal actions as deem fit & required.

**13. Specification of Work:**

Specifications are given in Annexure I & II. Interested Tenderers should go through it carefully and quote their rate.

- 14. The Agency is required to be entered in to an Agreement after selection of L1 bidder for the proposed Monitoring works of WB CAMPA for the F.Y. 2020-21.
- 15. The **PCCF & CEO, WB CAMPA**, reserves the right to place work order as per availability of fund and receiving the Administrative Approval.
- 16. The **PCCF & CEO, WB CAMPA, WB CAMPA** reserves the right to cancel the Tender, if necessary, without assigning any reason whatsoever.
- 17. The undersigned or his representatives will inspect the works related to monitoring, take or suggest necessary rectification as and when required. The Tenderers should render required co-operation in this regard.
- 18. During the inspection by the undersigned or his representative, if the quality of the monitoring work is not found up to the standard, the Organization is bound to rectify the monitoring work to the satisfaction of the PCCF & CEO, WB CAMPA or his representative. Otherwise, the work order will be cancelled and the security deposit will be forfeited to the Govt. of West Bengal.
- 19. The Tenderer will submit bills in triplicate with a copy of work order, bank details, work completion certificate etc. duly signed.
- 20. The Tenderers are required to inspect document enclosed with NIT before submission of the Tender and future ignorance of any such item will not be entertained.
- 21. All works are required to be carried out as per plan and specification & estimate of the project subject to the modification by the undersigned at any point of time during execution of the work duly notified to the Organization, within the project cost.
- 22. Statutory Deduction: Income Tax, GST, Labour Welfare Cess, as applicable, shall be deducted from the Gross amount of Bill.
- 23. The successful Tenderer will not assign any part of the work to any other organization.
- 24. Rate offered in the estimate is final and Tenderer will not have any further claim.
- 25. The acceptance of the Tender will be subject to the receipt of the approval of the higher authorities and availability of fund. The undersigned will not be responsible for any loss sustained by the Tenderer in the event of non-receipt of Government sanction.


26. The payment of bill for any work will be made according to the availability of fund and approval of higher authorities wherever applicable and no claim to delay in payment will be entertained.
27. The terms and conditions of this "Notice Inviting Tender (NIT)" is part and parcel of the contract form.
28. In case of any dispute in execution of the work and report thereof, **PCCF & CEO, West Bengal Compensatory Afforestation Fund Management and Planning Authority** will act as Appellant Authority and his decision will be final and binding.
29. Work order shall only be issued on receipt of final approval from appropriate authority.
30. The Organization shall comply with all State and Central Laws, Statutory Rules, Regulations, etc., such as The payment of wages Act, The Minimum Wages Act, The workmen's Compensation Act, The Employer's Liability Act, The industrial Disputes Act, The Employees' Provident Fund Act, Employees' State Insurance Scheme, the Contract Labour (Regulations and Abolition Act, 1970) and other Acts, Rules and Regulations for labour as may be enacted by the Government during the tenure of the Contract and having force or jurisdiction at site. The organization shall give to the local Governing Body, Police and other concerned Authorities all such notice as may be required under law.
31. The organization shall pay all taxes, fees, license charges, deposits, duties, tolls, royalty, commissions or other charges which may be levied on account of any of his operations connected with this contract. In case the Tender Inviting Authority makes any such payment, it shall be recovered from the organization bill.
32. During scrutiny, if it comes to the notice of the Tender Inviting Authority that the credential or any other paper found incorrect / manufactured / fabricated / fake, such Tenderer bids shall be rejected without any prejudice bids, bidder would not be allowed to participate in the Tender.  
The **CF and Jt. CEO, West Bengal Compensatory Afforestation Fund Management and Planning Authority**, Government of West Bengal, reserves the right to cancel the N.I.T. due to unavoidable circumstances after obtaining approval of the PCCF & CEO, WB CAMPA and no claim in this respect will be entertained.
33. Documents submitted by the organization along with technical bid, if any of them on verification found incorrect / manufactured / fabricated / fake or false, in that case awarded contract work shall liable to be terminated with imposition of penalties or penalized as deemed fit. The balance work shall be awarded on risk and cost base Tender.
34. The decision of **PCCF & CEO, WB CAMPA, West Bengal Compensatory Afforestation Fund Management and Planning Authority** shall be final and binding to follow in case of any discrepancy arises between two similar clauses contained in contract agreement.
35. The organization is liable to pay the skilled, unskilled and other labour wages as per existing rules.
36. Deduction of STDS, TDS, GST & Other tax etc., if applicable shall be made as per rule in vogue. **The estimated value put to tender is inclusive of all direct & indirect taxes and charges.**
37. All these terms and conditions along with such other terms and condition as the undersigned deems fit shall form a part of the agreement which is required to be made by the successful bidder with the undersigned.
38. Validity of the Tenderer will be 01 (one) year from the date of submission of the Tenderer or up to the end of financial year, as may be decided by the appropriate authority.

39. If Tenderer can complete the assignment satisfactorily and successfully, the validity of Tender may be extended for further year(s) subject to the approval of the competent authority.

## **8. Additional Terms & Conditions**

1. Notwithstanding anything contained in the form in which the contract is executed the following shall constitute terms and conditions of contract and shall be binding on the Firm.
2. The acceptance of the Tender including the right to distribute the work between two or amongst more than two Tenderers will rest with the competent authority without assigning reason thereof. The PCCF & CEO, WB CAMPA reserves right to reject any or all Tenders without assigning any reason thereof.
3. The Tenderer shall have to comply with the provisions of (a) Contract labour (Regulation & abolition) Rules, 1970(b) Minimum Wages Act 1948 or the modification thereof or any other laws relating the rates as will be in force from time to time.
4. Conservator of Forests and Joint Chief Executive Officer, West Bengal Compensatory Afforestation Fund Management and Planning Authority or his authorized representative shall not entertain any claim whatsoever from the Firm for payment of compensation.
5. The Tender Inviting Authority or the Society shall not be held liable for any compensation due to any circumstances such as untimely rains, other natural calamities, strike etc.
6. No Price preference will be applicable to W.B. Govt. Undertaking, as per Finance Dept. G.O. No. 8648-F(Y), dated 12th October 2012.
7. Imposition of any duty/tax rules etc. whatsoever of its nature (after work order/Commencement and completion of the work) is to be borne by the Tenderer.
8. No mobilization/ secured advance bill will be allowed.
9. GST, Cess, Income Tax, Ferry Charges and other Taxes if any are to be borne by the Firm. No extra payment will be made for these. The rate quoted in financial bid must be inclusive of these.
10. All working tools will have to be arranged by the Firm at his own cost.
11. In case any clarification is required, the interpretation of the Officer-in-Charge will be final.
12. The final acceptance of the Tender will be subject to the receipt of approval of higher authorities.
13. Final payment will be made after completion of all works and submission of final report.
14. The tenderer will not have any further claim other than the rate offered in the NIT.
15. PCCF & CEO, WB CAMPA reserves the right to cancel the agreement at any point of time during the execution of the work if it not done as per the specifications or any terms & conditions are violated by the Firm.
16. The successful Tenderer will not assign any or part of the work(s) to any other Firm/agency.
17. PCCF & CEO, WBCAMPA or his authorized representative will be the Officer-in-Charge in respect

to the contract and all correspondences concerning rates, claims, change in specification and/or designation similar important matters will be valid only if made by the Officer-in-Charge. If any correspondence of above Tender is made with Officers other than the Officer-in-charge for speedy execution of works, the same will not be valid unless copies are sent to the Officer-in-Charge and approved by him. The instruction given by the Head of Management Unit who has been authorized to carry out the work on behalf of the Officer-in-Charge and his authorized representative shall also be valid regarding specification, supervision, approval of materials and workmanship. In case of any dispute, the decision of the Officer-in-Charge shall be final and binding.


  
**Conservator of Forests  
&  
Jt. CEO, WB CAMPA**

**Memo No.: 687/CAMPA/2C-203/2021-22**

**Dated, Kolkata, 21/02/2022**

Copy for information and wide circulation through his office notice board to: -

1. The Principal Chief Conservator of Forests (HOFF), West Bengal
2. The Principal Chief Conservator of Forests & CEO, WBCAMPA
3. The Deputy Conservator of Forests and OSD, WBCAMPA
4. The Deputy CEO, WBCAMPA
5. The Chief Account Officer. WBCAMPA
6. The Deputy Conservator of Forests, MIS, WB, Aranya Bhawan. He is requested for making arrangement of uploading the enclosed "Tender Notice" in our official website.
7. Publicity Division for display in Notice Board and circulation in local office
8. Office Notice Board
9. The Accounts Section.
10. The Guard File.

  
**Conservator of Forests  
&  
Jt. CEO, WB CAMPA**

**FORM-I**  
**APPLICATION**

**To**

**The Conservator of Forests**  
**& Jt. CEO, WBCAMPA**

Subject: (Name of the Work with Tender reference no.)\_\_\_\_\_

Reference: (N.I.T. No.)\_\_\_\_\_

Dear Sir/Madam,

Having examined the Statutory, Non-statutory and NIT documents; I/We hereby submit all the necessary information and relevant documents for evaluation.

The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms for application and for completion of the contract documents is attached herewith.

I/We are interested in bidding for the work mentioned above

I/We understand that

(a) Tender Inviting Authority and Accepting Authority can amend the scope and value of the Contract bid under this project.

(b) Tender Inviting Authority and Accepting Authority reserve the right to reject any tender without assigning any reason.

The application is made by me/us on behalf of \_\_\_\_\_ in the capacity of \_\_\_\_\_ duly authorized to submit the tender.

**Enclosures:**

- (1) Technical Proposal (Envelop-I /Folder-I)
- (2) Financial Proposal (Envelop-II /Folder-II)

Date:\_\_\_\_\_

Signature of authorized officer of the firm

Title & Capacity of the officer:

Name of the Firm with Seal

**FORM – II**  
**STRUCTURE AND ORGANISATION**

1. Name of the applicant (Tenderer):

2. Office Address:

Telephone No.:

Fax No.:

3. Name and address of Bankers:

4. Attach an organization chart showing the structure of the Organization with names of key personnel and technical staff with Bio-data as per format given below.

Date: \_\_\_\_\_

Signature of authorized officer of the firm

Title & Capacity of the officer:

Name of the Firm with Seal

\_\_\_\_\_

Note: Application covers Proprietary Firm, Partnership, Pvt. Ltd. Company or Corporation

## FORM-III

### Average Annual Turnover Certificate

This is to certify that the following statement is the summary of Average Annual Turnover of the firm: <Name of the Firm> as per requirements of this NIT-

Sl. No.	Financial Year	Turnover rounded up to ₹ in lakh (two digit after decimal)
1	2018-2019	
2	2019-2020	
3	2020-2021	
Total		

Average Annual Turnover of Last Three (03) Years: ₹ (in lakhs)

Stamp & Signature



## FORM-IV

### EXPERIENCE PROFILE

#### LIST OF PROJECTS COMPLETED THAT ARE SIMILAR IN NATURE TO THE PROPOSED WORK

Name of the Employer	Name, Location and nature of work	Name of authorized supervisor with designation	Contract price in Indian Rupees	Percentage of participation of Company	Original date of starting work	Original date of completion of work	Actual date of starting of work	Actual date of completion of work	Reasons for delay in completion
...									

Note: a) Work Order / Work done Certificate from the employers to be attached.

b) Non-disclosure of any information in the schedule will result in disqualification of the firm.

Date.....

Signature of authorized officer of the firm:

Title & Capacity of the officer:

Name of the Firm with Seal:

## FORM-V

### List of team members with experience

SL. NO.	NAME & AGE	QUALIFICATION	EXPERIENCE IN YEARS	NATURE OF EXPERIENCE
1				
2				
3				
4				
5....				

**Stamp & Signature**

## **AFFIDAVIT**

**(To be furnished in non-judicial stamp paper of appropriate value duly notarized)**

(I) I, the undersigned do certify that all the statements made in the attached documents are true and correct. In case of any information submitted proved to be false or concealed, the application may be rejected and no objection/claim will be raised by the undersigned.

(II) The undersigned also hereby certifies that neither our firm M/S \_\_\_\_\_ nor any of constituent partners had been debarred to participate in tender by the Directorate of Forests /Government of West Bengal or any of the Statutory Bodies or Government Organizations in favour of whom credentials are preferred by the undersigned towards eligibility criteria, claim; during the last 5 (five) years prior to the date of this N.I.T.

(III) The undersigned would authorize and request any Bank, person, Firm, or Corporation to furnish pertinent information as deemed necessary and/or as requested by the Conservator of Forests & Jt. CEO, WB CAMPA herein referred to as the Tender Inviting Authority, to verify this statement.

(IV) The undersigned understands that further qualifying information may be requested and agrees to furnish any such information at the request of the Tender Inviting & Accepting Authority.

(V) Certified that I have applied in the tender in the capacity of individual/as partner of a firm & I have not applied severally for the same job.

Date:\_\_\_\_\_

Signature of authorized officer of the firm

Title & Capacity of the officer:

Name of the Firm with Seal

**FORM-VI**  
**FINANCIAL BID FORMAT**

<b>Name of Work Tender</b>	<b>Amount Put to Tender (Inclusive all taxes)</b>	<b>Rate Quoted by the Bidder (% above or less or at par)</b>	<b>Tendered amount both in Figure (₹) &amp; Words</b>
(1)	(2)	(3)	(4)
<b>Monitoring of WB CAMPA works of the F.Y. 2020- 21(Second Call).</b>	<b>₹ 3,60,000/-</b> (inclusive of all taxes and charges)		

Declaring that the item against which there are fixed Govt. rate such as minimum wage rate etc. shall be obeyed in letter in spirit & rate is inclusive of all taxes and charges.

Signature of the Tenderer with Seal & date

## Details of works for 3rd party Monitoring for the F.Y.2020-21 of WB CAMPA

## A - Expenditure done through IFMS

Sl no.	Circle	Division	Nature of Work	Broad Catagory	NFL/D FL	Expenditure incurred (Rs.)	Physical Achievement (quantity)	Physical Achievement (Unit)
1	2	3	4		5	14	15	16
1	Hill	Darjeeling	2nd year maintenance	CA	DFL	11,31,694	57.031	ha
2	Hill	Darjeeling	3rd year maintenance	CA	DFL	2,76,228	20.88	ha
3	Hill	Darjeeling	4th year maintenance	CA	DFL	2,13,691	20.00	ha
4	Hill	Kurseong	1st year maintenance	CA	DFL	4,09,748	17.14	ha
5	Hill	Kalimpong	Creation Work of Plantations	CA	DFL	29,75,623	45.658	ha
6	Hill	Kalimpong	1st year maintenance	CA	DFL	47,812	2	ha
7	Hill	Kalimpong	1st year maintenance	CA	NFL	2,56,585	9.5	ha
8	Hill	Kalimpong	2nd year maintenance	CA	DFL	1,77,385	8.939	ha
9	Hill	Kalimpong	2nd year maintenance	CA	NFL	44,267	2	ha
10	Northern	Jalpaiguri	1st year maintenance	CA	DFL	1,92,730	8.062	ha
11	Northern	Jalpaiguri	4th year maintenance	CA	DFL	21,331	2	ha
12	Northern	Coochbehar	2nd year maintenance	CA	NFL	34,438	1.564	ha
13	Northern	Baikunthapur	Creation Work of Plantations	CA	NFL	50,40,270	30	ha
14	North-West	Malda	Creation Work of Plantations	CA	DFL	1,43,987	2.00	ha
15	Wildlife North	Gorumara Wildlife	1st year maintenance of Fodder Plantations	CA	DFL	9,56,240	40	ha
16	Wildlife North	Jaldapara Wildlife	1st year maintenance of AR	NPV	DFL	10,75,154	45	ha
17	Wildlife North	Jaldapara Wildlife	2nd year maintenance	CA	DFL	4,96,080	30	ha
18	Wildlife North	Jaldapara Wildlife	4th year maintenance	CA	DFL	10,537	1	ha
19	BTR	BTR East	1st year maintenance	CA	DFL	7,88,898	33.00	ha
20	Central	Bankura North	Creation Work of Plantations	CA	DFL	8,76,419	14.04	ha
21	Central	Bankura North	2nd year maintenance	CA	NFL	3,678	0.1902	ha
22	Central	Bankura North	4th year maintenance	CA	DFL	34,599	4	ha
23	Central	Panchet	Maintenance of Official Computer	CA		19,250	2	Nos.
24	Western	Kharagpur	Creation Work of Plantations	CA	DFL	9,50,230	22	ha
25	Western	Kharagpur	3rd year maintenance	CA	DFL	2,54,410	25.00	ha
26	Western	Kharagpur	4th year maintenance	CA	DFL	17,300	2.00	ha
27	Western	Medinipur	Creation Work of Plantations	CA	DFL	4,74,415	7.60	ha
28	Western	Medinipur	Planting- Gap filling in Sal degraded forest with of Sal & it's associates under Artificial Regeneration	NPV	DFL	6,93,506	11.00	ha
29	Western	Medinipur	3rd year maintenance	CA	NFL	60,491	4.03	ha
30	Western	Rupnarayan	Planting- Gap filling in Sal degraded forest with of Sal & it's associates under Artificial Regeneration	NPV	DFL	6,92,905	11	ha
31	Western	Rupnarayan	1st year maintenance	CA	NFL	7,58,332	31	ha
32	Western	Rupnarayan	3rd year maintenance	CA	DFL	10,140	1	ha
33	Western	Jhargram	2nd year maintenance	CA	DFL	14,61,235	85.73	ha
34	South-East	Birbhum	Creation Work of Plantations	CA	DFL	70,163	1.124	ha
35	South-East	Birbhum	1st year maintenance of AR	NPV	DFL	35,33,810	170	ha
36	South-East	Birbhum	2nd year maintenance	CA	NFL	11,796	0.612	ha
37	South-East	Burdwan	Planting- Gap filling in Sal degraded forest with of Sal & it's associates under Artificial Regeneration	NPV	DFL	46,02,358	73	ha
38	South-East	Durgapur	Creation Work of Plantations	NPV	DFL	2,46,964	10	ha
39	South-East	Durgapur	Advance-cum-Creation work of Bamboo Plantation under Wildlife Management Plan	WLMP	DFL	3,29,136	4	ha
40	South-East	Durgapur	Advance-cum-Creation work of Fodder Plantation under Wildlife Management Plan	WLMP	DFL	3,17,422	5	ha
41	South-East	Durgapur	1st year maintenance of AR	NPV	DFL	7,00,935	50	ha
42	South-East	Durgapur	2nd year maintenance	CA	DFL	5,60,978	65.5	ha
43	South-East	Durgapur	2nd year maintenance	CA	NFL	2,572	0.133	ha

Sl no.	Circle	Division	Nature of Work	Broad Catagory	NFL/D FL	Expenditure incurred (Rs.)	Physical Achievement (quantity)	Physical Achievement (Unit)
44	South-West	Purulia	1st year maintenance	CA	NFL	2,44,386	10	ha
45	South-West	Purulia	2nd year maintenance	CA	DFL	4,41,957	25.97	ha
46	South-West	Purulia	4th year maintenance	CA	DFL	17,298	2	ha
47	South-West	Kangsabati North	Planting- Gap filling in Sal degraded forest with of Sal & it's associates under Artificial Regeneration	NPV	DFL	18,91,380	30	ha
48	South-West	Kangsabati North	1st year maintenance	CA	NFL	7,46,167	30.5	ha
49	South-West	Kangsabati North	2nd year maintenance	CA	DFL	68,182	4	ha
50	South-West	Kangsabati North	3rd year maintenance	CA	DFL	30,529	3	ha
51	South-West	Kangsabati North	4th year maintenance	CA	DFL	17,299	2	ha
52	South-West	Kangsabati South	Planting- Gap filling in Sal degraded forest with of Sal & it's associates under Artificial Regeneration	NPV	DFL	12,12,630	20	ha
53	South-West	Kangsabati South	1st year maintenance	CA	NFL	5,44,969	23.17	ha
54	Research	Silviculture Hill	Creation of tall seedling	NPV	DFL	14,30,000	55000	Nos.
55	Research	Silviculture Hill	Grafted Seedling	NPV	DFL	18,420	1200	Nos.
56	Research	Silviculture Hill	Setting up of orchards including fencing(ha.)	NPV	DFL	65,000	0.5	ha
57	Research	Silviculture Hill	Maintenance of clonal multiplical Garden at Sukna & Lava	NPV	DFL	1,50,000	2	Nos.
58	Research	Silviculture Hill	Renovation of permamnent mist chamber at Sukna, Sonada & Lava	NPV	DFL	1,50,000	3	Nos.
59	Research	Silviculture Hill	New clonal Orchard at Lebong	NPV	DFL	1,00,000	1	ha
60	Research	Silviculture Hill	1st year maintenance of Block Plantations	NPV	DFL	2,08,733	9	ha
61	Research	Silviculture North	Creation of tall seedling	NPV	DFL	25,35,492	110000	Nos.
62	Research	Silviculture North	Grafted Seedling	NPV	DFL	38,375	2500	Nos.
63	Research	Silviculture North	Setting up of orchards including fencing	NPV	DFL	-	-	-
64	Research	Silviculture North	Upgrading of Mist Chamber at Lataguri, Salugara & Rajabhatkhawa	NPV	DFL	1,50,000	3	Nos.
65	Research	Silviculture North	Maintenance of clonal hedge garden at three research nurseries	NPV	DFL	1,50,000	3	Nos.
66	Research	Silviculture North	Creation of clonal multiplication area over 2 ha. for making 60000 ramets per year at DG9, Salugara Soil Lab Range.	NPV	DFL	84,000	(12770 Remets)	ha
67	Research	Silviculture North	1st year maintenance of Block Plantations	NPV	DFL	3,71,079	16	ha
68	Research	Silviculture South	Creation of tall seedling	NPV	DFL	9,08,225	82500	Nos.
69	Research	Silviculture South	Grafted Seedling	NPV	DFL	38,375	2500	Nos.
70	Research	Silviculture South	Maintenance of existing mist chambers at Arabari Nursery (two permanent mist chambers and two poly tunnels)	NPV	DFL	1,99,787	2	Nos.
71	Research	Silviculture South	New clonal Orchard at Arabari and Hura -1 ha. each	NPV	DFL	83,999	1	ha

Sl no.	Circle	Division	Nature of Work	Broad Category	NFL/D FL	Expenditure incurred (Rs.)	Physical Achievement (quantity)	Physical Achievement (Unit)
72	Research	Silviculture South	1st year maintenance of Block Plantations	NPV	DFL	5,79,649	25	ha
73	Northern	Baikunthapur	Advance Work	CA	DFL	-		
74	Hill	Kurseong	Engagement of Fire Watchers	NPV		65,090	23	Ha./Yearly
75	South-West	Purulia	Engagement of Fire Watchers	NPV		1,98,000	70	Ha./Yearly
76	South-West	Kangsabati North	Engagement of Fire Watchers	NPV		4,52,800.00	160	Ha./Yearly
77	South-West	Kangsabati South	Engagement of Fire Watchers	NPV		6,96,601	253	Ha./Yearly
78	South-East	Burdwan	Engagement of Fire Watchers	NPV		5,85,810.00	207	Ha./Yearly
79	South-East	Durgapur	Engagement of Fire Watchers	NPV		6,16,929	387	Ha./Yearly
80	Central	Panchet	Engagement of Fire Watchers	NPV		1,96,728	70	Ha./Yearly
81	Central	Bankura North	Engagement of Fire Watchers	NPV		1,27,346	45	Ha./Yearly
82	Western	Rupnarayan	Engagement of Fire Watchers	NPV		11,31,520	400	Ha./Yearly
83	Western	Purba Medinipur	Engagement of Fire Watchers	NPV		4,22,785	149.5	Ha./Yearly
84	Hill	Darjeeling	Engagement of Fire Watchers	NPV		3,00,000	100	Ha./Yearly
85	Hill	Kalimpong	Engagement of Fire Watchers	NPV		1,20,000.00	40	Ha./Yearly
86	South-West	Purulia	Engagement of Fire Watchers	NPV		3,00,000	100	Ha./Yearly
87	Western	Kharagpur	Engagement of Fire Watchers	NPV		6,00,000	200	Ha./Yearly
88	Western	Medinipur	Engagement of Fire Watchers	NPV		5,40,000	180	Ha./Yearly
89	Western	Medinipur	Engagement of labour from JFMC for helping staff in driving of elephant	NPV		2,08,000	800	PDS
90	Western	Medinipur	Hiring of Vehicle for 1 month	NPV		2,00,000	100	No
91	Western	Kharagpur	Engagement of labour from JFMC for helping staff in driving of elephant	NPV		1,04,000	400	PDS
92	Western	Kharagpur	Hiring of Vehicle for 1 month	NPV		1,00,000	L.S.	No
93	Western	Rupnarayan	Engagement of labour from JFMC for helping staff in driving of elephant	NPV		53,040	204	PDS
94	Western	Rupnarayan	Hiring of Vehicle for 1 month	NPV		72,000	36	No
95	Western	Medinipur	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		1,56,000	600	PDS
96	Western	Medinipur	Hiring of Vehicle	NPV		7,44,000	372	No
97	Western	Jhargram	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		50,180	193	PDS
98	Western	Jhargram	Hiring of Vehicle	NPV		3,00,000	150	No
99	Western	Rupnarayan	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		67,600	260	PDS
100	Western	Rupnarayan	Hiring of Vehicle	NPV		2,31,750	116	No
101	Western	Kharagpur	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		90,220	347	PDS
102	Western	Kharagpur	Hiring of Vehicle	NPV		4,10,000	L.S.	No

Sl no.	Circle	Division	Nature of Work	Broad Catagory	NFL/D FL	Expenditure incurred (Rs.)	Physical Achievement (quantity)	Physical Achievement (Unit)
103	Central	Bankura North	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		46,760	180	PDS
104	Central	Bankura North	Hiring of Vehicle	NPV		2,40,000	120	No
105	Central	Bankura South	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		23,400	90	PDS
106	Central	Bankura South	Hiring of Vehicle	NPV		1,18,745	60	No
107	Central	Panchet	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		46,800	180	PDS
108	Central	Panchet	Hiring of Vehicle	NPV		2,40,000	120	No
109	South-East	Burdwan	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		1,17,000.00	450	PDS
110	South-East	Burdwan	Hiring of Vehicle	NPV		1,80,000.00	90	No
111	South-West	Purulia	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		1,95,000	750	PDS
112	South-West	Purulia	Hiring of Vehicle	NPV		11,00,000	550	No
113	South-West	Kangsabati South	Engaging labour & Hiring Vehicle for helping in combating Elephant Depredation	NPV		90,893	350	PDS
114	South-West	Kangsabati North	Supply of Fire extinguisher for fire control equipments	NPV		1,50,000	10	Nos.
115	Central	Bankura North	Supply of Fire extinguisher for fire control equipments	NPV		2,91,128	20	Nos.
116	Central	Bankura South	Supply of Fire extinguisher for fire control equipments	NPV		4,45,060	50	Nos.
117	Western	Jhargram	Supply of Fire extinguisher for fire control equipments	NPV		74,900	5	Nos.
118	South-East	Burdwan	Supply of Fire extinguisher for fire control equipments	NPV		1,80,000	12	Nos.
119	South-East	Durgapur	Supply of Fire extinguisher for fire control equipments	NPV		2,24,700	15	Nos.
120	BTR	BTR East	Supply of Fire extinguisher for fire control equipments	NPV		2,25,000.00	15	Nos.
121	Parks & Gardens	PGN	Supply of Wind Blower for fire control equipments	NPV		72,000	24	Nos.
122	CF, Monitoring	Monitoring North	Monitoring of plantations	NPV		1,15,548	288.73	ha
123	CF, Monitoring	Monitoring South	Monitoring of plantations	NPV		96,748	283.718	ha
124	South-East	Burdwan	Construction of Beat Offices	NPV		11,17,806	1	Nos.
125	Wildlife North	Gorumara Wildlife	Advance work of plantation under Compensatory Afforestation	CA	NFL	16,00,020	40	ha
126	CF, Monitoring	Monitoring South	Monitoring of plantations and others works of last 5 years	NPV		82,001	240.472	ha
127	CF, Monitoring	Monitoring North	Monitoring of plantations and others works of last 5 years	NPV		41,715	105.06	ha
128	HQ	HQ	Disbursement of wages of contractual staffs(4 month)	Interest		28,50,805		
129	HQ	HQ	Hiring of vehicle for office use (for 4 months)	Interest		2,37,348		
130	HQ	HQ	Payment of Professional and special services_ Other Charges.	Others		2,89,573		



Sl no.	Circle	Division	Nature of Work	Broad Catagory	NFL/D FL	Expenditure incurred (Rs.)	Physical Achievement (quantity)	Physical Achievement (Unit)
131	HQ	HQ	Office stationary and other store.	Others		3,93,455		
<b>Total expenditure through IFMS</b>						<b>634,78,478</b>		
<b>B - Expenditure done from Bank fund</b>								
132	South-East	Burdwan Division	Supply of Agriculture Implements			29,92,035	52	nos
133	South-East	Burdwan Division	for engaging labour for forest patrolling and fire protection			3,01,350		
134	South-East	Burdwan Division	supply of POL for departmental vehicle/motor cycle			99,528		
135	South-East	Burdwan Division	Beat office chain link Fencing for 3 location			2,99,730		
136	South-East	Burdwan Division	Construction of Range office, Katwa Social Forestry Range			30,36,763	1	nos
137	South-East	Burdwan Division	Construction of Gr-D Quarter at Katwa Social Forestry Range			11,47,786	2	nos
138	Hill	Kurseong Division	Supply of Agriculture Implements			19,95,000	29	nos
139	Hill	Kurseong Division	Gr-C Quarter maintenance			4,99,632	5	nos
140	Hill	Kurseong Division	Gr-D Quarter maintenance			5,95,934	12	nos
141	HQ	HQ	Expenses from Bank account			81,37,886		
<b>Total expenditure done from bank fund</b>						<b>191,05,644</b>		
<b>Grand Total (A+B)</b>						<b>825,84,122</b>		

## 6. Sampling strategy

The following definitions have been used in this section:

Project area: The area of a plantation site

Project site: This is the location where the plantation was taken up

For direct field observation, a two stage sampling strategy needs to be adopted. Of the total plantation projects taken up, first we need to select the projects to be sampled and secondly in the selected projects then take up field enumeration.

### a) Selecting the projects to be sampled

The level of precision in estimating survival percentage of plants depends on deviation admissible from true value of survival percentage at 95% confidence interval. Once the precision level is set, the sample area required in estimating survival percentage will be determined for each project site. The sample area for monitoring each project site must be calculated on the basis of the estimated variance of survival percentage in each project site. To estimate the number of plots needed for monitoring at a given confidence level, one should



obtain an estimate of survival percentage variance for each project site. This can be determined by taking a sample of 15 to 20 plots in each of the project sites.

Example to calculate survival percentage and the variance of survival percentage:

The calculations here are given assuming 25-30 trees were planted in a 0.5 hec area, 16 samples were taken from a give project site.

**Table 1:**

Plot no.	Survived	Died	Total	Survival %
1	23	4	29	0.79
2	22	6	28	0.79
3	20	10	30	0.67
4	21	9	30	0.70
5	15	15	30	0.50
6	20	5	25	0.80
7	23	7	30	0.77
8	19	11	30	0.63
9	26	4	30	0.87
10	27	3	30	0.90
11	24	6	30	0.80
12	22	8	30	0.73
13	23	3	26	0.88
14	25	5	30	0.83
15	21	9	30	0.70
16	19	13	30	0.63
		Mean		0.75
		SD =		0.11

Repeat this process for each project site and estimate the variance of survival percentage for all the sites.

**Case (1): The project area across the project sites is equal and variance of survival % is also equal:**

If the project area is equal for each project site, the number of plots per site =  $n_i = N/k$

$n_i$  = sample size for  $i$ th strata

$N$  = Total planted area

$K$  = number of strata

Normally, the project areas in the various locations are not equal, hence this case is practically not applicable



**Case (2): The project area across the project sites is unequal but the variance of survival % is equal:**

If the project area is different, the number of plots per strata are estimated by proportional allocation, i.e., proportional to strata size.

$$n_i = (N_i / N)n$$

$N_i$  = area of plantation for each stratum

$N$  = Total area of plantation

$n$  = total number of sample plots

$$n = \frac{t^2 pq}{d^2} \dots\dots\dots \text{Equation (1)}$$

(Sampling Techniques, W.G. Cochran, Third Edition, 1977, page.76)

If  $d = 0.05$ ,  $t$  at 95% confidence level = 2;  $p = 0.5$   $q = 0.5$

$$n = (4 \times 0.5 \times 0.5) / 0.0025 = 400 = n_0$$

If  $n/N < 0.1$  no finite population correction (fpc) is needed. If  $n/N > 1$ , fpc needed. Assume total area planted is 3200ha, the sample area equal to

$$n \text{ (with fpc applied)} = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}} = 400 / (1 + (400 - 1) / 3200) = 356$$

Project site	Project Area (ha)	Sample area ( ha)
A	1342	= (1342/8892)*356 = 0.1509 x 356 = 53.72 = 54
B	2450	= (2450/8892)*356 = 0.2755 x 356 = 98.08 = 98
C	2100	= (2100/8892)*356 = 0.2362 x 356 = 84.09 = 84
D	1650	= (1650/8892)*356 = 0.1856 x 356 = 66.07 = 66
E	1350	= (1350/8892)*356 = 0.1518 x 356 = 54.04 = 54
	Total=8892	Total sample area = 356 ha

**Case (3): The project area per site is unequal and variance of survival % is also unequal:**

In this case it is recommended that, for each site the sample area may be calculated based on the variance of the survival % with respect to that particular site using equation (1).

**Step-A:** Calculate the estimated mean survival percentage 'p' and standard deviation of 'p' for each project site separately as shown below:



Project site - A				
Plot.no.	Survived	Died	Total	% of survival
1	23	4	29	0.79
2	22	6	28	0.79
3	20	10	30	0.67
4	21	9	30	0.7
5	15	15	30	0.5
6	20	5	25	0.8
7	23	7	30	0.77
8	19	11	30	0.63
9	26	4	30	0.87
10	27	3	30	0.9
11	24	6	30	0.8
12	22	8	30	0.73
13	23	3	26	0.88
14	25	5	30	0.83
15	21	9	30	0.7
16	19	13	30	0.63
			mean=p=	0.75
			SD =	0.11

Project site - B				
Plot.no.	Survived	Died	Total	% of survival
1	14	14	28	0.50
2	12	15	27	0.44
3	11	10	21	0.52
4	12	16	28	0.43
5	13	14	27	0.48
6	14	13	27	0.52
7	11	16	27	0.41
8	13	15	28	0.46
9	14	12	26	0.54
10	11	15	26	0.42
11	12	16	28	0.43
12	13	17	30	0.43
13	12	15	27	0.44
14	10	14	24	0.42
15	12	16	28	0.43
16	12	15	27	0.44
			mean=p=	0.46
			SD =	0.042

Project site - C				
Plot.no.	Survived	Died	Total	% of Survival
1	8	15	23	0.22
2	10	15	25	0.20
3	9	14	23	0.22
4	10	15	25	0.20
5	7	15	22	0.23
6	11	15	26	0.19
7	9	15	24	0.21
8	8	16	24	0.21
9	9	16	25	0.20
10	9	14	23	0.22
11	8	14	22	0.23
12	9	15	24	0.21
13	7	19	26	0.19
			mean=p=	0.21
			SD =	0.01

Project site - D				
Plot.no.	Survived	Died	Total	% of survival
1	12	15	30	0.40
2	10	15	25	0.40
3	9	17	26	0.35
4	8	21	29	0.28
5	7	15	22	0.32
6	11	15	26	0.42
7	9	12	21	0.43
8	10	14	24	0.42
9	12	18	30	0.40
10	15	15	30	0.50
11	12	17	29	0.41
12	9	15	24	0.38
13	8	21	29	0.28
14	9	23	32	0.28
15	10	18	28	0.36
			mean=p=	0.37
			SD=	0.06

### Step - B:

Based on the mean survival percentage for each project site obtained in Step - A, and using the equation (1), calculate the sample area for each project site as shown table below column (4).



Col-1	Col-2	Col-3	Col-4	Col-5	Col-6	Col-7	Col-8
project site	Total Area (ha)	survival % = p	Sample area $n = n_o = \frac{t^2 pq}{d^2}$	n/N	n(fpc) $= \frac{n_o}{1 + ((n_o - 1) / N)}$	Sample size n (after fpc correction)	% of project site
A	1240	0.75	300	0.24	241.71	242	19.5
B	2350	0.46	397.44	0.16	340.07	340	14.5
C	1890	0.21	265.44	0.14	232.85	233	12.0
D	1475	0.37	372.96	0.25	297.84	298	20.0

**Note:**

1.  $q = 1 - p$
2. Since  $n/N$  for each project site is greater than 0.1, finite population correction (fpc) to be applied for the sample size calculated in column-4. After applying fpc the final sample size for each area is given in column-7.

$N$  = sample area;  $N$  = Total area at project site

$$\text{Sample size, } n \text{ (with fpc applied)} = \frac{n_o}{1 + \frac{(n_o - 1)}{N}}$$

3.  $t$  = t-table value at 95% confidence level = 2
4.  $d$  = margin of error = 0.05
5.  $n(\text{fpc})$  = sample size after doing final population correction

**Case (4): If the survival percentage for different plantation sites is not available,**  
choose 10% of the plantation area for each site as its sample size.

**b) Field enumeration in the selected projects**

After studying the approaches adopted to sample multi-row block plantations by the various State Forest Departments, ICFRE and other research organizations it was felt that the row sampling approach with 10% sampling intensity would be the best tradeoff between accuracy and effort. This approach is easy to implement since the forest personnel are already attuned to this in their regular monitoring cycles. The field enumeration will cover assessment of two aspects of the plantations namely survival and growth followed by aggregation of the results:

- **Assessing the survival:** In multi-row block plantations, any row can be selected as initial or starting row for counting and then every 10th row should be selected. In these rows all the plants should be counted till the end of the row, either dead or surviving, for calculation of survival percentage. For example, if 2nd row has been chosen as initial or start row then subsequent rows selected should be 12th, 22nd and so on till the end of the plantation area. All the plants of every 10th row need to be enumerated. The field sampling strategy is provided for in Annexure-I.
- **Assessing the growth parameters:** Generally the health of a plantation is expressed in terms of growth parameters of the plants. For this we measure the plant height and plant girth. This should be done at 1% sampling. Therefore, in all the rows selected above for



survival, one start plant should be selected for height and girth measurement at collar (50 cm above the ground level for upto 3 year old plantation and 100cm above ground level for upto 5 year old plantation and for plantations older than 5 years, diameter at breast height should be taken). Thereafter, every 10th plant should be selected for further recording of height and girth. If the start plant in row one is 3rd then other plants to be measured will be 13th, 23rd, 33rd and so on. It is advised to change the start plant for growth measurement in the 12th row by using a random number between 1 to 10. If the start plant in this 11th row comes to 5th then other plants to be measured will be 15th, 25th, 35th and so on. This should be followed for all the rows. The field sampling strategy is provided for in Annexure-I and the format for collection of enumeration data is provided for in Annexure-II. The survival percentage of the plantation can be calculated as the percentage of surviving plants compared to the total plants enumerated. The growth parameters of the plantation namely plantation height and plantation girth can be averaged from the total plants for which these two parameters were measured. These plantation level indicators then need to be filled in the Plantation Field Summary Report provided for in Annexure-III.

- **Aggregating the findings :** For the purpose of reporting, the survival percent should be weighted by net area planted in the same model. The percentage should be reported separately for each plantation model covered for the counting. i.e. if the survival percentage for irrigated teak plantation model has to be calculated, we need to first measure the survival percentage of the sample projects. i.e. if this comes to 60% for a 40 ha irrigated teak plantation, 40% for a 100 ha irrigated teak plantation and 80% for a 20 ha irrigated teak plantation then the weighted mean by net area planted comes to  $(60 \times 40 + 40 \times 100 + 80 \times 20) / (40 + 100 + 20)$  which comes to 50%. So the overall survival percentage of the irrigated teak plantation model is 50%.