

Engagement of Technical Consultants, System and Network Manager & Programmers in Forest Survey of India, Dehradun

The Forest Survey of India, Dehradun; an organisation under the Ministry of Environment, Forest & Climate Change (MoEF&CC) Government of India (www.fsi.nic.in) invites applications from willing and eligible Indian nationals for engagement as Consultants for various activities mentioned in the detailed terms of reference enclosed. The engagement will be purely on CONTRACT BASIS and a consolidated fees per month will be paid. Retired Central Govt. Employees having the desired qualification and experience in the field will also be considered. The details of educational qualification, experience, nature of work and other conditions etc are given for each post in the terms and conditions enclosed.

S. No.	Position	Number of posts	Consolidated Fee per month (all inclusive)	Experience
1.	Senior Technical Consultant	02	₹92,000/-	15 Years
2.	System & Network Manager	01	₹92,000/-	15 Years
3.	Junior Technical Consultant	02	₹80,000/-	10 Years
4.	Programmer	02	₹80,000/-	10 Years

1. No other compensation apart from consolidated fee/ remuneration will be admissible.
2. The details including qualification, experience, Terms of Reference etc are enclosed. The Forest Survey of India, Dehradun reserves the right to accept or reject in part of or in full or all the responses received from applicants without assigning any reasons whatsoever. Terms and Conditions of the engagement are mentioned in Annexure-I.
3. The last date for receipt of application in the prescribed format along with all supporting documents is **5th October 2018 up to 5.00 PM**. Applications received after due date/ time will not be considered.
4. Selection of the Consultant shall be made by a duly constituted Selection Committee by process of interview and interaction or any test which committee may feel necessary. The Date of interview shall be notified subsequently. The decision of the Selection Committee shall be final.

1. Senior Technical Consultant (Forest Inventory) – 01 Post (Forest Inventory)

1. Essential Qualifications:

- Post-Graduation in Statistics / Forestry / Biological Sciences/ Mathematics.

2. Desirable Qualifications:

- PhD in Natural Resource Management/ Forestry/ Biodiversity/ Remote Sensing & GIS/ Geo-informatics/Geo-Statistics.

(Preference will be given to the candidates with Post Graduation in Statistics)

3. Essential Experience:

- Minimum 15 years of experience in the field of Forest Inventory/natural resource assessment / agriculture statistics / GIS applications in forest resource assessment involving statistical methods.

4. Desirable Experience:

- Knowledge of international conventions on climate change.
- Publications and development of knowledge products with respect to forest resource management and biodiversity conservation especially in carbon estimation in forest, and Trees Outside Forest.

5. Responsibilities

- Development of methodologies and design of Forest and TOF Inventory.
- Processing of Forest Inventory and TOF data.
- Processing of Bamboo resources in Forest and TOF Inventory.
- Development of Allometric equations for forest, TOF and carbon estimation.
- Design and development of TOF projects and working knowledge of processing of TOF data.
- Statistical analysis of data in conjunction with geospatial data.
- Data processing and analysis of report.
- Report preparation.
- Assist in any other tasks as per requirement.
- Field tours for ground observations, sampling and validation.

6. Age Limit:

- Should not be more than 65 years of age on the last date for receipt of application.

7. Remuneration:

- The monthly consolidated remuneration of Senior Technical Consultant (FI) will be ₹92,000/- per month (including HRA)
- The Consultant shall not be entitled to any allowance such as DA, transport facility, residential accommodation, CGHS/Medical Facility, Medical reimbursement etc.
- If required to go on tour, TA/DA would be admissible as per the entitlements of comparable pay scale of Government Service.

Other terms and conditions and non-disclosure undertaking are enclosed as Annexure – I & II respectively.

2. Senior Technical Consultant – 01 Post (Forest Geoinformatics)

1. Essential Qualifications:

- Master Degree in Forestry/ Environmental sciences/ Geography/ Botany/ Agriculture or allied subjects with post graduate degree/diploma in Remote Sensing & GIS/ Geo-informatics.

2. Desirable Qualifications:

- PhD in any of the above subjects.

3. Essential Experience:

- Minimum 15 years of experience in the field of application of Geospatial technologies in natural resource management / forestry/ water resources/ soil science/ agriculture and allied areas.

4. Desirable Experience:

- Experience in natural resource monitoring and knowledge of global protocols and practices pertaining to natural resource mapping and monitoring.
- Knowledge of Remote Sensing/GIS software and emerging areas of geospatial technologies example SAR, LIDAR, UAV, etc.
- Publications in National and International journals, books, reports, etc.

5. Responsibilities

- Technical inputs and Support in development and standardization of methodologies in forest cover mapping, forest type mapping and other projects of geospatial applications.
- Support and supervision in collection and archiving of field data, satellite images, land cover/use maps and accuracy assessments.
- Research and technical inputs related to geospatial application in natural resource management and adoption of emerging geospatial technology applications viz SAR, LIDAR, UAV, etc for forest resource mapping, forest disturbance monitoring and related issues.
- Organize and conduct technical workshops and trainings.
- Prepare communication materials related to Remote Sensing and GIS applications.
- Prepare research papers, reports, etc.
- Assist in any other tasks as per requirement.
- Field tours for ground trothing, field observations etc

6. Age Limit:

- Should not be more than 65 years of age on the last date for receipt of application.

7. Remuneration:

- The monthly consolidated remuneration of Senior Technical Consultant (FGD) will be ₹92,000/- per month (including HRA)

- The Consultant shall not be entitled to any allowance such as DA, transport facility, residential accommodation, CGHS/Medical Facility, Medical reimbursement etc.
- If required to go on tour, TA/DA would be admissible as per the entitlements of comparable pay scale of Government Service.

Other terms and conditions and non-disclosure undertaking are enclosed as Annexure - I & II respectively.

3. SYSTEM & NETWORK MANAGER – 01 Post

(Forest Geoinformatics)

1. Essential Qualifications:

- B.E/B.Tech/MCA/MSc in Computer Science, Information Technology, ECE & ICT.
- Certification in networking from a recognized agency.

2. Desirable Qualifications:

- M. Tech in Computer Science

3. Essential Experience:

- Minimum 10 years of experience in architecture, designing, installing, configuring and maintaining WAN/LAN networks to include the associated encryption, firewalls Router, Switches.

4. Desirable Experience:

- Proven technical record and competence in managing a large complex of computer systems or computer systems/applications software / computer networks / computers, Plotters and Peripherals, network services, storage , servers(data and application), routers/firewall/UTM, Cloud services, Anti-virus softwares.
- Experience in Disaster Recovery support, secure access Network, IP/MPLS and Ethernet technologies, IP Services (IPv4, IPv6, VPN, Multicast, QOS, SNMP etc), Network Performance Monitoring.
- Expertise in IP routing, QoS, traffic engineering, DNS; DHCP; HSRP;, transparent firewalls.
- Broad networking- centric expertise with operating systems such as various Linux distributions, Windows server and workstation and hypervisors.

5. Responsibilities

- Management of Hardware such as servers, computers, plotters, printers, etc.
- Troubleshooting of hardware related issues, software/hardware compatibility, etc.
- Design and implementation of existing and new secure network architectures which include both hardware and software switches, firewalls and routers.
- Identifying network problems, isolating root causes, and initiating corrective action.
- Implementation of access and monitoring controls and compliance with security, safety and environmental guidelines.
- Managing firewalls, site to site and remote access VPNs.
- Ensuring proper operation of routing protocols.
- Developing standard operating procedures and design guides which outline implementation of various technologies.
- Plan and Evaluate network and security technologies, Developing requirements for Local area networks (LANs), Wide area network (WANs), Cloud Infrastructure, Virtual private networks (VPNs),routers, firewalls and related security and

network devices as well as hardware and software maintenance/management adhering to industry standard.

- Any other responsibility as per requirement of the organization.

6. Age Limit:

- Should not be more than 50 years of age on the last date for receipt of application.

7. Remuneration:

- The monthly consolidated remuneration of System & Networking Analyst will be ₹92,000/- per month (including HRA)
- The Consultant shall not be entitled to any allowance such as DA, transport facility, residential accommodation, CGHS/Medical Facility, Medical reimbursement etc.
- If required to go on tour, TA/DA would be admissible as per the entitlements of comparable pay scale of Government Service.

Other terms and conditions and non-disclosure undertaking are enclosed as Annexure - I & II respectively.

4. Junior Technical Consultant – 01 Post

(Forest Geoinformatics)

1. Essential Qualifications:

- Master's Degree in Forestry/ Environmental sciences/ Geography/ Botany/ Agriculture or allied subjects with post graduate degree/diploma in Remote Sensing & GIS/ Geo-informatics.

2. Desirable Qualifications:

- M. Tech. (Remote Sensing & GIS), PhD in Remote Sensing & GIS Applications

3. Essential Experience:

- Minimum 10 years of experience in the field of application of Geospatial technologies in natural resource management / forestry/ water resources/ soil science/ agriculture and allied areas.

4. Desirable Experience:

- Experience in natural resource monitoring and knowledge of global protocols and practices pertaining to natural resource mapping and monitoring.
- Knowledge of Remote Sensing/GIS software and emerging areas of geospatial technologies example SAR, LIDAR, UAV, etc.
- Publications in National and International journals, books, reports, etc.

5. Responsibilities:

- Technical inputs and Support in development and standardization of methodologies in forest cover, forest type mapping and other projects of geospatial application.
- Boundary survey and demarcation applications of geospatial techniques.
- Support and supervision in the collection and archiving of field data, satellite images, land cover/use maps and accuracy assessments.
- Research and technical inputs related to geospatial applications in natural resource management and adoption of emerging geospatial technology applications viz SAR, LIDAR, UAV, etc for forest resource mapping, forest disturbance monitoring and related issues.
- Organize and conduct technical workshops and trainings.
- Prepare communication materials related to Remote Sensing and GIS applications.
- Prepare research papers, reports, etc.
- Assist in any other tasks as per requirement.
- Field tours for ground truthing related works.

6. Age Limit:

- Should not be more than 45 years of age on the last date for receipt of application.

7. Remuneration:

- The monthly consolidated remuneration of Junior Technical Consultant (FGD) will be ₹80,000/- per month (including HRA)
- The Consultant shall not be entitled to any allowance such as DA, transport facility, residential accommodation, CGHS/Medical Facility, Medical reimbursement etc.
- If required to go on tour, TA/DA would be admissible as per the entitlements of comparable pay scale of Government Service.

Other terms and conditions and non-disclosure undertaking are enclosed as Annexure – I & II respectively.

5. Junior Technical Consultant (Forest Inventory) – 01 Post

(Forest Inventory)

1. **Essential Qualifications:**

- Post-Graduation in Statistics / Forestry / Biological Sciences/ Mathematics

2. **Desirable Qualifications:**

- PhD in Natural Resource Management/ Forestry/ Biodiversity/ Remote Sensing & GIS/ Geo-informatics/Geo-Statistics.
(Preference will be given to the candidates with Post Graduation in Statistics)

3. **Essential Experience:**

- Minimum 10 years of experience in the field of Forest Inventory / GIS applications in forest resource assessment / agriculture statistics.

4. **Desirable Experience:**

- Should have good knowledge of conventions on climate change.
- Publications and development of knowledge products with respect to forest resource management and biodiversity conservation especially in carbon estimation in forest and Trees Outside Forest.

5. **Responsibilities:**

- Development of methodology and design of Forest and TOF Inventory.
- Processing of Forest Inventory and TOF data.
- Processing of Bamboo resources in Forest and TOF Inventory.
- Development of Allometric equations for forest, TOF and carbon estimation.
- Design and development of TOF projects and working knowledge of processing of TOF data.
- Data processing and analysis of report.
- Assist in any other tasks as per requirement.
- Field tours for ground truthing related works.

6. **Age Limit:**

- Should not be more than 50 years of age on the last date for receipt of application.

7. **Remuneration:**

- The monthly consolidated remuneration of Junior Technical Consultant (FI) will be ₹80,000/- per month (including HRA)
- The Consultant shall not be entitled to any allowance such as DA, transport facility, residential accommodation, CGHS/Medical Facility, Medical reimbursement etc.
- If required to go on tour, TA/DA would be admissible as per the entitlements of comparable pay scale of Government Service.

Other terms and conditions and non-disclosure undertaking are enclosed as Annexure – I & II respectively.

6. PROGRAMMER – 01 Post

(Forest Geoinformatics Division)

1. Essential Qualifications:

- B.E/B.Tech/MCA/MSc in Computer Science, Information Technology or related fields.

2. Desirable Qualifications:

- M.E/M.Tech in Computer Science

3. Essential Experience:

- At least 8 years of experience in development of software program and applications. Knowledge of Raster and Vector based data formats and their use in software development, Geospatial applications development, customization of geospatial software.

4. Desirable Experience:

- Knowledge & experience in use of GIS server software like Geo server, Map server and GIS databases like post GIS, etc.
- Proficiency in Programming languages (.Net/ASP/VB.Net/C#/Python, Core Java, PHP, Node JS).
- HTML 5.0, CSS 3.0, Java script.
- RDBMS (MySQL, SQL Server, Postgre SQL, Oracle, MongoDB)
- Operating System (Linux/Windows), Experience in Cloud platform, Experience in video conferencing and e-learning applications.
- Development of Mobile based application preferably android platform using Phone gap, Android studio, etc.
- Mobile App development.

5. Responsibilities:

- Development and management of appropriate programmes under various operational areas such as Decision Support System, e-Green Watch portal, Forest Fire Alert application, etc.
- Development of suitable application for monitoring of forest cover mapping and other large distributed projects.
- Management of FSI website and other social media platforms.
- Assisting procurement of high end applications and development of system requirement and specification as per requirement.
- New initiatives for adoption of suitable technologies with an aim to reduce cost and time.
- Any other responsibility as per requirement of the organization.

6. Age Limit:

- Should not be more than 40 years of age on the last date for receipt of application.

7. Remuneration:

- The monthly consolidated remuneration of Programmer will be ₹80,000/- per month (including HRA)
- The Consultant shall not be entitled to any allowance such as DA, transport facility, residential accommodation, CGHS/Medical Facility, Medical reimbursement etc.
- If required to go on tour, TA/DA would be admissible as per the entitlements of comparable pay scale of Government Service.

Other terms and conditions and non-disclosure undertaking are enclosed as Annexure – I & II respectively.

7. PROGRAMMER – 01 Post

(Forest Inventory & Training Division)

1. Essential Qualifications:

- B.E/B.Tech/MCA/MSc in Computer Science, Information Technology or related fields.

2. Desirable Qualifications:

- M.E/M.Tech in Computer Science

3. Essential Experience:

- At least 10 years experience in development of web and desktop based software program and applications for natural resource assessment or monitoring.

4. Desirable Experience:

- Proficiency in Programming languages (.Net/VB.Net/C#.Net/ASP.NET, Core Java, PHP, MVC Architecture).
- HTML 5.0, CSS 3.0, Java script.
- Design and development of the databases and data processing software.
- RDBMS (MySQL, SQL Server, PostgreSQL, Oracle, MongoDB)

5. Responsibilities:

- Development of web based and desktop based applications
- Design and development of the databases for the new projects
- Development and maintenance of data entry system for NFI and any other projects
- Development and maintenance of data processing software
- Development of reporting tools & data checking tools
- Maintenance of the existing Database
- Any other responsibilities assigned from time to time
- Any ICT assistance or support to the HQ and Zonal Offices
- Mobile App development.

6. Age Limit:

- Should not be more than 40 years of age on the last date for receipt of application.

7. Remuneration:

- The monthly consolidated remuneration of Programmer will be ₹80,000/- per month (including HRA)
- The Consultant shall not be entitled to any allowance such as DA, transport facility, residential accommodation, CGHS/Medical Facility, Medical reimbursement etc.
- If required to go on tour, TA/DA would be admissible as per the entitlements of comparable pay scale of Government Service.

Other terms and conditions and non-disclosure undertaking are enclosed as Annexure – I & II respectively.

Other Terms and Conditions

Engagement:

- The engagement of Consultant will be purely on contract basis and will not confer any right for regular appointment in the Ministry/ organization.
- The Consultant will be appointed initially for a period of 12 months. His/ her services can be continued further subject to assessment of his/ her performance at the end of the tenure of 12 months by a duly constituted committee and further requirement of his/her services in the organisation.

Working Hours:

- The Consultant shall be required to observe the normal office timing and may also be called upon to attend the office on Saturday, Sunday or any holiday in case of exigencies of work. He/ she will be required to put in min 42 hours per week.
- Biometric Attendance based on AEBAS shall be compulsory.
- He/she will be required to make his services be available on Holidays/ weekends as and when called upon to do so in exigencies for which no additional remuneration shall be paid. However, he/she can avail compensatory off on subsequent working days during next 2 (Two) months.

Leave:

- The Consultant shall be entitled to avail 2 days of Leave in a month which he/she can avail at his convenience.
- The un-availed leave in a calendar year can not be carried forward to next calendar year.

Tax Deduction at Source:

- The Income Tax or any other tax will be deducted at source as per Government instructions. Necessary TDS Certificate will be issued.

Confidentiality of data and documents:

- The intellectual Property Rights (IPR) of the data collected as well as deliverables produced for the FSI shall remain with the FSI.
- No one shall utilize or publish or disclose or part with, to a third party, any part of the data or statistics or proceedings or information collected for the purpose of his assignment or during the course of assignment for FSI without the express written consent of the FSI.
- The Consultant shall be bound to hand-over the entire set of records of assignment to the Department before the expiry of the contract, and before the final payment is released by the organisation.

- The Consultant would be required to sign a non-disclosure undertaking as per ANNEXURE –III.

Conflict of interest:

- The Consultant shall in no case represent or give any opinion or advice to others in any matter which is adverse to the interest of the FSI nor will he indulge in any activity outside the terms of the contractual assignment.
- The Consultant shall not claim any benefit /compensation /absorption/ regularization of service with the FSI.

Termination of Agreement:

- The FSI may terminate the contract to which these terms apply, if:-
 - The Consultant is unable to address the assigned works.
 - Quality of the assignment work is not to the satisfaction of the Controlling Officer/Competent Authority in the FSI.
 - The Consultant is found lacking in honesty, integrity, in the even of incidence in violating moral turpitude, or acts which are not in conformity with the CSS(Conduct) Rules, 1964 applicable to the Central Govt. Employee. Warning, Black listing of the person from any temporary or permanent employment at FSI. Communicating the decision of black listing to other organizations/institutions. Legal action as per the law.
 - The Competent Authority may also terminate the contract at any time without giving any notice and also without assigning any reason.
 - Upon mutual agreement with the Consultants for which the Consultant shall be required to give advance notice of minimum 4 weeks.

NON-DISCLOSURE UNDERTAKING

To

The Director General
Forest Survey of India
Kaulagarh Road, PO – IPE
Dehradun - 248 195

Sir,

I hereby undertake to treat all the information that comes to my knowledge as part of my duties in this office as confidential information and keep it strictly confidential, not to sell, trade, publish confidential information to any one manner whatsoever including by means of reproduction either bin physical, hardcopy, digital or in electronic format. Not to engage in any other employment/ occupation/ consultancy or any other activity during my engagement with FSI which would otherwise conflict with my obligation towards FSI. To abide by data security policy and related guidelines issued FSI.

2. In the event of my termination or employment for any reason whatsoever, I shall promptly surrender and deliver to the FSI any record/material, equipment, documents or data which is of confidential nature.

3. I shall keep the FSI informed of any change in my address or contact details during the period of my engagement.

4. I undersigned that I can be terminated at any point of time for breach of the above conditions and can be proceeded against under the relevant laws for the time being in force.

5. For the purpose of this undertaking, confidential Information means any information received from any source, whether in physical, electronic or in digital format.

Signature.....

Name.....

Address.....

Date.....

Personal Contact No.....