

# Proposal for Strengthening and Up-gradation of National Forest Library and Information Centre

Submitted for funding under

**CAMPA**

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



By

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# **Proposal for Strengthening of National Forest Library and Information Centre for Education and Forestry Research**

**Submitted to: CAMPA, MoEF&CC GoI.**

**Proposed Budget of Rs. 1.63 Cr.**

**Duration: 1 years**

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## **Introduction**

The library in the Forest Research Institute (FRI) is the oldest and richest library dedicated to forestry and allied subjects in the South and South-East Asia. The library started with about one hundred books and a few periodical titles in English and German languages accommodated in a small room in 1906. However, upon shifting of the FRI to its newly constructed magnificent building on Chakrata Road in 1929, the library was provided with an abundant space in the front wing adjacent to the convocation hall, having all facilities that were required at that time. Later a separate building for the library was constructed on Chaturvedi Road in the campus and the library was shifted therein. Presently it has around 2 lakh books collection. With the constitution of the Indian Council of Forestry Research and Education (ICFRE), as an autonomous body under the Ministry of Environment and Forests, Govt. of India in the year 1986, the then Central Library of FRI was upgraded to National Forest Library and Information Centre (NFLIC), the acquisition of books and subscription to the journals increased manifold (Box 1 and Box 2). A new modern double storied library building having 2,766 m<sup>2</sup> plinth area with all up-to-date facilities like big stack rooms, air-conditioned reading rooms, conference hall, etc. was constructed on the Pearson Road, and the NFLIC shifted therein in the year 2000. The NFLIC also supports other Institutes Libraries functional in ICFRE research Institutes and Centers making its presence across the India. It provides services not only to the ICFRE Institutes but also to reputed organizations like Indira Gandhi National Forest Academy, Central Academy for State Forest Service residing in the FRI Campus (Table 1). The NFLIC facility is also available to public also who want to refer it for forestry and environmental information thus, making it an extremely valuable asset for the region. The facilities are extensively utilized by the students and research scholars of the FRI Deemed to be University for the purpose of Forestry education and research. NFLIC offers specialized services like literature search service, article on demand, compilation of bibliography on demand, document copy supply Service, contents, abstracts, photocopy service, inter library loan service, membership service, online public access catalogue (OPAC). In the year 2013 National Forest Archive was created at NFLIC which houses documents dated as old as 1636 in digital form for the users (Box 1).

The proposal is presented for strengthening and up gradation especially to enrich its document collection and also its digital resources including National Forest Archives. The modern facilities of NFLIC will be further upgraded so as to make it more useful for the purpose of education and research in forestry, environment, climate change and allied subject areas. The building needs to be efficient for which it is essential to do some minor civil and electrical repairs. It is proposed to replace the existing tube light with LED lights along with mobility sensors to conserve electricity and check unnecessary wastage.



**NFLIC building infrastructure with plinth area of 2766 sq m.**

The archival printed and hand written documents available in the NFLIC is treasure for scholars interested in studying history of forestry research and management in the British era. The documents in the form of books, maps, data, photographs, etc. is of enormous historical value as far as forestry research is concern. There is need to study, sort and classify the document for digitization and conservation. It is also required to protect more than 100 year old text related to forestry and allied subjects for future generations interested in forestry and environmental research. The National Forest Archive Created with digitization and documentation of some 6 lakh pages needs to be further enhanced and updated to make is user accessible.

**Table 1: Categories of the NFLIC users**

S. No	Categories
1.	Scientists of ICFRE/FRI
2.	Technical Staff of ICFRE/FRI
3.	Students and Research scholars of FRI Deemed University
4.	Project staff of ICFRE/FRI
5.	Officers, Faculty of IGNFA, SFS College, FSI, DFE
6.	IFS/SFS probationers of IGNFA and SFS College
7.	Special members
8.	Inter Library Loan
9.	Visitors or Short term Users for seven days to a month period

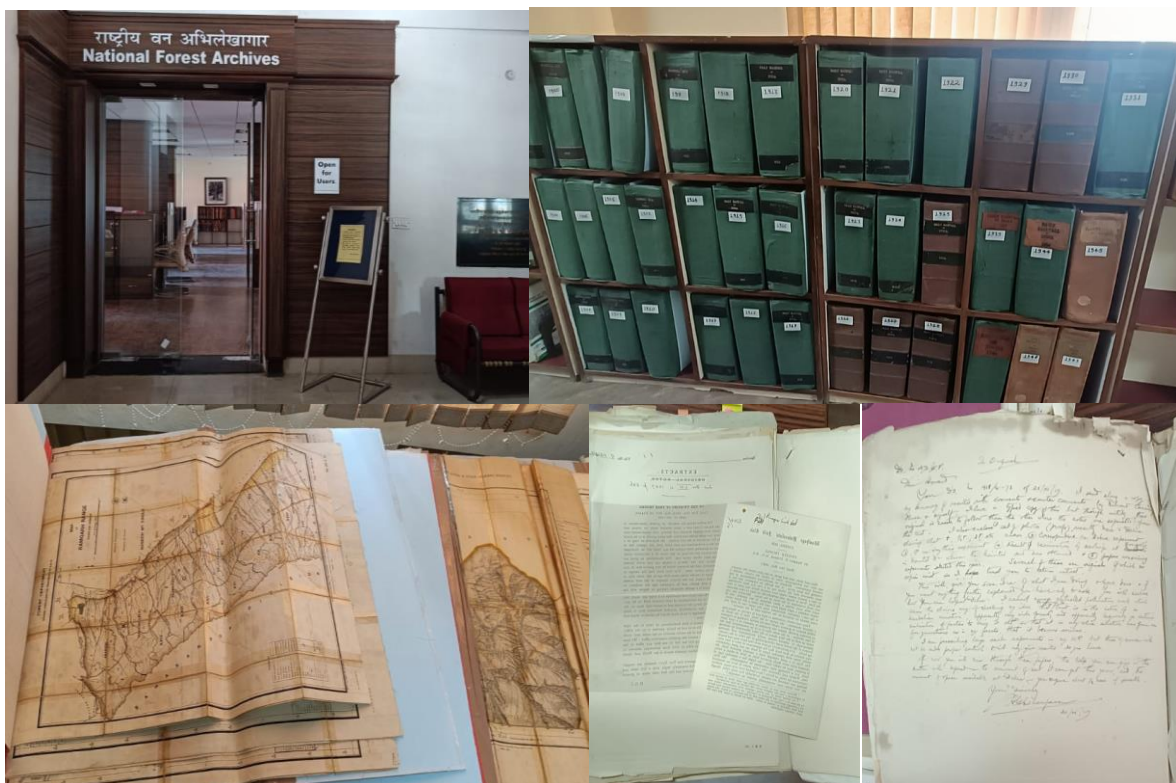
It is also proposed to develop mobile applications to extend digital services to the hands of the users. We will provide information directly to the smart phones regarding issue and return details, new arrivals, and other important information. The procurement of latest books and e-books and

other e-recourses will further improve its services for the members and users thereby contributing in the research and development output.

#### **Box 1. Documents available in the National Forest Archive at NFLIC**

- (A) Books no. 1936 up to 2012.
- (B) Forest pamphlets no. 1908 up to 1940.
- (C) Indian Forest Memoirs dealing with research information-on compiled as summary of scientific value in a particular discipline no. of available documents 10 from 1908 up to 1915, in digitized form.
- (D) Indian Forest Leaflets 1908 up to 1977.
- (E) Indian Forest record no. 469 from 1908 up to 1988
- (F) Indian Forest Bulletin 1911 up to 1982.
- (G) Photographs no. of documents 135 from 1917 of different type of species and tour notes
- (H) Manuscripts covered hand written letter conversation from 1910
- (I) Annual Research report 411 from 1869 up to 1988.
- (J) Proceedings no 56 from 1872 up to 1989.
- (K) Working Plans English from 1874 up to 2014
- (L) Total no. of documents 3321 digitized 6 lakh pages

There are more valuable material is available such as rainfall data of the British period which can be useful for the present day climate change research.



**National Forest Archive with documents, maps, books of archival importance**

### **Proposed Activities for strengthening of NFLIC**

1. Library automation for improving the library services for the users
2. Strengthening online and web based services for documents and literature search
3. Strengthening books and journals collection through subscription of full text and Bibliographic databases, journals, procurement of text and reference books
4. Digitization and strengthening of National Forest Archive database
5. Civil and electrical maintenance of the NFLIC building

## **Approach:**

### **Library automation and strengthening of the online and web based services (Activities 1 and 2)**

Radio Frequency Identification Device (RFID) based system will be installed for improvement of circulation, re-shelving and theft detection. Electromagnetic Security System was installed at NFLIC in 2001 for theft detection of documents. The existing system is out dated and needs to be replaced. RFID is the latest technology used in management of the libraries. Many of the premier institutes and Universities are using this in India. Library is having Online Public Access Catalogue (OPAC) for its users. Some PCs are required to enhance the literature search service facilities for more users. NFLIC is having server of integrated library management system Koha, E-prints repository of digital collection which needs upgradation and maintenance.

For upgradation of web and online based services the work will be outsourced for development of PC and mobile based application and IT professional on contractual basis will be hired for the project period for its implementation and initial maintenance. Once the system is completely user friendly the permanent staff can manage the data entry and its management. Required hardware and software will be procured for this activity.

### **Strengthening books and journals collection (Activity 3)**

NFLIC will subscribe full text databases like Web of science/Scopus/ Science Direct/J-Gate/ Springer Link etc. that contains references, abstracts and some full text also which will be useful for the users. The databases like Scopus which is Elsevier's abstract and citation database covers 84+ million records including references, 25.8+ thousand active peer-reviewed journals, 825+ book series, 249.0+ thousand books, 17.6+ million author profiles, and over 7000 publishers such databases are extremely important for the scientists and students. Latest books will also be procured for the users from the famous publishers like Elsevier, Springer, Tata McGraw Hill, Taylor & Francis etc. to strengthen the education and research output of the institution.

### **Digitization and strengthening of National Forest Archive database (Activity 4)**

National Forest Archive was created during 2013-15 in the NFLIC with some 6 lakh pages scanned and documented in database. It needs to be further enriched with digitization of more archival documents, viz., forest working plans, Indian forest records, bulletins, leaflets, brochures, books, manuscripts and other valuable grey literature available in the library of which approx. 3 lakh pages will be targeted again for the purpose of conservation and restoration through scanning and meta-tagging methodologies and subsequent online/ offline search and query facilities including mobile-app development.

For this the scanning, image processing and upgradation of existing database of 3 lakh documents will be carried out through outsourcing to reputed firm through tender process like previous years one Library professional with IT experience will also be hired for this work. The expert scientists/officers from FRI will be teamed for prioritizing and selecting documents for digitization work. The selected literature will be digitized, processed and uploaded to the existing database.

## **Civil and electrical maintenance work to make the building energy efficient (Activity 5)**

NFLIC building needs civil maintenance like terrace damp-proofing, plastering, white washing, painting and other minor repairs is using old heavy tube lights inside reading rooms which are consuming too much electricity. To prevent the extra use of electricity we can also replace these tube lights with energy efficient LED lights with mobility sensors. This is for the general cause to save valuable energy. Earlier also some efforts were made to open large windows to allow more natural lights inside the building. Such windows can be created on the ground floor also to minimize the artificial light requirements.

### **Yearly Work Plan / Targets**

S. No	Activity	Year I			
		Q1	Q2	Q3	Q4
	Implementation of Radio Frequency Identification (RFID) technology in NFLIC				
	Tender for Digitization work for National forest Archive				
	Digitization work for National forest Archive				
	Civil and electrical maintenance work to make NFLIC energy efficient				
	Subscription of Full text and Bibliographic Databases / journals				
	Purchase of books				

### **Proposed Budget**

S. No	Requirement	Justification	Cost in Lakh Rs.	Required for Activity
1	Implementation of Radio Frequency Identification (RFID) technology in NFLIC. (inclusive of required instruments like Integrated Tag Reader, RFID Tag, self-check-In/check-out system, security gate for entrance, book issue/return station, handheld RFID scanner, tagging device, smart library membership cards etc. will be finalized procured based on the requirements	Required for upgrading security system and also helpful in automation of stock verification, circulation of books to the users	₹ 30.00	Activity 1

	and budget approvals)			
2	Civil and electrical maintenance work to make NFLIC energy efficient (LED lights with mobility sensors) creating windows for more sunlight, Inverter, AC and heating systems)	Needed to reduce the power consumption of the NFLIC building and also demonstration of environmental friendly green building concept	<b>₹ 30.00</b>	<b>Activity 5</b>
3	PCs (12)	All the exiting PCs are old and needed up gradation. Useful for management of NFLIC and also for document search by the users	<b>₹ 6.00</b>	<b>Activity 1,2&amp; 4</b>
5	Server, LED screens/ e-books readers/laptops, projectors, peripherals, etc. Software for Library, database and other equipment maintenance for library automation	Needed for the conference hall and NFLIC	<b>₹ 6.00</b>	<b>Activity 1,2&amp;4</b>
	Subscription of Full text journals and Bibliographic Databases:	This will be useful for review of literature for educational and research purpose	<b>₹ 40.00</b>	<b>Activity 3</b>
	Purchase of text and reference books.	Required for the students and faculty of the institute	<b>₹ 30.00</b>	<b>Activity 3</b>

	Digitization and automation work outsourcing, maintenance of Koha and other existing software	For maintenance of National Forest Archive and database upgradation, Scanning of documents, image processing, pdf conversion, creating metadata and uploading information to the existing database. Automation of library for web and mobile applications	₹ 17.00	Activity 1&3,4
6	Contingency expenses	Required for upgradation, repair and AMC for equipments, Vacuum cleaners, ladders, book shelves, furniture etc. hiring of IT expert for service and database related work as and when required, labour charges, minor tools/equipments for library building and lawn maintenance, consumables, office/stationery and other expenses	₹ 4.00	
	<b>Total</b>		<b>₹ 163.00</b>	

**Total Rs One hundred sixty-three lakh only**

**Deliverables and Expected Outputs:**



The funds will be utilized for making NFLIC strengthened in terms of its collection of books/ journals and database, Services will be automated for users. More services will be accessible in digital form. The building will be maintained and energy efficient. Unauthorized circulation at entry gate will be controlled using latest security system. National Forest Archives will be upgraded leading to conservation of valuable documents and grey literature on history of forest science and management in British India. More than 100 years old printed and hand written documents will be made searchable and digitally available to the scholars for their academic work of forestry and allied subjects that are yet to be digitized and preserved.

Strengthening of NFLIC Library will support research, education and extension activities in the forestry and allied subjects that will contribute significantly in India's future sustainable development and social security through forestry education and research based livelihood development. All this will be helpful in capacity building of the researchers, faculty, students, NGOs, forest departments involved in the forestry and environmental science related activities in the country. Up gradation of the biggest forestry library will be extremely useful for education and R&D activities and will contribute significantly in National Action Plan on Climate Change, State Action Plan on Climate Change, National Communication on Climate Change, REDD+, Climate Change Mitigation and Adaptation, Sustainable Development Goals, Carbon Neutrality, Green Highway Policy, Green India Mission etc. of our country.





NFLIC building interiors