

ICFRE Format Guide for Submission of Research Project Proposal

Indian Council of Forestry Research and Education (ICFRE), an apex body in the national forestry research system, has been undertaking the holistic development of forestry research through need based research projects on the emerging issues in the sector, including global concerns such as climate change, conservation of biological diversity, combating desertification, and sustainable management and development of natural resources. ICFRE has adopted three levels of prioritization viz. prioritization of research problems as perceived by resource managers in states, prioritization of research projects at Institute level and prioritization of research themes at national level. Every institute has to meet regional requirement and strive for scientific leadership in few fields depending upon its strength.

Research Planning Process is a bottom up, transparent and participatory approach documented in the “**Methodology for Setting Research Priorities for ICFRE**” by equitable participation of all groups of research end users, researchers and research managers, envisaged through stakeholders meet, Research Advisory Group (RAG) at regional level and Research Policy Committee (RPC) at national level. RAG at each institute level is advisory in nature and new research proposals are prioritized by “weighted criteria method”. Each Project is given an index score by the RAG members at each institute and average index score is calculated. The research projects as per following Format Guide are submitted to ICFRE. RPC at ICFRE gives final approval to the research projects balancing the regional and national perspectives.

PART I: General Information

- 100 ICFRE Code Number (To be given by ICFRE after the project has been approved by RPC)
- 101 Project Number (To be given by Research Coordination Section of the concerned Institute after the project has been recommended by RAG)
- 102 Project Title (The title should indicate the research work on specified and well defined problems to be dealt with as precisely as possible in a few words)
- 1021 Name of Species (Wherever applicable)
- 1022 Thrust Area (theme)
- 1023 Project Type (Indicate whether research type or research & extension type)
- 1024 Project Area (Profile of project area may be mentioned)

- 103 Name of Institute (Write full name of the institute)
- 1031 Name of Division (Write the name of the division in which the work is proposed to be carried out)
- 1032 Name of Discipline (Write the name of the discipline in which the work is proposed to be carried out.)

- 104 Duration of the Project (Fill in the project period in years)
- 1041 Likely Date of Start (Fill in the expected date of start of the project)
- 105 Budget proposed for the project
- 106 Name and Designation of Principal Investigator
- 1061 Name and Designation of Co-Principal Investigator
- 1062 Name and designation of other Scientists and Research Personnel associated with the project
- 1063 Additional Research Manpower required (Project/Field Assistant, Junior Research Fellow, Senior Research Fellow, Project Associate, and Project Scientist)
- 107 Training Required
- 108 Equipments to be used in the project
- 1081 Equipments available in the Institute/Division
- 1082 New equipments required
- 109 Collaboration details
- 1091 Collaboration with other divisions/ discipline within the institute (Give full details)
- 1092 Collaboration (if any) with other institute of ICFRE (Give full details)
- 1093 Collaboration with other of institutes outside ICFRE (Give full details)
- 1094 Collaboration with other institutes outside India (Give full details)
- 110 **Project Summary** (The summary should be a self contained description of the research activity including research objectives; methodology to be adopted; and, expected outcome and utility of the project. Please underline the **keywords (at least 5)**, used in project summary, that best describe the project. The summary may be used to disseminate information related to new projects undertaken by ICFRE institutes. It should be between 150-250 words.)
- 111 **Importance of the proposed project** (The importance of the project should be brought out in the light of the international and national state of knowledge on the subject. This could be done in two parts namely matters relating to scientific and technical advancement of knowledge, and issues concerning application of the new knowledge to management of forests and environment in particular and socio-economic advancement of the country in general. It should be between 150-250 words.)

PART II: Technical Details

- 201 **Definition of the Research Problem and its Prioritization** (Please give precise technical statement of only those problems which the project is expected to cover within the specified duration of the project. Name & Score of problems may be provided from data of Questionnaire II of methodology for prioritizing research problem. Also identify the stimuli which prompted preparations and submission of the project proposal to ICFRE. The source of stimuli could be thematic/thrust area priority of the institute, National Five Year Plan priority of ICFRE, proceedings of a special workshop/seminar/stakeholders' meet etc.)
- 202 **Origin of the problem and its solution strategy** (The brief background information should help to understand the origin of the problem to be investigated with the location and scope of research, and the solution strategy including the research questions that will guide the research process and a statement as to how the research project will contribute to the solution of the problems so identified.)
- 203 **Objectives**
- 2031 Short term objective of the project (specific objectives should be spelled out point by point in telegraphic language keeping in view the definition of the problem and the parts of the research which are directly addressable by the project)
- 2032 Long term objective of the project (the overall aims of the research in view the definition of the problem and the solution strategy)
- 204 **Status of research on the subject** (Review of literature should provide in brief the state of knowledge in the proposed field of work, both in the country and in other parts of the world till date and similarity & dissimilarity of the present project problem from other works done in the past. Special mention needs to be made of all research works undertaken under ICFRE umbrella on the related subject. Literature survey will enable the referees to appreciate the effort that has been put in clearly identifying research/technological gaps and the need for intervention while preparing the project proposal)
- 205 Technical Programme
- 2051 **Methodology** (The description must give a clear understanding of the research technique/methods to be employed such as domain of population, sampling design, treatments to be applied, parameter to be collected, analytical methods whichever is applicable. Proposed methodology should be justified based on existing approaches and specified clearly the innovations to the existing methodology. PI may bring changes to proposed strategy to the present problem under Research Rolling Plan of ICFRE.)
- 2052 **Plan of Work** (The entire project is to be broken down to specific work elements, defined as **project activities**, in consonance with the objectives and methodology.)

While doing so, equal emphasis should be given to technical work elements, such as designing the experiment/model, data collection, analysis etc, and administrative work elements, such as purchase of equipments, recruitment of staff, etc to make the project amenable to analysis by PERT - Project Evaluation and Review Technique. Project activities should therefore be so defined that they are distinct and definite work elements/tasks so that time and resource requirement can be estimated precisely. Project activities should have sharpened headings.)

S.N	List of project activity	Details of works to be completed under each project activity indicating the completion of the specific project activity including qualitative and quantitative performance indicators

2053 **Project Flow Chart** (A flow chart should be constructed in terms of project activities identified and listed in previous subsection indicating the sequence of project activities.)

2054 **Time schedule of activities** (The timelines should be drawn in a single chart form with vertical axis representing the project activities that make up the project and a horizontal axis representing the total time span of the project, broken down into Quarter.)

2055 **Annual Action Plan** (On the basis of above, the yearly plan of action should be drawn and uploaded/ submitted in RIMS as **Annual Action Plan** in prescribed format (**Annexure-I**) for 1st year after the sanction of the project. Quarterly Monitoring is to be undertaken by the Director of the institute and Quarterly Progress Report in prescribed format (**Annexure-II**) will be submitted to ICFRE by the Institute. **Annual Action Plan** for subsequent financial year should be submitted/ uploaded in RIMS along with Quarterly Progress Report for the quarter ending March)

206 **Project Performance Parameters** (Please suggest criteria and indicators for monitoring the progress of the project)

207 User Target Group (Put tick mark)

State Forest Department		Forest Development Corporation	
Other Government Organization		Non-Government Organizations	
Forest Based Industry		Plantation Companies	

Farmers		Society: Urban/ Rural/ weaker Section / Tribal	
Any other(specify)			

208 Anticipated output of the Project (Put tick mark)

New technique		Improved technique	
New products		Improved product	
New process		Improved process	
Technology package		Data generation	
Development activity		Demonstration	
Exploitation of natural/ plantation resources		Reduction in production cost	
Patents		Conservation of bio-diversity	
Field trails		Improvement of environment	
Improvement in production / productivity		Pilot plant trials	
User trials		Transfer of technology	
Seeds improvement		Tree improvement	
Species improvement		Soil improvement	
Progeny trials		Basic research/PhD	
Any other (specify)			

209 **Success Indicators** (Please indicate the **areas** in which the findings of project can reasonably be expected to have a significant and positive impact. Also suggest **success indicators** (5-6) that measure **Outcomes** and **Impacts** of the project during and after the completion of the project. These indicators should be qualitative and quantitative, and specific to the areas in which the project is expected to have significant impact.)

2091 Specific requirement from other agencies that is critical for project findings to have significant and positive impact.

210 Name and address (including Email) of four **eminent** scientists/ subject matter experts engaged in the general area of the proposed research

1.	2.
3.	4.

PART III: Budget Estimates

301 Additional Research Manpower & justification

(It is expected that major part of the work would be carried out by the PI and the associated technical staff along with other JRF/SRF/RA/FA available in the division as per details to be given in the table below. However, some additional scientific and technical manpower may be asked for working full/part time on the project. The manpower requirement may be carefully assessed taking into account the level of personnel required and their likely availability. Accordingly salaries/emoluments may be calculated based on ICFRE norms.)

Table: Work load on existing research manpower due to proposed project

S.N.	Name & Designation of available Research manpower	Nature of Work	Time Spent
1	Principal Investigator		
2	Co- PI		
3			
4			
5			

Table: Details of Additional Research Manpower

S.N.	Designation of Additional research manpower	Nature of Work
1		
2		
3		
4		

JRF/SRF and other researchers engaged in the project may be encouraged for Doctorate of Philosophy provided it fulfills the main objectives of the project and is in the realm of the project.

302 Budget for Consumable materials with justification for the use of costly consumable, if any

(The budget should clearly indicate the costly consumable items that would be required on a continuous or intermittent basis during the implementation of the project.)

303 Budget for travel within India and justification for intensive travel on projects.

(The budget under this head is meant to cover the travel requirement of the Investigator, Co-Investigator and the research personnel working on the project, in connection with the project work such as literature survey, meeting, data collection etc. This travel is within the country. In case of projects involving intensive travel, the requirement may be extensively estimated and justified by the PI.)

304 Budget for other costs and their justification

(Project with special requirements not covered under other sections such as consultation, for external specialized instrumentation facilities etc should have realistic estimates under FRE. Contingencies are meant to cover incidental and other miscellaneous expenditure.)

305 Budget for permanent equipment and their justification

(Specifically list all items of permanent equipment or equipment requiring import. Be as specific as possible while naming the equipment. Include provisions for installation charge, inland transport insurance, AMC etc. in the estimated cost. Other minor items may be clubbed. In case of a demand for import of equipment, give reasons why indigenous models, if available cannot be used. Justification for each item of equipment including their accessories, specific characteristics, resolution etc. in relation to specific experiments/ measurements/ tests contemplated in the project is to be given.)

306 Budget for training along with their justification

(Training plan should be detailed with respect to requirement of the project. Based on the plan, budget may be estimated.)

307 Total Estimate (Rupees in Lakhs)

S N	Major Head*		Sub Head*	1 rd year	2 nd year	3 rd year	4 th year	5 th year	Total Budget
A	O.E. (Research)	1.	Fellowship / Scholarship Junior /Senior Research Fellows Wages Project Asstt./ Field Asstt.						
		2.	M&S Lab Contingency chemical & glassware						
		3.	Field Research Expenses						
		4.	Consultancy						
		5.	Seminar /Conference / HRD						
		6.	Extension						
		7.	Stationary						
		8.	Contingent Expenses						
		9.	Printing & Publication						
		10.	Maintenance of Equipment i). Scientific ii). Office						
B	O.E. (Technical)	11.	Maintenance of Vehicle i). Fuel/ POL ii). Repair / Maintenance						
C	T.E.	12.	Travelling-Expenses i). Dmoestic ii). International						
D	Capital Assets / Equipments	13.	i). Scientiifc Equipment ii) Office Equipment iii).IT Equipment						
			Total						

*Heads and subheads may be changed as per the requirement of Directorate of Administration, ICFRE

PART IV: REFERENCE

401 **References** (References should be listed alphabetically author wise as per The Indian Forester.)

PART V: DECLARATION

501 This is to certify that

To the best of my knowledge, the research work proposed in the project does not duplicate the work already done by any institute or individual.
The project has been developed with full consultation among the project Investigator and the associates

Project Investigator (Name & signature)	Co -P.I. (Name & signature)
Associates Name & Signature	Associates Name & Signature

502 Signature & comments of the Head of Division

503 **Report of referees**

(Brief description of referee comments in not less than 100 words and not more than 200 words. To be filled by RCS)

Referee 1:
Referee 2:

Recommendations of Group Coordinator (Research) in view of above comments

505 **Prioritization of Research Project** (to be filled by the institute)

S. N	Criteria	Average Score of members of RAG on 1-10 scale
1	User's needs (state research problem)	
2	Scientific advancement	
3	Scientific leadership to ICFRE	
4	Importance of research themes (Priority of research area)	
5	Economic benefit (increase in productivity)	
6	Improvement of environment quality	
7	Chances of developing a patent	
8	Poverty alleviation (creation of employment opportunity)	
9	Historical trend (institute or researcher's of employment opportunity)	
10	Consumption of Resources (high consumption low score)	
	Weighted score of the project	

5051 Recommendations of RAG

Signature & comments of the Director of the Institute