



# GUIDELINES FOR SUPPORT TO ENVIRONMENTAL RESEARCH



सत्यमेव जयते

Ministry of Environment & Forests  
Government of India



जहाँ है हरियाली  
वहाँ है खुशहाली





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## FOREWORD

Environmental research provides knowledge for the development of sound evidence-based policies and strategies towards conservation of natural resources of the country.

Globally, environmental research has provided important inputs for devising strategies to ensure ecological security and sustainable development.

The Ministry has been supporting research in Environment since 1985 in multidisciplinary areas by providing grants to various research institutions and universities for implementing research projects. The previous *Guidelines for Support to Environmental Research* were brought out in 2006. The need for revision of the Guidelines arose so as to provide renewed scientific impetus to address the emerging environmental challenges, broaden the participation of the stakeholders, introduce the concept of cost-sharing, thus making research in Environment more productive, with an emphasis on outputs and outcomes and their applications.

The *Guidelines for Support to Environmental Research – 2012*, inter alia, provide details on the types of research projects which would be sponsored by the Ministry, broad thrust areas of research, eligibility criteria, scope and coverage of research grants, criteria for selection of projects, concept of public-private partnership in R&D projects, procedure for invitation, submission, appraisal, monitoring and review of research projects along with norms of funding. The Guidelines also include the terms and conditions governing research grants.

These Guidelines enunciate the vision and mission of environmental research supported by the Ministry, thereby providing direction and purpose to research activities. The identified broad thematic areas aim at focusing the efforts in environmental research. Special attention has been given to pollution amelioration, biodiversity conservation, ecosystem studies, bioremediation, ecological restoration of

degraded ecosystems, development of cutting-edge technologies, socio-economic issues relating to the environment, etc. Through these Guidelines, a mechanism has been put in place for the wider dissemination of research findings and the scaling up of those outcomes and innovations, which are generated through research projects and are of societal relevance.

The revised Guidelines also lay emphasis on visible outputs and outcomes. To achieve this, the procedure for appraisal, monitoring and review has been further strengthened. An Apex Committee for Research, with eminent subject matter specialists, has been formulated with a view to, inter alia, provide overall direction to the research endeavours of the Ministry, ensuring synergy among research efforts of the Ministry, and to provide ways and means for scaling up of important and significant leads generated under different research programmes of the Ministry for wider replication.

I hope these Guidelines would be very useful to researchers in terms of focusing and prioritizing their research and would also be a positive step in further strengthening the procedures for processing research proposals.

I place on record my appreciation for the diligent and wholehearted efforts put in by Dr Amit Love, Deputy Director, and Dr J.R. Bhatt, Director, in bringing out these Guidelines. I especially wish to put on record the able guidance provided by my colleagues Dr G.V. Subrahmanyam, Advisor, Shri M.F. Farooqui, Special Secretary, and Dr Nandita Chatterjee, Additional Secretary, in bringing out these Guidelines.

Place : New Delhi  
Dated : 25.01.2012



**Dr Tishya Chatterjee**

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# 1. INTRODUCTION

The need for a strong Science and Technology (S&T) base for Environmental Research and Development (R&D) is well recognized. Research in Environment is an essential prerequisite for generating reliable data and new R&D knowledge relevant to Indian conditions for ensuring sustainable development.

The Ministry of Environment and Forests is classified as a 'Scientific Ministry' under the Government of India. Since its inception in 1985, the Ministry has been funding research through grant-in-aid projects to many research institutions in different areas under the broad ambit of environment protection and management. The Ministry had earlier brought out *Guidelines for Support to Environmental Research* in 2006. It has taken a number of new initiatives to strengthen scientific research in the area of environmental sciences. Some of these include instituting the National Environmental Sciences Fellows Programme, Mahatma Gandhi Chair in Ecology and Environment, etc.

The Ministry has now revised the *Guidelines for Support to Environmental Research* to provide renewed scientific impetus to address the emerging environmental challenges, broaden the participation of stakeholders, introduce the concept of cost-sharing and make the research in environment more productive, with an emphasis on outputs and outcomes. The revised Guidelines set forth the objectives and thrust areas of research, procedure for invitation and processing of research proposals for funding support, norms for funding, conditions of support and participation of public and private sectors in mutually agreed bilateral, multilateral, cross-sectoral and inter-institutional projects. Special attention has been given to pollution amelioration, biodiversity conservation and augmentation, development of cutting-edge technologies, dissemination of research findings and scaling up of the leads, which are generated through research projects and are of societal relevance.

Further, through these Guidelines all research undertaken in the Ministry is centralized in the Research Division of the Ministry through an Apex Committee on Research in Environment chaired by the Secretary (E&F). The Apex Committee would be supported by three thematic area-based Programme Advisory Committees (PACs). The PACs would be involved in appraising, monitoring, reviewing and recommending the research proposals for final approval and sanction by Apex committee.

The Apex Committee would provide the final sanction and approval of the recommended research projects, provide an overall direction to the research efforts of the Ministry, ensure synergy and linkages among the various arms of the Ministry and provide guidance for scaling up significant leads generated through research projects supported by the Ministry.

These Guidelines will also be applicable to other research programmes of the Ministry where specific guidelines for the purpose do not exist. Schemes that have a research component, such as the All India Coordinated Project on Capacity Building in Taxonomy, Assistance to Botanic Gardens, National Natural Resource Management System, etc. will follow these Guidelines with respect to emoluments to research and support staff. Such schemes may follow the funding norms prescribed in these Guidelines if the items covered under these norms are not specifically mentioned in the schemes. Wherever provisions of these Guidelines are used by other schemes, they will not be used in contravention of the objectives/guidelines/procedures laid down in such schemes.

## 2. VISION, MISSION AND OBJECTIVES OF R&D SCHEME

### **Vision**

Promotion of research into the various facets of ecology and environment for the conservation of the environment and natural resources of the country.

### **Mission**

To plan, support and coordinate environmental research in public interest for enhancing the understanding of the environment and ecology and devising strategies and solutions for environmental protection and management.

### **Objectives**

1. To generate information and knowledge required for developing strategies, techniques and methodologies for better environmental management
2. To find practical solutions to problems of environment protection and management (eg. eco-regeneration of degraded areas, management of plastic wastes, bioremediation of contaminated sites, etc.)
3. To build endogenous capacities and strengthen scientific manpower in multidisciplinary and emerging areas of the environment and ecology
4. To promote development of infrastructure facilities, where necessary, for undertaking environmental research
5. To generate, document and analyse information for taking policy decisions relating to the environment and natural resources, including preparedness for international negotiations
6. To support basic research which leads to applied research in the areas of the environment and ecology with the aim of development of management and policy interventions
7. To facilitate database management at one single point in the Ministry



### 3. INVITED AND COMMISSIONED RESEARCH PROPOSALS

Two types of research proposals are generally considered by the Ministry for funding support.

**Invited Proposals:** Proposals will be invited under this category by the Ministry through a transparent procedure of an open advertisement. Selection among the proposals received will be made competitively based on their technical soundness, including research credentials of the team and envisaged outcomes of research.

**Commissioned Proposals:** Depending upon specific needs of the Ministry or to focus research efforts on important areas of ecology and environment, the Ministry may—through a transparent process, directly commission research studies to one or a network of empanelled universities, research institutions, NGOs, Government ventures, public and private sector institutions identified on the basis of their recognized capabilities in the concerned area.

The Ministry could also directly commission, through a transparent process, All India Coordinated Research Programmes following multi-disciplinary and inter-disciplinary approaches involving a group of institutions on a specific subject of topical interest to the Ministry, as identified during brainstorming meeting(s) with experts on the subject.

Principal Investigators submitting Research Proposals need to be associated with a recognized institution/organization. For the above categories of proposals, viz. Invited and Commissioned, the appraisal procedure is outlined in the relevant section.

## 4. THRUST AREAS OF RESEARCH IN ENVIRONMENT

The broad thrust areas for supporting Research in Environment are given below.

1. Development of biological and other interventions for pollution, prevention and control
2. Development of strategies/technologies for prevention and/or control of pollution including waste recycling, management of hazardous substances, development of biodegradable plastics/eco-friendly alternatives and Instrumentation Development
3. Clean technologies: greening of products and processes
4. Restoration of degraded ecosystems, bioremediation of contaminated sites and water
5. Studies on conservation and enhancement of biological diversity including rare, endangered, threatened, endemic, economically and ecologically important taxa.
6. Studies related to different ecosystems, their conservation and management
7. Application of remote sensing and GIS for accurate inventory of natural resources and environmental planning
8. Research on climate change
9. Environmental health and toxicology
10. Research on land-use, land-cover and forest-cover changes
11. Studies on impacts of developmental activities on the environment and ecology
12. Conservation, enhancement and utilization of forests and their resources
13. Research on socio-economic issues of environment including legal and policy frameworks

The Ministry may also support new, creative, innovative and original proposals from researchers in areas which may be outside the identified thrust areas but have direct bearing on the environment and ecology. The grants to such proposals would not exceed 10% of the total allocation of the R&D Scheme. The above-mentioned thematic areas have been categorized into different Research programmes. Details of these research programmes have been given in Annexure I. Specific thrust areas would be identified and prioritized by the Apex Committee.

### ***Generation of time-series and geographical data in identified thematic areas***

The research projects, that generate time series and geographical data on different environmental variables (including those of biodiversity), in compatible formats will be encouraged. The Programme Advisory Committee would prescribe the compatible formats during project appraisal. This will enable the Ministry to build a database of specific variables in a particular thematic area in GIS format, which could be used for further research and sound policymaking.

## 5. SCOPE AND COVERAGE OF RESEARCH GRANTS

A grant for a research project is provided to the Principal Investigator through his/her concerned institution to cover the following:

- (i) Fellowship/Salaries and other related charges for research fellows/associates/research consultants and supporting staff. The salaries will be paid as consolidated amounts in accordance with the orders issued by the Ministry from time to time, either in regular monthly installments or as lump sum payments. The Principal Investigator (or any of the other investigators) who is employed and already receives a salary will not be paid any salary or honorarium out of the funds sanctioned for the project.
  - (ii) Acquisition of equipment not available in the institution or not available for dedicated use in the Project and expendable items, laboratory supplies and expenses for other project-related activities.
  - (iii) Cost of internal travel including participation in scientific conferences/symposia connected with the project. Foreign travel, out of project funds, may be considered in essential and exceptional cases.
  - (iv) Contingency grants.
- ❖ Any other expenditure which is considered appropriate depending upon the requirements of a specific proposal, with approval of the Ministry. The terms and conditions governing the Research Grants are given at Annexure II.

**Who are eligible:** Academic institutions, universities, national institutes, recognized R&D institutions, reputed non-governmental organizations and voluntary bodies, private organizations—including industry—through scientists and technologists working in them (NGOs, voluntary bodies and private organizations, including industry, have to be registered as research institutions with the Department of Scientific and Industrial Research, Government of India).

## 6. CRITERIA FOR SELECTION OF PROJECTS

The selection of projects will be based, wherever possible, on the fulfillment of certain basic criteria regarding their objectives, approach and competence available. Preference will be given to the following kinds of projects:

- i) Those concerned with research in environment subjects, are cross-sector and trans-disciplinary and of direct relevance to the objectives of environmentally sound development of the country;
- ii) Those attempting to solve any urgent and pressing environmental and ecological problem(s) perceived to be of wide national/specific interest and importance and are, therefore, of broad applicability or aim to produce results which can be replicated and used under a variety of conditions; or offer solutions to mitigate a specific regional need in the chosen problem field;
- iii) Those capable of producing knowledge which can be implemented directly, used for the purpose of environmental planning or can lead to innovation and development of environmentally sound technologies and techniques;
- iv) Those that can provide knowledge which is not being already generated by other programmes or is complementary to such knowledge; and which do not overlap with the mandates/programmes of other funding agencies;
- v) Those able to produce time-bound results;
- vi) Those co-sponsored or co-financed by industry, private and/or public sector organizations for solving region-and locations-specific environmental problems.

This set of criteria is meant to be indicative, with the primary aim of promoting research of the highest quality and competence.

## 7. CONCEPT OF PUBLIC-PRIVATE PARTNERSHIP FOR R&D PROJECTS

Public-private sector participation would be encouraged by the Ministry in Research Projects aiming at solving specific environmental problems which have practical and societal relevance. The partnership could be in terms of cost and benefit sharing, providing logistic support, agreement for wider replication of the research findings of the projects, etc. For public-private partnership in R&D Projects, a tripartite MoU would be signed on mutually agreed terms and conditions among the Ministry, private and public sectors and the Principal Investigator. The private sector would be involved in public-private partnership R&D projects through an open and transparent process of calling for Expression of Interest. The norms and parameters for assessment and evaluation of public-private partnership R&D Projects would be the same as applied to other Research Projects. The modalities for implementation of such Projects would be finalized by the Apex Committee.

## 8. PROCEDURE FOR SUBMISSION, APPRAISAL, MONITORING AND REVIEW OF RESEARCH PROPOSALS

The following procedure will apply to both Invited and Commissioned Proposals.

### **Step 1. Submission of proposals**

Proposals should be made in the prescribed application format (Annexure III to VI) in hard and soft copies and sent to Advisor (Research in Environment) in response to the advertisement given by the Ministry. The proposals should be submitted to the Ministry on or before the indicated last date of submission in the advertisement.

Ten hard copies of the application in prescribed format and a soft copy through e-mail or CD are required to be submitted. Proposals prepared by the Principal Investigator (PI) should be forwarded by the Head of the Institution. In case a research proposal involves a network of research institutions, the PI would identify the Lead Investigator from each of the participating Institutions with the approval of the Heads of these Institutions.

If the project is a joint venture, then it should be explicitly mentioned. In case of the involvement of public and/or private sector the details of work, cost and benefit (IPR, the Patent, etc.) sharing arrangements are to be clearly spelled out in the proposal. The Apex Committee will decide the detailed modalities in this regard.

The applications should clearly identify the research questions, methodologies involved and data sources. It should identify the complete team of Investigators and provide their detailed resumes highlighting their academic backgrounds and publication records. It should also specify the additional personnel support required, both scientific and support staff. It should provide a detailed break-up of the costs consistent with the Funding Norms as given in Section 9. It should detail the equipment (including computers and peripherals) that are specially required for the project. The project should provide timelines and milestones and expected outputs and outcomes.

### **Step 2. Preliminary Scrutiny**

Proposals received would be duly acknowledged. The proposals would be examined in the Research Division of the Ministry to determine whether or not they conform to one or more of the identified thrust areas of the Ministry. Weak, diffused, repetitive and/or superfluous proposal(s) could be rejected at this stage.

### **Step 3. Initial Appraisal by Programme Advisory Committee**

Each of the three Research Programmes given in Annexure I, would have a Programme Advisory Committee (PAC). The respective PAC would be chaired by an eminent scientist/expert, with subject experts as members. These PACs would be constituted by the Ministry to appraise, recommend, monitor and review the research proposals for funding under the R&D Scheme.

The proposals will be placed before the PAC after a preliminary scrutiny.

The PAC will determine if the proposal generally meets expectations of technical competence of the research team, completeness required of the proposal and usefulness of research outputs. If not, the proposal may be recommended for rejection at this stage. If the project is not rejected, the PAC will identify and a minimum of three and maximum of five Expert Peer Reviewers from a list of already empanelled peer reviewers. The proposal will be referred to this expert panel for review.

The appraisal/evaluation of research projects by the committee members of the PAC would be undertaken only if they have no conflict of interest, whatsoever.

#### **Step 4. Expert Peer Review by empanelled reviewers**

The research proposals will be independently reviewed by at least three empanelled Expert Peer Reviewers. The expert peer review aims at evaluating the submitted research proposals in a competitive and detailed manner. The Ministry will empanel expert reviewers in specific subject areas who would give expert comments/suggestions on the research proposals. The expert peer reviewers would be intimately associated with the PAC during the process of monitoring and evaluation of the outcomes and outputs for the projects reviewed by them. The empanelled expert peer reviewers would act as third party evaluators in this process. Such a mechanism would lead to an institutional memory for a particular sanctioned project and would help in monitoring its progress better.

#### **Step 5. Final Appraisal by Programme Advisory Committee**

The appraisal process by the PAC would also include an independent peer review of the research proposal by at least three empanelled expert peer reviewers. The PAC will consider the reviews received from the empanelled Expert Peer Reviewers in each case, and determine whether or not the research proposal should be accepted. The PAC would evaluate and scrutinize the proposals with respect to originality of the proposal, scientific and technical soundness, including assessment of objectives and methodology, expected outcomes and outputs and practical utility of the research outputs.

The PAC would also evaluate the research proposal from a financial angle, which would include the scrutiny of the proposed budgetary requirements and the component-wise analysis of the costing of the project. The Committee would assess whether the budgetary requirements are commensurate with the work to be carried out. This would also include scrutinizing and evaluating the requirement of the research and technical staff and the necessity for the equipment proposed in the project. The PAC would identify and clearly list the expected outcomes of the projects it recommends for sanction of grant-in-aid. The PAC should, inter alia, assess the following;

1. Expected and other physical outcomes of the project
2. Component-wise analysis of the costing of the project
3. Cost-benefit analysis in terms of the physical outputs and environmental benefits
4. Minimum required tenure of the project
5. Techno-commercial feasibility of the project
6. Modalities for replication of the outcomes

7. No duplication with existing work/ongoing projects
8. Standardization of the design parameters for technology and preparation of protocols/prototypes for achieving reliable and replicable processes

The conditions relating to the availability of the report in public domain, patent-related conditions, revenue generation issues, etc. would be determined by the PAC before recommending the project.

In case of research projects proposals that are of more than Rs 50 lakhs, an empanelled institutional reviewer (subject to availability) may be used by PAC.

The PAC would evaluate the projects based on an indicative Project Evaluation Matrix\*.



## Project Evaluation Matrix\*

S.No.	Parameter	Score obtained (on a scale of 0-10)
1	a) Alignment with priorities/needs of Ministry/Thrust Areas b) Whether peer reviewers, comments have been taken into cognizance	
2	Experience of PI in relevant area and Innovative approach/Originality of proposal	
3	Relevance of the objectives and feasibility of the methodology	
4	Doable targets/milestones of work and corresponding timelines and well-defined outcomes	
5	Capacity building	
6	Budgetary estimates in line with the work to be carried out and the expected and other physical outcomes, including component-wise analysis of the costing of the project,	
7	Techno-commercial feasibility of the project, possibility for generation of new and creative scientific knowledge or field-level demonstration and extension or scope for patents, copyright, trademark, geographical indication	
8	Potential for peer-reviewed publications/new knowledge generation/ state-of-art reports/new knowledge products	
9	Societal relevance/potential for extension at the field level/large-scale replicability, including cost-benefit analysis in terms of physical outputs and environmental benefits, modalities for replication of the outcomes and preparation of protocols/prototypes for achieving reliable and replicable processes	
10	Involvement of Public and/or Private Sector in rendering <b>a)</b> technical expertise <b>b)</b> cost sharing <b>c)</b> cost sharing and technical expertise	
<b>Grand Total (out of 100)</b>		

Every parameter carries equal weightage and a maximum score of 10. The score of each parameter is summed up to obtain a grand total. The maximum score which could be obtained is 100. The percentage of marks obtained would be calculated and projects which obtain the minimum cut-off mark of 60% may be considered for recommendation by the concerned Programme Advisory Committee.

\*This is an indicative matrix and can be modified by the Programme Advisory Committee

### **Step 6. Approval and Sanction of research projects by the Ministry**

It would be the endeavour of the Ministry to complete the project appraisal cycle in three to six months from the date of receipt of the proposal. Based upon the recommendations of the PAC, the Apex Committee for Research in Environment would examine the recommended cases for approval and financial sanction.

### **Step 7. Monitoring and Review**

The monitoring and review of physical and financial progress of projects sanctioned by the Ministry will be carried out by the PAC at least once in a particular financial year. The empanelled Expert Peer Reviewers/third party institutional monitors (subject to their availability) would assist the PAC in the monitoring of ongoing research projects. One of the empanelled Expert Peer Reviewers, who reviewed a particular project at the initial stage, would be involved in its monitoring process in the PAC. Big research projects would be monitored through an empanelled third-party institutional monitor and the PAC.

### **Step 8. Acceptance of the Final Technical Report**

The Principal Investigator will circulate the draft of the Final Technical Report (FTR) to the Programme Advisory Committee and to the empanelled peer reviewers/third party institutional monitors (subject to their availability). The PI will also make a presentation before the PAC. Based on the recommendation of the PAC and the empanelled peer reviewers/third party institutional monitors (subject to their availability), the Apex Committee would undertake the final acceptance of the FTR and, thereafter, the final settlement of accounts and closure of the project would be done.

### **Independent Evaluation**

The Ministry may engage independent evaluation and assessment agencies for the evaluation of the R&D scheme against the physical outputs and final outcomes of the Scheme and to suggest improvements/modifications for effective implementation of the Scheme.

## APEX COMMITTEE ON RESEARCH IN ENVIRONMENT

An Apex Committee on Research in Environment will be constituted by the Ministry to, inter alia, provide overall direction to the research endeavours of the Ministry, ensure synergy and linkages in the research efforts of various arms of the Ministry (eg. BSI, ZSI, WII, GBPIHED, ICFRE) and avoid duplication of efforts among them, serve as a think tank acting as a symbiotic link/bridge/conduit between research findings and their implementation by research managers and other stakeholders.

The Apex Committee will have the following members:

- 1) Secretary (E&F), Chairman
- 2) Concerned Additional Secretary dealing with Research in Environment (RE) Division - ex officio member
- 3) Additional Secretary & Financial Advisor—ex officio member
- 4) Chairman, National Biodiversity Authority—ex officio member
- 5) Chairman, Central Pollution Control Board—ex officio member
- 6-11) Six eminent subject experts—members
- 12) Advisor (RE)—Member Secretary  
Joint Secretaries/Advisors/IGFs of Relevant Divisions/Chairmen of the Programme Advisory Committees—Special Invitees

### Terms of Reference

- (i) To provide overall direction to the research endeavours of the Ministry in the broad area of ecology and the environment
- (ii) To identify thrust areas of research, approval and sanction of research projects recommended by the Programme Advisory Committees, acceptance of Final Technical Reports and closure of research projects
- (iii) To suggest concrete multidisciplinary and interdisciplinary research programmes in the areas of ecology and environment for implementation by different Programme Advisory Committees
- (iv) To ensure synergy and linkages between the research sponsored by MoEF with that done/ sponsored in subordinate and autonomous organizations of the Ministry as well as other concerned Government departments, to the extent possible
- (v) To provide ways and means for scaling up of important and significant leads generated under different research programmes of the Ministry for wider replication
- (vi) To resolve disputes, if any, ensuing out of joint-venture projects with public–private sector participation especially those relating to copyright, IPR, royalty, etc.
- (vii) To provide modalities for implementation of public/private partnership research projects
- (ix) To consider all proposals for Research Projects/fellowships/awards/chairs for final approval and financial sanction based on the recommendations of the respective Programme Advisory Committee/Awards Committee/Management Committee/Committee of Experts or any other such committee constituted for the purpose
- (xi) To regulate and control all research programmes, fellowship programmes, awards and chairs under the R&D Scheme
- (xi) To consider any such other matter relating to the R&D Scheme as may be deemed fit for the promotion of research in the area of environment and ecology

The Apex Committee should meet biannually/quarterly in every financial year.

## 9. NORMS OF FUNDING

The following table gives the norms for funding different components of Research Projects with respect to all categories—Invited Proposals and Commissioned Proposals.

<b>Table 1: Norms for Funding Research Projects:</b>	
<b>Item</b>	<b>Funding Norm</b>
Pay and allowances of research staff*, **	As per norms given in the subsection of pays & allowances of research staff in the section on Terms and Conditions for sanction of research projects in Annexure II
Honorarium to retired professors/senior scientists/consultants**	Maximum of Rs 30,000/- per month, subject to other Government Rules
Support staff (technical/non-technical, eg. Junior Technical Assistant, Technical Assistant, Field Attendant, Senior Technical Assistant, Computer/data-entry operator/field worker) *, **	As per host institution rules
Equipment/Instruments including computers, softwares and peripherals necessarily required for dedicated use in the Project and are not available in the Department/institution or are available in the Department/institution but are not available for dedicated use in the Project	100% on competitive bidding/tender basis in accordance with host institution norms
Travel/Consumables & Expendables/other project charges/under their project PI may budget items such as expenditure for maintenance of equipment analysis of samples, etc.	On case-to-case basis depending on the nature and extent of field work involved
Contingency	5% of the total Project cost (excluding institutional charges) for Projects upto 50 lakhs, the quantum will be decided on a case-to-case basis for Projects cost > 50 lakhs.
Institutional Charges	Project cost < Rs 20 lakhs: 20% of Project cost. Project cost >= Rs 20 lakhs to Rs 50 lakhs: 15% of Project cost subject to a minimum of Rs 4 lakhs and a maximum of 5 lakhs Project cost > Rs 50 lakhs: the quantum will be decided on case-to-case basis Institutional charges are not applicable to subordinate/autonomous institutions/Centres of Excellence of the Ministry and regional offices of the Ministry

\* subject to periodic centralized revision by Department of Science and Technology, Government of India

\*\* In the specific case of Commissioned projects there could be flexibility in the designations of the research staff after due approval of the Ministry.

The PAC will thoroughly examine the financial and staff requirement of each proposal keeping in view the projected work to be carried out. After thorough examination, the Programme Advisory Committee would recommend the adequate level of manpower and financial support under various budget-heads to be provided for achieving the expected outputs and outcomes of the project. The Apex Committee would examine the case, on the basis of recommendations of the PAC, and the process for final sanction of the research project.

## 10. MAINTAINING A WEBSITE OF RESEARCH PROJECTS AND DISSEMINATION OF RESEARCH FINDINGS

The Research Division of the Ministry envisages maintaining a 'Research Library' which would include a directory of projects with their outcomes, quantum of funds granted and their executive summaries. This library would be made available 'online' for use by all stakeholders.

The Ministry is in the process of developing an online web-enabled submission and tracking system for research projects. The website will also display projects under consideration, projects under implementation and findings of completed projects.

Unless restricted, for reasons including IPR issues, wide dissemination of research findings would be encouraged. Apart from professional journals/books, final technical reports of completed projects may be disseminated through one or more of the following channels, as appropriate:

- ❖ Website of the Ministry
- ❖ Enviro News
- ❖ Website of ENVIS Centres/Nodes through EI Division
- ❖ Websites of Major Universities (through UGC)
- ❖ Websites of State Pollution Control Boards
- ❖ Professional Workshops/Seminars/Brainstorming meets

# ANNEXURES





## RESEARCH PROGRAMMES

The programmes under the R&D Scheme are as follows:

### **I. Environmental Research Programme (EnvRP)**

The EnvRP specifically deals with the “brown issues”, i.e. problems related to pollution, climate change, hazardous waste management, agro-chemicals, waste minimization and reuse, carrying capacity studies, development of eco-friendly and cleaner technologies, providing scientific inputs to address policy problems relating to environmental pollution control and management, ecological restoration and bioremediation, environmental health and toxicology, etc.

### **II. Ecosystems Research Programme (EcRP)**

The Ecosystem Research Programme (EcRP) deals with “green issues” relating to ecology, conservation of natural resources, Eastern and Western Ghats, aquatic and terrestrial ecosystems, mountain ecosystems, tropical rainforests, wetlands, mangroves and coral reefs, biosphere reserves, biodiversity and the study of inter-relationships between humans and environment and seeks to generate scientific knowledge needed to manage natural resources wisely.

### **III. Research Programme in Socio-Economic issues of Environment (RPSE)**

This programme supports research on environmental and ecological economics, socio-economic issues arising out of extant as well as new contemplated legislation(s), tribal, rural, urban issues vis-a-vis legislation, role of gram panchayats and civil society in the implementation of environmental legislation, etc.

### **All India Coordinated Programmes in identified research priority areas**

The Ministry could also formulate and launch All India Coordinated Programmes under any of the above-mentioned Research Programmes. The All India Coordinated Programme would focus on particular priority area of research identified either by the concerned Programme Advisory Committee or the Apex Committee of Research.

Under the Programme, there would be a network of participating research/academic institutions spread across the country, and individual Principal Investigators would implement the sanctioned research projects on the identified priority area of research under the Programme.

The sanctioned research projects under the Programme would be unified by a common research theme. This would lead to the generation of information/data on different aspects of the identified research priority area, which could then be ploughed back into development of policy and management interventions or the further development of the research area. The information generated through the All India Coordinated Programmes could also be brought out as a publication. The publication would be brought out by the Ministry.

Under the All India Coordinated Programme, one of the Principal Investigators working at the participating Institute would also act as a Coordinator of the Programme. As the Coordinator, the concerned PI would consolidate data from all the participating Principal Investigators and prepare a consolidated progress report for the Programme and give a comprehensive presentation on the progress of the Programme to the concerned Programme Advisory Committee. The Coordinator of the Programme would be provided a separate budget for the coordination activity. The participating PIs would also prepare annual progress reports for their individual research projects and would also give presentations to the concerned Programme Advisory Committee.

Monitoring and Review of the All India Coordinate Programme would be done at least once every year by the concerned Programme Advisory Committee both for the collective progress of the Programme as a whole and for each individual research project under the Programme.

An open and transparent process would be adopted for the invitation of proposals under the All India Coordinated Programme. The process adopted for appraisal, monitoring and review would be the same as given in these Guidelines.

## TERMS AND CONDITIONS GOVERNING THE RESEARCH GRANTS

1. The approved grant should be exclusively spent on the project for which it has been sanctioned within the stipulated time period. Industry, public and private sector organizations can co-sponsor a project on mutually agreeable terms, which can be formalized through an agreed MoU with the Ministry of Environment & Forests (MoEF). In the project wholly sponsored by the Ministry, the grantee organization is not permitted to seek or utilize funds from any other organization (Government, semi-government, autonomous or private) for the same research project. Any unspent amount out of the grant given by the Ministry for a particular project would be required to be surrendered to the MoEF, and the carry forward of the unutilized amount from one to the next for utilization for the same project would require the specific approval of the Ministry.
2. A Project will normally be sanctioned for a maximum period of three years. The grant will be payable in two installments each year including the first year on the submission of Utilization Certificates, Expenditure Statement and Progress Reports. The cost of permanent equipment may be released as a one-time allocation. In the case of collaborative research carried out by a network of institutions, the Coordinating Institution would be responsible for the submission of the Utilization Certificate and Expenditure Statement (Appendix I&II) and Progress Reports covering all the partners. The authorities of the institution(s) where research activities are to be carried out would receive the grants and be responsible for their disbursement, administration and maintenance of accounts. The Principal Investigator will incur expenditure within the ambit of the sanctioned amounts under the heads, and in normal circumstances, inter alia, adjustment among budget heads is not permissible. In case of an unavoidable situation, the PI must seek prior approval of the MoEF through the Institute.

An extension of upto a maximum period of two years may be granted to Research Projects in deserving cases. Any request for an extension of the Project should be sent by the PI to the Ministry at least three months before the closing date. The PI should not make any expenditure after the closing date without specific approval of the Ministry or till the extension is conveyed to him. The extension may or may not involve a change in overall scope of the Project and, if granted, adequate additional funds would be sanctioned by the Ministry towards the prescribed extension period. In the case of an extension of tenure of Research Projects, the Programme Advisory Committee would provide complete justification for the same.

3. The implementing institution and the PI have the responsibility for completion of the Project and to achieve the expected outcomes and deliverables of the Research Project.

In case, the PI leaves the institute on account of superannuation/unforeseen circumstances, the responsibility for the completion of the Project may be entrusted, at no extra cost, to another equally qualified investigator by the Head of the Institution with the approval of the Ministry. In case the PI is shifting to another institution due to a new appointment/transfer/long-term deputation, the project could be transferred to that institution with mutual consent of both the institutions and with the approval of the Ministry

4. Project funds will be granted to credible research institutions and not directly to the Project proponent (PI), i.e. grants will be made available to the institutions with whom the PI is affiliated.
5. Those institutions/individual PIs which/who do not render accounts/submit physical progress reports against the released grants will be blacklisted by the Ministry after ensuring an adequate dialogue, both in speech and writing, by the Ministry with the authorities of the concerned defaulting institution/individual.
6. For permanent and semi-permanent assets acquired solely or mainly out of the grant, including books and furniture, an audited record in the form of a Register in the prescribed pro forma shall be maintained by the grantee. The term "Assets" here means (a) immovable property and (b) movable property of a capital nature, where the value exceeds Rs 50,000/-. The grant should not be utilized for construction of any buildings. Full facilities by way of accommodation and infrastructure required for the project will be provided by the grantee organization. Grant for building cannot be considered under the Scheme.
7. The grantee organization will furnish three copies of yearly progress reports of the work done on the project as per pro forma given in Appendix III. The PI is required to make a presentation on the progress of work carried out in the project to the PAC at least once, in a given financial year. The MoEF can depute empanelled Expert Peer Reviewers/scientists/specialists/finance persons of the Ministry to visit the grantee organization periodically for reviewing the progress of the work and for suggesting such measures as to ensure early realization of the objectives of the project. Full facilities are to be provided by the grantee organization to the visiting scientists/specialists.
8. At the conclusion of the project, the Government of India will be free to sell or otherwise dispose of assets, which are the property of the Government of India. The grantee organization shall render to the Government of India necessary facilities for arranging the sale of these assets. The Government of India has the discretion to gift the assets to the grantee organization, if the Government of India considers it appropriate.
9. All equipment and stores purchased out of the grant would remain with the institution concerned unless otherwise specified in the sanction. However, the grantee organization will submit the list of assets acquired under the project as per the prescribed pro forma (Appendix IV).

All the assets including equipment and prototypes acquired with the grant will be the property of the Government of India and without the prior sanction of the MoEF should not be disposed of or encumbered or utilized for any purposes other than those for which the grant has been sanctioned.
10. The PI shall submit three hard copies and one soft copy of the progress report of the project at the end of each year to the Contact Person for an Annual Review of the project.
11. The Ministry may permit international travel out of project funds in essential and exceptional cases.

12. The grantee organization is required to provide a list of assets referred to in (6) above. to the Ministry at the end of each financial year and at the time of seeking further installments of the grant.
13. The grantee organization would furnish to the MoEF a Statement of Expenditure and Utilization Certificate in prescribed formats within sixty days from the close of each financial year, i.e. by 31<sup>st</sup> May, for the grant released during the previous financial year. An audited statement of account pertaining to the grant may also be furnished within nine months of the close of the financial year.
14. The following guidelines may be adopted while accounting the expenditure on HRA and Medical Allowance:
  - a) The staff engaged in the research project are not eligible for HRA if they have been provided quarter/hostel facilities.
  - b) The staff engaged in the project are not eligible for HRA if the organization's rules do not provide HRA for its own staff.
  - c) The research staff who are not provided hostel facilities are eligible for HRA as applicable to scientific staff/teaching staff as per the instructions/orders issued by the Ministry from time to time.
  - d) The supporting staff such as technical assistant, laboratory assistant, etc. are eligible for HRA as per the rates applicable to non-teaching/scientific staff of the organization concerned, if they are not provided residential facilities.
  - e) For the purpose of HRA, fellowship/lump sum amount for Research Associate, Research Fellows/ Project Fellows, Technical Assistant, Laboratory Assistant, Laboratory Attendant, Field Assistant, Drivers and Field Attendant will be taken as the basic pay.
  - f) Maximum HRA payable will be limited to the 6<sup>th</sup> Pay Commission's recommendations, as accepted by the Government of India.
  - g) Medical allowances, if applicable, should be as per the rules of the organization. In respect of non-governmental organizations, this will be limited to a maximum of Rs 1,000/- per annum.
15. The Comptroller and Auditor General of India at his discretion shall have the right of access to the books and accounts of the grantee organization for the grants received from the Government of India. During the course of implementation of the project, the MoEF may depute its staff or scientists, including those from other institutions, to visit the research institution(s) concerned to review the progress of the projects.
16. All accounts in respect of the project will be subject to audit by the institution auditors. On termination of the project, duly audited accounts shall be submitted and the unspent balance, if any, shall be refunded to the MoEF within six calendar months of completion of the project. Full and final payment will be made after the acceptance of all the financial certificates, audit reports and final technical reports of the project. Ten (10) per cent of the sanctioned amount will be released only on completion of all closure formalities.

The grantee organization should maintain separate audited accounts for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the Ministry of Environment and Forests. The interest thus accrued will be treated as a credit to the grantee organization to be adjusted towards further installments of the grant.

17. Sale proceeds, if any, as a result of the development of the project arising directly from the funds granted by the MoEF shall be remitted to the Government of India. The Government of India may, at its discretion, allow a portion of such receipts to be retained by the grantee organization.
18. The know-how generated from the project will be the property of the Government of India and receipts by way of the sale of know-how, royalty, etc. shall accrue to the Government of India. The Government of India may, at its discretion, allow a portion or whole of such receipts to be retained by the grantee organization. The sale of know-how, collection and settling the rate of royalty, etc. would be decided by the MoEF in consultation with the National Research Development Corporation (a public sector undertaking) or any other government body which has the responsibility for licensing the transfer of know-how from research and development projects.

### **IPR Issues**

The MoEF shall have sole right to patent the research fully funded by the Ministry. In case the MoEF has not funded the project fully, an undertaking should be taken from the project proponent that no IPR/Royalty would be charged in future public projects supported by the MoEF.

19. Investigators who wish to publish papers based on the research work done under the Project or to present such papers at conferences need to duly inform the MoEF and should acknowledge the financial support received from the Ministry. Three copies of the publications/papers shall be sent to the Ministry.
20. The grantee organization is not permitted to entrust the implementation of the project work, for which grant is being sanctioned, to any other organization and diversion of the grant, or any portion of it, as assistance to any other organization. In case the grantee organization is not in a position to execute or complete the work, it is required to refund forthwith to the Government of India in the Ministry of Environment and Forests, the entire amount of grant received by it. In exceptional cases, this condition may be relaxed by the Government.
21. The staff, if any, sanctioned for the project should be recruited as soon as possible and equipment, if any sanctioned, should be ordered within ninety days.
22. The staff that may be employed for the project by the grantee organization are not to be treated as employees of the Government of India and the deployment of such staff at the time of completion or termination of the project will not be the concern/responsibility of the Government of India. The staff appointed for the research project will be subject to the administrative control and service rules as applicable at the institute where they are appointed.

23. The following guidelines may be adopted while appointing the project staff (co-terminus with the project):

The selection and appointment of Emeritus Scientists/Support Staff/Consultants for the project may be made by the Principal/Lead Investigator following the procedures of the concerned Institutions for periods not exceeding the sanctioned duration of the project. The qualification and experience should be as per the host institution norms.

A Committee will be constituted for the selection of Junior Research Fellows JRF/Senior Research Fellows SRF in Ministry's project. This Committee would be approved by the Head of the host institution where the Project is being operated. This committee would have the PI of the project as a member and there would be three expert members. The minimum eligibility criteria for applicants would be the same as that for the CSIR-UGC examination. Generally, preference would be given to the candidates who have qualified the NET examination. In case the Selection Committee selects a candidate who has not qualified the NET examination, it has to provide adequate justification for the same in the minutes of the meeting. Any non-NET candidate selected for the Ministry's projects would be designated as Junior/Senior Project Fellow and would be given a fellowship as mentioned under the section on pays and allowances of Research Staff. The Junior/Senior Project Fellow would be allowed to pursue higher University Degrees.

Details of the selection process and the emoluments for research fellows/associates is given in a separate section.

24. The MoEF reserves the right to terminate the grant at any stage if convinced that the grant has not been properly utilized or appropriate progress is not being made. Upon such termination, full audited accounts will have to be submitted and a refund of all unspent balances will have to be made promptly to the Ministry.
25. The project will become operative with effect from the date on which the grant is received by the grantee organization. The date of receipt of the grant will be intimated by the grantee organization to the Ministry of Environment and Forests.
26. If the investigator leaves the institution where the project is based, he should submit 10 copies of complete and detailed report of the work done on the project till the date of his release. Prior to leaving, the Investigator shall inform the Ministry and get an approval to hand over the project to another Investigator who shall be responsible for the completion of the project and submission of the final report.
27. The project will become operative with effect from the date of receipt of the First Demand Draft or through ECS by the grantee organization. The date of receipt of the Demand Draft will be intimated by the Principal Investigator to the Ministry.
28. The duration of the project includes the period for the submission of the Final Technical Report (FTR). No additional time will be provided by the Ministry for the submission of FTR. The submission of the FTR, complete in all respects, within the project duration is essential. The PI will submit Final Technical Report to the Ministry in the prescribed pro forma given in Appendix V. The following measures are proposed in case the PI fails to submit the FTR:

- i) A minimum of 10% of the remaining project outlay would be released only after the submission of a copy of the FTR, complete in all respects.
  - ii) The PI and the institution which do not submit the FTR even six months after the end of the scheduled time period would not be funded by the Ministry in the future.
  - iii) The Head of the Institution (Vice-Chancellor/Registrar/Director) where the PI is located should be intimated regarding the non-submission of the FTR and the decision of Government to suspend future funding to the institution.
  - iv) A list of such PIs and Institutions would be circulated among all government agencies that fund research.
29. The following procedure will be adopted for acceptance of the FTR of research projects:
- i) The Principal Investigator will circulate the draft FTR to the Programme Advisory Committee and to the empanelled peer reviewers and also make a presentation before the Programme Advisory Committee.
  - ii) Based on the recommendation of the Programme Advisory Committee and empanelled peer reviewers, the FTR will be processed in the Ministry for final acceptance by the concerned Divisional Heads for the final settlement of accounts and closure of the project.
30. The grantee organization will furnish 10 copies of a detailed report to the Ministry of Environment and Forests on the outcome of the project, as per the prescribed pro forma. The PI will take all necessary steps to disseminate the outputs and outcomes of the project through print and electronic media.
31. In case of a violation of any of these conditions of the grant or in case of closure or dissolution of the organization, the government may take possession of all the assets of the organization acquired out of Government grants and use them in any manner deemed appropriate or to recover from the organization the value of such assets at its discretion. In the event, after due enquiry, if the Ministry concludes that the progress of a research project is highly unsatisfactory and cannot be improved, it may terminate the project. Upon such termination, full audited accounts and refund of all unspent balances will have to be made promptly to the Ministry.
32. Non-governmental organizations seeking financial assistance for research projects shall execute a Bond in the prescribed format (Appendix VI).
33. All correspondence is to be addressed to the Contact Person specified for the concerned Research Programme.



## **GUIDELINES FOR APPOINTMENT OF JUNIOR RESEARCH FELLOW (JRF)/SENIOR RESEARCH FELLOW (SRF)/ JUNIOR PROJECT FELLOW/ RESEARCH ASSOCIATES IN RESEARCH PROJECTS OF THE MINISTRY**

The following guidelines govern the selection procedures for JRFs and SRFs solely for the purpose of MoEF sponsored projects.

- (a) The available number of fellowships/associateships are to be advertised by the concerned organizations/institutions where the appointment is to be made, in at least one national newspaper and *Employment News* and the website of the institution at least two months prior to the dates on which the candidates are to be called for the oral interview. The calls for the interview must be sent at least three weeks in advance to enable candidates from different parts of the country to make advance travel arrangements. (Suitable TA/DA–rail fare for II class–would be paid to the candidates called for interview.)
- (b) The screening of the applications for calling candidates for interviews should be done by a Screening Committee approved by the Head of the host institution. The minimum educational criteria would be same as applicable for UGC-CSIR NET examination. The final Selection Committee should also be approved by the Head of the host institution and should consist of at least three expert members and the Principal Investigator of the Project.
- (c) During the oral interview, the candidate should be tested for his basic understanding, his knowledge in the subjects relevant to the proposed research programme.
- (d) In selecting candidates through the oral interview, preference should be given to candidates who have passed national written tests like UGC-CSIR national entrance test (NET-JRF & NET) and the GATE examination of Ministry of Human Resource Development
- (e) A separate new category of Junior Project Fellow is introduced. Junior Project Fellows are candidates selected by Selection Committee. These fellows are not NET-qualified, i.e. neither NET-JRF nor NET, and would be given fellowships at the rate given in the table (P.28).

Prior Approval of the RE Division, Ministry of Environment and Forests, is required before appointing a non-NET qualified candidate as a Junior Project Fellow in the research projects sponsored by the Ministry. The Principal Investigator of the project would have to send the following documents for the perusal of the Ministry in this regard:

- (i) Copy of open advertisement in *Employment News* and a national newspaper
- (ii) Tabulated summary of the applicants including whether the applicant is NET-qualified or not
- (iii) Speaking minutes of the Selection Committee providing justification for recommending a non-NET candidate for selection.

The approval of the Ministry for the appointment of a non-NET candidate as a Junior Project Fellow would be subject to the endorsement of the Apex Committee of Research. It may be clarified that the Principal Investigator would be able to appoint the non-NET candidate as Junior Project Fellow after he receives approval of the Ministry but this approval would be subject to the endorsement of the Apex Committee of Research. In case the Apex Committee of Research does not endorse the decision, the Junior Project Fellow would be removed, following due procedure.

A compiled list of research projects wherein non-NET candidates have been selected would be reported to the Apex Committee of Research.

## (f) PAY AND ALLOWANCES OF RESEARCH STAFF

i) Junior Research Fellow (JRF)/Senior Research Fellow (SRF)/Junior Project Fellow

Sl.No.	Designation & Qualification	Revised Emolument per month for the first two years	Emoluments per month after two years/SRF
1.	Junior Research Fellow (JRF) leading to PhD Ø Post Graduate Degree in Basic Sciences/Environmental Sciences/other allied subjects and NET qualified (NET-JRF) OR Ø Graduate Degree in Professional Courses and GATE or equivalent qualification	Rs 16000/-	Rs 18000/-
2.	Junior Research Fellow (JRF) leading to PhD Ø Post Graduate Degree in Basic Sciences/Environmental Sciences/Other allied subjects who have qualified NET for Lectureship	Rs 12000/-	Rs 14000/-
3.	Junior Project Fellow*	Rs 10000/-	Rs 12000
4.	Junior Research Fellow (JRF) leading to PhD Ø Post Graduate Degree in Professional Courses	Rs 18000/-	Rs 20000/-
*This category would be operative till such time that the subject area of Environmental Sciences is included in UGC-CSIR JRF-NET examination or until further orders.			

The host institution should review the performance of the fellow after two years through an appropriate Review Committee constituted by the Head of the Institution. The fellowship indicated in the after two years slab may be provided after successful assessment by this Review Committee.

In programmes where there is a need to engage research personnel at a level higher than JRF/SRF, and such a need has been accepted by the funding agency, the remuneration for such personnel may be fixed as indicated below.

ii) Research Associates (RA)

Remuneration of Research Associates may be fixed at a consolidated amount at one of the three pay levels given below, depending upon the qualifications and experience. The Institute/Organisation concerned may decide the level in which a particular associate should be placed, based on his/her experience. The Essential Qualification (EQ) for RA is as follows:

Doctorate (PhD/MD/MS/MDS) or equivalent degree or having three years of research, teaching and design and development experience after MVSc/MPharm/ME/MTech.

Sl.No.	Category	Revised Emoluments per month
1.	Research Associate (RA-I)	Rs 22000/-
2.	Research Associate II (RA-II)	Rs 23000/-
3.	Research Associate III (RA-III)	Rs 24000/-
The stipend of Research Fellow/Associate is exempt from the payment of income tax under 10(16) of IT Act, 1961.		

**(g) Service Conditions:**

1. DA and CCA: JRFs, SRFs and Research Associates will not be entitled to these allowances.
2. House Rent Allowance (HRA): All Research Fellows may be provided hostel accommodation, wherever available, and those residing in accommodation provided by the Institute will not be eligible for drawing HRA. Wherever provision of hostel accommodation is not possible, HRA may be allowed to all the above categories, viz., JRF, SRF and RA, as per Central Government norms applicable in the city/location where they are working. The fellowship amount may be taken as basic for calculating the HRA.
3. Medical Benefits: Research Fellows and Research Associates (JRF/SRF/RA) will be entitled for medical allowance as applicable in the implementing institution.
4. Leave and other entitlements benefits: JRFs/SRFs are eligible only for casual leave while Research Associates are entitled to leave as per the rules of the host institution. Participation of any of these categories (JRFs/SRFs/RAs) in any scientific event/workshops in India or abroad will

be treated as “on duty”. The travel entitlement for JRFs/SRFs/RAs for participation in scientific events/workshops in India will continue to be the same as earlier, i.e. 2nd AC by rail. Maternity leave as per Government of India instructions issued from time to time would be available to female candidates in all categories.

5. Bonus and Leave Travel Concession: JRFs, SRFs and Research Associates will not be entitled to these allowances.
6. Retirement Benefits: JRFs, SRFs and Research Associates will not be entitled to these benefits.
7. Publication/Patent: The results of the research work under taken by the JRFs/SRFs/RAs may be published in standard referred journals at the discretion of the fellow or his Guide. It should be ensured by the fellow that the assistance provided by the funding agency of Government of India is acknowledged in all such publications.
8. Encouragement for pursuing higher degree: Students selected as JRFs/SRFs may be encouraged to register for higher degrees and the tuition fees to undertake these studies may be reimbursed to the student from the contingency grant sanctioned under the project grant, if required.
9. Obligations of JRF/SRF/RA: The obligations of JRFs/SRFs/RAs are enumerated below.
  - a) He/she shall be governed by the disciplinary regulations of the host Institute where he/she is working.
  - b) The JRF/SRF/RA must provide a detailed consolidated report of the research work done during the entire period of Fellowship on completion of the tenure/resignation of the Fellowship at the earliest.

## COVERING LETTER FOR APPLYING FOR RESEARCH GRANTS

To

The Secretary  
Ministry of Environment & Forests  
Paryavaran Bhawan  
CGO Complex, Lodhi Road  
New Delhi-110 003.

Sir,

1. A research project entitled “ \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ ” is forwarded herewith.

2. It is certified that the same project or project with similar objectives has not been submitted to any other funding agency by the Investigator.

3. We have carefully read the terms and conditions of sanctioning the project and agree to abide by them.

4. The organization will provide all necessary infrastructural facilities (both laboratory and administrative) if the project is sanctioned.

5. The organization is fully responsible in regard to matters pertaining to the project.

6. Certified that the equipment proposed in the project proposal are not available in the Department/Institution or are available in the Department/Institution but not available for dedicated project use. The following is the list of equipments:

a).....

b).....

Yours faithfully,

(Principal Investigator)

Date.....

(Registrar/Director/Head of the Institution)

Place.....

## APPLICATION PRO FORMA FOR GRANT FOR RESEARCH PROJECT (To be filled in by the Principal Investigator)

1. Title of the Project :
  2. Name and Designation of the Principal Investigator :
  3. Name and Designation of the Co-investigator :
  4. Postal Address of the Principal Investigator and Co-investigator :
  5. Name of the institution(s)/organization(s) in which the project will be carried out (Specify whether College or educational institution (Private/aided/government/autonomous)/University Department/Government Institution /Non-governmental organization, etc.) :
  6. Name of other institution(s)/Organisation(s) involved in the project (Specify whether College or educational institution/University Department/ Government Institution/Non-governmental organization, etc.) :
  7. Geographic location of research project site (latitude and longitude), wherever applicable :
  8. Participation of public and private sector and/or other government ventures :
- (Please give details regarding sharing of work components, cost and outputs, including implementation arrangements, and modalities of achievement of the envisaged objectives against the stated milestones of work)
7. Duration of the Project :
  8. Total amount of assistance required :
  9. The detailed project proposal consists of the following :

**Part I** - AN ABSTRACT, NOT EXCEEDING ONE PAGE, describing the background, objectives, methodology and figures of year-wise budget and keywords (six words)

**Part II** - should contain the following:

- a) State of Art of the subject: including work done in India and elsewhere
- b) Detailed literature survey
- c) Objectives
- d) Detailed methodology
- e) Year-wise work plan
- f) Minimum required tenure of the project
- g) Practical relevance/utility of the project
- h) Expected and other physical outcomes of the project
- i) Agencies which can utilize the results of the project
- j) Techno-commercial feasibility of the project
- k) Modalities for replication of the outcomes
- l) Standardization of the design parameters for technology and preparation of protocols/ prototypes for achieving reliable and replicable processes
- m) Component-wise justification of the costing of the project
- n) Cost-benefit analysis in terms of physical outputs and environmental benefits
- o) Statement of originality and certification on No Duplication with existing work/ongoing projects

**Part III** - Biographical Sketch of the investigator(s) detailing research credentials and research papers published in the area of the proposed research project

**Part IV** - Facilities (equipment/instruments) available at institution(s)/organization(s) for carrying out the project

**Part V** - Project budget in the prescribed format

## PROJECT BUDGET

A.	Salaries & Wages:	I Year	II Year	III Year	Total
1.	Research Associate				
2.	JRF/SRF				
3.	Supporting technical staff or other personnel, if any				
	Grand total:				

\* Please specify the rate of salary and wages per month for each category and also rates of HRA and Medical Benefit.

### B. Permanent Equipment (Please specify various individual items of equipment)

Total equipment cost

- C. Expendables/Consumables  
(Chemicals & Glassware)
- D. Travel
- E. Other project costs, if any (please specify)  
This head may include items such as  
organization of workshops,  
maintenance of equipment,  
analyses of samples, etc.
- F. Contingencies
- G. Dissemination of Research Work
- H. Institutional Charges (as per Section 9 of these guidelines) – (A to F)  
Except permanent equipment cost

Grand Total (A+B+C+D+E+F+G+H):

(Justification for amounts proposed under each head must be furnished with a view to justify its need and relevance to the project).



**CERTIFICATE TO BE PROVIDED BY THE PRINCIPAL INVESTIGATOR/CO-INVESTIGATOR/HEAD OF THE INSTITUTION**

1. It is certified that we have completed the projects entitled
  - i)
  - ii)
  - iii)

sanctioned by the Ministry of Environment & Forests and have submitted the Final Technical Reports, financial statements, etc. to the satisfaction of the Ministry.

2. Certified that funds have not been received from other divisions of the Ministry for the same project.
3. Certified that the following projects are being conducted by the PI with the funds received from other funding agencies.

S.No.	Title of the Project	Funding Agency	Scheduled date of completion
1.			
2.			

4. Certified that the equipment proposed in the project proposal are not available in my laboratory/institution.

Investigator/Co-investigator

Signature of Principal/Dean of University/Head of the Institution

Place

Date

Note: Strike out whichever is not applicable

A copy of the project financed from other sources along with a copy of its sanction letter may also be attached.

## ENDORSEMENT FROM HEAD OF THE INSTITUTION

(To be given on letter head)

**Title of the Project:**

1. The Institute certifies the participation of \_\_\_\_\_ as the Principal Investigator and \_\_\_\_\_ as the Principal Co-investigator for the project and that in the unforeseen event of discontinuance by the Principal Investigator, the Principal Co-investigator will assume the responsibility of the fruitful completion of the project (with due information to the MoEF).
2. Certified that the equipment and other basic facilities mentioned in part IV of Appendix II and such other administrative facilities as per terms and conditions of the grant, will be extended to the investigator(s) throughout the duration of the project.
3. The Institute assumes to undertake the financial and other management responsibilities of the project.

Date:

Place:

Name and Signature of  
Head of the Institution

# APPENDICES



## UTILIZATION CERTIFICATE MINISTRY OF ENVIRONMENT AND FORESTS

(To be sent in duplicate)

**For the financial year (from 1<sup>st</sup> April of the current year to 31<sup>st</sup> March of the next calendar year)**

1. Title of the Project/Scheme/Programme :
2. Name of the Principal Investigator & Organization. :
3. Ministry of Environment & Forests Letter No. :  
and date of sanctioning the project.
4. Amount brought forward from the previous financial :  
year, quoting the Ministry of Environment & Forests  
Letter No. and date on which the Authority to  
carry forward the said amount was given
5. Amount received from Ministry of Environment :  
& Forests during the financial year  
(Please give number and dates of sanction orders  
showing the amount paid)
6. Total amount that was available for expenditure :  
(including commitments) incurred during the  
financial year (S.No. 4+5)
7. Actual expenditure (excluding commitments) :  
incurred during the financial year
8. Unspent Balance amount refunded, :  
if any (Please give details of Cheque  
No., etc.)
9. Balance amount available at the end of :  
financial year.

10. Amount allowed to be Carried forward :  
to the next financial year vide Letter  
No. and date

11. Accrued bank Interest :

Certified that the expenditure of Rs.....  
Rupees .....) mentioned against Column  
7 was actually incurred on the Project/Scheme for the purpose which it was sanctioned.

Date:

\_\_\_\_\_  
(Signature of  
Principal Investigator)

\_\_\_\_\_  
(Signature of Registrar/  
Accounts Officer)

\_\_\_\_\_  
(Signature of Head  
of the Organization)

OUR REF. NO.

ACCEPTED AND COUNTERSIGNED

Date:

COMPETENT AUTHORITY  
MINISTRY OF ENVIRONMENT & FORESTS

\_\_\_\_\_  
Signature of the  
Principal Investigator

\_\_\_\_\_  
Head of the Institution

\_\_\_\_\_  
Registrar

## EXPENDITURE STATEMENT MINISTRY OF ENVIRONMENT & FORESTS

Statement showing the expenditure of the period from..... to  
\_\_\_\_\_.

Sanction No. & Date :

1. Total outlay of the project: Rs \_\_\_\_\_

2. Date of Start of the project: \_\_\_\_\_

3. Duration: \_\_\_\_\_

4. Date of Completion: \_\_\_\_\_

a) Amount received during the financial year: \_\_\_\_\_

b) Unspent amount carried forward from previous financial year: Rs \_\_\_\_\_

c) Total amount available for Expenditure (a + b): Rs \_\_\_\_\_

S.No.	Budget head	Amount carried forward	Amount received	Amount received + amount carried forward	Amount Balance/ excess expenditure
1	Salaries				
2	Permanent Equipment Purchased (item-wise)				
3	Expendables/Consumables				
4	Travel				
5	Contingencies				
6	Other Project Costs, if any (please specify)				

7	Dissemination of Research Work				
8	Institutional Charges				
9	Accrued bank Interest				
10	Total				
11	Amount allowed to be Carried forward to the next financial year.				

Certified that the expenditure of Rs .....

Rupees.....) Actually incurred on the Project/Scheme for the purpose for which it was sanctioned.

\_\_\_\_\_  
 (Signature of Principal Investigator)

\_\_\_\_\_  
 (Signature of Registrar/  
 Accounts Officer)

\_\_\_\_\_  
 (Signature of Head of the Organization)

OUR REF. NO.

ACCEPTED AND COUNTERSIGNED

Date:

COMPETENT AUTHORITY

MINISTRY OF ENVIRONMENT & FORESTS



## PRO FORMA FOR ANNUAL PROGRESS REPORT

### Part-I

1. Name & Address of the Principal Investigator (PI) :
2. Telephone & Fax No. :
3. Project Details
  - 3.1 Title
  - 3.2 Sanction Number (Date & Year)
  - 3.3 Date of Start
  - 3.4 Date of completion (expected)
4. Financial Details
  - 4.1 Total Outlay
  - 4.2 Amount received so far
  - 4.3 Amount utilized so far
  - 4.4 Projected requirements for the remaining period
5. Staff
  - Research Associate/Senior Research :  
Fellow/JRF/TA/FA, etc.
6. Permanent equipment sanctioned/procured (Please give details such as Name, Model, Accessories, etc. & date on which these were purchased by the Awardee or received from the MoEF)
7. Percentage utilization of Permanent equipment

## Part-II

1. Scientific components of the project :
  - 1.1 Objectives of the project
  - 1.2 Objectives undertaken so far
2. Area of work :
  - i) State
  - ii) District
  - iii) Location

(Please provide the map, if possible).
3. A brief resume of the work done since the inception of the project:
4. Methodology followed:
5. Achievements & Deficiencies, if any (Please enumerate findings in a cogent and concise manner):
6. Results of academic importance:
7. Results of practical importance:
8. Publications/Patent, if any, based on the date of the project:  
(Attach photocopies)
9.
  - i) Statement by the PI with reference to overall performance and attainment of the objectives of the project
  - ii) Any other information related to the project work

Signature of the PI

## PRO FORMA FOR MAINTAINING ASSETS

Assets acquired wholly or substantially out of Government Grants

Register to be maintained by grantee institution

Name of sanctioning authority							
Sl.No.	Name of grantee institution	No. and date of sanction	Amount sanctioned	Brief purpose of grant	Whether any condition regarding the right of ownership of Govt. on the property or other assets acquired, out of the grant was incorporated in the grant-in-aid sanction	Particulars of assets actually created or acquired	Value of the assets as on

Amount released on disposal	Reason and authority for disposal	Disposed of or not	Reasons if encumbered	Encumbered or not	Purpose for which utilized at present	Remarks	Usefulness Of the Equipment & its percentage utilization

Certified that above items are entered in Stock Register No. \_\_\_\_\_

Page No. ....on.....

Signature of Principal Investigator

Signature of Registrar/Director/  
Head of the Institution

**PRO FORMA FOR FINAL TECHNICAL REPORT**

**Part-I**

- 1. Title of the Project :
- 2. Name of the PI & Address :
- 3. Number & Date of Sanction Letter :
- 4. Duration of the Project
- 4.1 Date of Commencement
- 4.2 Date of Completion
- 4.3 Extension of period
- 5. Budget
- 5.1 Total amount sanctioned during  
The entire tenure under different  
Subheads :
- 5.2 Total amount spent during the  
Entire tenure under different  
Sub-heads

Receipt

Expenditure

- 1. Salaries
- 2. Permanent Equipment
- 3. Expendables/Consumables
- 4. Travel
- 5. Other project costs
- 6. Contingencies
- 7. Dissemination of Research Work
- 8. Institutional Charges
- 9. Bank interest, etc.

## **Part-II**

1. Preface :
2. Abstract of the Project :
3. Highlight of the findings achieved In the Project. :
4. Detailed report of work done on the Project. :
- i) Summary of the objectives
- ii) Methodology
- iii) Result
- iv) Discussion and Analysis
- v) Tables, charts, etc.
- vi) Figures
- vii) Likely impact of the work on the Scientific potential of our country.
- viii) Bibliography
5. Executive Summary of the Project (not exceeding 5-6 pages).

## **Part-III**

1. Recommendation including remedial measures relevant to the environmental problems studied under the Scheme.
2. List of research papers published/accepted in journals/Patent the research work done under the Scheme.  
(Two copies of each of the reprints/accepted Papers also to be enclosed).

Signature of the Principal Investigator

Registrar/Head of the Institution

**PRO FORMA FOR BOND TO BE FURNISHED BY THE  
NON-GOVERNMENTAL ORGANISATION**

KNOW ALL MEN BY THESE PRESENTS THAT we, signed for and on behalf of a Society registered under the \_\_\_\_\_ and having its office at \_\_\_\_\_ (herein after called the 'Obligors' which terms shall unless excluded by or, repugnant to the context be deemed to include its successors, permitted assigns and all persons entitled to and capable of disposing of the assets and properties of the obligors) are held and firmly bound to the President of India (herein after called the 'Government', which term shall unless excluded or repugnant to the context be deemed to include his successors and assigns) in the sum of Rs \_\_\_\_\_(Rupees\_\_\_\_\_only) well and truly to be paid to the Government on demand and without a demur for which payment we firmly bind ourselves by these Presents,

1. SIGNED this \_\_\_\_\_day of \_\_\_\_\_in the year Two thousand\_\_\_\_\_.
2. WHEREAS on the obligor's request, the Government has as per the Union Ministry of Environment & Forests Letter No. \_\_\_\_\_dated \_\_\_\_\_(hereinafter referred to as the 'Letter of Sanction' agreed to make in favor of the obligors a grant of Rs \_\_\_\_\_(Rupees \_\_\_\_\_only) out of which Rs \_\_\_\_\_(Rupees\_\_\_\_\_only) have on \_\_\_\_\_been paid to the obligors (the receipt of sum the \_\_\_\_\_do hereby admit and acknowledge) on condition of the obligors having agreed to the terms and conditions mentioned in the letter of sanction.
3. NOW the condition of the above-written obligation is such that if the obligors duly fulfil and comply with all the terms and conditions mentioned in the Letter of Sanction then the above written bond or obligation shall be void and of no effect; but otherwise it shall remain in full force, effect and virtue.
4. And those Presents further witness as under:
  - i. The decision of the Secretary to the Government of India in the Ministry of Environment and Forests on the question as to whether there has been breach or violation of any of the terms and conditions mentioned in the Letter of Sanctions shall be final and binding on the obligors.
  - ii. The Government has agreed to bear the stamp duty, if any, chargeable on the Presents.
5. In witness whereof those Presents have been executed on behalf of the obligors pursuant to the Resolution No. \_\_\_\_\_dated\_\_\_\_\_passed by the Board of the Management of the Society (Governing Body) of the obligors, on the and year herein above-written.

Obligors in the presence of  
With name and address

Accepted for and on behalf of

1. Signature of the grantee institution
2. (for office use only) Of the President of India  
Witness:- (Name and Designation)





**For further details, please contact:**

Adviser (RE)

Ministry of Environment & Forests  
Paryavaran Bhawan, CGO Complex  
Lodhi Road, New Delhi - 110 003

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