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No. B-35011/17/2025-C&I-Part(1)
GOVERNMENT OF MIZORAM
COMMERCE, INDUSTRIES, GEOLOGY & MINING DEPARTMENT

Mizoram Secretariat, MINECO.
Aizawl, the 1st July, 2026.

To

✓
The Director
Directorate of Commerce & Industries
Mizoram : Aizawl

Subject:

**Launch of Open Call for Startups, MSMEs, Innovators,
and organizations under the BHARAT-WIN Portal for
water Sector innovation- reg**

Sir,

With reference to the subject cited above, I am directed to enclose herewith a copy of letter received from Ministry of Jal Shakti, Dept of Water Resources, River Development & Ganga Rejuvenation dated 23rd June, 2026 for necessary action.

Encl: As Stated

Yours faithfully,

Digitally signed by
LALENGZAMI RALTE
Date: 01-07-2026
11:46:52

(LALENGZAMI RALTE)

Under Secretary to the Govt. of Mizoram
Commerce, Industries, Geology & Mining Department

Directorate of Commerce & Industries
Mizoram : Aizawl

Receipt No. 790

Date. 21/7/26

P.O (Plg)
Mm 3/7
DA

Government of India/ भारत सरकार

Ministry of Jal Shakti/ जल शक्ति मंत्रालय

Department of Water Resources, River Development & Ganga Rejuvenation

जल संसाधन, नदी विकास और गंगा संरक्षण विभाग

Research and Development Division/ अनुसंधान एवं विकास प्रभाग

First Floor, Wing- 4, West Block-1, R.K. Puram, New Delhi- 110066

प्रथम तल, विंगन. 4, पश्चिम खण्ड-1, आर के पुरम, नई दिल्ली-110066

Telephone/ दूरभाष-011-29583482, Email/ ई-मेल: watrnd-mowr@nic.in

No. 15/2/2026-R&D / 122

Dated: June 23, 2026

OFFICE MEMORANDUM

To,

Chief Secretaries/Secretaries (Water Resources)

All States/UTs

Sub: Launch of Open Call for Startups, MSMEs, Innovators, and organisations under the BHARAT-WIN Portal for Water Sector Innovation – reg.

Sir/Madam,

I am directed to refer to the revised Research & Development (R&D) Guidelines (copy enclosed) of the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti. This initiative is designed to foster scientific and technological solutions to address India's water challenges through a 'Whole-of-Government' approach.

2. As part of this initiative, A Jal Shakti Hackathon was conducted during 2025-2026, during which nineteen (19) winning teams were selected for their innovative ideas. Now, the Ministry has launched an open call for Startups and MSMEs to support product and prototype development in the water sector. Detailed information regarding the Open Call, thematic areas, eligibility criteria, and submission guidelines is available on the Bharat WIN Portal (<https://bharatwin.mowr.gov.in>) or through the BHARATWIN APP, available on Android and iOS.

3. The submission of proposals begins on 1st June 2026, and the last date for submission is 31st July 2026. Eligible applicants will receive financial support and grants-in-aid to develop prototypes and products. The ultimate goal of this endeavour is to create practical, scalable, and field-ready solutions for the water sector.

4. The active participation of innovation-driven enterprises from your State/UT will significantly contribute to the development of indigenous, scalable, and sustainable technological solutions to address emerging water-sector challenges and to strengthen national water security and sustainable water resources management.

5. In this regard, to maximize outreach and encourage the participation of as many Startups, MSMEs, Innovators, Startup Missions, Innovation Councils, Incubation centres, Organisations, etc., you are requested to kindly disseminate this Open Call widely within your States/UTs and also host the details of this initiative on your respective official websites and digital platforms.

Encls: As above

Yours faithfully,

(Srinivasu Bairy)

Director (R&D)



P.B. of Secretary
Commerce & Industries
Receipt No. 439
Date 24/6/26

Secy. CI, 44M
Secy. IWR

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24/6

25/6/26

Copy to:

1. PPS to Secretary, DoWR, RD&GR, Shram Shakti Bhawa, New Delhi- 110001
2. PPS to AS&MD, National Water Mission, DoWR, RD&GR, Block No. 3, CGO Complex, Lodhi Road, New Delhi-110003.
3. PPS to JS, National Water Mission, DoWR, RD&GR, Block No. 3, CGO Complex, Lodhi Road, New Delhi-110003.

(4)

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
अनुसंधान एवं विकास प्रभाग
प्रथम तल, विंग न. 4, पश्चिम खण्ड-1, आर के पुरम, नई दिल्ली-110066
दूरभाष-011-29583482, ई-मेल: watrnd-mowr@nic.in
No. 18/30/2020-R&D/ Dated: 01.12.2025

Sub: Circulation of Revised Guidelines for Implementation of R&D Programme (Sponsoring & Coordinating Research in Water Sector) – regarding.

Sir/Madam,

I am directed to convey that the revised Guidelines for Implementation of the R&D Programme (Part-I and Part-II) under the sub-component "Sponsoring and Coordinating Research in Water Sector" The approved Guidelines (Part-I and Part-II) are enclosed herewith. INCs are requested to:

- Circulate the guidelines amongst concerned institutions, experts and committee members.
- Ensure that all new proposals are aligned with the revised provision.

This issues with the approval of the competent authority.

Digitally signed by
Lokesh Kumar Meena
Date: 01-12-2025
16:29:34
(Lokesh Kumar Meena)
Assistant Director (R&D)

To,

1. Member Secretary, Indian National Committee on Climate Change (INCCC), NIH, Roorkee.
2. Member Secretary, Indian National Committee on Ground Water (INCGW), CGWB, Faridabad.
3. Member Secretary, Indian National Committee on Surface Water (INCSW), CWC, R K Puram.

Copy for information to:

1. PPS to AS & MD (NWM), DoWR RD&GR, 2nd Floor, Block-III, CGO Complex, Lodhi Road Delhi 110003.
2. PPS to JS (NWM), DoWR RD&GR, 2nd Floor, Block-III, CGO Complex, Lodhi Road Delhi 110003.

**Guidelines for Implementation of R&D Programme
(Sponsoring & Coordinating Research in Water Sector)
Part-I: Instructions for Investigators**

1.0 Introduction

1.1 R&D Programme of DoWR, RD&GR, MoJS - Scope & Objectives

Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD&GR), Ministry of Jal Shakti (MoJS) provides financial assistance to promote research work in the field of Water Resources under the sub-component "Sponsoring and Coordinating Research in Water Sector" of the scheme "Research and Development Programme in Water Sector and Implementation of National Water Mission" during 15th Finance Commission Period and subsequent plans. The assistance is provided by way of grants to academicians/experts (investigators) in the Universities, IITs, recognized R&D laboratories, Water Resources/ Irrigation departments of the Central & State Governments and NGOs.

Considering the peculiarities and large variation in the nature of problems associated with water resources planning and development, the issues involved in research related to particular region and specific projects, DoWR, RD&GR is sponsoring research proposals of applied nature along with basic and action research. The research activities of such nature are implemented through Committees constituted by the Ministry involving the academicians/experts.

R&D Division, DoWR, RD&GR, MoJS is Subject Matter Division (SMD) for coordination of above research activities which acts as the Ministry's interface with above Committees. It is also working as Secretariat to "Standing Advisory Committee (SAC) in Water Sector" of DoWR, RD&GR for approval of recommended research proposals.

Guidelines for formulation and submission of the research proposals and other related instructions are given in this document along with its Appendices & Annexure.

1.2 Indian National Committees (INCs)

In order to coordinate the research activities, DoWR, RD&GR, MoJS has constituted Indian National Committees (INCs) on various aspects related to Water Resources Development and Management. At present, three Research Committees, namely, on Surface Water, Ground Water and Climate Change has been constituted. The subject domains of research for these INCs are provided in **Appendix-1**. The research needs identified by the Department, after consultation with relevant stakeholders, are given in **Appendix-2**. Considering the significant number of areas where research is needed, priority areas for research have been identified and are listed in **Appendix-3**. The research and development efforts should primarily concentrate on these priority areas. However, it is important to note that research in other areas mentioned in the 'Research Needs' should also continue to be pursued.

The research proposals can be submitted at any time during the year to concerned Indian National Committees / R&D Division.

The Member Secretaries and addresses of the INCs Secretariat for sending the proposals and other related correspondence are given below:

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I) Indian National Committee on Surface Water (INCSW)

Member Secretary: Director, WS&RS Directorate, Central Water Commission
Secretariat: WS&RS Directorate, Central Water Commission, 1st Floor, Wing-4, West Block-1, R. K. Puram, New Delhi - 110066
 Phone: 011-29583435
 Email: incsw-cwc@gov.in

II) Indian National Committee on Ground Water (INCGW)

Member Secretary: Scientist (JAG level officer), Central Ground Water Board
Secretariat: INCGW Secretariat, Central Ground Water Board, Bhujal Bhawan, NH-4, Faridabad - 122001 (Haryana)
 Phone: 0129-2477112
 Email: msincgw-cgwb@nic.in, tsmeast-cgwb@gov.in

III) Indian National Committee on Climate Change (INCCC)

Member Secretary: Scientist (JAG level officer), National Institute of Hydrology, Roorkee
Secretariat: INCCC Secretariat, National Institute of Hydrology, Roorkee-247667
 Phone: 01332-249216,
 Email: inccc.nih@gmail.com

IV) Technical Evaluation Committee (TEC)

After receiving the proposals from Startups/MSME/Industries/academia for developing Proof of Concept, Pilots/Commercial Product, the Technical Evaluation Committee, as constituted by SAC, shall conduct a detailed evaluation of the proposals. The details of the TEC and SAC are in Part II of Guidelines.

1.3 R&D Division, DoWR,RD&GR, MoJS (Subject Matter Division)

The R&D Division is Subject Matter Division (SMD) of DoWR,RD&GR, MoJS for coordinating the sub-component "Sponsoring and Coordinating Research in Water Sector" of scheme "Research and Development Programme in Water Sector and Implementation of National Water Mission". The contact detail of the R&D Division is given below:

Director, R&D Division

Department of Water Resources, River Development & Ganga Rejuvenation,
 Ministry of Jal Shakti,
 1st Floor, Wing-4, West Block-1,
 R. K. Puram, New Delhi - 110066.

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Telephone: 011-29583482
Email: watrnd-mowr@nic.in

2.0 General Instructions

2.1 Research Categories

Research and related activities for which Grants-in-Aid from DoWR, RD&GR can be sought shall cover one or more from the following list:

- Basic Research
- Applied Research
- Action Research

2.2 Types of Research Proposals

i) Invited Research Proposals

The proposals which are invited by DoWR, RD&GR directly for research in the priority areas and other areas of substantial importance in water sector are termed as Invited Research Proposals.

2.3 Investigators (PI & Co-PI)

The academicians/experts responsible for conducting research are called Investigators. Depending upon the magnitude and nature of research involved, scheme may have more than one investigator and in such a case, the first investigator shall be known as Principal Investigator (PI) and others as Co-Principal Investigator (Co-PI). Association of Co-PI in a research scheme is desirable.

2.4 Institution & Lead Institution

Any technical, scientific, academic establishment or research organization where research work is carried out through funding by Central / State Government and where PI is working, is to be known as **Institution**.

In the event of multi institutional (collaborative) proposals involving two or more institutions, the institution taking lead in the research will be termed as **Lead Institution**.

2.5 Who can be funded

The following Indian Organizations/ Institutions/private sector would be considered for funding:

- Top 50 NIRF/THE/QS-ranked Institute of National importance, Incubators.
- R&D Institutes/Labs of the Central or State Government
- Organisations under MoWR
- Indian NGOs registered under relevant Society Act, non-profit making recognized Indian Private R&D Institutions/ Organizations registered with Department of Scientific and Industrial Research (DSIR) having adequate infrastructure and facilities to carry out R&D work
- Startups/MSME/Industries/academia for developing Proof of Concept, Pilots/Commercial Product.

- Any other approved by SAC.

2.6 Items that can be funded

The following items may be considered for funding:

- i) Remuneration / Emoluments for research personnel in the grades of Junior Research Fellow (JRF)/ Senior Research Fellow (SRF)/ Research Assistant (RA) as per DST Guidelines dated 26.06.2023 (**Appendix-4**) and their subsequent revision time to time.
- ii) Cost of conducting the experiment including cost of consumables, books, journals reference manuals/codes.
- iii) Travel in connection with the research.
- iv) Purchase of equipment and development of infrastructure necessary for the research, as approved.
- v) Overhead Charge as per DST guidelines (**Appendix 5**) and their subsequent revision time to time, if the host institute is providing facilities like infrastructure, staff, water, electricity communication, etc.
- vi) Organizing hackathons on priority water issues to generate innovative problem statements. An initial support of Rs 1 lakh to the hackathon winners may be provided for developing detailed Proof-of-concept (PoC) proposals for the selected projects. .
- vii) Pilots/Prototype/Commercial Product up to Technology Readiness Level (TRL7/8).
- viii) Any other item approved by SAC.

2.7 Items that cannot be funded

Funding is not provided for the following items:

- i) Foreign travel.
- ii) Salary of the PI, other investigators and non-research staff who are regular employees of the Institute.
- iii) Honorarium or cash incentives in any form for the investigators and research staff.
- iv) For infrastructure such as construction, maintenance and repair of buildings, purchase of vehicle, ACs, etc.
- v) Any other item that may be disallowed by SAC.

3.0 Preparation of Research Proposal

The proposal should be well written clearly stating a synopsis of the work already done nationally and internationally, the objectives, methodology, estimated cost, duration of scheme, milestones and phasing of physical & financial progress, deliverable and outcomes.

Proposals which clearly identify the new aspect of a technology/ innovation to be made and propose to take the investigation to its logical conclusion including field trials; proposals where the probable users of the new technology are not only identified but also join

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the R&D work, stand a better chance of acceptance. The PI should ensure that the proposed research have not been done elsewhere to avoid duplication.

Note: Proposals that do not undertake investigation of any new techniques, which are more in nature of data collection and application of known techniques to the data; proposals where the end-user of the new technique is not clearly identified, will generally be discouraged.

3.1 Components / Expenditure Heads of Estimate

The expenditure to be incurred on the research scheme may be kept under the following expenditure heads /components while preparing the estimate:

1. Research Manpower
2. Travel Expenditure (TE)
3. Infrastructure / Equipment
4. Experimental charges
 - Consumables
 - Non-research personnel
 - Third party service (typing of report, lab analysis etc.)
5. Contingency
6. Overhead Charges

The proposal should contain year-wise physical and financial phasing of each component. The provisions for above expenditure heads/ components as elaborated in the following Para should strictly be adhered to while formulating the proposal.

3.1.1 Research Manpower

- a. A limited number of research personnel, called Research Staff, may be engaged to assist the investigators in conducting research. There are only three categories for the research personnel allowed in the research schemes:
 - Junior Research Fellow (JRF)
 - Senior Research Fellow (SRF)
 - Research Associate (RA)
- b. Eligibility and Remuneration / Emoluments for research personnel (JRF, SRF and RAs) would be as per orders issued by DST/ DoWR, RD&GR from time to time. The present order in this regard is given at **Appendix-4**.
- c. The components of Remuneration / Emoluments for research personnel should be indicated in the estimate in terms of man-months and all financial outgo for it should be indicated year/phase-wise in the estimate.
- d. Though the primary responsibility of conducting the research is that of the PI and Co-PIs, no part of their salaries can be charged to the estimate. The salaries of the investigators (PI and Co-PIs) are to be paid out of the regular budget of the institute where they are employed.

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- e. No provision for honorarium or other such cash incentives to the Investigators is permissible.
- f. The reward for the investigators (PI and Co-PIs) is indirect, by way of opportunity for pursuit of academic excellence and its attendant benefits; travel grants; opportunities to participate in seminars/workshops; grants for purchase of books and journals, etc..

3.1.2 Travel Expenditure (TE)

- a. Provision can be made in the estimate for travel expenditure connected with research. The entitlement for TE for each category will be as per the rules of host Institute. The estimate should not be lump sum. The places intended to be visited, number of visits, purpose, mode / class (economy class by air/ AC-II tier by rail/by road restricted to AC-II tier of rail fare) should be given.
- b. The mode of journey allowed (air/rail/road) will be as per the TE entitlement rules of the host Institute and limited to rates admissible under Govt. of India rules and directions issued by Ministry of Finance from time to time.
- c. Provision should be made for one long distance journey by one person once a year for attending R&D Session or meeting of the RC for presentation of work done. The provision made on this account should be indicated separately.

3.1.3 Infrastructure

- a. Infrastructure comprises purchase of equipment of a permanent nature and its installation; purchase of software; purchase of data like the meteorological data from IMD or the satellite imageries from NRSC. The provision for infrastructure/equipment etc. should be linked with the actual requirement at the start of relevant phasing subject to provision of Para 2.7. Separate details indicating year-wise / phase-wise requirement of infrastructure and equipment need to be indicated in the proposal.
- b. The estimate for equipment to be purchased should be based on Proforma Invoices or budgetary quotations for all the items. The Proforma Invoices should be enclosed with the proposal.
- c. Provision for minor items/equipment up to Rs. 1000/- such as pipelines, fixers, general tool etc. even of permanent or semi-permanent nature may be made under "Experimental Charges".
- d. Purchase of computers and its peripherals may be considered only in rare cases where the importance of the work so demands.
- e. NGOs and Private Institutions would have to bear 50% of the equipment cost.

3.1.4 Experimental Charges

- a. Experimental Charges include the expenditure for actually conducting the research and comprises cost of engaging any labour, cost of all consumables, research related seminar/conference, cost of any construction related to research activity sanctioned in the scheme.

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- b. Provision for minor items/equipment up to Rs. 1000/- such as pipelines, fixers, general tool, etc., even of permanent or semi-permanent nature may be made under this head.
- c. Wages for non-research personnel/ staff (laborers etc.) engaged for research scheme may be allowed under "Experimental Charges" only if following two conditions are fulfilled:
 - The said staff is engaged specifically for the purpose of said research.
 - The said staff will be working full time only for the purpose of said research.

In case such provision is made, the PI should provide justification and Certificate for the same along with the Expenditure Statement.

- d. No salary of the lab assistant, helper, typists and other such personnel who are employees of the institute, can be charged to the research scheme. However, a provision for a nominal honorarium to such non-research staff of the Institute may be made under Experiment Charges for their extra work done for the research scheme. Only one person may be so considered for such extra work from one scheme at a time. The PI should give a certificate to this effect.
- e. Provision for printing of 10 copies of the Final Report may be made under this head. Five copies of the report need to be sent to the RC along with its soft copy and five copies may be kept with the PI/Institute. If the report is found to be useful and worthy of wider distribution, the RC will make arrangement to print more copies. If the PI or the institute needs more than five copies then the institute should bear the cost for the same.

3.1.5 Contingency

- a. Contingency is only a budget provision for unforeseen situations; for any variation in estimation of four main sub-heads. A provision of upto 5% of the total cost of these or Rs 1.00 lakh, whichever is less can be included in the estimate.
- b. It is emphasized that contingency is not a separate head of expenditure. There are only four heads for expenditure, namely Research Manpower, Travel Expenditure, Infrastructure and Experimental Charges. Therefore, the contingency is not visible in the Expenditure Statement, whereas it may be visible in the estimate.

3.1.6 Overhead Charges

- a. Overhead Charges is provided to the host Institute for providing its facilities like infrastructure, staff, water, electricity, communication etc. for conducting research during operation of the scheme.
- b. The provision of Overhead Charges is based on norms for individual centric extramural research project issued by the Department of Science and Technology (DST) from time to time. The latest norms issued vide OM No. SR/S9/Z-11/2013 dated 24.2.2015 (Appendix 5) are as under:

(i) For proposals costing upto Rs. 1.0 crore - 10% of the total cost for educational institutions and NGOs and 8% for laboratories and institutions under Central and State Government Department/Agencies;

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- (ii) **For proposals costing more than 1.0 crore and upto Rs. 5.0 crore** - Rs. 15.00 lakh or 10% of the total cost whichever is less;
 - (iii) **For proposals costing more than 5.0 crore and upto Rs. 20.0 crore** - Rs. 20.0 lakh; and
 - (iv) **For proposals costing more than 20.0 crore** - Quantum is to be decided on case to case basis.
- c. Overheads to Private Institutions/ Universities would not be provided.
 - d. In case of multi institutional proposals, the Overhead Charges as calculated in Sub-Section (b) above will be distributed among all participating Institutes. The Lead Institution may finalize the share of Overhead Charges among participating/ collaborating institution(s) and consent in this regard may be given by the participating/ collaborating institution(s) at the time of submission the research proposal.
 - e. Booking of expenditure for 'Overhead expenses' will not be automatic. The funds released every year shall only cover the four heads of estimate i.e. Remuneration for research personnel, Travel Expenditure, Infrastructure and Experimental Charges. Overhead expenses shall actually be paid to the institute by DoWR,RD&GR only after completion of the research scheme and acceptance of the final report by DoWR,RD&GR.

3.2 Views of End Users

PI will identify the end users and obtain their views on outcome of the research in respect of the both sponsored as well as invited research proposals. A Certificate in this regard from such end users may be enclosed with the proposal at the time of submission.

3.3 Proposals in Hand with the PI

The PI should indicate the number of proposals already in hand and pending along with their funding agencies. The request of PI for sanction of a new research proposal would be considered only after completion of previous on-going project funded by DoWR,RD&GR, if any. Only one research proposal would be considered at a time from one PI. The details should be provided as per the **Annexure-1**.

3.4 Consent of Collaborating Institutions

In case of multi-institutional proposals, the PI from the lead institution has to submit the consent of collaborating institutes regarding their contribution in research work, estimated cost, amount of Contingency and share of Overhead Charges in the prescribed format given at **Annexure-2**.

4.0 Submission of Research Proposals

The research proposals (Invited as well as Sponsored) for Grants-in-Aid can be submitted by (PIs) dully recommended by their Head of the Institute/Organization at any time during the year. The proposal is to be submitted in five copies in a prescribed proforma as

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given in **Appendix-6** along with soft copy in PDF / Word format to the concerned RCs. In case of doubt, the proposal can also be submitted to the R&D Division (SMD) for forwarding to the appropriate RC.

5.0 Terms and Conditions of the Grants

The Terms and Conditions of the Grants, as given in the **Appendix-7**, should strictly be followed by the PI and his Institute.

6.0 Approval/Sanction of New Research Proposals

After examination, INCs would consider the proposals in its meetings and recommend for approval of DoWR, RD&GR through SMD. On the approval of Competent Authority, the administrative approval/ sanction orders would be issued by the SMD i.e. R&D Division.

7.0 Operation of Approved / Sanctioned Schemes

7.1 Date of start of the scheme

The starting date for the scheme shall be taken as the date on which the first activity is initiated which however shall not be later than one (1) month from the date of receipt of first installment of the funds by the Research Institute/organization. This date shall be intimated by the Principal Investigator to the INCs/ R&D Division. The approved period for completion of the scheme shall reckon from this date.

7.2 Schedule of Release of Funds

- a. The release of first installment of the funds would be processed by SMD only after receipt of the acceptance of the 'Terms and Conditions of Grant' as given in by the PI duly endorsed by the Head of the institution of PI. It is the responsibility of the PI and his Institute to ensure the compliance of the 'Terms and Conditions of Grants'.
- b. First installment may include 30% amount of Remuneration/Expenditure for Manpower, Travel Expenditure & Experimental Charges and 100% of the admissible amount for Infrastructure/ Equipment to be utilized during the financial year.
- c. Funds would be provided by transfer of Money directly in the account of appropriate authority in the Institute/ organization of PI as indicated in the proposal.
- d. Further funds would be released in installments commensurate with the progress of work and actual requirements of the Infrastructure/ Equipment to be utilized during that financial year. For this purpose, Annual Progress Report indicating the amount to be released, identified milestones achieved along with UC of previous year in prescribed Form 19(A) and statement of head wise Expenditure as on 31st March should be submitted to concerned INC by the PI on or before 30th June.
- e. INC will examine the request submitted by PI for release and send it to MoWR for release of fund through SMD.
- f. Final installment including Overhead Charges would be released on the completion of the scheme and acceptance of the final report of the scheme by the MoWR.

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7.3 Service Requests

All Service Requests are to be submitted by PI to concerned INC. The same will be processed and recommended by the concerned INC to R&D Division for approval / release of fund. The commonly required Service Requests are:

- a. **Release of Fund:** The detail procedure is indicated in Section 7.2.
- b. **Revalidation:** The funds released in a Financial Year are meant for its utilization during that Financial Year only. Any unspent balance of previous Financial Year has to be revalidated for utilization during the next Financial Year. The request of PI for revalidation of fund should invariably reach INC on or before 15th April.
- c. **Time Extension:** Funds can be released only during the validity of the scheme i.e. sanctioned duration. The extension beyond the sanctioned duration may be considered in few deserving cases depending on the progress made and need of the scheme. Time Extension is always without additional financial liability. Time extension will be given initially upto 50% of original time period of the project. Beyond this, it will be provided in exceptional circumstances on case to case basis. PI should submit request for Time Extension at least six months in advance of the sanctioned completion date giving reasons for delay and full justification for extension sought.
- d. **Revision of Estimate:** Any change in the estimate as sanctioned, whether resulting in an overall increase in cost, or involving a transfer of funds from one head to other is considered a revision of the estimate.
- e. **Change of PI -** In the unforeseen and legitimate event of discontinuation of the PI, the Co-PI will assume full responsibility for completion of the project. In such cases the PI/Institute should evolve steps to ensure successful completion of the Project and Institute should nominate any one of the Co-PI as PI for the remaining work, before relieving the existing PI. Proposal to this effect by the Head of Institution, will promptly be sent to the INC/DoWR, RD&GR for seeking approval.

Depending on the type of request, the required documents to be enclosed with the Service Request are shown in the table below:

S. No.	Service Request	Progress Proforma (Appendix-8)	Utilization Certificate (Appendix-9)	Statement of Equipment Purchased (Appendix-10)
1	Funds Release	Yes	Yes	Yes
2	Revalidation	Yes	Yes	No
3	Time Extension	Yes	No	No
4	Estimate Revision	Yes	Yes	Yes

It is advisable that the PIs should schedule their works so that the requests for funds etc. are clubbed with the Annual Report.

7.4 Monitoring and Periodic Returns

For the purpose of monitoring, release and other service requests, the PI is required to submit an annual progress report as on 31st March to the INC on or before 30th June.

Proforma for the annual progress report, which is also the proforma for service requests such as release and revalidation of fund, time extension etc. The periodic returns / documents required to be submitted are:

- a. A brief narrative report. (Two copies only)
- b. A proforma for progress (Appendix-8).
- c. Utilization Certificate GFR19-A (Appendix-9)
- d. A proforma for Statement of Equipment purchased (Appendix-10)

8.0 Completion of Research Scheme

Completion of the work and completion of the scheme are two different things. On completion of the work as envisaged by the PI, draft report should be prepared and five copies of the same should be sent to the INC. The INC may send the draft report to experts for comments. Depending on the comments of experts, the PI may have to carry out some further work/analysis.

8.1 Completion & Acceptance of Report

Final Completion Report should be prepared, as per **Appendix-11**, only after receipt and compliance of comments of the experts sent by INC. Five copies of Final Completion Report in print and soft copy should be sent to the INC. Final Completion Report of the scheme is to be accepted by INC.

For any software/computer programmes that are developed as a part of the project, following shall be supplied to the INC concerned.

- a. Complete source code with detailed comments on the code in print medium.
- b. Complete source code with detailed comments on the code in soft copy.
- c. Executable file in soft copy.
- d. User manual in print medium.
- e. User manual in soft copy.

8.2 Documents to be submitted for completion of scheme

The following documents should be submitted with Final Report for formal completion of the scheme and release of last installment including overhead charges:

- a. Final Utilization Certificate
- b. Expenditure Statement
- c. Statement of equipment purchased and their condition/scope for further use etc.

8.3 Refund of Interest Accrued / Unused funds

All interests or other earnings, if any, against Grants-in-Aid released to Institution should be mandatorily refunded to the Consolidated Fund of India (CFI) on year to year basis or on completion of the scheme. Such amount is not allowed to be adjusted against future releases. Any unspent balance / unused fund, if any, after the completion of the scheme should also be refunded.

8.4 Return of Equipment Purchased

All the assets acquired from the grant will be the property of DoWR,RD&GR, MoJS, Government of India and should not be disposed off or encumbered or utilized for purposes other than those for which the grant had been sanctioned, without the prior sanction of DoWR,RD&GR.

On conclusion/ termination of the project, DoWR,RD&GR will be free to sell or otherwise dispose off the assets which were acquired from the funds of Government of India. The Institute shall render the necessary facilities for arranging the sale of these assets. The DoWR,RD&GR has the discretion to gift the assets to the Institutions or transfer them to any other Institution, if it is considered appropriate.

9.0 Dissemination and Publication of Research Findings

- a. The data pertaining to the project should be systematically collected, scientifically documented and submitted to INC for access by others.
- b. Investigators are required to publish some research papers emerging out of the research scheme in leading National/International Journals with prior approval of DoWR,RD&GR. If the results of research are to be legally protected, it should not be published without securing legal protection and approval of DoWR,RD&GR..
- c. Investigators should acknowledge the assistance received from DoWR,RD&GR in their published papers.
- d. The research findings of the scheme on its completion may also be disseminated by PI through presentation in workshop/ seminar etc. conducted by INC.
- e. The Investigator(s) should not enter into collaboration with a foreign party (individual/ industry) for using the results of a DoWR,RD&GR funded R&D project without prior approval of DoWR,RD&GR.

10.0 Intellectual Property Rights and Transfer of Technology

With a view to encourage the institutions to file patent applications on their innovations, motivate them to transfer their technologies for commercialization, and to facilitate them to reward their inventors, the following instructions are to be followed:

- a. The PI should seek permission from the concerned RC before proceeding to take out any patent, copyright or otherwise commercially exploit the results of a DoWR,RD&GR funded R&D project.
- b. The Principal Investigator will be recognized as the inventor of the findings of the scheme but the title to the patent, copyright and other Intellectual Property Rights shall be the property of the Government of India.

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- c. The Government may, in its discretion, allow a portion of such receipts to be retained by the inventor which is undertaking the project. It is the responsibility of the PI and its institute to process the case for obtaining the patent.
- d. On behalf of the Government, the RC concerned shall monitor the progress in this respect and shall enter into an agreement with the PI regarding sale of know-how, collection and distribution of royalty/premium, ratio of sharing etc. of the DoWR, RD&GR funded projects.

11.0 ToR for Invited Research Proposals

For invited research proposals, the ToRs, outcomes and deliverables provided by INCs at the time of inviting the proposals should be followed along with these guidelines.

12.0 Instructions for NGOs and Submission of bond by them

The NGOs will be required to execute a bond with two sureties to the President of India in accordance with the concerned rule of the GFR before release of the grants to them. Specific instructions for NGOs along with the format of bond as given at **Appendix-12 and Appendix-12.1** should also be followed along with these guidelines.

Appendix-1**Subject Domain wise Areas of Research for Indian National Committees (INCs)**

The areas for research under the three INCs are listed below. However, these are only indicative and not exhaustive.

I) Indian National Committees on Surface Water (INCSW)

- Surface Water Hydrology
- Evaporation Control
- Ground Water Hydrology and Management (Excluding Ground Water Hydraulics)
- Instrumentation
- Real Time Systems and Application of GIS and Remote Sensing.
- Management of Floods
- Irrigation
- Drainage
- Agronomy
- Water Management
- Environmental Impact and Socio-Economic Aspect of Water Resources Projects
- Plasticulture Development & Geo-textiles
- Meteorology
- Hydraulic Structures (including masonry and concrete structures)
- River and Estuarine Hydraulics
- River Morphology
- Ground Water Hydraulics
- Instrumentation for Seismic and Geophysical Measurements
- Open Channel Flow
- Pipe Flow
- Hydraulic Machinery
- City Water Supply
- Ports and Harbours
- Rock Mechanics
- Application of High Technology and Instrumentation and Measurement Techniques
- Soil and Materials
- Structures

II) Indian National Committees on Ground Water (INCGW)

- Ground Water Recharge
- Ground Water Quality
- Impact of Climate Change on Ground Water
- Ground water-Surface water interrelation
- Ground water management
- GIS & Remote sensing
- Geophysical Investigation

- Mathematical /Simulation modeling

III) Indian National Committees on Climate Change (INCCC)

- Downscaling of climate change models
- Assessment of impact of climate change on water resources.
- Adaptation strategies for changing climate scenario.
- Studies proposed in Strategy - I.5 under Goal 1- 'Comprehensive Water Database in Public Domain and Assessment of the Impact of Climate Change on Water Resources' of National Water Mission as indicated below.

Strategy - I.5 under Goal 1- 'Comprehensive Water Database in Public Domain and Assessment of the Impact of Climate Change on Water Resources'

Research and studies specifically for projection of impact of climate change on surface and ground water including its water quality in areas of (i) Basin efficiency, (ii) Possibilities of increasing dam heights, (iii) Identification of minor tanks where FRL can be raised without raising dam heights by installing gates and evaluation of the same, (iv) Identification of tanks and water bodies which can be effectively de-silted, where silt has commercial value and evaluation of the same, (v) Improving intra-national equity in usable water for drought management like conducting economics considering land, water and livelihood to plan how much water is necessary to yield reasonable income, (vi) Water harvesting, provided this is socially desirable and provided that corresponding water saving is possible elsewhere in the region, (vii) Impact on Intensity-Duration-Frequency relationships in urban areas, (viii) Impact on Magnitude-Duration-Frequency of drought (agricultural, meteorological and hydrological), (ix) Study of Water-energy-Climate Change relationships, (x) Planning tidal embankments to protect against tides and increased flood frequency and increased sea level, (xi) Effect to sea level rise on ground water salinity and prospective measures like groundwater recharge, (xii) Possible tidal channels for fresh water storage, (xiii) Preparation of sediment budgets and accounts for each basin, (xiv) Review the interpretation of regime maintenance on Ganga, after climate change, (xv) Isotope applications in GW dating and contaminant transport, (xvi) GW basin models for conjunctive use of SW & GW and application of RS/GIS in GW management, (xvii) Assessment and strategies for development potential of deeper aquifers, (xviii) Coastal aquifer management including use of hydraulic barriers for control of sea water ingress, (xix) Assessment of feasibility and viability of rainwater harvesting in existing domestic and commercial buildings, (xx) Supporting researchable issues specifically of (xxi) Atmospheric Science Groups towards downscaling of GCM or RCM to basin/project level and also understanding the effect of climate change on monsoons, (xxii) Supporting water and climate related researches towards studying the sensitivity of different hydrologic types of water projects to different climate change scenarios and improvements required in hydrometric networks to incorporate climate change, (xxiii) Building a Universal Soil Loss model depicting erosion and sediment transport etc. Proving the model based on sediment flow and reservoir sedimentation data, Actuating the above model for changed rainfall regime and changed management practices, (xxiv) Developing,

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through R&D effort, a combined unsteady flow hydraulics-cum-sediment transport model capable of depicting river erosion in each flood event. Using the model to test river management works, (xxv) Water quality modeling for each major river and aquifer, (xxvi) Hydro chemical and solute transport modeling in areas vulnerable for seawater ingress and water quality, (xxvii) Developing urban storm water drainage models with due consideration to the topographical features and the urban layouts, and (xxviii) Developing criteria and guidelines to ensure urban storm water drainage improvements.

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Appendix-2**Research Need in Water Sector**

The research needs, identified after consultation with relevant stakeholders, are given below. However, these are only indicative and not exhaustive.

1. Development of unutilized water resources**(i) Enhancing storage and water distribution system****(a) Supply Side Management**

- Review of practice of irrigation planning corresponding to water availability at 75% dependability
- Inter-basin transfer of water
- Evolving innovative method for storage of water in hilly areas
- Impact of water resources structures on hydrology and water quality in a basin

(b) Demand Side Management

- Management of water demands through technologies, policy and specifications
- Periodic assessment of water resources availability (both surface and Ground water) in the country
- Assessment of return flows
- Developing new technologies for measuring water flows and water quality including remote sensing and in-situ
- Assessment of usage of ground water in different sectors viz. agriculture, industry, domestic and other
- Development of simplified aquifer maps which can be used by common man to plan their available water resources
- Understanding relationship between agriculture water use and climate, crop type and water application rates
- Improvement in crop productivity per unit of water
- Studies related to use of just adequate amount of water for a particular crop
- Cultivation of crop of shorter duration and less water requirement
- Identification of crops / crop variety using less water and having good productivity region-wise.
- Aspects related to crop diversification
- Crop market in order to link crop production and variety with respect to the water availability, region wise
- Pilot / demonstration projects for implementing Sahi-Fasal concept of optimal water use in agriculture sector with the help of NGOs and district level & State level authorities.
- Developing improved crop varieties for use in dry land agriculture

- Developing strategies for regulated deficient drip irrigation for orchard crops in hilly region
- Models/ guidelines for release of water from reservoir as per requirement of crop
- Management of invasive weed (like Prosopis Juliflora) which are consuming substantial water in water stress region

(c) Social and Economic Aspects of Water

- Assessment of impact of socio-economic aspects of the people due to water resources development and management
- Proper economic evaluation of water resources projects based on updated knowledge

(d) Improving Knowledge Base

- New / indigenous technology for water data measurement.
- Issues related to construction materials, their testing and related aspects
- Issues related to design, construction, inspection, repair and safety of concrete and masonry dams
- Non-destructive testing technologies
- Emerging construction technology and new construction materials
 - Admixture to concrete – Material and efficacy
 - High performance cement
 - Fibre reinforced concrete – Material and techniques
- Analysis of various underground structures
- Fracture mechanism in rocks
- Solution to landslide problem

(e) Leveraging Local and Traditional Knowledge in Water

- Depletion of traditional sources of water

(ii) Improvement of the efficiency of present utilization

(a) Improving water use efficiency

- Scientific assessment of water use in agriculture, domestic, commercial and industrial use
- Improving the efficiency of water use in all sectors
- Regular post project evaluation studies and bench-marking for major and medium irrigation / multi-purpose projects for various benefits
- Development of water efficiency guidelines for agriculture and industry sector
- Development of new yet actionable methodologies to increase WUE in all sectors
- Pilot/demonstration projects for improvement in water use efficiency in collaboration with States.
- Efficiency rating on water gadgets



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- Bench-marking for urban water use and introduce concept of water efficiency index for urban areas
- New tools like water accounting, water auditing, water footprints, virtual water transfers etc.
- Use of canal lining to prevent seepage losses
- Automation of water resources projects.

(b) Capacity for optimal and efficient water management

- Integrated basin level water resources management
- Development of models of integrated water resource management for various water resources scenario
- Research in water policy leading to its review
- Regulatory framework for water governance
- Study of water regulatory authorities and to develop guidelines to establish WRA in each State
- Framework for groundwater management
- Review of existing structure of institutions dealing with water at national, state and local level.
- Effective mechanism for resolving inter-state conflicts
- Studies required for enhancing the resolution of conflicts in water sector
- Measures for institutional reforms at Field level (WUA and PIM) and Basin level (River Basin Organizations)
- Leadership of women in water sector and income generation
- Evolving steps needed for increasing involvement of women in water users association / Pani Panchayat
- Skill gap assessment, employment creation and workforce development in water sector

2. Ensuring sustainability of water resources and projects both in terms of quantity and quality including adaptation and mitigation of Climate Change threats

(a) Mitigation of degradation of ecosystem

- Source sustainability for domestic water supply schemes
- Cost effective water purification technologies
- Assessment of environmental flows / requirement
- Aspects related to carbon footprint and carbon trading for water projects
- Development of capacity for river health assessment
- Developing innovative techniques for preventing pollution
- Controlling non-point source pollution

- Detection and control of new emerging contaminants like micro plastics, pharmaceutical waste etc.
- Development of sensors for detection of pollutant in fresh water
- Understanding behavior of aquatic ecosystem in a broad systematic context including their water requirement
- Management of water quality and quantity parameters to sustain aquatic habitat
- Understanding and predicting floods and its causes
- Development of online end to end early warning system for flood control
- flood forecasting (Hydrological Model) for rivers of shorter lengths
- creating resilience from urban flooding
- occurrence of landslide due to heavy rains during monsoon in Western Ghats
- Morphological behavior of rivers
- Management of silt in rivers
- Integrating sediment management in basin plan
- Improving understanding related to connectivity between aquifers, wetland and rivers
- Ecosystem based measures for conservation of wetlands
- Effect of infrastructure development on ground water recharge and rainfall pattern
- Improvement of understanding of the concept related to spring shed management viz. Spring rejuvenation's techniques; spring potential assessment etc.
- Linkages between groundwater withdrawal and land subsidence

(b) Climate Change Threats and Mitigation

- Projection of the impact of climate change on water resources as per the guidelines mandated by IPCC
- Real time forecast models/climate change models
- State level/basin level water-energy-climate change relationships including both urban and rural area.
- Decline in the glaciers and the snowfields in the Himalayas and their impact
- Effect of climate change on groundwater quality in alluvial aquifers due to increased flood and drought events;
- Influence of Climate change on groundwater recharge
- Assessment of increased saline intrusion in coastal and island aquifers due to rising sea levels and its mitigation
- Impact of climate change on extremely events particularly in high floods and low flows
- Reported reduction in number of rainy days and increased intensity of rainfall – its impact on different aspects of design of water resources.
- Management of flood events due to overall increase in the rainy-day intensity;
- Management of drought like situations due to overall decrease in the number of rainy days in many parts of the country;
- Crop Water Requirement in climate change scenario

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- Estimation of forest water requirement in climate change scenario
- Impact of variation in time distribution of water availability on irrigation planning
- Impact of climate change on water governance and gender equity based on water demand and supply change due to uncertain droughts and floods.
- Impact of climate change on public health
- Changes needed in policy & planning and management practices to optimally utilize the resources;
- Evolving/demonstrating adaptation measures for climate change threats
- Efficacy for various measures for mitigating the impact of the projected changes in the water resources

3. Augmentation of water resources – innovative source development, recycle and reuse

- Developing new and innovative supply enhancing technologies
- Improving existing supply enhancing technologies such as wastewater treatment, desalination etc.
- Assessment of groundwater recharge by various means like pond, recharge wells, check dams, unlined channels, roof top rainwater harvesting etc..
- rapid aquifer recharging
- Use of treated wastewater for water conservation
- Evolving innovative, cost effective, eco-friendly and sustainable methods of conservation of water
- Treatment for saline water intrusion to ensure availability of water in coastal areas

Appendix-3**Priority Areas of Research:**

The areas where need for research is felt are quite large in number. Therefore, the areas requiring immediate attention need to be identified and prioritized. Consequently, identified priority areas are given as below.

- Review of practice of irrigation planning corresponding to water availability at 75% dependability
- Developing new technologies for measuring water flows and water quality including remote sensing and in-situ
- Development of simplified aquifer maps which can be used by common man to plan their available water resources
- Studies related to use of just adequate amount of water for a particular crop
- Aspects related to crop diversification
- Pilot / demonstration projects for implementing Sahi-Fasal concept of optimal water use in agriculture sector with the help of NGOs and district level & State level authorities.
- Assessment of impact of socio-economic aspects of the people due to water resources development and management
- Proper economic evaluation of water resources projects based on updated knowledge
- Issues related to construction materials, their testing and related aspects
- Issues related to design, construction, inspection, repair and safety of concrete and masonry dams
- Depletion of traditional sources of water
- Scientific assessment of water use in agriculture, domestic, commercial and industrial use
- Improving the efficiency of water use in all sectors
- Regular post project evaluation studies and benchmarking for major and medium irrigation / multi-purpose projects for various benefits
- Development of water efficiency guidelines for agriculture and industry sector
- Efficiency rating on water gadgets
- New tools like water accounting, water auditing, water footprints, virtual water transfers etc.
- Automation of water resources projects.
- Research in water policy leading to its review

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- Regulatory framework for water governance
- Studies required for enhancing the resolution of conflicts in water sector
- Measures for institutional reforms at Field level (WUA and PIM) and Basin level (River Basin Organizations)
- Skill gap assessment, employment creation and workforce development in water sector
- Source sustainability for domestic water supply schemes
- Development of capacity for river health assessment
- Understanding and predicting floods and its causes
- Development of online end to end early warning system for flood control
- Flood forecasting (Hydrological Model) for rivers of shorter lengths
- creating resilience from urban flooding
- Morphological behavior of rivers
- Management of silt in rivers
- Improvement of understanding of the concept related to spring-shed management viz. Spring rejuvenations techniques; spring potential assessment etc.
- Projection of the impact of climate change on water resources as per the guidelines mandated by IPCC
- Real time forecast models/climate change models
- Decline in the glaciers and the snowfields in the Himalayas and their impact
- Effect of climate change on groundwater quality in alluvial aquifers due to increased flood and drought events;
- Influence of Climate change on groundwater recharge
- Impact of climate change on extreme events particularly in high floods and low flows
- Evolving/demonstrating adaptation measures for climate change threats
- Developing new and innovative supply enhancing technologies
- Improving existing supply enhancing technologies such as wastewater treatment, desalination etc.
- Rapid aquifer recharging
- Use of treated wastewater for water conservation
- Evolving innovative, cost effective, ecofriendly and sustainable methods of conservation of water

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Appendix-4

16/10/2020-R&D

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भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विप्लव और गंगा संरक्षण विभाग
अनुसंधान एवं विकास प्रभाग
प्रधान सचिव, विभाग नं. १, पश्चिम बंगला-1, 201 के पुन, नई दिल्ली-110066
दूरभाष-011-29583482, ई-मेल: waternd-mowr@nic.in

No. 16/10/2020-R&D/

Dated: September 01, 2023

OFFICE MEMORANDUM

Subject: Revised guidelines on emoluments and other conditions of service for research personnel, etc.

In supersession of this Ministry OM No. 16/10/2000-R&D/137862/2020(1) dated 06.08.2020, it has been decided that the "Revision of emoluments and guidelines on service conditions for research personnel employed in R&D programme of Central Government Departments /Agencies" issued vide Department of Science and Technology OM No. DST/PCPM/Z-06/2022(E-file-41804) dated 26.06.2023 (enclosed as Annex -I) will be applicable to the research schemes under the R&D programme of the DoWR, RD&GR.

The Revised Guidelines will be applicable with effect from 01.01.2023.

This issues with the concurrence of Integrated Finance Division, DoWR, RD&GR, MoJS vide Diary No. 435/IFD/2023-24 dated 24.8.2023 and approval of Secretary (DoWR, RD&GR).

Encl.: As above

[Signature]
01/09/2023

(महेश कुमार)

निदेशक (अनुसंधान एवं विकास प्रभाग)

Copy to:

1. Chairman, Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi-110066.
2. Addl. Secretary & Mission Director, National Water Mission, DoWR, RD&GR, MoJS, 2nd Floor, Block-III, CGO Complex, Lodhi Road, New Delhi - 110003.
3. JS&FA, DoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
4. JS (A), DoWR, RD&GR, MoJS, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.
5. Commissioner (SPR), DoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
6. Commissioner (CAD), DoWR, RD&GR, MoJS, Shastri Bhawan, New Delhi-110001.
7. Commissioner (Ganga), DoWR, RD&GR, 8th floor, Block No. 11, CGO Complex, New Delhi-110 003.

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8. Commissioner (Indus), DoWR, RD&GR, 8th floor, Block No. 11, CGO Complex, New Delhi-110 003.
9. Commissioner (B&B), DoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
10. Chairman, Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad, 121001.
11. Director, Central Water & Power Research Station, Khadakwasla, Pune-411024.
12. Director, Central Soils & Materials Research Station, O'of Palme Marg, Hauz Khas, New Delhi - 110016.
13. Director, NIH, Jal Vigyan Bhawan, Roorkee-247667.
14. Member-Secretary (INCSW) & Director, CWC, 1st floor, 4th wing, West Block-I, R.K. Puram, New Delhi-110066.
15. Member-Secretary (INCC) & Director, NIH, Jal Vigyan Bhawan, Roorkee-247667.
16. Member-Secretary (INCGW) & Sc-D & TS to Member (East), Central Ground Water Board, Bhujal Bhawan, NH-IV, Faridabad, 121001.
17. Director (Finance), DoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
18. Director (Morphology & CC), CWC, 1st floor, 4th wing, West Block-II, R.K. Puram, New Delhi-110066.
19. Finance Desk, DoWR, RD & GR, MoJS, Shram Shakti Bhawan, New Delhi-110001.
20. Guard File, R&D Division, DoWR, RD & GR, MoJS, R K Puram, New Delhi.

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**DST/PCPM/Z-06/2022
(E-file -41804)
Government of India
Ministry of Science & Technology
Department of Science & Technology**

Technology Bhavan
New Mehrauli Road
New Delhi-110016
Dated: 26th June 2023

OFFICE MEMORANDUM

Subject: Revision of emoluments and guidelines on service conditions for Research Personnel engaged in R&D programme of the Central Government Departments/ Agencies

Attention is invited to the Office Memorandum (O.M.) No. SR/S9/Z- 08/2018 dated 30.01.2019 issued by the Department of Science and Technology, Government of India on the above subject. The matter has been further considered by the Government and the following revised emoluments have been approved. The O.M. is applicable to the research personnel working on R&D programmes funded by the Central Government Department/Agencies.

1. Emoluments:

A. Junior Research Fellow (JRF) / Senior Research Fellow (SRF)

Sl. No.	Designation & Qualification	Revised Emoluments per month
I	Junior Research Fellow (JRF) Post Graduate Degree in Basic Science OR Graduate / Post Graduate Degree in Professional Course selected through a process described through any one of the following: a. Scholars who are selected through National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) and GATE. b. The selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MoE, ICAR, ICMR, IIT, IISc, IISER, NISER etc.	Rs. 37,000/-

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II	Senior Research Fellow (SRF) Qualification prescribed for JRF with two years of research experience	Rs. 42,000/-
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A.1 After completion of two years, an external assessment by the Institution where the student is enrolled for Ph.D. is mandatory for upgradation from JRF to SRF. The fellow may be awarded SRF after successful assessment.

A.2 Annual Satisfactory Assessment is mandatory to continue the benefit of fellowship during SRF period.

B. Research Associate

Research associates may be fixed at a consolidated amount at one of the 3 pay levels given below depending upon the qualification and experience. The Institute/Organization concerned may decide the level in which a particular associate should be placed based on the experience. The Essential Qualification (EQ) for RA is as follows:

Ph.D./MD/MS/MDS or equivalent degree or having 3 years of research, teaching and design and development experience after MVSc/M.Pharm/ME/M.Tech with at least one research paper in Science Citation Indexed (SCI) journal.

Sl. No.	Category	Revised Emoluments per month
I	Research Associate –I	Rs. 58,000/-
II	Research Associate –II	Rs. 61,000/-
III	Research Associate –III	Rs. 67,000/-

2. Service Conditions:

- i. **DA:** JRFs, SRFs, and Research Associates will not be entitled to DA.
- ii. **House Rent Allowance (HRA):** All research fellows may be provided hostel accommodation wherever available. Research fellowship holders residing in hostels shall not be entitled for 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 percentage required for calculating HRA will be based on the fellowship amount.
- iii. **Medical Benefits:** The research fellows and research associates (JRF/SRF/RA) will be entitled to medical allowance as applicable in the implementing institute.



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iv. **Leave and other entitlements:** The JRF/SRF 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 (JRF/SRF/RA) in scientific events/ workshops in India or abroad will be treated as "on duty" with due approval of the host institution. The travel entitlement for JRF/SRF/RA 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 the Govt. of India instructions issued from time to time would be available to female candidates in all categories.

v. **Bonus & Leave Travel Concession:** JRFs, SRFs and Research Associates will not be entitled to these allowances.

vi. **Retirement Benefits:** JRFs, SRFs, and Research Associates will not be entitled to these benefits.

vii. **Publication/Patent:** The results of JRF/SRF/RA's work research work maybe published preferably in standard refereed journals with the concurrence of the Fellow and his/her Supervisor / Advisor. It should be ensured by the fellow that the assistance provided by the funding agency of the Government of India is acknowledged in all such publications.

viii. **Obligation of JRF/SRF/RA:**

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 send a report of the research work done during the period of Fellowship as may be asked by the sponsoring agency.

3. Central Government Departments /Agencies are requested to ensure that the above guidelines are followed in regard to the remuneration and other benefits to the research personnel engaged in R&D projects funded by them.

4. Selection for award of fellowship shall ordinarily be through common competitive examinations. However, for subjects where there is no examination presently, Government Department and their authorized agencies and institutions may start conducting examination to screen candidates for award of fellowships. This shall not be applied retrospectively and the persons already enrolled shall be exempted.

5. Departments/Ministries concerned should meet the additional financial burden from their existing outlay under the respective schemes by efficient utilization of resources and cutting down on non-priority activities. Subsequently, if additional resources are needed, the same will be considered by the Ministry of Finance based on pace of expenditure and extent of savings in non-priority activities.

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6. The revised emoluments will take effect from 01.01.2023.
7. This issues with the approval of the Department of Expenditure, Ministry of Finance vide DoE O.M No. 33(14)/PFC-II/2018 dated 21.06.2023.

Ryadav
26/06/2023
(Rahul Yadav)
Deputy Secretary (Finance)

To

1. All Ministries/Departments/Agencies of the Government of India
2. All Heads of DST

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Appendix-5

Government of India
Ministry of Water Resources
River Development & Ganga Rejuvenation
P P Wing - R&D Division
1st floor, Wing-4, West Block-I, R.K. Puram, New Delhi-110066
Telefax: 011-26104082 E-mail: watrnd-mowr@nic.in

No. 18/30/2015-R&D/524-521

Dated: 18.06.2015

OFFICE MEMORANDUM

Subject: Revised rate of Overhead Charges for the research proposals funded under R&D Programme of MoWR, RD & GR.

Approval of the competent authority is hereby conveyed for the revised rates of overhead charges similar to the overhead charges as mentioned at the sub para (iii) of para-1 of DST OM No. SR/S9/Z-11/2013 dated 24.02.2015 (copy enclosed as Annex - I, titled "Norms for individual centric Extramural Research Project funded by Department of Science & Technology, Government of India") for the research proposals funded under R&D Programme of MoWR, RD & GR.

This issues with the concurrence of Integrated Finance Division, Ministry of WR, RD & GR vide its Diary No. FTS dated 03.06.2015.

Encl.: As above

o/c

(Alok Kumar Maurya)
Assistant Director (R&D)

Copy to:

1. Chairman, Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi-110066.
2. JS&FA, MoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
3. JS (PP), MoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
4. Commissioner (SPR), MoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
5. Commissioner (Pen-R), MoWR, RD&GR, Shastri Bhawan, New Delhi-110 001.
6. Commissioner (FM), MoWR, RD&GR, 8th floor, Block No. 11, CGO Complex, New Delhi-110 003.
7. Commissioner (Indus), MoWR, RD&GR, 8th floor, Block No. 11, CGO Complex, New Delhi-110 003.
8. Commissioner (B&B), MoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
9. Chairman, Central Ground Water Board, Jam Nagar House, Man Singh Road, New Delhi-110011.
10. Director, Central Water & Power Research Station, Khadakwasla, Pune-411024.
11. Director, Central Soils & Materials Research Station, Olof Palme Marg, Hauz Khas, New Delhi - 110016

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12. Director, NIH, Jal Vigyan Bhawan, Roorkee-247667.
13. Member-Secretary (INCSW) & Chief Engineer (EMO), CWC, Room No. 413(S), Sewa Bhawan, R.K. Puram, New Delhi-110066.
14. Member-Secretary (INCCC) & Director, NIH, Jal Vigyan Bhawan, Roorkee-247667.
15. Member-Secretary (INCGW) & Superintending Hydrogeologist, CGWB, 18/11, Jam Nagar House, Man Singh Road, New Delhi - 110011.
16. Director (Finance), MoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.
17. Director (R&R), CWC, Room No. 403(S), Sewa Bhawan, R.K. Puram, New Delhi-110066.
18. Under Secretary (FD-I), MoWR, RD&GR, Shram Shakti Bhawan, Rafi Marg, New Delhi-110 001.

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No. SR/SS/Z-11/2013
Government of India
Ministry of Science & Technology
Department of Science & Technology

Technology Bhawan
New Delhi - 110016

Dated: 24 February, 2015

OFFICE MEMORANDUM

Subject: Norms for individual centric Extramural Research Project funded by Department of Science & Technology, Government of India

The question of framing revised norms for the Individual Centric Extramural Research (EMR Projects) has been under consideration of the Department for quite some time. In supersession of earlier instructions on this subject, it has now been decided that the following norms will be applicable to individual centric EMR projects (i.e. proposals submitted by an individual researcher or a group of researchers including proposals for establishing Centres, Units etc.) funded by the Department of Science & Technology, Government of India.

(i) Equipment:

Full cost of equipments which is/are specifically recommended/approved by Project Advisory Committee (PAC) be provided without discriminating the type of institutions (Public, Private, NGO etc.). Ownership of such equipments shall vest in the Government and these shall not be disposed of without obtaining prior approval of the authority which sanctioned the grant-in-aid. At the end of the project a specific request be made by the grantee institution for retention/transfer of these equipments to the institute subject to the institute in ensuring proper upkeep of these equipments and making these available to the other researchers on recommendation of DST. A list of such equipments be placed in the website of the concerned institute.

(ii) Emoluments:

The emoluments for manpower (other than JRF, SRF, RA and Research Scientist) to be fixed as per the norms adopted by the implementing institutions. In instances where the norms are not available in the institution, the norms framed by Department will be applied.

(iii) Overheads:

Towards meeting the cost of academic expenses including infrastructural facilities, an amount of:

- a) For projects costing upto Rs. 1 crore, 10% of the total cost for educational institutions and NGOs and 8% for laboratories and institutions under Central Government Departments/Agencies;

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b) for projects costing more than Rs. 1.0 crore and upto Rs. 5.0 crore, overheads of Rs. 15.0 lakh or 10% of total cost whichever is less;

c) for projects costing more than 5.0 crore and upto Rs. 20.0 crore, Rs. 20.0 lakh will be provided as overheads; and

d) for projects costing more than Rs. 20.0 crore, the quantum will be decided on a case to case basis.

(iv) Travel & Contingencies:

Rs.50,000/- each per annum will be provided for Travel and Contingencies. Higher amount, based on the recommendations of the Expert Committee, to be provided where the research work involves field work or/and project has many investigators / institutions and larger manpower. The contingency amount may also be used for paying Registration Fees for attending international conferences.

(v) Consumables / Supplies & Materials:

The amount may be fixed based on the recommendations of the Expert Committee.

(vi) Flexibility in Recurring budget:

a) Though different allocations are made under various heads in recurring budget such as manpower, consumables, contingency, travel, etc., the investigator has been given flexibility to use upto 10% funds sanctioned under each recurring heads (consumables, travel, contingency etc, but not manpower budget) The PI will inform the Programme Division accordingly. The Programme Division in such cases will issue the revised sanction within the said limit of 10 percent and overall recurring budget allocation.

b) The Investigator will have the flexibility to appoint more or lesser number of staff and change the designation of manpower within the sanctioned manpower budget.

(vii) Entitlement of travel and accommodation by non-official members:

a) Non-official members invited for the official meetings be provided economy class air fare. Specific approval of Secretary, DST be taken for travel by executive/higher class where a non-official is or was entitled to travel by executive class.

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(viii) Honorarium:

Sitting fee / Honorarium to non-official members will be provided @ Rs.2,500/- per day for the meeting day.

(ix) Extension of Projects:

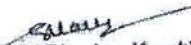
Extension of project upto six months can be granted by the Head of Programme Division, at the specific recommendations of PAC, if it does not involve increase in the cost of the project. Extension beyond the period of six months, should be granted only with the concurrence of IFD.

(x) Transfer of PI from one Institute to another Institute

The change of the host institute on account of PI moving from one host institute to another host institute will be considered in DST subject to the present host institute giving its no objection certificate and the prospective institute agreeing to the terms and conditions of sanctioning of the grant. In such cases, the equipment etc and the balance of funds will be transferred from the present institute to the proposed institute.

2. This OM comes into effect immediately. Cases in which the sanctions have already been issued will not be reopened.

3. This issues with the approval of Secretary, DST vide Dy. No.718 dated 5 February 2015 and concurrence of JS&FA vide his Dy. No. 2106 dated 17 February 2015


(Shashi Bhushan Kaushik)
Director

Copy to:

1. All Divisional Heads, DST.
2. PPS to Secretary, DST.
3. PS to JS & FA, DST.
4. COA, DST.
5. DS(IFD), US(IFD), IFD, DST.
6. DDO, DST

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Appendix-6

Proforma of Application for Research Proposal for Grants

(To be filled by PI and submitted to concerned INC)

(Please read carefully the guidelines to investigators before filling this proforma)

1 Project Title (*keep it as short as possible*)**2 Principal Investigator (PI)**

Name

Designation

Address

Telephone & Mobile No.

Fax

e-mail

3 Research Station/ Institution (Lead Institute in case of Multi-Institutional proposal)

Name of the Institution

Head of the Institution

Address

Telephone

Fax

e-mail

Nearest Rail head/Airport

4 Collaborating Institution, if any

Name of the Institution

Head of the Institution

Address

Telephone

Fax

e-mail

Nearest Rail head/Airport

5 Co- Principal Investigators (Co-PI) including if from Collaborating Institution

Name

Designation

Address

Telephone & Mobile No.

Fax

e-mail

6 Brief Bio-data of the Investigators

(Enclose at the end of the proposal as per format given at Annexure-1)

7 Details related to Sub-agency Account, if already opened:

- i) Name of authorized person holding account with complete address:
- ii) Organization Name as per Bank records:

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- iii) Bank Account No.
- iv) IFSC Code:
- v) MICR Code :
- vi) Bank Name:
- vii) Bank Branch Address:
- viii) Unique Agency code of the Organization and Institute:
- ix) Telephone & Mobile No.

(The institutions applying for funding for the first time has to provide these details after sanction of project)

8 Category of R&D Activity (Tick those which are applicable)

- a. Basic Research
- b. Applied Research
- c. Action Research

9 Description of the Proposal

(Describe the research proposal, the background, how the idea originated etc.)

10 Objectives. Classify the objectives of proposed research under one or more of following and explain the objectives briefly.

- a. Finding answers to as yet un-answered questions. (List the questions)
- b. Development of a new computational procedure. (State the purpose of the procedure)
- c. Development of a new software/application. (State the purpose of the software/application)
- d. Development of a new field technique. (State the purpose of the proposed technique)
- e. Design and/or develop a new device. (State the purpose of the device)
- f. Investigation of the behavior of a natural process. (state what new aspects are to be investigated and why)
- g. Any other (Specify and explain)

11. Contribution to Water Resources Development

(Describe very briefly the contribution envisaged to be made by the proposed R&D activity to the Water Resources Sector)

12 Putting the Research to Use

- a. Identify the possible end-users for the results of proposed research. (A certificate is to be attached from two (2) end users by PI)
- b. List the actions that will be necessary to put the results to use.
- c. List the difficulties/problems that may be encountered in putting the results to use.
- d. Are the possible end users being involved in the research? If yes then describe how, if not then explain why not.



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13 Present State of Art

- Describe the work that has already been done at International Level
- Describe the work that has already been done at National Level
- Explain how the work proposed to be done by you will be different from the work already done by others at National and International levels.
- List the references examined by you to reply to a) and c) above

14 Methodology

(Describe clearly the experiment; observations and data collection; and analysis)

15 Cost Estimates**15.1 Total Cost of the project including Overhead Charges (if any)****15.2 Head-wise Abstract**

S. No	Head	Amount (Rs.)
1	Research Manpower	
2	Travel Expenditure	
3	Infrastructure /Equipment	
4	Experimental Charges	
	Sub Total	
5	Contingency	
	Total	
6	Overhead Charges	

(Note: Provide year-wise & phase-wise details of each head in separate table.)

15.3 Justification for Institutional Overhead Charges.**15.4 Heads wise Details****Research Manpower**

Designation	Year 1			Year 2			And so on
	Rate/month	Months	Amount	Rate/month	Months	Amount	

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And so on							
-----------	--	--	--	--	--	--	--

Totals**Grand Total for Remuneration/Emoluments for Manpower****15.5 Man-months utilization table.**

(For each of the research staff, list the activities and the months (from start) in which he/she will be carrying out each of these activities thus justifying the total man-months)

Designation:**Total Man-months:****Months from Start →**

Activities	1	2	3	4	5	6	And so on
And so on							

15.6 Travel Expenditure (TE)

(Give the break-up for the provision for TE indicating the places to be visited, purpose, number of visits to each place by air/ rail/ road with approximate fares for each type of journey).

15.7 Infrastructure (Purchased items of a permanent nature like equipment, software or data etc.)

(Give details indicating specifications, quantity and rate. Estimated cost for all items of commercial nature should be supported by proforma invoices.)

15.8 Experimental Charges

List the items and estimated cost.

16 Work Schedule

- Probable Date of Commencement
- Duration of Study
- Stages of Work and Milestones:

Identifiable Milestones of progress	Months from start	Amount to be released
Start	0	(Amount of first installment)
1		
2		
And so on		

Notes:

- The work should be divided into quarterly milestones.

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- b. The milestones are mainly for the purpose of monitoring of progress and release of funds. The funds to be released on achieving various milestones should be indicated.
- c. Normally there may be only one release of funds in a financial year.

17 Declaration

1. I have carefully read the terms and conditions of the research grant and agree to abide by them.
2. This is to certify that I have neither submitted this proposal elsewhere for financial support nor have undertaken it at the request of any commercial agency or as a consultancy.
3. I/We have enclosed the following:
 - a. Complete Research Proposal (5 copies)
 - b. Views of End Users
 - c. Undertaking from the Collaborating Institution(s)

Date:

Signature of PI

Place:

Name

Designation

18 Endorsement from the Head of Institution

1. The Institute / Organization welcomes the participation of Dr./Mr./Mrs. as the PI and Dr./Mr./Mrs. as the Co-PI for the above research scheme. In the unforeseen and legitimate event of discontinuation by the PI, the Co-PI will assume full responsibility for completion of the project. Information to this effect, endorsed by me, will promptly be sent to the INC/DoWR, RD&GR.
2. The necessary equipment and institutional support as described in the proposal will be made available as and when required for the purpose of the project to ensure that the work is taken up on priority and completed on schedule.
3. In the event of foreclosure /discontinuation /cancellation of the scheme for any reason, the entire amount released for the scheme will be fully refunded to the DoWR, RD&GR along with the interest prescribed till the date of return by the institute/ organization.
4. The Register of permanent and semi-permanent assets acquired out of grants from DoWR, RD&GR will be maintained as per **Appendix-11**.
5. The Organization shall ensure that financial and purchase procedures are followed as per the prescribed norms of the organization, within the allocated budget.
6. The Organization shall provide the Statement of Expenditure and the Utilization Certificate (UC) for the grant issued by the DoWR, RD&GR in the prescribed format in a time bound manner.
7. The assets acquired out of this grant shall be transferred to the desired destination in good & working condition as and when required.

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Date:

**Seal & Signature of the Head of
Organization**

Place:

** The term "assets" mean (i) immovable property (ii) movable property of a capital nature where the value exceeds Rs. 1,000/- (Rupees one thousand only).*

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Appendix-7

Terms and Condition of Grant
(To be submitted to INC on receipt of Sanction Order of the scheme)

1. All correspondence in connection with the execution of this scheme/project should be carried out with the INC.
2. Approval of the Research Scheme is for specific purpose with defined objectives and outcomes. The grant released for the sanctioned Research Scheme should exclusively be spent on the sanctioned items within the stipulated period.
3. **The Project is considered to have commenced as soon as the first activity is initiated.** This date should be intimated by the Institution authorities/ Principal Investigator to the INC. The date of commencement, in no case be later than one (1) month from the date of receipt of payment by the Institution.
4. The Institution will not entrust the implementation of the work (except the out-sourced part as approved) for which the Grant is being sanctioned to any other institution nor will it divert the Grant receipts to other institutions as assistance. In case the Institution is not in a position to implement or complete the Project, it should, forthwith, refund the entire grant received by it or the balance Grant with it to DoWR,RD&GR through demand draft in favour of PAO, DoWR,RD&GR.
5. The Remuneration / Emoluments and other service conditions for research personnel engaged under the scheme shall be governed by the norms issued by DoWR,RD&GR as given in **Appendix-4 and Appendix-5**. They are not to be treated as employees of the Government of India and DoWR,RD&GR will have no liability, whatsoever, for the project staff after the completion of the Project.
6. No consultants/coordinators/staff other than those shown in the final approved estimate shall be engaged / deployed for the scheme.
7. The PI shall furnish a **Certificate** to the effect that research staff has been engaged in accordance with the provisions of **Appendix-4 and 5**.
8. Before a grant is released to an NGO, the grantee will be required to execute a bond with two sureties to the President of India in accordance with the concerned Rule of the GFR.
9. The organization shall follow a proper system of accounting, reporting and auditing of expenditure in respect of this Grant.
10. All procurement will be in terms of standard rules of the Government of India and all expenses shall be fully vouchered and booking of all expenditure shall be as per actual.
11. **The accounts will be subject to audit by I.A.O./CA (WR). The accounts will also be open to audit by the Comptroller and Auditor General of India.**
12. Transfer of funds from one expenditure head to other is not allowed.
13. Each installment of funds is to be utilized in the financial year for which it is sanctioned. Any unspent balance carried over to next financial year is got to be revalidated before its utilization. Application for revalidation of unspent balance as on 31st March should be submitted to the INC on or before 30th April along with the reasons for non-utilization/underutilization of fund.
14. For permanent, semi-permanent assets acquired solely or mainly out of the project grant, an audited record in the form of a register shall be maintained by the Institute as per Appendix-11. The Institute is required to send a list of assets acquired from the grant to INC. All equipment procured from this grant should prominently display a label

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"FUNDED BY DoWR,RD&GR" or "PURCHASED WITH FINANCIAL ASSISTANCE FROM DoWR,RD&GR".

15. All the assets acquired from the grant will be the property of DoWR,RD&GR, Government of India and should not be disposed off or encumbered or utilized for purposes other than those for which the grant had been sanctioned, without the prior sanction of DoWR,RD&GR.
16. The grant shall not be utilized for construction works unless specific provision is made for that purpose. Full infrastructural facilities by way of accommodation, water, electricity, communication, etc. for smooth implementation of the project shall be provided by the Institute.
17. For monitoring of the physical and financial progress of the scheme, the periodic returns / documents required to be submitted by the PI are:
 - Annual Progress Report (Financial Year basis) by 30th April
 - Brief Quarterly Progress Report (Appendix-12) within 15 days of the end of 1st, 2nd and 3rd quarter of Financial Year (i.e. 15th July, 15th Oct and 15th Jan)
 - Utilization Certificate as prescribed in Form GFR-12-A / GFR-12-C of the General Financial Rules 2017 (Appendix-10) by 30th April
18. During the implementation of the scheme, the Institution will provide all facilities to the visiting team to review the progress and suggest suitable measures by way of accommodation, etc. at the time of their visit.
19. For release of fund and other service requests, the PI has to submit the following documents to INC:
 - a) Physical and financial annual progress report (1st April to 31st March) and Service Request (Appendix-9) on or before 30th June. The report should specify in detail the achievements of the research work vis-a-vis amount spent, purpose etc.
 - b) Utilization Certificate (UC) in the prescribed proforma as given in Appendix-10.
 - c) Details of amount sought may be provided in various heads of the sanctioned estimate on the date of seeking next installment.
20. **The DoWR,RD&GR reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilised or satisfactory progress is not being made.**
21. In case of foreclosure /discontinuation /cancellation of the scheme for any reason, the entire amount released for the scheme will be fully refunded to the DoWR,RD&GR along with the interest prescribed till the date of return by the institute/ organization.
22. On closure of scheme on completion, DoWR,RD&GR will be free to sell or otherwise dispose off the assets which were acquired from the fund of Government of India. The Institute shall render to the Government necessary facilities for arranging the sale of these assets. DoWR,RD&GR has the discretion to gift the assets to the Institutions or transfer them to any other Institution if it is considered appropriate.
23. In the unforeseen and legitimate event of discontinuation by the PI, the Co-PI will assume full responsibility for completion of the project. In such cases the PI/Institute should evolve steps to ensure successful completion of the Project and Institute should nominate any one of the Co-PI as PI for the remaining work, before relieving the existing PI. Proposal to this effect by Head of the Institution, will promptly be sent to the INC /DoWR,RD&GR for seeking approval.



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24. Investigators are required to publish some research papers emerging out of the research scheme in leading National/International Journals. If the results of research are to be legally protected, it should not be published without securing legal protection and approval of DoWR,RD&GR. A copy of all such published paper may be submitted to INC / R&D Division.
25. Investigators wishing to publish technical/ scientific papers based on the results of research scheme should acknowledge the assistance received from DoWR,RD&GR.
26. The research findings of the scheme on its completion would also be disseminated by PI through presentation in workshop/ seminar etc. conducted by INC.
27. The Investigator(s) should not enter into collaboration with a foreign party (individual/ industry) without prior approval of DoWR,RD&GR.
28. The research institutes/organizations have to furnish a **Certificate** to the effect that 'this Grant does not relate the same staff structure for which a Grant under some other schemes has been allowed'.
29. After completion of the scheme, any unutilized amount along with interest accrued/payable if any should immediately be reported to the concerned INC and the same be surrendered to DoWR,RD&GR.
30. PI will ensure that the research work is completed within the prescribed duration. Any financial liability on account of delay in completion of research work on the part of the Institute will be that of the Institute.

Acceptance of the Conditions of the Grant by PI & Head of the Institute

I, ..., being a Principal Investigator (PI) of the research scheme entitled ".....", do hereby accept all the 'Terms and Conditions of Grants' as mentioned above.

Signature with Seal

Name of Head of the Institute
Designation
Date
Place

Signature with Seal

Name of Principal Investigator
Designation
Date
Place

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Appendix-8

Service Requests

*For the financial year:**Title of the scheme:**Name of the Institute:**Financial Progress:*

Year	Opening Balance	Grant Received	Total	Expenditure	End Balance

Head wise Expenditure:

Head of Expenditure	Expenditure till the end of previous financial year	Expenditure during the financial year	Total
Remuneration/Emoluments of Manpower			
TE			
Infrastructure			
Experimental Charges			
Total			

Man month's utilization: For each of the research staff, indicate following:

Designation	Man-months sanctioned	Cumulative Man-months utilized	Is the work done proportionate to man-months utilized? (Yes/No)

Work Progress

Indicate the progress against the agreed Work Schedule (As per the item 16 of the sanctioned proposals)

Funds to be released: Amount Rs. _____**Date of Completion:** (a) Scheduled Date (b) Expected Date

If there is a delay then state reasons for delay.

Any Revision of Estimate? If yes, then enclose details with justifications.

Enclosures (tick): UC (Appendix-9) Narrative Progress Report

Signature of Principal Investigator

Name
Date

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Appendix-9

Utilization Certificate

Copy of relevant Form from GFR 2017

FORM GFR 19- A

Utilization Certificate

[See Rule 212 (1)]

Sl. No. Letter No. and date Amount

Total

Certified that out of Rs _____ (Rupees _____) of
 Grants-in-aid sanctioned during the year _____ in favour of
 _____ under this Ministry / Department Letter no. given in the
 margin and Rs. _____ (Rupees _____) on account of unspent
 balance of the previous year, a sum of Rs _____
 (Rupees _____) has been utilized for the purpose
 of _____ for
 Which it was sanctioned and that the balance of Rs _____
 (Rupees _____) remaining
 unutilized at the end of the year has been surrendered to Government (vide
 No _____, dated _____) / will be adjusted towards the grants-in-
 aid payable during the next year _____.

2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was
 sanctioned have been duly fulfilled / are being fulfilled and that I have exercised the following
 checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised

- 1.
- 2.

Signature

Designation.....

Date

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Appendix-10**Statement of Equipment Purchased**

Assets acquired wholly or substantially out of Government grants Register maintained by grantee Institution

Name of Sanctioning Authority _____

Serial No	
Name of Grantee Institution	
No. and date of sanction	
Amount of the sanctioned grant	
Brief purpose of the grant	
Whether any condition regarding the right of ownership of Government in the property or other assets acquired out of the grant was incorporated in the grant-in-aid sanction.	
Particulars of assets actually Credited or acquired	
Value of the Assets as on (Date)	
Purpose for which utilized at Present	
Encumbered or not	
Reasons if encumbered	
Disposed of or not	
Reasons and authority, if any, for disposal	
Amount realised on disposal	
Remarks	

Principal Investigator

Head of the Department

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Appendix-11**Format for Completion Report**

1. Title of the scheme
2. Name and addresses of the PI and other investigators
3. Name and address of the Institute
4. Financial details (Sanctioned cost; amount released; expenditure; unspent balance (if any) and return of unspent balance)
5. Utilization Certificate
6. Statement of equipment purchased under the scheme
7. Original objectives and methodology as in the sanctioned proposal.
8. Any changes in the objectives during the operation of the scheme.
9. All data collected and used in the analysis with sources of data.
10. Methodology actually followed. (observations, analysis, results and inferences)
11. Conclusions/ Recommendations
12. How do the conclusions/recommendations compare with current thinking
13. Field tests conducted.
14. Software generated, if any.
15. Possibilities of any patents/copyrights. If so, then action taken in this regard.
16. Suggestions for further work

Signature
(Head of the Department)
Name
Date

Signature
(Principal Investigator)
Name
Date

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Appendix-12

Specific Instructions for sanction of Grants to NGOs under these Guidelines**Specific instructions for sanction of R&D Grants to Non-Governmental Organizations (NGOs)**

1. What constitutes an NGO An Indian non-profit making agency, which is registered under Indian Societies Registration Act or Indian Charitable Trusts Act, including societies or trusts created by the Central or State Government.

Recognized academic institutions and professional associations and profit making NGOs shall be excluded from this definition.
2. Draft format for the bond The format of the bond is enclosed at **Appendix-14.1.**
3. Who are acceptable as sureties Only those persons/entities are acceptable as sureties whose fixed deposits/assets are more than the proposed grant-in-aid to the concerned NGO. Certified copies of bank statement/audited accounts of sureties are required to be submitted.
4. Duration of the bond
 - Initially the duration of the bond shall be for 365 days beyond the scheduled date of completion.
 - If a time extension becomes necessary during the operation of the scheme, then the duration of the bond should also be extended to 365 days after the revised scheduled date of completion. Extension of bond would be a pre-requisite for such time extension.
5. If the scheme is not completed satisfactorily The entire funds released should be refunded to the Ministry within one month from Ministry conveying to the NGO to do so. If the NGO fails to do so, then the Government would proceed to recover the amount from the sureties.
6. Financial limits for sanction of grant-in-aid to NGOs

The estimate will be examined on its merits. But,

 - The expenditure under Equipment's Head should be restricted to absolute minimum and if possible, 'nil'.
 - The payment of salary to the personnel of the NGOs should not exceed Rs. 25,000/- per annum in each case.
7. Conditions of Grant-in-Aid
 - Apart from requirements under GFR, 2017, the grant-in-aid should conform to the pattern of assistance or rules governing such grants as approved by Ministry of Finance/ IF Wing.
 - The grant-in-aid should not be used to meet any administrative expenditure of NGO.
 - The account of the grantee NGO shall be open to inspection by the sanctioning authority/ audit.
 - The grantee NGO should ensure that its accounts are

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audited by C&AG of India/Chartered Accountants as per the provisions of GFR 2017 in respect of the expenditure out of the grants received and a copy of the audited accounts should be made available to the government as required.

8. Requirements regarding registration of the NGOs

The NGO must be registered, either under the Indian Societies Act or Indian Charitable Trusts Act. No funding shall be provided to un-registered NGOs.
9. Other qualifying criteria
 - NGO should generally have an all India character and should satisfy well-defined criteria regarding their resources, activities and personnel and their activities help promote the welfare schemes and programmes of the Government. Exceptions can be made in the case of highly deserving isolated organizations whose credibility and ability to achieve social objectives is accepted.
 - The NGO should be in operation for not less than three years after date of registration.
 - The NGO should supply a copy of their Memorandum of Association and rules and regulations.
 - The NGO should have submitted to the Registrar of Societies or Registrar of Trusts, as the case may be, audited accounts every year for last three financial years. A certificate to this effect from the appropriate Registrar should be enclosed.
 - The NGO should also enclose a copy of their income tax returns for the previous three financial years.
 - The NGO should have already existing premises/office in the State where it wishes to work.
 - The NGO must have office premises either of its own or rented in the name of the NGO in the State where it wishes to work. There should be at least minimum necessary furniture and office equipment;
 - The NGO should have at least one full time specialist relating to field of activities and at least one full time person for administration/financial management. The governing body of the NGO must have at least 35% members with background in the field of activity;
 - The NGO must have sufficient fixed/ cash assets to establish that it is an organization of substance;
 - Before the first project is assigned to NGO, its credentials and assets should be verified by an independent agency to establish its bonafides.
10. Black listing of NGOs

An NGO blacklisted by any Ministry/Dept. of Govt. of India will not be sanctioned any R&D project.

The NGO would furnish an affidavit that they have not been blacklisted by any other government agency. In the event it comes to notice that an NGO has submitted a

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false affidavit in this respect, apart from available legal recourse, the NGO and all the executive members of the said NGO shall be blacklisted by DoWR, RD&GR and the same shall be conveyed to all the central government agencies.

11. Providing R&D funds to private companies
No funds will be provided to a private company, the definition of a company being an agency registered under the Companies Act.
12. Format for Submission of Proposal
The proposal should be submitted as per the format given in Appendix-6. In addition, a BOND and a Certificate is to be submitted as mentioned in Para 2 and Para 10 above respectively.

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Appendix-12.1

Format of Bond and Certificate to be submitted by NGOs

BOND

This bond is made this _____ day of _____
(month) and _____ (year) between

_____ an association registered under the Societies Registration Act, 1860

and _____ having its office at _____

_____ (full address) in the State of _____
hereinafter called the 'obligor' (which expression shall, unless excluded by or repugnant to the context, be deemed to include its successor-in-interest) of the First Part through its current office bearers

(1) Shri/Smt. _____ (name of 1st office
bearer) son/daughter/ wife of Shri/Smt. _____ resident of _____ (2)

Shri./Smt. _____ (name of 2nd office
bearer) son/daughter/ wife of Shri/Smt. _____ resident of _____

hereinafter called the signatories (which expression shall, unless excluded by or repugnant to the context be deemed to include their respective heirs, executors, administrators and legal representatives) and the President of India (hereinafter called the Government) of the Second Part.

Whereas at the request of the obligor, the Government have sanctioned a grant-in-aid of Rs. _____ (Rupees _____) vide their letter No. _____ dated _____ (hereinafter referred to as "the said letter") which forms an integral part of these presents and a copy whereof is annexed hereto for the purpose of and on condition of the obligor executing a bond in favour of the Government on the terms and conditions and in the manner hereinafter contained which the obligor has agreed to do.

Whereas the signatories are the current office bearers of the obligor and are authorized to operate upon and bind the funds of the obligor.

Now this bond witnessed and it is hereby agreed and declared as follows:

- (1) That the obligor shall utilize the said grant-in-aid of Rs. _____ (Rupees _____) only for the purpose specified in the said letter and for no other purpose whatsoever.
- (2) That the obligor shall abide by all the terms and conditions specified in the said letter and the General Financial Rules, 1963 as amended from time to time and any orders or instructions that may be issued by the Government from time to time.
- (3) That in the event of any failure on the part of the obligor to abide by any of the terms and conditions of the Grant-in-aid specified in the said letter or its/their committing any breach thereof or in the case of misuse or use for indifferent purposes of the grant-in-aid money or any material/information coming to light leading to

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cancellation of grant, the Government will be at liberty to order the obligor and or the Authorized Signatories or either of them to repay in full forthwith the entire grant-in-aid amounting to Rs. _____ (Rupees _____) with interest thereon as may be fixed by the Government and decision of the Secretary to the Government of India in the Ministry of Water Resources about the amount so to be repaid shall be final and binding on the obligor and the sureties. In the event of failure on the part of the obligor and or the signatories or either of them to repay the amount so ordered by the Government, the Government shall reserve the right to recover the amount from the obligor and or the signatories or either of them as deemed appropriate.

- (4) The obligor agrees and undertakes to surrender/pay to Government the monetary value of all such pecuniary or other benefits which it may receive or derive/have received/ derived through unauthorized use such as letting out of the premises of the property/building created/acquired/constructed largely from/ out of the Government Grant for adequate or less than adequate consideration or use of such premises for any purpose other than that for which the grant was intended. The decision of the Secretary to the Government of India in the Ministry of Water Resources as regards the monetary value aforementioned to the surrendered/paid to the Government shall be final and binding on the obligor.
- (5) Upon the obligor utilizing the grant-in-aid only for the purpose specified in the said letter and abiding by fulfilling and performing all the terms and conditions of the said letter, the written obligation shall be void and of no effect but otherwise it shall be and remain in full force effect and virtue.

Provided always and it is hereby agreed and declared that the decision of the Secretary, Ministry of Water Resources as to whether the obligor has or has not performed and observed the obligations and conditions herein before received shall be final and binding.

Provided further that the liability of the two Signatories hereunder shall not be impaired or discharged by reasons or time being granted or any forbearance, act or, omission of the Government or any person authorized by them (whether with or without the knowledge or consent of the signatories) nor shall it be necessary for the Government to sue or take action against the obligor before suing or taking action against the signatories or either of them.

The stamp duty on the bond shall be borne by the Government.

IN WITNESS WHEREOF these presents have been signed by
Shri/Smt. _____ (name of the office bearer) and
Shri/Smt. _____ (name of the office bearer) for on

behalf of the obligor

Signed by (1) _____ Dated _____
(Signature of office bearer of the obligor)

Name and Address:

(2) _____ Dated _____
(Signature of office bearer of the obligor)

Name and Address:

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in the presence of

1. Witness _____
(Signature)Name _____ and _____ Address _____

_____2. Witness _____
(Signature)Name _____ and _____ Address _____

_____Signed by Shri/Smt. _____ and on
behalf of the President of India in the presence of(Signature)
Designation:1. Witness _____
(Signature)2. Witness _____
(Signature)(EACH PAGE OF THIS BOND HAS TO BE SIGNED BY THE TWO OFFICE BEARERS
OF THE INSTITUTION WHO ARE AUTHORISED TO OPERATE UPON AND BIND
THE FUNDS OF THE INSTITUTION)



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Certificate

Certificate/ Undertakings to be given by _____

_____ in terms of Ministry of
Water Resources, Government of India, New Delhi's sanction letter No.
_____ dated _____

1. We undertake that our Organization namely _____
_____ agrees to
the conditions of the grant as laid down in the above mentioned letter and Annexure to
this letter.
2. We certify that our organization is not involved in any proceedings relating to the
account or conduct of any of its office bearers.
3. We certify that all the Rules and Regulations are being followed and the prescribed
documents are being maintained.
4. We certify that the office bearers signing undertakings are duly authorized to operate
upon and bind the funds of the organization.
5. We certify that our organization namely _____
_____ is not engaged in any
corrupt practice.
6. We certify that our organization namely _____
_____ has not received
from any other department of the Central/ State Government for the same purpose
during the period of the grant.
7. We undertake to bear the prescribed percentage under the scheme towards total project
cost from our resources.

Signature of the Authorized Person
DateSignature of the Authorized Person
Date

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Annexure-1

Proforma for Bio-Data of Principal Investigator (PI) and Co- Principal Investigator (Co-PI)

1. Name
2. Date of Birth
3. Date of Retirement
4. Institute
5. Full address for correspondence
6. Phone and e-mail ID
7. Educational /Professional Qualifications*

S.No.	Degree	Institution	Year of passing	Division/Class

*Commencing from latest

8. Employment Experience*

S.No.	Position & Organization	Nature of Job	Period

*Commencing from latest

9. List of Publications (For last 5 calendar years wise only)

- 9.1 Journal Publications
- 9.2 Conference Presentations

10. Patents filed/Granted with details
11. Books Published /Chapters contributed
12. Track Record and Workload Assessment of the PI

List all the research *and consultancy* schemes, whether funded by DoWR, RD&GR or any other agency, in which the present PI is/was Principal Investigator, in following groups.

12.1 Sponsored Research / Consultancy Projects – Completed

S. No	Title	Sponsoring Agency and Officer Concerned	Period		Amount (Rs in lakh)	Achievements
			From	To		

12.2 Sponsored Research / Consultancy Projects - In-hand/ Ongoing

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S. No	Title	Sponsoring Agency and Officer Concerned	Period		Amount (Rs in lakh)	Achievements
			From	To		

12.3 Research Schemes foreclosed with reason

S. No	Title	Sponsoring Agency and Officer Concerned	Period		Amount (Rs in lakh)	Reasons of foreclosure
			From	To		

12.4 Sponsored Research/Consultancy Projects submitted for approval of sanction of Grants

S. No.	Title	Agency to whom submitted	Duration	Amount (Rs in lakh)

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Annexure-2**Endorsement from collaborating Institution/Agency**

I have gone through the Research proposal entitled..... Submitted by
..... (Name of PI) of..... (Name of the collaborating
Institution/Agency) for DoWR, RD&GR funding and noted the obligations and
responsibilities indicated in our name which are as below :

1. Proposed activities of research work (list activities)
2. Estimated cost for the proposed activities (mention amount in Rs.)
3. Share of Overhead charges and Contingency (Taken together)

I hereby affirm that my organization is committed to participate in the research
scheme to the full extent with above mentioned obligations and responsibilities.

(Head of the collaborating Institution/Agency)
Seal/Stamp

Date
Place

Digitally signed by
Lokesh Kumar Meena
Date: 01-12-2025
16:21:12

**Guidelines for Implementation of R&D Programme
(Sponsoring & Coordinating Research in Water Sector)
Part-II: For Use of Research Committees**

1.0 Introduction

1.1 R&D Programme of DoWR, RD&GR - Scope & Objectives

Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD&GR), Ministry of Jal Shakti (MoJS) provides financial assistance to promote research work in the field of Water Resources under the sub-component "Sponsoring and Coordinating Research in Water Sector" of the scheme "Research and Development Programme in Water Sector and Implementation of National Water Mission" during 15th Finance Commission Period and subsequent plans. The assistance is provided by way of grants to academicians/experts (investigators) in the Universities, IITs, recognized R&D laboratories, Water Resources/ Irrigation departments of the Central & State Governments and NGOs.

Considering the peculiarities and large variation in the nature of problems associated with water resources planning and development, the issues involved in research related to particular region and specific projects, DoWR, RD&GR is sponsoring research proposals of applied nature along with basic and action research. The research activities of such nature are implemented through Committees constituted by the Ministry involving the academicians/experts.

R&D Division, DoWR, RD&GR, MoJS is Subject Matter Division (SMD) for coordination of above research activities which acts as the Ministry's interface with above Committees. It is also working as Secretariat to "Standing Advisory Committee (SAC) in Water Sector" of DoWR, RD&GR for approval of recommended research proposals.

The composition and functions of the SAC are provided below:

I. Composition of SAC:

- AS&MD (NWM), DoWR, RD&GR, MoJS - Chairperson
- Joint Secretary, NWM - Member
- Joint Secretary & Financial Advisor - Member
- Domain Expert from CWC/CGWB - Member
- Director, R&D Division, DoWR, RD&GR - Member Secretary

Any other representative(s) from the Central Government Ministry/Department/Organization may be co-opted by the Chairperson.

II. Functions of SAC:

- To carry out reviews and to provide necessary guidance & directions from time to time on effective implementation of R&D Programme of DoWR, RD&GR.
- To recommend priority areas of research to be conducted under the R&D Programme.
- To consider all invited proposals, recommended by various INCs and TEC for their approval by DoWR, RD&GR.
- To decide on the Quantum and milestones of payment.

Instructions for formulation and format for submission of research proposals and other related instructions to PI along with the subject domain/priority areas of INCs are given in Part-I of the Guidelines. The instructions in this part of Guidelines are for use of INCs for implementation of activities under sub-component "Sponsoring and Coordinating Research in Water Sector" of scheme "Research and Development Programme in Water Sector and Implementation of National Water Mission" during 15th Finance Commission Period and subsequent plans.

2.0 Functions of Indian National Committees (INC)s of DoWR, RD&GR

The functions of Research Committees (INC)s of DoWR, RD&GR are listed below:

- a. To review the R&D activities in the subject area; identify topics which need immediate attention and encourage the national institutions to take up research on these topics. The committee may also identify and recommend the institutions for taking up research on specific topics.
- b. To maintain effective co-ordination to avoid overlaps in the research programmes of the different institutions.
- c. To encourage indigenous industry to take up technology development in the subject area.
- d. To encourage voluntary professional bodies and Non-Governmental Organizations (NGOs) to take up R&D activities, in the subject area
- e. To review the state of the art in the country in different branches of the subject area by collecting relevant information from national and international organizations and publish 'State of the art Report'.
- f. To co-ordinate and recommend funding for research proposals/schemes to be taken up by the research institutions/ organization/ R&D labs in the country on basic research, applied research and action research, along with other areas of research in the subject field.
- g. To prepare ToR for inviting research proposals of topics finalized by the Ministry.
- h. To monitor the progress of research proposals invited by the Ministry.
- i. To disseminate research findings by publishing journals, research news/ digests; arranging and conducting seminars/ conferences/workshops etc.

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- j. To promote and co-ordinate effective participation of India in the International programmes related to the subject area and to act as national committee for such International bodies where required.

3.0 Constitution of Indian National Committees (INCs)

3.1 The INCs are constituted by the DoWR, RD&GR. The subject domain/priority areas, Member Secretaries and addresses of INCs are given in Part-1 of the Guidelines. The composition of the INCs comprises the members of permanent and non-permanent nature. Some members are from DoWR, RD&GR & its offices and others are representatives from different Department/Ministries, Research Institution/Organization, Universities/Academic Institutes, NGOs and Experts. The composition of three INCs is given below:

A. Composition of Indian National Committee on Surface Water (INCSW)

- | | |
|--|--------------------|
| 1. Member (WP&P), Central Water Commission (CWC), New Delhi | Chairman |
| 2. Member (D&R), CWC or his representative not below the rank of Chief Engineer | Member (Permanent) |
| 3. Chairman, Central Ground Water Board or his representative not below the rank of Chief Engineer | Member (Permanent) |
| 4. Director, National Institute of Hydrology, Roorkee | Member (Permanent) |
| 5. Director, Central Soil and Material Research Station (CSMRS) | Member (Permanent) |
| 6. Director, Central Water and Power Research Station (CWPRS) | Member (Permanent) |
| 7. Director (R&D), DoWR, RD&GR, MoJS | Member (Permanent) |
| 8. Representative of Finance Wing, DoWR, RD&GR, MoJS not below the rank of Director | Member (Permanent) |
| 9. Representative of Ministry of Agriculture not below the rank of Director | Member (Permanent) |
| 10. Representative of Ministry of Environment Forest & Climate Change not below the rank of Director | Member (Permanent) |
| 11. Representative of Ministry of Housing and Urban Affairs not below the rank of Director | Member (Permanent) |

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- | | | |
|-----------|---|------------------------------|
| 12. | Representative of National Mission for Clean Ganga not below the rank of Director | Member (Permanent) |
| 13. | Representative of Department of Drinking Water and Sanitation not below the rank of Director | Member (Permanent) |
| 14. | Representative of DST/DSIR/CSIR not below the rank of Scientist 'F'/Director | Member(Permanent) |
| 15. | One Representative of State Governments/ Water and Land Management Institutes (WALMIs) not below the rank of Chief Engineer | Member(Non-Permanent) |
| 16. | One Representative of a Professional Society/NGO having relevant technical expertise | Member(Non-Permanent) |
| 17. & 18. | Two eminent experts/ academicians | Member(Non-Permanent) |
| 19. | Director, CWC, New Delhi (to be nominated by Chairman, CWC) | Member-Secretary (Permanent) |

Note: Members at S. No. 15 to 18 will be nominated by DoWR, RD&GR on the recommendation of INC for a term of 3 year. The INC may co-opt any other expert/ official as and when considered appropriate.

B. Composition of Indian National Committee on Ground Water (INCGW)

- | | | |
|----|--|--------------------|
| 1. | Chairman, Central Ground Water Board | Chairman |
| 2. | Member (SML), Central Ground Water Board | Member (Permanent) |
| 3. | Representative of Central Water Commission, New Delhi not below the rank of Chief Engineer (to be nominated by Chairman, CWC) | Member (Permanent) |
| 4. | Representative of Geological Survey of India not below the rank of Director (to be nominated by Director General, GSI, Kolkata) | Member (Permanent) |
| 5. | Representative of National Institute of Hydrology, Roorkee, not below the rank of Scientist 'F' (To be nominated by Director, NIH) | Member (Permanent) |

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- | | | |
|----------|---|------------------------------|
| 6. | Representative of Central Pollution Control Board, New Delhi not below the rank of Director (To be nominated by Chairman, CPCB) | Member (Permanent) |
| 7. | Representative of Ministry of Environment Forest and Climate Change not below the rank of Director | Member (Permanent) |
| 8. | Representative of Ministry of Agriculture not below the rank of Director | |
| 9. | Representative of Ministry of Housing and Urban Affairs not below the rank of Director | |
| 11. | Director(R&D), DoWR,RD&GR | Member (Permanent) |
| 12. | Representative of Finance Wing, DoWR,RD&GR not below the rank of Director | Member (Permanent) |
| 13. | One Representative of State Research Institutes not below the rank of Chief Engineer | Member (Non-Permanent) |
| 14. | One Representative of a Professional Society/NGO having relevant technical expertise | Member (Non-Permanent) |
| 15 & 16. | Two (2) eminent experts/ academicians | Member (Non-Permanent) |
| 17. | An officer of CGWB equivalent to JAG Level (To be nominated by Chairman, CGWB) | Member (Permanent) Secretary |

Note: Members at S. No. 13 to 16 will be nominated by DoWR,RD&GR on the recommendation of INC for a term of 3 year. The INC may co-opt any other expert/ official as and when considered appropriate.

C. Composition of Indian National Committee on Climate Change (INCCC)

- | | | |
|----|---|--------------------|
| 1. | Director, National Institute of Hydrology | Chairman |
| 2. | Director, IITM, Pune or his representative | Member (Permanent) |
| 3. | Advisor (Technical), National Water Mission | Member (Permanent) |
| 4. | Advisor, National Mission for Strategic Knowledge for Climate Change | Member (Permanent) |
| 5. | Representative of Central Water Commission, New Delhi not below the rank of Director (to be nominated by Chairman, CWC) | Member (Permanent) |
| 6. | Representative of Central Ground Water Board, New Delhi not below the rank of | Member (Permanent) |

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- | | | |
|-----|--|-----------------------------|
| | Director (to be nominated by Chairman, CGWB) | |
| 7. | Representative of Ministry of Agriculture not below the rank of Director | Member (Permanent) |
| 8. | Representative of Ministry of Environment Forest and Climate Change not below the rank of Director | Member (Permanent) |
| 9. | Representative of Ministry of Housing and Urban Affairs not below the rank of Director | Member (Permanent) |
| 10. | Director(R&D), DoWR, RD&GR, MoJS | Member (Permanent) |
| 11. | Representative of Finance Wing, DoWR, RD&GR not below the rank of Director | Member (Permanent) |
| 12. | One Representative of IIT Delhi/IIT Roorkee not below the rank of Professor | Member(Non-Permanent) |
| 13. | One Representative of IISC Bangalore/IIT Madras not below the rank of Professor | Member(Non-Permanent) |
| 14. | One Representative of IIT Kanpur/IIT Guwahati not below the rank of Professor | Member(Non-Permanent) |
| 15. | One Representative of a Professional Society/NGO having relevant technical expertise | Member(Non-Permanent) |
| 16. | An officer of NIH equivalent to JAG Level, (To be nominated by Director, National Institute of Hydrology, Roorkee) | Member Secretary(Permanent) |

Note: Members at S. No. 12 to 15 will be nominated by DoWR, RD&GR on the recommendation of INC for a term of 3 year. The INC may co-opt any other expert/official as and when considered appropriate.

- 3.2 In case of Non-permanent Members, the INC should submit a proposal to the SMD (R&D Division, DoWR, RD&GR) for nomination of new members before the expiry of three year term of existing member. The proposal should indicate the members retiring on completion of their term and a panel of new members consisting of three times the number of retiring members for next term.
- 3.3 The case for reconstitution should be submitted to the SMD about three months before the end of the current three-year term. However, the membership is not automatically dissolved at the end of three-year term and in the unlikely event of a delay in nomination, the committee should continue to function with its current membership.

- 3.4 Consent of the proposed members should be obtained by INC before proposing their names.

4.0 Constitution of Technical Evaluation Committee (TEC)

After receiving the proposals, the Technical Evaluation Committee, as constituted by SAC, shall conduct a detailed evaluation of the proposals. The Composition of the TEC will be as follows:

Sl. No.	Name of Officer/ Department	Designation
i.	Joint Secretary NWM	Chairperson
ii.	Domain Expert from CWC/CGWB	Member
iii.	IT Expert having domain knowledge of AI/IoT/DSS from DoT	Member
iv.	Representative from DoDW&S	Member
v.	Director, NIH, Roorkee	Member Secretary

*The SAC may customize the structure of TEC, on a project-to-project basis, as deemed appropriate.

** The expert should not be from the same institute /Organization whose proposal is under consideration.

Mandate: The Technical Evaluation Committee (TEC) will recommend the following:

- Technical examination of the project,
- Recommend Project duration,
- Key Performance Indicators (KPIs) for each selected beneficiary/ project for monitoring purposes.
- Mid-term and 3rd Party Review on completion of projects by shortlisted/earmarked Experts.
- Any other item as desired by the Chair of Technical Evaluation Committee (SAC).

5.0 Secretariat Expenditure for INCs

5.1 The INC should plan all the activities for the financial year at the beginning of it and prepare an estimate to cover expenses of all such activities under the Secretariat Expenses of INC. The estimate may include the following items:

- a) Operational expenses (consumables, communication, expenditure for holding the meetings etc.)
- b) Travel Expenses (TE) for PIs and non-official members: A provision to be made for the payment of Travel Expenses (TE) to the members of the INCs for travel in connection with the work of the committee as indicated in the table given below:

Members employed in offices/ organizations under Central or State Government, PSUs, private companies, associations of manufacturers and traders.	TE will not be paid by DoWR, RD&GR
Members from educational institutions	TE to be paid preferably by the employer institute. But if the institute is not in a position to do so, TE can be paid by DoWR, RD&GR. This should be indicated in the proposal for nomination/reconstitution.
Members in their individual capacities as non-official, representing NGOs other than associations of manufacturers and traders	TE can be paid by DoWR, RD&GR if the member so desires. This should be indicated in the proposal for nomination/reconstitution.

Where TE will not be paid by the DoWR, RD&GR this should be brought to the notice of the prospective member while seeking his consent. Members from educational institutes should be asked to confirm whether or not their institute will pay for the TE.

- c) Cost for holding R&D sessions and workshops/seminars, sponsoring events for dissemination of research findings etc.
- d) Honorarium to experts: The INC may engage experts for examination of the new proposals and project completion reports. The amount of the honorarium may be kept as Rs. 3000/- per proposal or as decided by the MoWR from time to time.
- e) Cost of the items/office equipment which are necessary for the working of the INC and not provided by the parent office of the Member-Secretary.
- f) Cost of printing reports, publishing journals etc.

5.2 Once the estimate is sanctioned for secretariat expenditure, the funds will be placed at the disposal of the PAO of the parent office of the Member Secretary (in case of attached and subordinate organization of DoWR, RD&GR). Further expenditure from these funds may be incurred by INC as per the GOI rules. Others

organizations (NIH) may keep provision for secretariat expenses in their regular budget.

5.3 At the end of the financial year the Member Secretary of INC should submit an Expenditure Statement and Utilization Certificate (UC) as on 31st March to SMD on or before 30th June. The estimate for the next year will be sanctioned only after receipt of the Expenditure Statement and UC for the previous year.

6.0 Policy and ToR for Invited Research Proposals

- 6.1 DoWR, RD&GR will invite research proposal in the priority areas and other areas of substantial importance in water sector.
- 6.2 Research Committee may shortlist areas for invited research on the basis of deliberations/minutes of the meetings of the SAC, INC, workshops and seminars etc. A Background Note on the area may be prepared indicating the current status, research gap, topics of research, objectives and identified institutes for conducting research.
- 6.3 The identified topics and target institutes for invited research will be considered and finalized by the SAC.
- 6.4 INC will prepare Methodology and ToR for deliverables & outcomes of all finalized topics for the research and request Institutes / PIs to submit the proposals in accordance with R&D Guidelines. A sample ToRs for proposals related to impact assessment of climate change and down scaling studies of river basins is enclosed at **Appendix-13** for reference.
- 6.5 The proposals for invited research schemes would be processed and recommended by the concerned INC for consideration of SAC for approval of DoWR, RD&GR through SMD.

7.0 Examination of Research Schemes (both Sponsored as well as Invited)

- 7.1 As soon as a new research proposal is received, the INC secretariat should examine whether the topic of the proposal is within its domain and adheres to the guidelines. It should also be checked whether the given annexures, documents /certificates are as required. If not, then the proposal may be returned to the PI with its observations. The PI may revise and resubmit it to the INC. It is the responsibility of the INC to examine all aspect the proposal, including estimates.
- 7.2 INC should ensure that no research proposal from any of its members as PI is considered for funding.
- 7.3 If the proposal satisfies above requirements, then INC will allot an identification number for reference and send soft copy of the proposal to 2-3 experts/ reviewers for its peer review and to all its members for their views, if any.

- 7.4 Comments received from all the sources should not individually be sent to the PI for compliance/replies. The INC Secretariat may consolidate all the comments and send these to the PI in one go.
- 7.5 The source of each comment is to be kept confidential from the PI.
- 7.6 On receipt of the views from reviewers, INC may ask the PI to submit the revised proposal after incorporating the views of the experts/ reviewers and the observations of INC, if any.
- 7.7 For verification that there is no duplication of study/ research proposal, INC will obtain views of DST/DSIR/CSIR, Ministry of Earth Sciences, Ministry of Environment & Forest and Ministry of Agriculture etc on the proposal within a month from date of issue of such letter from INC.etc., on the proposal within a month from date of issue of such letter from INC. The respective National Missions under the National Action Plan on Climate Change are also to be consulted prior to consideration of the proposal/inviting proposal on the topic selected in the case of INCCC.
- 7.8 The entire process of examination and evaluation should be completed within 6 months.

8.0 Procedure for approval of research schemes

- 8.1 After completing the process of examination as discussed in Para 6 above, the INC may hold its meeting and invite PIs to present their proposals before the Committee for discussion. On the basis of discussion, INC may take a view on the schemes to recommend or not for further consideration.
- 8.2 All invited proposals would be recommended by the INCs and sent to SMD i.e. R&D Division in prescribed Proforma (**Appendix-14**) for further consideration by SAC. The proposal will be processed for Approval/ Sanction of DoWR,RD&GR for funding after its recommendation by SAC.

9.0 Monitoring of Progress of Research Schemes

The method of monitoring of progress (both physical & financial) of research scheme should be indicated by INC while making recommendation of the scheme for Approval/Sanction of MoWR. For the monitoring of progress, annual progress report (from 1st April to 31st March) of ongoing schemes is required to be Submitted by PI to the INC on or before 30th June of the following financial year. Each INC will identify the schemes requiring specific monitoring depending upon the cost involved and importance/ urgency of outcome. The remaining schemes could be monitoring based upon the periodic reports submitted by PIs.

- 9.1. For monitoring the progress of the ongoing research schemes each INC should conduct the R&D session at least once a year with following objectives:

a. Mid-term and peer review of ongoing schemes.

b. Identification of areas that are neglected and which need attention.

c. General brainstorming.

9.2 The session should involve not only the members of INC, officers from MoWR and organization under MoWR but also the reputed academicians and practicing engineers, technology leaders. Young scientists and engineers will find it encouraging if some of them, down to the level of RA/SRF/JRF, from some select schemes are involved.

9.3 Each INC will identify the schemes requiring specific monitoring depending upon the cost involved and importance/urgency of outcome. For the purpose of specific monitoring, INC may prepare a panel of experts to visit the institute periodically to review the progress of work being carried out and to suggest suitable measures to ensure realization of the objectives / outcomes of the project.

9.4 Annual progress report (from 1st April to 31st March) of ongoing schemes is required to be submitted by INC to the SMD within 15 days of the receipt of the same from PI. Status of pending progress reports would be reported by the INC to SMD by 31st July of the following financial year

10. Release of funds, time extension, revalidation etc.

10.1 All service requests for release of funds, revalidation, revision of estimate etc. in respect of ongoing schemes will be examined and recommended by concerned INC as per the check list (**Appendix-15**) for processing by SMD.

10.2 The approval for time extension for completion of the projects will be granted by INC subject to fulfillment of conditions, upto six months from the original date of completion. Any further time extension would be referred with recommendations to SMD.

10.3 Requirements to be fulfilled for obtaining further installments of funds, revalidation of unused funds, time extension etc. and procedure to be followed are given in Part 1- of the Guidelines.

11.0 Closure on completion /Premature closer

11.1 Mostly the PI would complete the work and the scheme would be closed in the normal course. As indicated in Part-1 of the Guidelines, the PI will first send draft report to the INC. The INC will then get the draft report examined by members of INC / officers from the organizations under DoWR, RD&GR and/or if necessary, external experts.

11.2 The draft report would be examined in the context of stated objectives, outcomes and methodology as given in the original proposal. The purpose is to verify if the stated methodology has been followed. The draft report should thereafter be accepted, if necessary, with minor modifications, and the PI can proceed with final report.

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- 11.3 If it is felt that the PI has not made sincere efforts to achieve the stated objectives then it needs to be considered whether any useful purpose can still be achieved within the remaining funds (if any) by insisting on more work. If this is not possible then the scheme may be prematurely closed.
- 11.4 When a scheme is to be terminated prematurely, the case should be examined by the concerned INC with reasons and justification for premature termination. In case, it is proposed that all the grant should be recovered, then the INC may write to the PI without approval from the DoWR,RD&GR. But, if it is proposed to recover only the unspent balance, then the case should be submitted to the DoWR,RD&GR with justification for not recovering the entire amount. In such case, the adverse comments should be taken into account when evaluating the track record of the Institute and the PI the next time he submits a new proposal.
- 11.5 In cases where the experts evaluating the results consider that some more work will significantly improve the outcome, the matter may be discussed with the PI for continuing the scheme with additional funding if necessary, or for submission of a new proposal.
- 11.6 Approval from MoWR is not necessary to close the scheme on its completion.

However, following documents should be kept by INC for dissemination /record and a copy of the same may be sent to R&D Division:

- Two copies of the final completion report in print format.
 - The soft copy of the report.
 - Comments on draft report by the evaluators.
 - A brief assessment by the INC indicating the action to be taken on the outcome of the work.
 - Final statement of account, all Utilization Certificates.
- 11.7 The Demand Draft for unspent balance receipt from PI should be sent to PAO, DoWR,RD&GR by INC under intimation to R&D Division with photocopy of the Demand Draft. In case the unspent balance has been refunded through or through Bharat Kosh, the details of same may be submitted.

12.0 Printing of Reports and Dissemination of Research Outcomes

Necessary provision may be made in the annual budget of the INC for printing extra reports, if required. Also, when the INC prints the report due credit should be given to the authors of the report, the PI and other investigators who worked on that project. INC should device methodology for effective dissemination of outcome of research. A copy of report should be uploaded on the website of the INC and DoWR,RD&GR.



Note: These guidelines should be read with the "Part 1 - Instructions for Investigators".

Appendix-13**Sample Terms of Reference (TOR) and deliverables for Invited Proposals****Sample 1 - R&D Project proposals for Downscaling Studies**

The proposal may involve accomplishment of following tasks:

- TASK 1: Project formulation and monitoring
- TASK 2: Data collection and data base development
- TASK 3 : Selection of GCMs
- TASK 4: Bias Correction
- TASK 5: Statistical Downscaling
- Task 6: Dynamic downscaling
- TASK 7: Downscaling of Extremes
- TASK 8: Uncertainty Analysis
- TASK 9: Presentation of Results

The deliverables of the project are as under:

- Baseline data, information and past studies considered for downscaling.
- GCM simulations used for downscaling with Bias correction.
- Downscaled output of minimum five GCM simulations in CMIP5 for climatological variables in a compact grid format, at different temporal scales (preferably at daily interval) projected up to the years 2100, for the basin using statistical/dynamic down scaling techniques and to be made available to all the PIs within one year.
- Outputs may be projected at basin scale and also at State/UT scale so that the results could become direct inputs to the basin level impact studies and State level action plan being prepared by other agencies.
- Downscaled output for hydrological extremes for the basin projected up to the years 2100.
- Outputs of uncertainty analysis of various downscaling
- Organization of Workshop/Trainings on downscaling.

Sample-2: R&D proposals on Impact Assessment of Climate Change

The proposal may involve accomplishment of following tasks

- TASK 1: Project formulation and Monitoring
- TASK 2: Data collection and data base development
- TASK 3: Downscaling
- TASK 4: Calibration and Validation of Hydrological Models
- TASK 5: Assessment of climate change impacts
- TASK 6: Conclusions and Adaptation options

The deliverables of the project are as under:

- Base line data, information and past studies
- Results of parametric/non-parametric tests for trend detection for hydro-meteorological and hydrological variables.
- Calibrated and validated hydrological model(s)
- Impacts on water availability at various gauging sites within the basin (in terms of change in flow duration curves),
- Impacts on irrigation water demands,
- Identification of hydrological extremes based on the base line data
- Impacts on meteorological/hydrologic droughts (in terms of change in frequencies of occurrence), Analysis of uncertainties in the impacts. The impacts and the associated uncertainties must be assessed for near-future (2015-2040) and for distant future (2040-2100), and
- Recommendations for adaptation measures/options
- Additional deliverables (optional) depending on their importance for the basin and the available expertise in the investigating team.

Note: This is a sample of TOR prepared by INCCC for 'Downscaling' and 'Impact assessment of Climate Change for River Basins' and given here for illustrative purpose only. The actual TORs and deliverables would be communicated by INCs at the time of inviting the proposals.

Appendix-14

**Proforma for submission of new research schemes for Approval of Standing
Advisory Committee (SAC) for Research in Water Sector**

1. Name of Scheme	:	
2. Name of PI	:	
3. Institute	:	
4. Research Committee	:	
5. Total Cost	:	
6. Duration	:	
7. Amount of first installment	:	
8. Objectives:		
9. Methodology:		
10. Abstract of Cost:		
No.	Head	Amount in Rs.
i.	Remuneration/ Emoluments	
ii.	Travel Expenditure	
iii.	Experimental Charges	
iv	Infrastructure	
	Sub Total	
v.	Contingencies	
	Total	
vi.	Institutional Overhead Charges	
	Grand Total	
11. Identified end users of outcome of the research and their views/ recommendation:		
12. Duplicity Check from Ministries/Departments involved in research activities in water sector, DoDW&S and other organizations under DoWR, RD&GR, etc.:		

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Appendix-15**Check List for Service Request for Ongoing Schemes**

1. Title of the Scheme:
2. Name of PI:
3. Sanctioned cost:
4. Sanctioned Duration:
5. Starting date of the Scheme:
6. Probable completion date:
7. Services Recommended by the INC:

Year wise amount released so far	Year	Amount Released	Expenditure Incurred	Balance
	Total			
Release of fund proposed	Amount:			
Revalidation of unspent balance	Amount:		For Year:	
	Amount:		For Year:	
Time Extension (enclose a note on reasons for delay and justification for time extension)	Scheduled Date of Completion:			
	Time Extension recommended upto:			
Revision of estimate	Current Sanctioned Cost			
	Revised Cost			
Any other?				

8. Enclosures**Yes/No/Not Applicable**

Utilization Certificate	
Subhead wise expenditure statement, indicating deviation if any and justification for the deviations.	
Details of permanent equipment purchased with GFR 19	

9. Progress**Yes/No/Not Applicable**

Monitoring. Is it satisfactory?	
Is progress of work satisfactory?	
Is it commensurate with expenditure, particularly on salary and TE?	
Is it commensurate with utilization of man-months?	
If release of fund is being recommended then confirm whether the corresponding mile stones have been achieved.	
Cost of permanent equipment. Is it prima facie reasonable?	
Deviations of expenditure from sanctioned cost. Are the deviations and justifications for the same acceptable?	

Signature of the Member-Secretary of INC

Digitally signed by
Lokesh Kumar Meena
Date: 01-12-2025
16:24:14

