

03/2021

**HSPCB****Date:-23/04/2021**

To,

HARYANA STATE POLLUTION CONTROL BOARD
C-11, SECTOR-6, PANCHKULA
Ph. 0172-2577870-73
E-mail:hspcbho@gmail.com

1. The Department of Technical Education, Haryana, Panchkula
2. National Institute of Technology, Kurukshetra.
3. Maharshi Dayanand University Rohtak
4. Hisar, Agriculture University, Hisar
5. Guru Jambheshwar University, Hisar
6. Maharishi Markandeshwar University, Mulana

Sub:- R & D Proposals aligned to the objectives of Jal Jeevan Mission - Har Ghar Jal - Reg.

Sir,

Kindly refer to letter no. A-14011/1/2020-WQM-I/4123 dated 23.12.2020 on the subject noted above.

In this connection, I have been directed to enclose herewith the copy of letter dated 23.12.2020 received from Central Pollution Control Board regarding R & D Proposals aligned to the objectives of Jal Jeevan Mission - Har Ghar Jal and request you to submit R& D proposal to MOJS through their researchers/ Scientists/ students etc please.

DA/ As above

Digitally signed by JATINDE
PAL SINGH
Date Fri Apr 23 11:10:33 IST
2021
Reason: Approved

Sr. Env. Engineer (HQ)
For Member Secretary



**Har Ghar Jal
Jal Jeevan Mission**

**Building Partnership
Changing lives**

Guidelines
Research & Development Projects
Jal Jeevan Mission
(Har Ghar Jal)



सत्यमेव जयते

Government of India
Ministry of Jal Shakti
Department of Drinking Water and Sanitation
National Jal Jeevan Mission

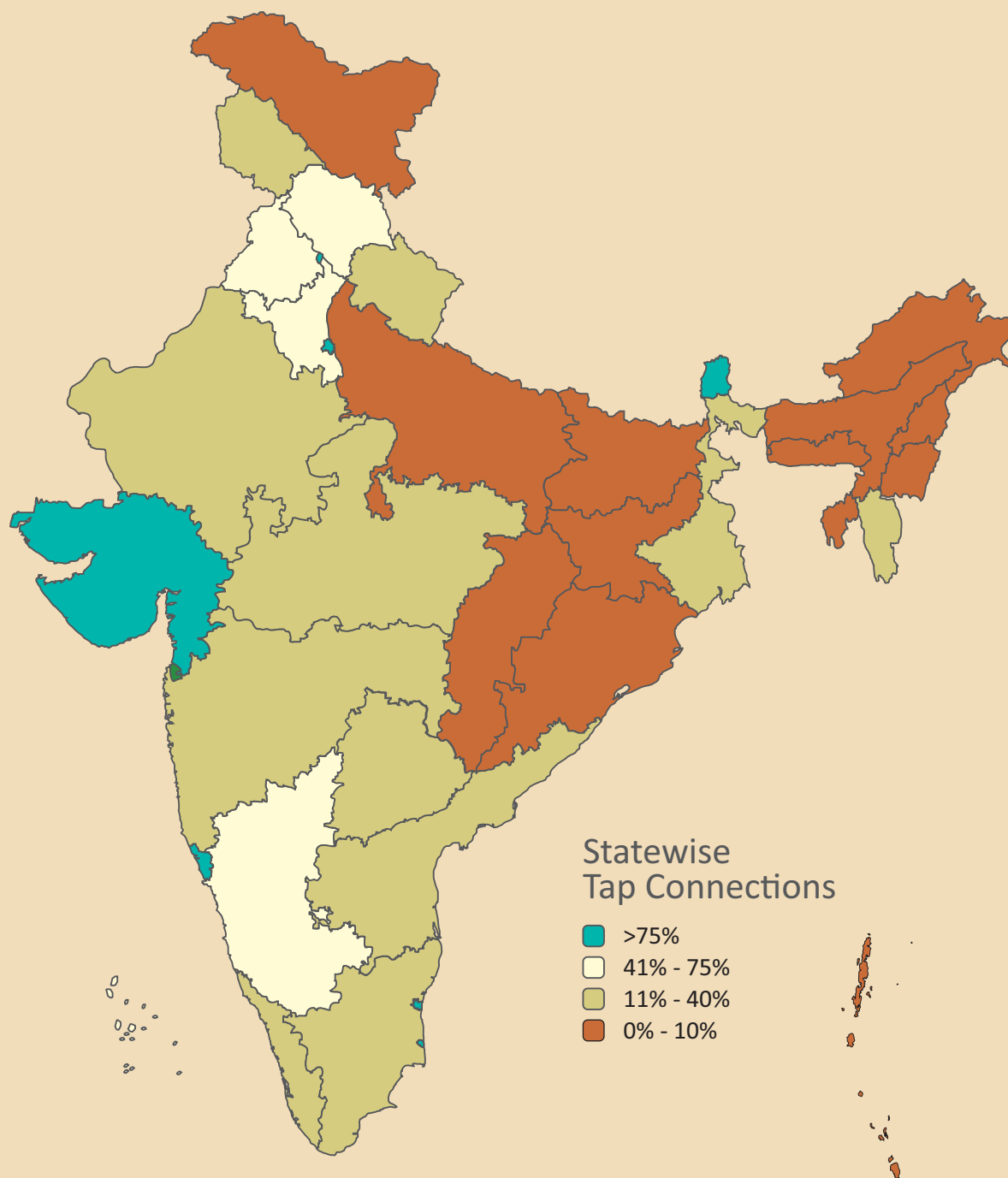
August, 2020



Har Ghar Jal
Jal Jeevan Mission

Status of household tap connections

(as on 01.04.2019)





Shri Narendra Modi
Prime Minister of India

“ I declare from the Red Fort today that in the days to come, we will take forward the Jal Jeevan Mission. The Central and the State governments will jointly work on this **Jal Jeevan Mission**. We have promised to spend more than **Rs. 3.50 Lakh Crores** on this mission in the coming years.....in the next five years, we have to do more than four times the work that has been done in the last 70 years...”

(Independence Day address of Prime Minister from Red Fort on 15th Aug, 2019)



Bharat Lal



**Additional Secretary &
Mission Director**

Government of India
Ministry of Jal Shakti
Department of Drinking Water and Sanitation
National Jal Jeevan Mission

Foreword

Jal Jeevan Mission is being implemented in partnership with States to enable every household in all villages to have Functional Household Tap Connection (FHTC) by year 2024 and every family gets assured quality of safe drinking water of prescribed quality on regular and long term basis. The rural drinking water supply is a complex subject with various social, environmental and technical challenges.

In order to implement the mission with speed and scale, it is necessary to address the technological and knowledge gaps that come up during the implementation. The R&D guidelines encourages young minds, researchers, academia, entrepreneurs, start-ups working in this sector to provide cost-effective solutions and fill knowledge gaps. Furthermore, The Department/ National mission/ SWSM will conduct action research and concurrent evaluation studies for adopting evidence-based technical intervention to manage rural water supply efficiently, effectively and economically.

Present issues in drinking water sector like geo-genic and anthropogenic water quality issues, long-term potable water supply in harsh edapho-climatic conditions and disaster prone areas, measurement and monitoring of water service delivery, action research on behaviour change, cost-effective grey water treatment and reuse etc. may be taken up and financial support will be made available to carry forward the research, field validation and demonstration. Partnership with industry is also welcomed in the guidelines to develop technology and innovation in the focus areas.

The researchers, innovators, scientists and various institutions are also encouraged to publish their project work undertaken in reputed journals for the larger benefit of the society. All R&D proposals are required to be submitted through online portal.

I hope the guideline for research & development project under Jal Jeevan Mission will facilitate in building partnership with scientists and R&D institutions, innovators, entrepreneurs and create useful knowledge that will help in resolving various challenges in the sector so as people lives can be improved further.

[Bharat Lal]

17 August, 2020

Contents

1. Introduction	1
2. Thrust areas for R&D	1
3. Eligibility criteria	1
4. Duration of the R&D project	1
5. Confidentiality clause	1
6. Procedure of submission of proposal and approval	2
7. General conditions	2
8. Funding of the R&D projects	5
9. Intellectual property rights	6
10. How to apply	6
Annex - I	7
Annex - II	8
Annex - III	10

1. Introduction

As per operational guidelines on Jal Jeevan Mission, good quality proposals related to water and sanitation received from R&D institutions and innovators will be scrutinised and selected for demonstration purpose on pilot basis. After approval of the proposals by Technical Committee, Department/ National Mission will decide the place of demonstration, in consultation with States/ UT, if necessary. This will be a boost for young entrepreneurs/start-ups working in the field of water to provide cost effective solutions. Further, action research and concurrent evaluation studies will be taken up every year by Department/ National Mission, State Water and Sanitation Mission for adopting evidence based policy/ technical interventions to manage rural water supply effectively.

2. Thrust areas for R&D

2.1 The proposals are invited in the following thrust areas: -

- i.) drinking water treatment technologies to supply potable water in quality affected areas;
- ii.) long-term potable water supply in harsh edapho-climatic conditions and disaster prone areas;
- iii.) monitoring the service delivery of water supply system using smart technologies;
- iv.) action research on behaviour change, social aspects and governance in rural water supply and sanitation; and
- v.) Grey water management in rural areas.

2.2 Apart from the above indicated thrust areas, other R&D proposals that have a bearing on rural water supply and sanitation would also be considered subject to their relevance established in the application form. Thrust will be given on technology development, demonstration and providing them in the field through long term trials and transfer of technology for large scale application.

3. Eligibility criteria

The applicant must have a proven experience working in the thrust areas as mentioned in Section 2. The following may apply:

- i.) individuals or research institutions or organizations or universities including deemed universities.
- ii.) the applicant may be an individual or single specified entity, or a group of entities joined together as a consortium. In case of consortium, the lead partner must be clearly identified and shall be liable for fulfilling all and any obligations towards the proposal goals;
- iii.) The applicant may partner with industry, if needed as per their institution's rules. Industry partner can be considered for funding if they contribute 50% of the budget; and
- iv.) the applicant who have already developed a technological intervention in the thrust areas and require funding to validate/ field test can also apply.

4. Duration of the R&D project

The duration for the R&D project will be up to 18 months.

5. Confidentiality clause

Information relating to the examination, evaluation, comparison, and post qualification of application, and recommendation of funding decision, shall not be disclosed to applicant or any other person, not officially concerned with such process, until the award of the funding.

Any attempt by applicant to influence the evaluation authority or other officials in the examination, evaluation, comparison, and post qualification of the application or funding decisions may result in the rejection of their application.

6. Procedure of submission of proposal and approval

6.1 The applicants who comply with the eligible criteria can apply in the online application format hosted in the DDWS website. There is no last date for submission of applications. The online applications would be considered on rolling basis periodically (once in four months' subject to minimum number of applications and budget).

6.2 A technical committee has been constituted under the chairmanship of Principal Scientific Advisor, GoI vide office order number: 11042/ 22/ 2015-WATER-II dated 24 Oct 2019. The technical committee will examine and review the R&D proposals. Those satisfying the eligibility would be considered for selection depending on the priority and fund availability as decided by the Technical Committee and approval of the Secretary, DDWS. Applications not satisfying the eligibility criteria would be rejected in the preliminary scrutiny by DDWS before consideration of the same by the Committee.

7. General conditions

- i.) The Principal Investigator (PI) implementing the Project is required to take all the financial and administrative responsibilities for the Project.
- ii.) In case of consortium, the PI has to obtain formal consent from the collaborating organizations. Formal MoU/Agreement may be worked out detailing the obligations and arrangements stated in the proposal and shall obtain approval from DDWS subsequent to the sanctioning of the Project.
- iii.) International travel is not permitted under the project fund.
- iv.) The project proponent may recruit JRF/ SRF/ RA depending upon the requirement. The qualification, emoluments and service conditions for recruitment of JRF/ SRF/ RA shall be as per the OM No. SR/ S9/ Z-08/ 2018 dated 30.01.2019, of Department of Science and Technology, GoI as amended time to time.
- v.) Approval of the research proposal and the grants released is for the specific project sanctioned and the released grant should be exclusively spent on the project within the stipulated period. The PI may use funds obtained from any other organization/ donors with the concurrence of DDWS for the project. Any unspent balance along with accrued interest out of the amount sanctioned must be surrendered to the Government of India through a Cheque/ DD/ RTGS in favour of Drawing & Disbursing Officer of DDWS.
- vi.) 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 PI.



- vii.) All the assets acquired from the sanctioned grant will be property of the Government of India and should not be disposed off or encumbered or utilized for the purposes other than those for which the grant has been sanctioned.
- viii.) It is the policy of DDWS that the equipment procured under the project fund be optimally utilized. The PI shall permit the use of any spare or idle capacity of the equipment to legitimate users from the parent and other organizations.
- ix.) At the completion/ termination of the Project, the Government of India will be free to sell or otherwise dispose off the assets procured through the sanctioned fund. The PI shall render the Government necessary facilities for arranging the sale of such assets. The Government of India has the discretion to gift the assets to the organization or transfer them to any other organization if it is considered appropriate.
- x.) Interim quarterly progress report in the format enclosed as Annexure-I will have to be submitted to DDWS. In case necessary the presentation by PI or visit to monitor the project will be done by DDWS representative or team. The Fund for the second instalment will be released only after audited expenditure statement and satisfactory achievement of milestones as provided in 8(xii). The first quarter period shall be rounded off to the last date of the running quarter. The subsequent periods shall begin from the first day of the next quarter.
- xi.) The Comptroller and Auditor General, at its's discretion, shall have the right to access to the books and accounts of the PI maintained in respect of the grant received from the Government of India.
- xii.) R&D grant from Jal Jeevan Mission received by PI should be kept in a separate bank account (specifically opened for concerned sanctioned Project) and under no circumstances, shall be mixed with the general account. The interest earned should be reported to DDWS and should be reflected in the Statement of Expenditure. The interest thus earned will be treated as a credit to the PI and the same shall be adjusted towards further instalment of the grant.
- xiii.) The PI shall not entrust the implementation of the work (except the out-sourced part as approved) for which the grant has been sanctioned to any other Organization nor will it divert the grant received to any other Organization as assistance. In case the PI is not in a position to implement or complete the Project, and the project is closed in the midst without obtaining any purposeful result the unspent balance including interest accrued, if any should be returned by the PI/ Institute to DDWS within a period of 15 days along with reasons for the premature closure of the project.



- xiv.) All the personnel including Research personnel appointed under the project, for the full/ part duration of the Project are to be treated as temporary employees and will be governed by the administrative rules/ service conditions (for leave, TA/ DA, etc.) of the implementing organization. They are not to be treated as employees of the Government of India and DDWS will have no liability, whatsoever, for the Project staff after the completion of Project duration. The detailed qualification and experience requirements needed for Project staff shall be as per the OM No. SR/ S9/ Z-08/ 2018 dated 30.01.2019, of Department of Science and Technology as amended time to time.
- xv.) For expeditious implementation of the research project, PI may take the assistance of the those organization which have relevant experience in the process of selection and appointment of staff . Emoluments for the posts not covered under DST's OM will be governed by the norms prevalent in the implementing Organization or as agreed upon in consultation with DDWS.
- xvi.) The date of commencement of project should be immediately intimated by the Organization authorities/ PI to DDWS. The Project will deemed to have started from the day on which the first instalment grant is received by the PI/ Institute/ Organization. The project completion date should also be intimated by PI however, the project is deemed to be completed on the day of receipt of completion report by DDWS.
- xvii.) If PI to whom a grant for a project has been sanctioned wishes to leave the organization, where the Project is based, PI/ implementing organization will inform DDWS of the same and in consultation with DDWS, necessary steps to ensure successful completion of the project should be taken, before PI is relieved.



- xviii.) PI is encouraged to publish technical/ scientific papers based on the research undertaken during the project in leading Indian/ International journals. The PI and shall acknowledge the support received from DDWS, indicating the programme. PI should provide soft copy of such publications to DDWS.
- xix.) The PI would submit the following documents on completion of the Project: -
- a) Statement of closure (Annexure-II) along with audited statement of expenditure incurred.
 - b) Two copies of Completion Report along with copies of publications/ patents made out of the Project (shall be submitted in soft copies).
 - c) The complete project report with executive summary have to be submitted separately in the digital format (in data storage device). All the materials mentioned above needs to be send to the Mission Director, NJJM with a copy to Director, JJM-IV, DDWS, New Delhi.

- d) Presentation of the findings on the final report has to be made by the Principal Investigator before the Technical Committee.
- xx.) DDWS reserves the right to terminate the Project at any stage in case it is found that the grant has not been properly utilized or satisfactory progress is not being achieved. In such cases, the unspent balance along with interest if any, with the PI/ Institute will have to be refunded to DDWS with in 15 days.
- xxi.) In case of extension of project period to any PI/ Institute, approval of Secretary, DDWS will be required. In case of delay in project completion, a penalty of 5% of the amount released will be levied on the PI/ Institute. However, if the PI/ Institute requests the DDWS, well in advance (at least one month prior to project completion date), for project extension and the same is granted by the DDWS, this penalty clause will not apply.

8. Funding of the R&D projects

- i.) General financial prudence for expenditure of public money shall be exercised by PI/ Institute.
- ii.) Contingency expenditure should not exceed 10 % of the total budget
- iii.) Overhead charges also cannot be more than 10% of the budget
- iv.) Administrative charges for the execution of the Project (like providing peons and typists, purchasing office equipment and furniture etc.) will have to be met from contingency and overhead charges.
- v.) Expenditure on purchase of equipment should not exceed more than 25% of the total budget
- vi.) Special provision for Library development cannot be kept in the R&D proposal. Purchase of any specific book/ reading materials etc. can be done from contingency or overheads.
- vii.) Emoluments to the project staff specifically recruited for the project during the duration of the project can be charged under the R&D Project. Emoluments of the Consultants will be commensurate with the guidelines for JRF, SRF and RA released by the Department of Science & Technology from time to time.
- viii.) Salary (full or partial) for the regular staff of the institutions / organisation / departments who will get involved in the Project either as PI or as Project Director or in any other capacity cannot be charged under the project. Neither they will be allowed to have any honorarium from the project budget. In case the PI is the retired person and not drawing any pension/ salary from any source, then the DDWS may consider giving him/ her token honorarium from the project budget.



- ix.) The project proponent may keep JRF/ SRF/ RA depending upon the requirement. The qualification, emoluments and service conditions shall be as per the OM No. SR/ S9/ Z-08/ 2018 dated 30.01.2019, of Department of Science and Technology as amended time to time.
- x.) The financial budget for the R&D Project has to be prepared year-wise and not in a consolidated fashion for the entire duration of the project
- xi.) Once a project is sanctioned, no request for change of Emolument of any project staff will be entertained.
- xii.) Fund release conditions:
 - a) First instalment funds of 40% of the total budget will be released immediately after approval of the project.
 - b) Second instalment funds of 40% value will be released after submission of Interim Project Report and after expenditure of more than 60% is done out of the available funds under the project. Audited statement of expenditure until the previous month along with Submission of Utilization Certificate duly signed by the Principal Investigator and institutes' Head of Finance and Account is mandatory (refer Annex III).
 - c) Third and final payment of 20% project budget will be done after submission of all deliverables mentioned in this guidelines along with documents mentioned in 7(xix) for completion of the project, audited statement of expenditure and the PI to make a presentation of the project before Technical committee chaired by Principal Scientific Advisor after completion of the Project. This amount of 20% shall be released after acceptance of the completion report by the Secretary, DDWS.
- xiii.) If the project is not completed by PI/ Institutions due to any reason, the unspent balance along with interest accrued if any, is to be refunded to DDWS.

9. Intellectual property rights

For any data, information, materials and documents, provided or procured by the PI under the sanctioned fund, including the data, information, materials and documents generated as an output of the project, the intellectual property rights will be owned strictly by the Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India.

10. How to apply

The application has to be submitted through online portal only. Please visit <https://ejalshakti.gov.in/misc/RndDProject/ProjectLogin.aspx> to upload the application and know the status of application.

For more information please contact:

R&D cell,

National Jal Jeevan Mission,

Department of Drinking Water & Sanitation,

Ministry of Jal Shakti, Government of India.

1207, Pandit Deendayal Antyodaya Bhawan,

CGO Complex, Lodi Road, New Delhi 110 003

Phone: 011-2436 6530

URL: <https://ejalshakti.gov.in/misc/RndDProject/ProjectLogin.aspx>

email: rnd-ddws@gov.in.

Format - Interim quarterly progress report

1. Project title:
2. Project commencement date:
3. Project completion date:
4. Name of Principal Investigator:
5. Name of Co-Investigators:
6. Budget sanctioned:
7. Overall Objective of the project:
8. Status of project- (As per timeline/ Milestone of approved project proposal)

Quarter	Deliverable	Milestone	Status
Quarter 1	Deliverable 1	Milestone 1 Milestone 2	
Quarter 2	Deliverable 1	Milestone 1 Milestone 2	

9. Reasons for not achieving targeted progress
10. Details of JRF/ SRF/ RA engaged in the R&D project

S. No.	Name	JRF/ SRF/ RA	Date of engagement	Qualification	Emoluments
1.					
2.					

11. Expenditure

S. No.	Major head	Budget	Expenditure	Remarks
1.	Recurring			
2.	Non recurring			
3.	Contribution			
..				

Dated signatures and name of:

Principal investigator (PI.):

Controlling officer:

Head of institution:

Closure report

1. Name of the Project:
2. Sanction order no. & date:
3. Project commencement date:
4. Project completion date:
5. Extension order (if applicable)
6. Details of interim progress report (IPR) submission

S. No.	IPR report No.	Submission date	Remarks
1.			
2.			
..			

7. Abstract of R&D Project
8. Output of R&D project

S. No.	Outputs	Deliverables	Status	Remarks
	Product			
..				
	Service			
..				
	Process			
..				
	Application			
..				

9. Expenditure

S. No.	Major Head	Budget	Expenditure	Remarks
1.	Recurring			
2.	Non recurring			
3.	Contribution			
4.			

- i.) Please enclose the Audited Expenditure Statement;
- ii.) Balance amount must be returned to mission. The details may be provided.

- 10. Date of interim evaluation (if any) and the names of the experts constituting those evaluation teams;
- 11. Completion Report submission in soft copy;
- 12. Principal Authors:
- 13. Details of Publication made in this R&D project:

S. No.	Name of journal in which research paper is published	Citation (APA style)	Soft copy is provided to ministry	Disclaimer if any
1.				
2.				
3.				
..				

Name and dated signature of

Principal Investigator

Co-Investigators

Head of Controlling Department

Head of the Institution

GFR 12 A
(See Rule 238 (i))
Utilization Certificate for the Year 20XX-XX
In respect of recurring/ non - recurring
Grants-in-aid/ Salaries/ Creation of Capital Assets

1. Name of the Scheme/ Project :
2. Whether recurring or non-recurring :
3. Grants position at the beginning of the Project :
 - (i) Cash in hand/ bank :
 - (ii) Unadjusted balances :

TOTAL :
4. Details of grants received, expenditure incurred and closing balances (Actuals) :

Unspent balances of grants received years (figure is at Sl. No. 3 (ii))	Interest earned thereon	Interest deposited back to the Government	Grants received during the year 2020-21			Total available Funds (1+2+3+4)	Expenditure incurred	Closing balances (5-6)
			Sanction No.	Date	Amount			

Component wise utilization of grants

Grants-in-aid General	Grants-in-aid Salary	Grants-in-aid creation of capital assets	Total

Details of grant position at the end of the year

- i) Cash in hand/ bank :
 - ii) Unadjusted advances :
- TOTAL :

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

- i) The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in the financial statement/ accounts.
- ii) There exists internal controls for safeguarding public funds/asset, watching outcomes and achievements of physical targets against the financial inputs , ensuring quality in assets creation, etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.
- iii) To the best of knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules /Standing Instructions and scheme guidelines.
- iv) The responsibilities among the key functionaries for execution of the Project/scheme have been assigned in clear terms and conditions of the grants –in aid.
- v) The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme/project was intended to operate.
- vi) The expenditure of various components in the Scheme/project was in the proportion authorized as per the scheme guidelines and terms and conditions of the grants in aid.
- vii) It has been ensured that the physical and financial performance under (name of the scheme/project) has been according to the requirements as prescribed in the R&D guidelines issued by the Government of India and the statement of performance/targets achieved as per the interim progress report attached as Annex-I.

Date:

Place:

Signature:

Name:

Head of the Finance

Signature:

Name:

Principal Investigator

Signature:

Name:

Head of Institution



Best Tableaux Republic Day Parade 2020 on Jal Jeevan Mission

For more information please contact:

R&D cell,

National Jal Jeevan Mission,

Department of Drinking Water & Sanitation,

Ministry of Jal Shakti, Government of India.

1207, Pandit Deendayal Antyodaya Bhawan,

CGO Complex, Lodi Road, New Delhi 110 003

Phone: 011-2436 6530

URL: <https://ejalshakti.gov.in/misc/RndDProject/ProjectLogin.aspx>

email: rnd-ddws@gov.in.



Har Ghar Jal
Jal Jeevan Mission



Building Partnerships
Changing Lives

Government of India
Ministry of Jal Shakti
Department of Drinking Water & Sanitation
National Jal Jeevan Mission
New Delhi 110 003