Annexure-1 Template for Concept Note

The Concept Note should be a maximum of four (4) pages [excluding the "Information on the ProponentOrganization" and CV of PIs and Co PIs) (**Annexure 3 & 4**)].

Date of Proposal Submission

1	4	0	6	2	0	2	5
d	d	m	m	y	y	y	y

1	Type of Proposal	Category-I	✓	Category-II				
2	Project Title	**Community Managed Water Governance in the Himalayan villages via Participatory Action Research - Community Labs**						
3	Project Location	10 Villages in Uttarakhand						
4	Scale of Project operation	National		Regional	✓	Local		
5	Implementation Agencies	Swami Rama Himalayan University, Jolly grant, Dehradun, Uttarakhand www.srhu.edu.in						
	Principal Investigator (PI)	Mr. Nitesh Kaushik Deputy Director & Water Management Expert, SRHU 9837021771 watsan@srhu.edu.in						
	Advisor	Prof. H. P. Uniyal Advisor, SRHU Former Director, State Planning Commission, GOUK Former HOD & CGM Uttarakhand Jal Sansthan 9411110538 hpuniyal@gmail.com						
	Co- Principal Investigator (co-PI)	1. Er. D. K. Singh CGM & HOD Uttarakhand Jal Sansthan, GOUK. 9927027172 cgmujs@gmail.com 2. Er. Atul Uniyal Scientist, SRHU 9897272021, atuluniyal@srhu.edu.in 3. Er. Karan Singh Civil Engineer, SRHU 8755098781, knegi497@gmail.com 4. L.S.Bisht Social Expert. SRHU 7500344487							
6	Implementing partners	Uttarakhand Jal Sansthan, Department of Drinking Water and Sanitation, GOUK.						

Swami Rama Himalayan University
Director Research

	Key Persons of Implementing Partners with contact details	Mr. Nitesh Kaushik Deputy Director, WATSAN – SRHU 98637021771 watsan@srhu.edu.in
7	**Synopsis of the Project (500 words)**	

Water governance systems in Himalayan villages across the Indian Himalayan Region (IHR) are increasingly strained due to a confluence of interlinked factors, including water insecurity, climate variability, population outmigration, and the deterioration of traditional practices. The decline of customary governance mechanisms rooted in community stewardship and ecological balance has been accelerated by the imposition of top-down, technocratic models that often marginalize local knowledge and reduce community participation. Consequently, poor operation and maintenance, weak institutional accountability, and infrastructure underutilization have led to water resource degradation and compromised supply reliability.

This project aims to address these challenges through the co-creation of a community-managed water governance framework, informed by rigorous action research and grounded in a comparative analysis of existing governance models across the IHR. The study will systematically document both successful and unsuccessful models, evaluating them against parameters such as sustainability, equity, resilience, and community engagement. Lessons learned will inform the design of an innovative and adaptive governance model, tailored to local socio-ecological contexts.

The proposed governance model will be pilot tested in 10 representative villages in Uttarakhand. These pilots will serve as testbeds for empirical validation through structured impact assessments, focusing on climate resilience, gender equity, social inclusion, and improved service delivery in water supply systems. The pilot will generate evidence to refine the model and establish mechanisms for scalability and replicability.

At the heart of the project is the establishment of "Community Labs"—participatory platforms for co-learning, institutional strengthening, and applied innovation. These Labs will facilitate capacity building of key local institutions including Village Water & Sanitation Committees (VWSCs), Self-Help Groups (SHGs), and Van Panchayats. Activities will include training on water budgeting, water quality testing, disinfection protocols, decentralized infrastructure management, and rainwater harvesting. Community-based water quality monitoring teams will be trained and equipped to ensure the delivery of potable water, reinforcing public health outcomes.

The project also envisions the development of a community-managed Operation and Maintenance (O&M) system, supported by robust institutional frameworks for financial sustainability, preventive and curative maintenance, grievance redressal, and participatory monitoring and evaluation.

Aligned with the thematic priorities of the National Mission on Himalayan Studies (NMHS) and national water policy directives, this initiative contributes directly to SDG 6 (Clean Water and Sanitation) and SDG 13 (Climate Action). By integrating traditional ecological knowledge with modern governance innovations, the project offers a scalable, climate-resilient, and inclusive model for decentralized water governance in the Indian Himalayan Region.

8	**Rational of the Project (200 words) why the project is necessary**
	The Indian Himalayan Region (IHR) is experiencing a growing water scarcity crisis, exacerbated by climate variability, inadequate infrastructure maintenance, and fragmented, top-down governance systems. Despite large-scale interventions such as the Jal Jeevan Mission (JJM), many schemes remain non-functional due to insufficient community engagement, limited local ownership, and poor alignment with regional socio-ecological contexts. Evidence from successful community-led initiatives underscores the effectiveness of participatory water governance but reveals limitations in scalability, institutional coordination, and sustainability. This project addresses these critical gaps by designing and piloting a replicable, community-managed water governance model, integrating traditional water practices with modern technological interventions. Central to the initiative is the establishment of a Community Lab, which will build capacities of local institutions, retrofit and augment existing water systems, and promote inclusive governance through the active participation of women and marginalized groups in decision-making processes. By aligning with the National Mission for Sustaining the Himalayan Ecosystem (NMSHE) and Sustainable Development Goals (SDGs) 6, 13, and 15, the project seeks to deliver scalable, climate-resilient solutions that strengthen water security, ecosystem integrity, and rural livelihoods across the IHR—contributing directly to India's environmental and developmental priorities.
9	**Proposed Outcomes of the projects (in bullets)**
	➢ Conduct a comprehensive assessment of diverse water governance systems across states in the Indian Himalayan Region (IHR). ➢ Develop a robust, evidence-based community-managed water governance model derived from the analysis of successful and failed governance practices. ➢ Establish Community Labs in 10 pilot villages in Uttarakhand as platforms for action research, innovation, and capacity building. ➢ Establish/strengthen Community Water Management Committees (CWMCs) in target villages. ➢ Enhance the institutional capacities of Village Water & Sanitation Committees (VWSCs), Self-Help Groups (SHGs), Van Panchayats, and Panchayati Raj Institutions (PRIs) to effectively manage water resources. ➢ Establish and operationalize sustainable operation and maintenance (O&M) systems, including institutional frameworks, financial management, cost recovery mechanisms, and preventive and curative maintenance protocols. ➢ Mainstream gender equity and social inclusion into all levels of water governance, ensuring active participation and leadership of women and marginalized groups. ➢ Improve local water management systems through source sustainability measures, supply augmentation, irrigation efficiency, and enhanced water quality monitoring and treatment. ➢ Develop a standardized protocol and toolkit based on action research findings to guide implementation and scaling. ➢ Disseminate project outcomes and advocate for policy uptake through strategic engagement with government agencies and sectoral stakeholders. ➢ Document and share the final community-managed water governance model to support replication and scalability across the IHR.

10	**Expected Project Impacts**
	• **Improved Water Security:** Enhanced and sustained access to safe, adequate, and reliable water for drinking, domestic use, and agriculture in pilot villages through strengthened local water systems. • **Community Ownership and Participation:** Increased community involvement in water governance, fostering a sense of ownership and long-term sustainability of water infrastructure and services. • **Institutional Strengthening:** Strengthened local institutions (VWSCs, SHGs, Van Panchayats, PRIs) and effective integration of government schemes with community-led systems for improved service delivery and accountability. • **Operational Community Labs:** Functional Community Labs established as centers for innovation, traditional knowledge integration, and capacity building, enabling decentralized solutions and livelihood-linked water management practices. • **Gender Equity and Inclusion:** Enhanced participation of women and marginalized communities in decision-making processes, reducing gender-based burdens and promoting equitable access to water resources. • **Climate Resilience:** Improved resilience of communities to climate variability through sustainable source protection, spring-shed management, and adaptive water practices. • **Health and Sanitation Improvements:** Reduced incidence of waterborne diseases and improved hygiene outcomes through assured water quality testing, disinfection, and community awareness. • **Agricultural Support:** Reliable water availability supporting irrigation and agriculture, leading to improved productivity and food security in hilly terrains. • **Community Empowerment:** Empowered communities capable of managing, maintaining, and monitoring their water systems through capacity building and participatory governance. • **Replicable Governance Model:** Development and documentation of a tested, community-managed water governance model with potential for replication across the IHR. • **Knowledge Sharing and Policy Uptake:** Dissemination of outcomes to inform policymakers and stakeholders, facilitating upscaling and policy adoption across similar eco-regions.
11	Project Budget

S No	Items	Amount (INR)
1.	Professional Services[1]	**6534000**
2.	Training Expenses[2]	**1240000**
3.	Domestic Travel Expenses[3]	**2640000**
4.	Office Expenses[4]	**3170000**
5.	Printing and Publication[5]	**500000**
6.	Digital Equipment[6]	**1035000**

	7.	Materials and Supplies[7]	**10575000**
		Total	**25694000**
	GST@18% if applicable		

12 Contribution from Others Sources (Co-financing)

Total Budget Requirements (INR)	Financing Plan		
25694000	Request from NMHS	On Research	On Ground
	25694000	10960000	14734000
		43%	57%

Year- wise Budget Breakup

S#	Budget Head	1st year	2nd year	3rd year	Total
1.	Professional Services[1]	2178000	2178000	2178000	6534000
2.	Training Expenses[2]	363334	513333	363333	1240000
3.	Domestic Travel Expenses[3]	880000	880000	880000	2640000
4.	Office Expenses[4]	1230000	980000	960000	3170000
5.	Printing and Publication[5]		125000	375000	500000
6.	Digital Equipment[6]	1035000			1035000
7.	Materials and Supplies[7]	2745000	5220000	2610000	10575000
Total					**25694000**

Note: Please take note of following suggestions at the time of preparation of budget:

1 ***Professional Services:*** Hiring charges to various services/ expertise of Govt. and Non-Govt. Institutions, Organizations for conducting Mission activities, and salary of consultants and others NMHS professional staff and payment to other departments for service rendered, overheads. Number of manpower along with the designation and per month salary should be enlisted and submitted separately.

2 ***Training Expenses:*** Capacity Building and Training Programmes, workshops, extension programs through State Govt. agencies.

3 ***Domestic Travel Expenses:*** Traveling expenses during the professional services, field visit for various projects

sites, and meetings.

4 ***Office Expenses:*** Recurring and non-recurring contingent expenses, Stationary charges, other Office expenses and contingency expenses during implementation of various activities, Minor office equipment, Office assistant and Data Entry Operators.

5 ***Printing and Publication:*** Printing and publication of the books manuals, papers, etc.

6 ***Digital Equipment:*** Hardware & software, Minor equipment, etc.

7 ***Materials and Supplies:*** Lab supplies and materials store, such a light and sound systems, demonstrations models, pilot plant, educations supplies, agricultural supplies, chemical and glassware, spare parts and supplies and goods. A separate list along with per item cost with justification should be mentioned separately.

Annexure 2

1. Introduction

(a) Background

Water is increasingly becoming a scarce resource resulting in socio-political conflicts in many parts of the world. Chronic stress on the environment due to water scarcity, hydrological disruptions, and extreme weather events (floods and droughts) are some of the biggest threats to global prosperity and stability. Hence, sustainable water security has been recognised as one of the **Sustainable Development Goals** (SDGs). Water governance in the Himalayan villages of India is at a critical juncture due to multifaceted challenges. Government initiatives, such as the Jal Jeevan Mission (JJM), aims to provide piped water (single village and multi village scheme) to all rural Indian households by 2024. However, top-down approaches like JJM often lack community engagement, leading to poor maintenance, underutilized infrastructure, and financial unsustainability, with approx. 30% of schemes failing within five years.

Hybrid models like anthropogenic funding projects succeed by combining community participation with government and NGO support. Swajal's village committees ensure **local ownership**, with 80% of systems functional after a decade. Himmothan revives springs, training women for maintenance, benefiting more than 50,000 households. Dhara Vikas restores 700+ springs in Sikkim, using community-led springshed management.

Panchayat water governance approach involves decentralizing water management to local Panchayati Raj Institutions (PRIs), such as Gram Panchayats, to ensure community-driven planning, implementation, and maintenance of water supply systems. The Panchayat water governance approach strengthens localized, inclusive water management and sustainability but is hindered by capacity gaps, political influences, and coordination issues. Strengthening training, ensuring financial autonomy, and fostering community awareness can enhance its effectiveness.

Water User Committee governance approach involves community-elected or appointed groups managing local water supply and sanitation systems. These committees, typically comprising 6-12 members with mandated representation from women (at least 50%) and marginalized groups, focus on participatory management, operation, and maintenance, and monitoring of water infrastructure. This approach promotes community-driven, inclusive, and sustainable water management but faces challenges like limited expertise, low engagement, and resource constraints. Enhancing training, ensuring equitable participation, and streamlining coordination with stakeholders can strengthen its impact

Ownership Approach enhances sustainability and local relevance but faces challenges in scaling, coordination, and maintaining long-term community engagement. Solutions like streamlined coordination, innovative financing, and technology integration can mitigate these drawbacks.

Climate variability, including erratic rainfall and declining spring flows, threatens the sustainability of **traditional water systems** such as naulas (stone spouts), dharas (natural springs), kuhls (irrigation channels), and baudis (small reservoirs). These systems have historically fostered community ownership and ecological balance, ensuring equitable access to water for drinking, irrigation, and livestock. However, their functionality is declining due to Climate Variability, Outmigration, Lack of Community Participation, Inadequate Maintenance, Poor Government community coordination and Socio-Economic Shifts.

This project aims to investigate community-driven water governance models in India's Himalayan region, where many initiatives are underway. By analyzing both successful and failed models, we seek to identify key factors contributing to their outcomes. Our analysis will cover the success rates of effective models and their potential for long-term impact. By conducting a comprehensive study and analysis, we hope to develop a sustainable water governance model that can endure over time, engage the community effectively, and benefit them maximally. Hence, there is an urgent need for a scalable, community-driven water governance model that leverages traditional practices, strengthens local institutions, and integrates external support to ensure equitable and sustainable water access. Also the project aims to Establish Community Lab for development of innovative practices and traditional practices for providing integrated developmental solutions

(b) Project Area

The project area encompasses the Himalayan regions of India, particularly focusing on 10 villages across three Himalayan states:

•**Uttarakhand**: 10 vulnerable villages will be selected after consultation of partner agency Uttarakhand Jal Sansthan Government of Uttarakhand and getting information from prefeasibility form.

(c) Situation Analysis of the Area

The Himalayan villages of Uttarakhand are highly susceptible to climate change impacts, manifesting as unpredictable rainfall patterns, receding glaciers, and altered spring discharges. These changes directly threaten water availability for drinking and agriculture, impacting livelihoods and increasing vulnerability of mountain communities. The key issues include:

- **Top-Down Interventions:** Government-led schemes often fail to incorporate community ownership, leading to mismanagement and infrastructure decay.
- **Capacity Gaps:** Limited technical and financial skills in communities hinder effective water management and infrastructure upkeep.
- **Climate and Socio-Economic Pressures:** Climate change and outmigration exacerbate water scarcity and weaken community structures for collective action.
- **Degrading Traditional Systems:** Reduced spring flows and lack of maintenance threaten the viability of naulas, dharas, kuhls, and baudis.

There is an urgent need for a scalable, community-driven water governance model that leverages traditional practices, strengthens local institutions, and integrates external support to ensure equitable and sustainable water access.

(d) Identification Issues/Problems and Justification for the Project

The Himalayan villages of India face critical water governance challenges driven by acute water scarcity, exacerbated by climate variability, including erratic rainfall, declining spring flows, and extreme weather events like floods and droughts. These environmental stressors threaten traditional water systems such as naulas, dharas, kuhls, and baudis, which have historically ensured equitable

access for drinking, irrigation, and livestock but are now deteriorating due to outmigration, inadequate maintenance, poor government-community coordination, and socio-economic shifts.

Government-led initiatives like the Jal Jeevan Mission (JJM), aimed at providing piped water to all rural households, often fail due to top-down approaches lacking community engagement, resulting in approximately 30% of schemes becoming non-functional within five years because of poor maintenance, underutilized infrastructure, and financial unsustainability.

Community-driven models demonstrate success through participatory approaches, with Swajal maintaining 80% functional systems after a decade and Dhara Vikas restoring over 700 springs, but these models face scalability issues, coordination challenges, and limited community engagement due to capacity gaps, political influences, and resource constraints.

Similarly**, Panchayat and Water User Committee governance approaches** promote inclusivity—mandating at least 50% women representation and marginalized group participation—but are hindered by political interference, lack of financial autonomy, and insufficient training.

Justification for the Project

The Indian Himalayan Region (IHR) is experiencing a growing water scarcity crisis, exacerbated by climate variability, inadequate infrastructure maintenance, and fragmented, top-down governance systems. Despite large-scale interventions such as the Jal Jeevan Mission (JJM), many schemes remain non-functional due to insufficient community engagement, limited local ownership, and poor alignment with regional socio-ecological contexts. Evidence from successful community-led initiatives underscores the effectiveness of participatory water governance but reveals limitations in scalability, institutional coordination, and sustainability.

This project addresses these critical gaps by designing and piloting a replicable, community-managed water governance model, integrating traditional water practices with modern technological interventions. Central to the initiative is the establishment of a Community Lab, which will build capacities of local institutions, retrofit and augment existing water systems, and promote inclusive governance through the active participation of women and marginalized groups in decision-making processes.

(e) How the Project is relevant to NMHS and National Priorities

This project directly aligns with NMHS's Broad Thematic Area of "Water Resource Management" and explicitly addresses the cross-cutting issues of "Climate Change" and "Gender Equity". By focusing on sustainable water security, the project contributes to national priorities related to environmental protection, rural development, and climate resilience in the Indian Himalayan Region (IHR). The project also complements and supplements Sustainable Development Goal (SDG) 6 (Clean Water and Sanitation) and SDG 13 (Climate Action). Furthermore, it supports the preservation of Himalayan ecosystems and freshwater resources, which are critical for India's water security and sustainable development.

(f) Identify the Project Beneficiaries

The primary beneficiaries will be the local communities in the selected villages in Uttarakhand particularly women and vulnerable households who are most affected by water scarcity. Other beneficiaries include local government bodies, NGOs, and academic institutions involved in water resource management.

(g) Ongoing activities/other projects or activities in support of this project

Currently, there are many waters governance approaches like NGO Water Governance model, Panchayat and its subcommittee model, single and multi-village scheme model etc to support in this project. The project aims to investigate community-driven water governance models in India's Himalayan region, where many initiatives are underway.

(h) Expected Impacts of the Proposed Project

- **Improved Water Security:** Enhanced and sustained access to safe, adequate, and reliable water for drinking, domestic use, and agriculture in pilot villages through strengthened local water systems.
- **Community Ownership and Participation:** Increased community involvement in water governance, fostering a sense of ownership and long-term sustainability of water infrastructure and services.
- **Institutional Strengthening:** Strengthened local institutions (VWSCs, SHGs, Van Panchayats, PRIs) and effective integration of government schemes with community-led systems for improved service delivery and accountability.
- **Operational Community Labs:** Functional Community Labs established as centers for innovation, traditional knowledge integration, and capacity building, enabling decentralized solutions and livelihood-linked water management practices.
- **Gender Equity and Inclusion:** Enhanced participation of women and marginalized communities in decision-making processes, reducing gender-based burdens and promoting equitable access to water resources.
- **Climate Resilience:** Improved resilience of communities to climate variability through sustainable source protection, spring-shed management, and adaptive water practices.
- **Health and Sanitation Improvements:** Reduced incidence of waterborne diseases and improved hygiene outcomes through assured water quality testing, disinfection, and community awareness.
- **Agricultural Support:** Reliable water availability supporting irrigation and agriculture, leading to improved productivity and food security in hilly terrains.
- **Community Empowerment:** Empowered communities capable of managing, maintaining, and monitoring their water systems through capacity building and participatory governance.
- **Replicable Governance Model:** Development and documentation of a tested, community-managed water governance model with potential for replication across the IHR.
- **Knowledge Sharing and Policy Uptake:** Dissemination of outcomes to inform policymakers and stakeholders, facilitating upscaling and policy adoption across similar eco-regions.

2. Project Description

(a) Aim, Objective(s), and Goals

Aim: To develop and pilot a replicable, community-managed water governance model in the Indian Himalayan Region (IHR) by establishing Community Labs that integrate traditional knowledge with modern water management practices, strengthen local institutions, promote gender equity and climate resilience, and ensure sustainable, equitable, and continuous access to clean water for drinking, domestic use, and livelihoods.

Objective(s):

- Design and develop a context-specific, evidence-based, and replicable community-managed water governance model tailored to the needs of Himalayan villages.
- Establish and strengthen Community Water Management Committees (CWMCs) in selected

villages to lead participatory water governance processes.

- Foster active community involvement in the planning, implementation, and management of water systems to build local ownership and accountability.
- Establish Community Labs in pilot villages as platforms for integrating traditional knowledge with innovative practices to deliver holistic, livelihood-linked water solutions.
- Develop and implement village-level Water Security Plans (WSPs) to ensure sustainable and climate-resilient water availability.
- Assess the technical feasibility, scalability potential, and economic viability of the developed governance model across diverse Himalayan contexts.
- Promote policy engagement and knowledge dissemination to advocate for the adoption and upscaling of community-managed water governance frameworks.
- Mainstream gender-inclusive and socially equitable practices into all stages of water governance, ensuring meaningful participation of women and marginalized groups.
- Document, validate, and disseminate the community-managed water governance model for replication across the Indian Himalayan Region (IHR).

Goals:

- Design and develop a replicable, community-managed water governance model for the Indian Himalayan Region (IHR) to ensure long-term water security, equity, and sustainability.
- Establish and strengthen Community Water Management Committees (CWMCs) in pilot villages to institutionalize participatory and accountable water governance at the local level.
- Set up Community Labs as innovation and capacity-building hubs to integrate traditional water wisdom with modern practices, supporting water security and climate-resilient livelihoods.
- Formulate and implement village-level Water Security Plans (WSPs) that address local water needs, promote source sustainability, and ensure effective planning, operation, and maintenance of water systems.

(b) Proposed Activities to Achieve Project Goals

To accomplish the project's overarching goals of design and develop a tested, replicable community-managed water governance model tailored for the Indian Himalayan Region (IHR) a series of well-planned activities will be undertaken in consultation with the respected community. These activities are structured to address the identified issues and challenges effectively:

1. Baseline Study and Literature Review of Water Governance Models in 5 IHR States
2. Stakeholder Consultations, FGDs, Household Surveys, and In-depth Interviews
3. Data Entry, Analysis, and Synthesis of Findings
4. Field Exposure Visits for Learning and Cross-State Exchange
5. Development of Draft Community-Managed Water Governance Model
6. Selection of 10 Pilot Villages in Uttarakhand
7. Establishment of Community Labs in Pilot Villages
8. Formation/Strengthening of Community Water Management Committees (CWMCs)
9. Capacity Building and Training Programs
10. Development and Implementation of Village Water Security Plans (WSPs)
11. Monitoring and Evaluation of Piloted Governance Model
12. Impact Assessment (Technical, Institutional, Socio-Economic)
13. Economic Viability and Scalability Assessment
14. Finalization and Validation of Water Governance Model
15. Documentation and Knowledge Dissemination
16. Policy Advocacy and Stakeholder Engagement

(c) Describe the details of Activities (each activity separately)

S. No.	Activity Description	Duration	Deliverables
1	**Baseline Study and Review of Governance Models in 5 IHR States**	Months 1–9	Compilation of existing water governance models (successful/failed) in 5 states State-wise review reports Identification of gaps and best practices
2	**Stakeholder Consultations, FGDs, Surveys, and Interviews**	Months 2–4	Completion of household surveys and FGDs in all study regions Interview transcripts and consultation reports Honorarium support and refreshments provided Community engagement and consent documentation
3	**Social Assessment and Data Analysis**	Months 2–5	Application of social assessment tools Data entry and statistical analysis completed State-wise assessment reports Summary of enabling and disabling factors in water governance
4	**Field Exposure Visits and Cross-Learning Events**	Months 2–8	Exposure visits for CWMC members and local leaders Learning exchange reports and documentation Best practices identified for replication
5	**Development of Draft Water Governance (WG) Model**	Months 8–9	Draft framework of a community-managed WG model Inclusion of traditional knowledge and modern techniques Expert validation meetings completed
6	**Selection of 10 Pilot Villages**	Months 10–11	Selection criteria finalized Village readiness assessments completed 10 pilot villages in Uttarakhand
7	**Establishment of Community Labs**	Months 11–30	Community Labs set up with tools and space Training infrastructure prepared Community ownership documented
8	**Formation and Strengthening of CWMCs and Village Institutions**	Months 13–15	CWMCs formed or revitalized in all pilot villages Linkages with SHGs, PRIs, VWSCs established Institutional capacity baseline established

9	**Capacity Building & Skill Training Programs**	Months 13–24	Trainings conducted on O&M, governance, financial systems, water quality testing, source sustainability Training manuals and IEC materials prepared Feedback and evaluation reports
10	**Augmentation of water Management system (WSPs)**	Months 13–30	10 Village-level WSPs developed Source mapping, water budgeting, augmentation of water management system and planning documentation Integration of gender, climate, and equity aspects
11	**Monitoring and Evaluation of Piloted WG Model**	Months 19–36	Monitoring framework applied CWMC functionality assessed Performance tracking reports (monthly/quarterly)
12	**Impact and Economic Viability Assessment**	Months 31–36	Technical, institutional, and socio-economic impact assessment Cost-benefit and scalability analysis report Community feedback documentation
13	**Finalization and Validation of WG Model**	Months 34–36	Stakeholder consultation for validation Final governance model toolkit/manual Model aligned with SDG 6, 13, and 15
14	**Knowledge Dissemination and Policy Advocacy**	Months 32–36	State-level dissemination workshops Policy briefs and advocacy notes prepared Replication roadmap and stakeholder outreach
15	**Project Management, Reviews, and Reporting**	Year 1–3	Regular review and coordination meetings Annual progress reports, audits Mid-term and final evaluation reports
16	**Gender and Social Inclusion Mainstreaming** *(Cross-cutting)*	Year 1–3	Gender-disaggregated data analysis Inclusion tracking in trainings and CWMCs GESI (Gender Equality and Social Inclusion) integration reports
17	**Communication and Outreach** *(Cross-cutting)*	Year 1–3	Project website/content Case stories, photo documentation, social media updates IEC tools for awareness and replication

IV. Key Beneficiaries

- Indigenous communities living in Himalayan villages
- Local governments, NGOs, local policymakers, and government agencies responsible for water governance model and water resource management.
- Environmental organizations working to preserve Himalayan ecosystems.
- Researchers and scientists studying water resource management.

V. Expected Results

Upon successful completion of the project, the expected results include:

- Increased availability of clean water through rejuvenated springs and maintained infrastructure.
- A replicable framework for community-managed water governance across Himalayan states
- Strengthened water user Committee with enhanced technical and financial capacity, particularly among women and marginalized groups.
- Financially viable water systems with community-managed tariffs and government support.
- Reduced vulnerability to water scarcity through adaptive management and conservation practices.
- Reduction in waterborne diseases and improved water quality in pilot areas.
- Economic viability and scalability assessments providing valuable insights for future implementations.

(d) Expected outcomes of the project

- Conduct a comprehensive assessment of diverse water governance systems across states in the Indian Himalayan Region (IHR).
- Develop a robust, evidence-based community-managed water governance model derived from the analysis of successful and failed governance practices.
- Establish Community Labs in 10 pilot villages in Uttarakhand as platforms for action research, innovation, and capacity building.
- Establish/strengthen Community Water Management Committees (CWMCs) in target villages.
- Enhance the institutional capacities of Village Water & Sanitation Committees (VWSCs), Self-Help Groups (SHGs), Van Panchayats, and Panchayati Raj Institutions (PRIs) to effectively manage water resources.
- Establish and operationalize sustainable operation and maintenance (O&M) systems, including institutional frameworks, financial management, cost recovery mechanisms, and preventive and curative maintenance protocols.
- Mainstream gender equity and social inclusion into all levels of water governance, ensuring active participation and leadership of women and marginalized groups.
- Improve local water management systems through source sustainability measures, supply augmentation, irrigation efficiency, and enhanced water quality monitoring and treatment.
- Develop a standardized protocol and toolkit based on action research findings to guide implementation and scaling.
- Disseminate project outcomes and advocate for policy uptake through strategic engagement with government agencies and sectoral stakeholders.
- Document and share the final community-managed water governance model to support replication and scalability across the IHR.

(e) Time Frame [with WBS and Gantt Chart showing each Activity and subcomponents]

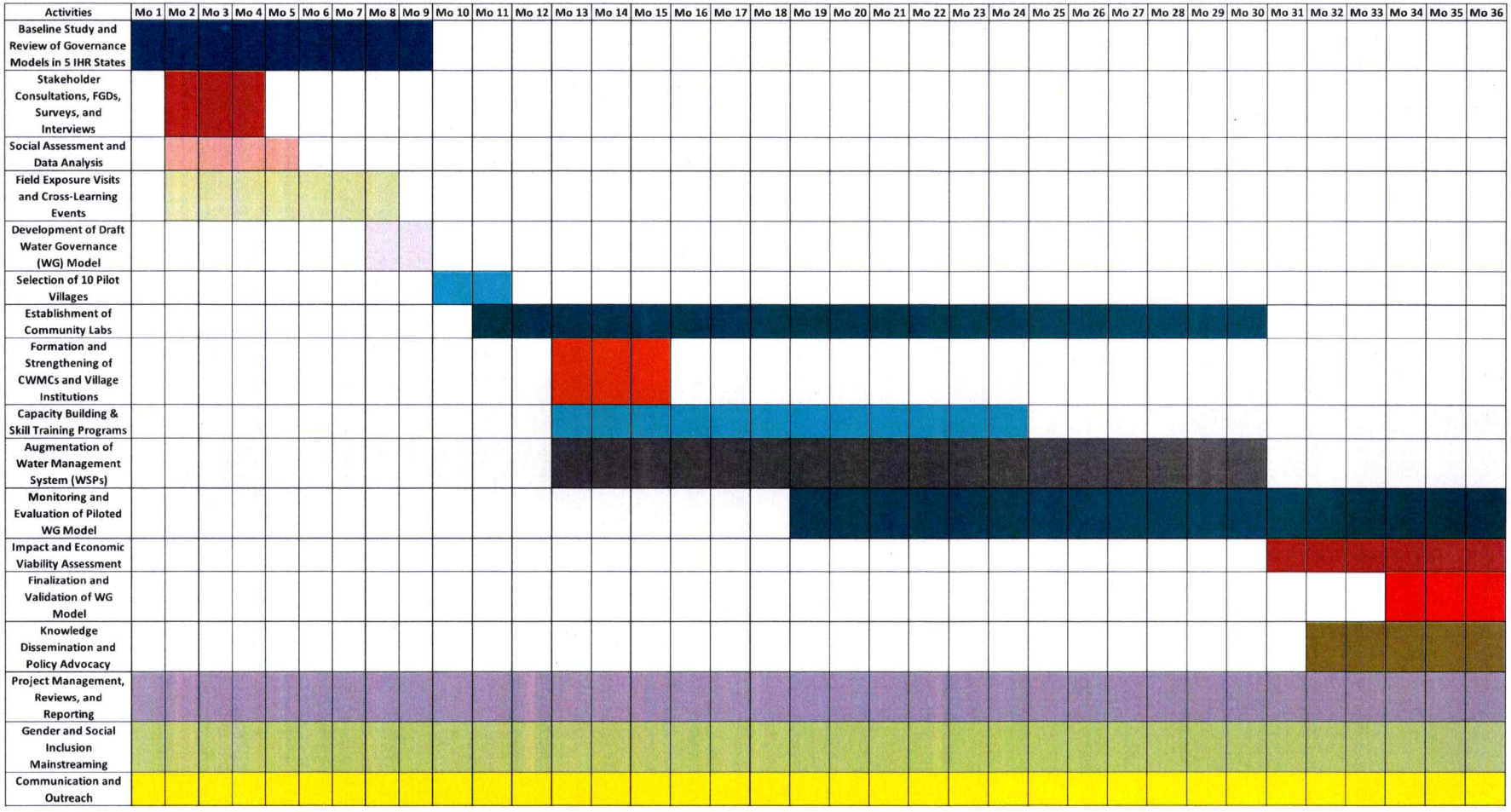


Figure 1: Time Frame [with WBS and Gantt Chart showing each Activity and subcomponent]

3. Project Implementation Plan

(a) How Project Would Be Implemented

The project will be implemented in a phased approach to ensure its success:

Phase 1: Research and analysis of various water governance model

- Research and analysis of various water governance model: Baseline surveys and community consultations to identify water challenges and existing water governance system.
- Resource Mapping: Assess water sources available, existing agriculture patterns, socio-economic data, and Local water governance schemes/programs. Will use PRA tools for mapping resources, vulnerabilities, and demographics.
- Awareness Raising: Awareness campaigns on the importance of community-managed water resources.

Phase 2: Planning to design replicable community-managed water governance model in the villages

- Replicable community-managed water governance model: Propose a replicable community-managed water governance model tailored for the Indian Himalayan Region (IHR) to ensure sustainable and equitable water access
- Development of Integrated community managed water governance model: Developed a replicable model for water governance across the IHR.
- Field scale testing of developed modals and adopt most suitable and efficient water governance system.

Phase 3: Establish and strengthening local water governance model

- Strengthening water governance model: Following a comprehensive analysis of local water governance models, we will implement effective models and refine those with shortcomings to enhance their performance.
- Set up local governance systems and strengthen the capacity of existing village water sanitation committees/user water groups to take ownership of the projects and water supply activities. These groups will maintain the water supply and ensure sustainability of water supply projects.

Phase 4: Establishment of Community Lab

- Establishment of Community Lab enables local people to adopt better Traditional water Conservation practices, undertake spring shed works, and through effective O&M ensuring long-term sustainability of their water scheme. The main objective of establishing community lab is to development of innovative practices for providing integrated developmental solutions and ensure livelihood activities
- Establish community labs to develop innovative and traditional practices, integrating developmental solutions to support sustainable livelihood activities
- Monitoring, Study and Impact assessment: Real time monitoring through dashboard/early waring system and impact assessment of implementation on Water quality & Quantity.

Phase 5: Capacity Building & Training Programs

- Quarterly Training: Organize 5 training sessions annually for women, Village water sanitation committees/Water user groups and van Panchayat Samitie, diversified Biodiversity, water conservation, and organic farming.
- Conduct hands-on training workshops for CWMC members and selected community youth (Jal Mitras/Water Friends).

Phase 6: Strengthen Social, Institutional and Financial mechanism

- Scaling-Up Mechanisms: Facilitate replication of successful practices across the district by involving GPs, Gram Panchayat Jal Sansthan and other lined departments and developed Policy document (By-Laws).
- Development of Village Water Security Plans: Developing village-level Water Security Plans, including water budgeting, demand-side management strategies, and equitable distribution mechanisms

Phase 7: Documentation of Best Practices & Case Studies

- Document case studies, best practices and prepare awareness material to disseminate successful water Governance models across other vulnerable regions.
- Will be published demand driven action research paper and working paper.

Phase 8: Final Project Report

- Comprehensive Documentation: Prepare and submit the final report documenting all progress, case studies, research paper, patent and developed Policy document with recommendations of scaling up replicable community-managed water governance model

(b) Identification of Project Partners and How They Would Be Coordinated

Project partners will include:

1. **Local Communities:** Community-based organizations will be established to facilitate coordination and participation.
2. **Governmental Agencies:** Coordination with disaster management authorities and relevant government departments will be essential to ensure alignment with existing water governance approaches and response efforts.
3. **Academic Institutions:** Engagement with academic institutions (IIT Roorkee) will facilitate technical expertise, research, and knowledge dissemination.

A project management team will oversee coordination among partners. Regular meetings, workshops, and reporting mechanisms will be established to ensure effective collaboration.

(c) Details of Project Workers to Be Included

The project team will consist of the following key members:

1. **Principal investigator and co-principal investigator:** Oversees overall project implementation, liaison with NMHS, financial management, and reporting in consultation with Advisor.
2. **Research Associate:** Provides technical expertise on springshed management, hydrological assessments, and water quality
3. **Senior Research Fellow:** Facilitates community mobilization, participatory planning, and social assessments.
4. **Senior Project Fellow:** two for Uttarakhand responsible for on-ground implementation, community engagement, and data collection
5. **Office Assistant:** Responsible for data collection, analysis, and reporting.

6. **Consultancy services:** To take expert opinion and support in Geospatial techniques which will be used also in development of modal

Phase 1: Project Preparation

- **Formation of Project Management Team:** The project will kick off with the establishment of a project management team comprising experts in disaster management, water supply systems, engineering, and community engagement. This team will be responsible for guiding the project throughout its lifecycle.
- **Review of Existing water governance model:** In this phase, a comprehensive review of existing existing water governance model will be conducted. This includes studying both domestic and international solutions to gather insights and best practices.
- **Stakeholder Consultations:** Engaging with stakeholders, including local communities, government authorities, and relevant organizations, is crucial. Initial consultations will be held to understand the specific needs and challenges in the study areas of Uttarakhand, Sikkim, and Himanchal Pradesh.
- **Identify Pilot Locations:** Based on stakeholder inputs and technical assessments, suitable locations for pilot installations will be identified.

Phase 2: Design and Development

- **Collaboration with Experts:** To ensure the success of the project, collaboration with experts in engineering, design, and materials is essential. These experts will provide technical guidance and support in developing a replicable water governance model.
- **Development of Precise Designs:** Design and develop a tested, replicable community-managed water governance model tailored for the Indian Himalayan Region (IHR) to ensure sustainable and equitable water access.
- **Pilot Testing:** Pilot test and validate the effectiveness of the developed water supply system under real-world climate-extreme scenarios to ensure resilience and reliability.

Phase 3: Analysis and Evaluation

- **Comprehensive System Analysis:** A thorough analysis of the water governance model performance will be conducted. This analysis will cover technical feasibility, economic viability, and scalability potential.
- **Temporal Variability Assessment:** Statistical analysis will identify patterns and trends, considering environmental factors and climate data.
- **Economic Analysis:** Cost-effectiveness evaluations will be performed to assess the project's economic viability and to determine the affordability of scaling up the system.

- **Documentation and Transparency:** Comprehensive documentation of designs, technical specifications, prototypes, and research processes will be maintained. This documentation will ensure transparency, facilitate peer review, and provide a foundation for future replication.

Phase 5: Knowledge Dissemination

- **Community Training:** Training sessions will be conducted for community members to educate them on how to operate, maintain, and administer the water supply systems.
- **Educational Materials:** Educational materials will be developed for local schools and community centers to raise awareness on importance of community-managed water resources
- **Policy Advocacy:** Based on research findings and analyses, policy recommendations will be drafted.
- **Success Stories:** The project's success stories and case studies from pilot installations will be shared to inspire and encourage the adoption of similar systems in other regions.

Phase 6: Sustainability Planning

- **Sustainability Plan:** A sustainability plan will be developed to ensure the continued functionality of the implemented systems. This plan will outline strategies for ongoing maintenance and support.
- **Collaboration with Local Authorities:** Collaboration with local authorities and community-based organizations will be established to create a network for long-term sustainability. These partnerships will facilitate ongoing support and maintenance efforts.

(e) Exit Strategy - How Outcomes Will Be Sustained After Funding Ceases

The project's sustainability plan includes the following strategies:

1. **Community Ownership:** Empower local communities to take ownership of the water supply systems. Train community members to operate and maintain the systems independently.
2. **Local Partnerships:** Establish partnerships with local authorities and community-based organizations to ensure ongoing support and maintenance of the systems.
3. **Capacity Building:** Provide training to local technicians and maintenance teams to address routine maintenance and minor repairs.
4. **Knowledge Sharing:** Continue knowledge dissemination efforts through educational materials and workshops to reinforce the importance of different water governance approaches.
5. **Monitoring and Evaluation:** Implement a long-term monitoring and evaluation mechanism to assess system performance and address any issues that may arise.
6. **Resource Mobilization:** Explore opportunities for local funding, grants, and partnerships to support ongoing maintenance and expansion of the systems.

4. Project Management and Co-ordination

(a) Financial Management and Procurement

Financial Management: The project's financial management will be carried out with transparency and accountability. A dedicated finance team will oversee budgeting, expenditure tracking, and financial reporting. Key financial management practices include:

- Regular financial audits to ensure compliance with donor requirements.
- Effective budget monitoring and adjustments based on project needs.
- Transparent financial reporting to donors and stakeholders.

Procurement: Procurement processes will adhere to international best practices, ensuring efficiency and fairness. Key procurement activities include:

- Competitive bidding processes for equipment and materials.
- Supplier selection based on technical specifications, cost-effectiveness, and reliability.
- Ensuring that procurement practices align with project timelines.

(b) Identification of Risks Associated with Projects and How These Risks Will Be Addressed

Risk 1: Technical Challenges: The development of replicable water governance system may encounter technical challenges. To address this risk, a team of technical experts will be continuously engaged in monitoring and troubleshooting technical issues. Regular system maintenance and capacity building for local technicians will mitigate these challenges.

Risk 2: Community Engagement: Ensuring active community participation may be challenging. Community facilitators will be responsible for building trust and fostering community engagement through awareness campaigns and involvement in decision-making processes.

Risk 3: Funding and Resource Constraints: Sustaining the project beyond the funding period is a potential risk. The project will explore local funding opportunities, partnerships, and advocacy for continued support. An exit strategy focused on community ownership will also reduce resource dependence.

Risk 4: Environmental Impact: The project's activities may have environmental consequences. Environmental impact assessments will be conducted, and mitigation measures will be implemented to minimize any negative effects.

(c) How Cross-Cutting Issues Will Be Addressed in the Project

Gender Equality: The project will promote gender equality by ensuring equal participation of women in all project activities. Gender-sensitive training materials and approaches will be developed to address the unique needs of women and girls in the community.

Social Inclusion: The project will be inclusive of marginalized and vulnerable groups, ensuring their active involvement in decision-making and benefiting from the project's outcomes.

Climate Change Resilience: Given the region's vulnerability to climate change, the project's disaster-resilient water supply systems will be designed to withstand changing climate patterns and extreme weather events.

Environmental Sustainability: Environmental sustainability will be a priority, with a focus on eco-friendly materials and practices. Environmental impact assessments will guide project activities.

(d) How the Project Would Be Sustainable and Replicable for Wider Benefits

Sustainability: Sustainability will be achieved through:

- **Community Ownership:** Empowering local communities to operate and maintain the systems.
- **Local Partnerships:** Collaborating with local authorities and organizations for ongoing support.
- **Capacity Building:** Training local technicians for system maintenance.
- **Advocacy:** Promoting the integration of water governance systems into policies and plans.

(e) How Project Information Would Be Disseminated for Better Visibility

Project information will be disseminated through various channels to enhance visibility:

- **Social Media:** Active engagement on social media platforms will share project milestones, success stories, and educational content.
- **Local Workshops and Meetings:** Community meetings, workshops, and seminars will disseminate information to local stakeholders.
- **Reports and Publications:** Regular reports and publications will be produced, highlighting project progress and outcomes.
- **Media Outreach:** Engaging with local and national media outlets to showcase project achievements.
- **Peer Sharing:** Collaboration with academic institutions for research sharing and peer learning.
- **Advocacy Campaigns:** Advocacy efforts will include policy briefs, presentations, and engagement with policymakers to raise awareness.

By utilizing these channels, the project aims to create better visibility and disseminate project information widely to maximize its impact and reach.

5. Monitoring, Reporting, and Evaluation

(a) How Project Progress Would Be Reported (Technical and Financial)

Technical Reporting: Project progress will be reported through regular technical reports that detail key activities, achievements, challenges, and lessons learned. These reports will include:

- Updates on the establishment of community lab and development of replicable water governance system.
- Data on system performance, including water quality improvement and pollutant removal rates.
- Community engagement activities and outcomes.
- Training and capacity building efforts.
- Environmental impact assessments and mitigation measures.

Financial Reporting: Financial reports will provide transparent accounts of project expenditure, budget utilization, and compliance with donor requirements. These reports will include:

- Detailed breakdown of project expenditures.
- Budget versus actual expenditure analysis.
- Compliance with financial guidelines and regulations.
- Identification of any financial risks and their mitigation measures.

(b) Describe the Internal Progress Assessment Arrangement

Internal progress assessments will be conducted by the project management team on a regular basis to ensure project activities are on track. These assessments will involve:

- Monthly or quarterly meetings to review project milestones and achievements.
- Monitoring of technical progress and adjustments based on feedback from technical experts.
- Financial review to ensure adherence to budgetary constraints and allocation.
- Assessment of community engagement and participation levels.
- Evaluation of the effectiveness of capacity building and training efforts.
- Identification of emerging risks and implementation of mitigation strategies.

(c) How Project Would Be Monitored

Project monitoring will be a continuous process to track progress, assess performance, and identify areas for improvement. Key monitoring activities include:

- Regular site visits to pilot installations in Uttarakhand to observe system functionality.
- Data collection on water quality and pollutant levels in disaster scenarios.
- Community engagement monitoring to evaluate the level of community participation.
- Performance indicators tracking to measure the project's impact.
- Environmental monitoring to assess the project's ecological footprint.
- Financial monitoring to ensure adherence to budgetary constraints.

(d) Project Evaluation Strategy

A comprehensive project evaluation strategy will be employed to assess the project's overall impact and effectiveness. This evaluation will include:

- **Outcome Evaluation:** Assessing the achievement of project objectives and goals, including improved access to clean drinking water during disasters.
- **Impact Evaluation:** Measuring the broader impacts of the project on the well-being and resilience of the communities in Uttarakhand.
- **Cost-effectiveness Evaluation:** Analyzing the project's financial efficiency and benefits.

- **Environmental Evaluation:** Evaluating the environmental impact and sustainability of the project.
- **Community Feedback:** Gathering feedback from community members and stakeholders to assess their perception of the project's outcomes.

(e) Attending Committee Meetings and Workshops

Regular attendance at committee meetings and workshops will be a key component of project monitoring and evaluation. The project management team and relevant stakeholders will participate in:

- Project review meetings to discuss progress, challenges, and solutions.
- Community workshops to engage with local stakeholders, receive feedback, and share project updates.
- Technical workshops with experts to ensure alignment with best practices.
- Environmental assessment meetings to review and address ecological impacts.
- Financial audits and meetings with auditors to ensure financial transparency and compliance.

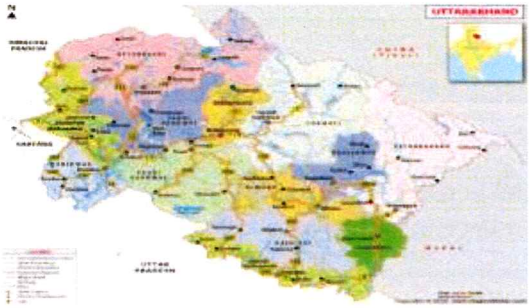
By actively participating in these meetings and workshops, the project will foster collaboration, transparency, and accountability, ultimately enhancing its effectiveness and impact in the target areas.

6. ANNEXURES

(a) Site description:

The project targets 10 villages in Uttarakhand facing water scarcity due to climate change, environmental degradation, and socio-economic shifts. In Uttarakhand's Garhwal and Kumaon regions, villages at 1,200-2,500 meters rely on naulas and dharas springs, impacted by reduced discharge from deforestation, erratic monsoons, and geological shifts, affecting subsistence farming communities where women spend 3-5 hours daily fetching water. These diverse sites, with populations of 150-500, were chosen for their traditional water systems and scalable potential for integrated, community-driven interventions combining scientific and indigenous practices to enhance water security


INDIA


UTTARAKHAND

(b) Detailed Budget and Disbursement Plan (Only on the heads of Accounts given in Concept Note Format)

Professional Services					
Designation	**Nos.**	**Duration (Mos)**	**Monthly Salary**	**Total**	
Senior Research Fellow (Social, Institutional and gender)	1	36	42000+10% HRA	1663200	
Research Associate III	1	36	67000+10% HRA	2653200	
Senior Project Fellow	2	36	28000+10% HRA	2217600	
Sub Total				**6534000**	
Training Expenses					
Awareness and Community Mobilization	10	3	8000	240000	10 villages and 8000 per village per year village for 3 years which include Days celebration and Pakhwadas etc.
Training					
Training programme	10	8	5000	400000	(Quarterly training program for 2 year, participants from PRI/VWSC/Van Panchayat/SHGs etc. considering 20 participants @250 per participants per program)
Skill Training of Village maintenance workers, water quality testing group	10	5	6000	300000	5 person per village, 3 days training@2000/day
Workshop					
2 workshops	2	1	150000	300000	Considering 30 participants in each workshop @5000 per participants per workshop) which includes participants from Government/NGOs/Research Institutes & PRIs.
Sub Total				**1240000**	
Domestic Travel Expenses					
For Uttarakahnd					

24 visits of RA, SRF and PI/Co-PI	24		65000	1560000	considering Quarterly two visits of RA/SRF/PI/Co-PI and total 24 visits throughout the project duration (Travel coast include 5 days of staying@2500*2 rooms*5 days = 25000 and fooding considering 5 dasys@3000 = 15000 and travel expenses for taxi for 5 days@5000/day = 25000)
Monthly Visits of SPF	36		30000	1080000	2 SPF would be provided a consolidated TA of 15000/month (considering 15 visits per months @1000/day for each month)
Sub Total				***2640000***	
Office Expenses					
Office Assistant	*1*	*36*	*25000*	*900000*	
Nonrecurring expenses	1	1	250000	250000	Laptop, Printer, iPad and software and other office appliances
Honorarium to expert including Travel 100 mandays (Tech/Inst/Gender/Environmental)	1	100	10000	1000000	
Recurring expenses	36		20000	720000	
Contingency expenses		LS	300000	300000	
Sub Total				**3170000**	
Printing and Publication			500000	**500000**	Development of manual, papers, IEC material etc.
Digital Equipment					
Hardware and minor equipment					
Automatic Chlorinator including installation	10		50000	500000	
Water quality field test kit, Chemicals	11		15000	165000	
Water quality testing prob	2		35000	70000	
Digital Camera	1		100000	100000	
Tools and plants for village maintenance workers	10		10000	100000	
Software	1		100000	100000	
Sub Total				**1035000**	

Materials and Supplies					
1. Study of different water governance model in 5 States					
Stake holders consultation, FGD, household survey, interviews and meetings etc.	5		100000	500000	Consultation with stake holders in 5 state
social assessment tools	5		10000	50000	
Refreshment & other expenditure during meetings	5		20000	100000	
Honorarium to community, village level leaders	5		10000	50000	
field exposure and learnings	5		200000	1000000	considering field exposures in 5 States for exploring various models assuming 200000/state.
Honorarium to surveyor	5		20000	100000	
Data entry and analysis	5		5000	25000	
Lesson learnt and development of WG model	1		50000	50000	
2. Action research on Community managed Water governance Model (Community Lab) in 10 villages of 3 States					
i. Activities for developing community Lab (Hardware)					
Hydrological and other investigations	10		50000	500000	
Water quality testing, disinfection and other related activities	10		50000	500000	
Source sustainability measures	10		200000	2000000	
water budgeting	10		5000	50000	
Rainwater Harvesting	10		100000	1000000	
Scheme augmentation	10		250000	2500000	
Irrigation pond/other water efficient practices	10		100000	1000000	
ii. Activities for developing community Lab (Software)					
Financial Management					
Cost Recovery (Budget Preparation)	10		5000	50000	
Convergence of existing schemes	10		30000	300000	
Tarif fixation	10		5000	50000	
Documentation and record keeping	10		10000	100000	
Social and Institutional	10				

Development of Bylawas	10		5000	50000	
Roles and responsibility of each village level Institution (GP/VP/SHGs/VWSCs)	10		10000	100000	
Gender equity and social inclusion	10		20000	200000	
Establishment of O&M system	10		25000	250000	
Sustainability of developed Water Governance System	10		5000	50000	
Sub Total				**10575000**	
Total				**25694000**	
GST 18% extra if applicable				**1903500**	

TOR/Job Descriptions for all project implementing personnel

1. **Principal investigator and co-principal investigator:** Oversees overall project implementation, liaison with NMHS, financial management, and reporting in consultation with Advisor.
2. **Research Associate:** Provides technical expertise on springshed management, hydrological assessments, and water quality
3. **Senior Research Fellow:** Facilitates community mobilization, participatory planning, and social assessments.
4. **Senior Project Fellow:** two for Uttarakhand responsible for on-ground implementation, community engagement, and data collection
5. **Office Assistant:** Responsible for data collection, analysis, and reporting.
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(यूजीसी अधिनियम, 1956 की धारा 2(f) के अंतर्गत उत्तराखण्ड राज्य अधिनियम द्वारा स्थापित)

Swami Rama Himalayan University

(Estd. Under section 2(f) of UGC Act, 1956 vide Uttarakhand State Act)

Dr. Rajendra Dobhal
FNASc
Vice Chancellor

Chairman
The National Academy of Sciences, India, UK Chapter

Swami Ram Nagar,
Jolly Grant, Dehradun-248016,
Uttarakhand, India

Tel.: 91-135-2471142 / 2471143
Email: vc@srhu.edu.in
Website: www.srhu.edu.in

डॉ. राजेन्द्र डोभाल
एफ.एन.ए.एस.सी.
कुलपति

अध्यक्ष
राष्ट्रीय विज्ञान अकादमी, भारत
उत्तराखण्ड अध्याय

SRHU/VC/Ext./2025-29 Date: 13th June, 2025

Endorsement Letter

This is to certify that:

1. The Swami Rama Himalayan University hereby commits to execute the NMHS-funded project entitled **"Community Managed Water Governance Model in Himalayan Villages"**, funded under the National Mission on Himalayan Studies (NMHS), Ministry of Environment, Forest and Climate Change (MoEF & CC), Govt of India, New Delhi.

2. The University welcomes the participation of **Prof. H. P. Uniyal, Advisor, Mr. Nitesh Kaushik, Deputy Director WATSAN – SRHU as the PI and Er. Atul Uniyal, Scientist, SRHU, Mr. L.S. Bisht, Social Expert and Er Karan Singh, Civil Engineer** as Co-PI for the Project supported under NMHS.

3. In case of discontinuance by the Principal Investigator in any unforeseen circumstances, the Co-PI or any other suitable professional staff entrusted with from the organization will resume the responsibility of the fruitful completion of the project with due information to the NMHS, MoEF & CC, Govt. of India.

4. The start date of the project will be considered as specified in the NMHS-Sanction Letter/ Order, issued to the University from the NMHS, MoEF & CC, GoI.

5. The investigators will be governed by the rules and regulations of University and will be under Administrative Control of the University for the duration of the project.

Contd…2..

6. The grant by the NMHS, MoEF & CC, GoI will be used to meet the expenditure on the project and for the period, for which the project has been sanctioned as mentioned in the NMHS-Sanction Letter/ Order.

7. The University will provide basic infrastructure and other requisite facilities to the investigator for undertaking the research project.

8. The University will take into books all assets, if applicable, created in the aforementioned project, and its disposal would be at the discretion of NMHS, MoEF & CC, GoI.

9. The University endorses to undertake the financial and other management responsibilities of the project, and there will be no administrative or other liability attached to NMHS, MoEF & CC, GoI at the end of the project.

Dr. Rajendra Dobhal
FNASc

Swami Rama Himalayan University
Vice-Chancellor

Annexure -3

Information on the Proponent Organization

Note: Please fill in this form online with the Concept Note and Full Proposal.

Project Title	Community Managed Water Governance in the Himalayan villages via Participatory Action Research - Community Labs		
Name of the Organization	Swami Rama Himalayan University		
Mailing Address	Swami Ram Nagar, Jolly Grant, Dehradun		
Visiting Address (if different from above)	Swami Ram Nagar, Jolly Grant, Dehradun		
Telephone	0135-2471346	Fax	
E-mail	watsan@srhu.edu.in	website	https://srhu.edu.in
Mission and Goal of the Organization	Research, education, health care, social and outreach.		
About the organization	Registration date:	Established under Section 2 (f) of UGC Act, 1956 vide Uttarakhand State Act no. 12 of 2013 with the enactment of Uttarakhand private University Act 2023 Notification Number: 349/XXXVI(3)/2013/66(1)/2013 Date of incorporation: 01 October 2013	
	Category:	University	
	Contact Person:	Mr. Nitesh Kaushik	
	Number of staff:	2989	
	No. of technical staff	46	
Bank Account details	Account Name:	SRHU SCIENTIFIC AND INDUSTRIAL RESEARCH	
	Bank Name:	State Bank of India	
	Bank Address:	HIHT, Jolly Grant, Dehradun. Uttarakhand- 248016	
	Account No.:	37200223663	
		IFSC Code-SBIN0010580	
	Other routing code	MICR Code-248002201	
	Signatories names	Dr. Vijay Dhasmana, Dr. V. Chauhan & Dr. Prakash Keshaviah	
References	Name, address and Tel No (Referee1):	Dr. Sumit Sen Associate Professor, Department of Hydrology, IIT Roorkee, 9457449522 Sumit.sen@hy.iitr.ac.in	
	Name, address and Tel No. Referee 2)	Dr. Sanjeev Bhucher, ICIMOD, Katmandu, Nepal Senior Intervention Manager Springs +9779860802175 Sanjeev.bhuchar@icimod.org	

Projects implemented during the last 5 years relevant to the theme of the current proposal				
S.No	Title of the project	Donor / Amount		Reference (Name/Tel/email)
1	Affordable Climate-Resilient Water Supply Infrastructure Prototype for the Indian Himalayan Region	National Mission on Himalayan Studies (NMHS), Ministry of Environment Forest & Climate Change (MoEFCC), Government of India	1,01,00,000	Er. M.S. Lodhi Nodal Officer, NMHS-PMU, GBP NIHE HQs nmhspmu2016@gmail.com
2	Social Audit & Environmental Audit of Sewage Treatment Plants (STPs) & Interception & Diversion (I&D) under Namami Gange	State Mission for Clean Ganga (SMCG), Namami Gange, Govt. of Uttarakhand	21,68,870	Dr. Puran Joshi Social Development Expert spmgngrba.utk01@gmail.com Ph.: 0135-2769932, 2769998
3	Key Resource Centre (KRC)	Ministry of Jal Shakti, Govt. of India.	2,37,48,000	Ministry of Jal Shakti, Govt. of India. E-mail krc-njjm@gov.in via gov.in
4	Jal Jeevan Mission	State water and Sanitation Mission Govt. of Uttarakhand	3,17,02,000	State water and Sanitation Mission Govt. of Uttarakhand, ceswsm2020@gmail.com
5	THF-Implementation of Water, Springshed and Sanitation Schemes	Rural India Supporting Trust (RIST)	5,61,00,000	Krishna Trivedi Program Manager The Hans Foundation # 160, Phase-II, Vasant Vihar Dehradun|Uttarakhand - 248146 Phone 0135 - 2769978, Extension-26 and 27 krishna@thfmail.com
6	Hans Jaldhara	The Hans Foundation	3,91,07,297	Krishna Trivedi | Program Manager The Hans Foundation # 160, Phase-II, Vasant Vihar Dehradun Uttarakhand - 248146 Phone 0135 - 2769978, Extension-26 and 27 krishna@thfmail.com
7	Key Resource Center - ODF verification Study UP	Deptt. of Panchayati Raj Gov. of UP	13,20,000	(522) 232-2924. Fax: (522) 232-2923. E-mail: panchraj@nic.in
8	Himmothan Pariyojana WASH Plus	Tata Trusts & Titan Co. Ltd	3,27,56,600	Dr. Vinod kothari Regional Manager (TATA TRUSTS) vkothari@tatatrusts.org 7055216767 Org. Name TATA TRUSTS

Darpan ID- SRHU- UA/2018/02/2601

Due to size constraint, we were not able to upload the annual reports for the last three years

(*) In case of Private/Non Government Organization Annual Reports of the Organization and registration in Darpan Portal for the last three years need to be provided along with Technical reports/Publications

CV of Principal Investigator (PI)

1	Submitted CV of PI/ CO-PI	PI				✓		Co-PI					
2	Name in full (in block letters)	**NITESH KAUSHIK**											
3	Designation of PI/CO-PI	Deputy Director & Water Management Expert											
3	Date of Birth and Age as on Project submission date	1	1	0	3	1	9	7	4	51	03	03	
		d	d	m	m	y	y	y	y	Years	Months	Days	
5	Nationality	Indian											
4	Sex	Male				✓		Female					
6	Address for correspondence (in block letters with pin code)	WATSAN Department, Swami Rama HimalayanUniversity Swami Ram Nagar, Jollygrant Dehradun, 248016											
7	Contact mobile number/	Mobile:				9837021771							
	e-mail id	e-mail				nkaushik@srhu.edu.in							

7. Educational Qualification

(a) Details of Examination Passed from Graduation onward to Ph.D)

S No	Exam Passed/ Degree Awarded	University/ Institution/ Board	Year of Passing	Subjects Taken	Result with Division/ Class
1.	M.Tech	University of Pune (Dissertation at IIT – Delhi)	1997	Atmospheric Science	1st (Gold Medalist)
2.	M.Sc	IIT, Roorkee	1995	Physics	2nd
3.	Master in Ecology & Environment	Indian Institute of Ecology & Environment	2000	Ecology & Environment	1st
4.	B.Sc	University of Meerut	1993	Science	1st

(b) Details of Ph.D.

Title of Ph D Thesis	Subject /Branch	University/ Organization

(C) Professional Trainings, if any

Organisations	Period		Details of Trainings
	From	To	
Dy. Director, WATSAN & Environmental Specialist at Swami Rama Himalayan University / Himalayan Institute Hospital Trust, Dehradun	Feb 2004	Present	Management and technical expertise on various consultancy water & sanitation projects, Nodal officer for National Jal Jeevan Mission, GoI
Environmental Specialist at Project Management Unit, The Swajal Project, Dept. of Drinking Water & Sanitation, Govt. of Uttarakhand Uttarakhand	Nov 2000	Jan 2004	Management of World Bank funded Water & Sanitation project. Activities include Water Resource management, water & sanitation services, water quality
Environmental Specialist and Portfolio Manager at Project Management Unit, The Swajal Project, Dept. of Rural Development, Govt. of Uttar Pradesh	Apr 1997	Nov 2000	Management of World Bank funded Water & Sanitation project. Activities include WaterResource management, water & sanitation services, water quality

9. Research Experience
Distinguished professional with an extensive academic background in the domains of atmospheric science, environmental studies, and water resource management. Achieved a Gold Medal during M.Tech in Atmospheric Science from the University of Pune in 1997, with dissertation completed at IIT Delhi. Additionally, holds an M.Sc in Physics from IIT Roorkee in 1995, a Master's in Ecology & Environment from the Indian Institute of Ecology & Environment in 2000, and a B.Sc from the University of Meerut in 1993. Significant contributions to research through various noteworthy publications and presentations, including "Water Bank: Rooftop Rainwater Harvesting in Mountainous Village of Himalayas" and "Action Research on Solar Pumping Water Scheme & Geohydrology based

Springshed Management in Himalayas," both presented during the 6th India Water Week in September 2019 under the Ministry of Jal Shakti, Government of India. Showcased expertise in international forums, presenting papers like "Experience of Himmothan Project in the Himalayas through a Community Management Approach" and "Water Management Systems & Approaches: Ancient Time to Present and Role of Community in Water Management in Indian Himalayas" in prestigious conferences such as the World Mountain Forum and the International Conference of Water, Engineering, and Development Centre at Loughborough University, UK.

10. Experience related to sustainable mountain development, If any (200 words)

- Having vast experience of 25+ years on SDG 6 (Water & Sanitation)
- Management of World Bank funded Water & Sanitation project. Activities include Water Resource management, water & sanitation services, and water quality.
- Management and technical expertise on various consultancy water & sanitation projects, Nodal officer for National Jal Jeevan Mission, GoI
- Managed solid and liquid waste management phase I under Swach Bharat Mission, GOI.

11. Major Awards/ Recognition (if Any) at National / International Level

Acting water Management Expert member at District Water & Sanitation Mission in Dehradun under the chairmanship of District Magistrate formal member of SWAJAL General body, department of drinking water and sanitation government of Uttarakhand.
Associated with department of Rural Development, Gov. of Uttar Pradesh and department of Drinking Water and Sanitation, Gov. of Uttarakhand as Environmental Specialist. Also Published several ,anuals ansd Booklets for SWAJAL Project and TATA Trust funded Himmotthan Project. Activly associated with resource center development concept with international water and Sanitation Center (IRC), Neederlands.

12. Members of Learned Societies (International and National) if any

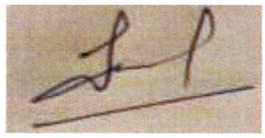
13. Major Scientific/ Technological Achievements(2) (if any)
Action research on Solar based Water Supply Pumping Scheme, individual rooftop Rainwater harvesting Tanks, Catchment area protection.
(New Methods/ Theory/ Process established, Technology Developed, Socioeconomic issues Addressed, Unique data base/centres established etc) Actively associated in development of concept of community participatory water and sanitation implementation under SWAJAL project.

14. Publications/Patents (numbers only)							
Scientific Papers		Policy Papers	Books		Technical Reports	Project Proposals for Fund Generation	Patents (if Any)
International	National		Edited	Written			

15. Experience in Managing Research Projects				
No of similar Projects Managed (with details)				
S No	Project Details	Donor Agency	Duration	Project Budget (INR)
1.	Swajal (UP Rural Water Supply as Environmental Sanitation Project)	World Bank	1998-2002	4,55,87,000
2.	Sector Reform Project	Ministry of Rural Development, Deptt. of Drinking Water and Sanitation.	2002-2005	74,09,000
3.	Total Sanitation Campaign	Ministry of Rural Development, Deptt. of Drinking Water and Sanitation.	2005-2006	16,00,000
4.	Himmothan Pariyojana Phase I	Sir Ratan Tata Trust, Mumbai	2002-2005	3,72,67,559
5.	Himmothan Pariyojana Phase II	Sir Ratan Tata Trust, Mumbai	2006-2009	6,65,75,332

6.	Watermill Initiative	UREDA & Asian Development Bank	2006-2007	10,35,448
7.	Sector Wise Approach Program (SWAp) Project Management Unit Swajal Project, Dehradun/Tehri	World Bank	2006-2009	2,60,00,000
8.			2010 to 2014	2,40,00,000
9.	Uttarakhand Urban Center Development Institute	Asian Development Bank	2011- 2013	56,42,000
10.	Himmothan Pariyojana Phase III	Tata Trusts	2011- 2014	4,21,66,845
11.	National Rural Drinking Water Program	Ministry of Drinking Water & Sanitation, GoI	2014-2016	25,00,000
12.	Zila Yojana Phase I	State Govt.	2015-2016	1,17,213
13.	Himmothan Pariyojana WASH Plus	Tata Trusts & Titan Co. Ltd	2015 – 2017	3,27,56,600
14.	Zila Yojana Phase II	State Govt.	2017-2018	2,00,000
15.	School WASH Rudrapryag	Himalayan Institute Hospital Trust	2018-2019	12,00,000
16.	Solid and Liquid Waste Management phase I (SLWM)	Swachh Bharat Mission (G), GoI	July-Sept 2018	50,000
17.	Hans Jaldhara	The Hans Foundation	2016 – 2018	3,00,00,000
18.	Preparation of DPR 8 village Pauri and 1 village Haridwar District	The Hans Foundation	Sept.-Oct. 2018	1,98,000
19.	Need Assessment survey of water and Electricity	The Hans Foundation	Jan -June 2019	2,35,224
20.	Key Resource Center - ODF verification Study UP	Deptt. of Panchayati Raj Gov. of UP	2017 to 2018	13,20,000
21.	Namami Gange	State Programme Management Group GoUK.	2017-2017	1,50,000
.22.	Solid and Liquid Waste Management phase II (SLWM)	Swachh Bharat Mission (Gramin), GoI	2019-2022	2,76,000
23.	National Key Resource Center (NKRC)	Ministry of Drinking Water & Sanitation, GoI with State Govt.	2018 – 2020	40,00,000
24.	THF-Implementation of Water, Springshed and Sanitation Schemes	The Hans Foundation	2018 – 2020	5,61,00,000
25.	Implementation Support Agency (ISA) Jal Jeevan Mission, GOI	Govt. of India, Govt. of Uttarakhand	2020 to cont.	23,00,000

26.	Sector Partner	Ministry of Jal Shakti, Govt. of India.	2021 to cont.	27,72,000
27.	Key Resource Centre (KRC)	Ministry of Jal Shakti, Govt. of India.	2021 to cont.	2,37,48,000
28	Jal Jeevan Mission	State water and Sanitation Mission Govt. of Uttarakhand	2021 to cont.	3,17,02,000
29	**PI of Social & Environmental Audit of STPs under Namami Gange**	State Mission for Clean Ganga (SMCG), Namami Gange, Govt. of Utttarakhand	Jan 2025 to cont.	21,68,870
30	**Co – PI of Affordable Climate-Resilient Water Supply Infrastructure Prototype for the Indian Himalayan Region**	National Mission on Himalayan Studies (NMHS), Ministry of Environment Forest & Climate Change (MoEFCC), Government of India	Mar 2025 to cont.	1,01,00,000



Date: 14.06.2025

Name: Nitesh Kaushik

Place: Jolly Grant, Uttarakhand

(Signature of PI)

CV of Advisor

1	Submitted CV of PI/ CO-PI	PI	✓	Co-PI	
2	Name in full (in block letters)	Prof. Harsh Pati Uniyal			
3	Designation of PI	Honorary Advisor			
3	Date of Birth and Age as on Project submission date	2 5 1 1 1 9 5 2	72	06	20
		d d m m y y y y	Years	Months	Days
5	Nationality	Indian			
4	Sex	Male	✓	Female	
6	Address for correspondence (in block letters with pin code)	Swami Rama Himalayan University Swami Ram Nagar, Jollygrant Dehradun, 248016			
7	Contact mobile number/	mobile:	9411110538		
	e-mail id	e-mail	hpuniyal@gmail.com		
8					

7. Educational Qualification

(a) Details of Examination Passed from Graduation onward to Ph.D)

S No	Exam Passed/ Degree Awarded	University/ Institution/ Board	Year of Passing	Subjects Taken	Result with Division/ Class
1.	B.Tech	G. B. Pant University of Agriculture and Technology	1976	Civil Engineering	1

(b) Details of Ph.D.

Title of Ph D Thesis	Subject /Branch	University/ Organization

(C) Professional Trainings, if any

Organizations	Period		Details of Trainings
	From	To	
Swami Rama Himalayan University, Swami Ram Nagar, Jolly Grant, Dehradun	Apr 2021	Present	Professor & Advisor
State Planning Commission, Govt. of Uttarakhand	Dec 2012	Dec 2019	Advisor
State Planning Commission, Govt. of Uttarakhand	Oct 2009	Nov 2012	Director
Chief General Manager and Head of Department.	Nov 2002	Oct 2009	

9. Research Experience

Completed B.Tech from G.B. Pant University of Agriculture and Technology in 1975, , career has been dedicated to pioneering advancements in water resource management. Over the years, Plays several Key roles, including Director at the State Planning Commission and Chief General Manager, where played a vital role in strategic planning and execution.

Significant contributions to sustainable water practices, notably authoring the "Uttarakhand Manual for Rain Water Harvesting & Recharge," a pivotal guide published by the Planning Department of Uttarakhand. Additionally, documented innovations by the Drinking Water Supply Department, further showcasing commitment to advancing water sustainability.

publications such as "Drinking Water Production in India - Bank Filtration as an Alternative," published in Water Digest, addressing innovative water treatment approaches. Also emphasized rainwater harvesting through publications like "Harvest Rainwater - Secure Tomorrow" and advocated for "Uttaranchal Koop" as an innovative solution for mountainous water supply.

Furthermore, dedication to innovation is highlighted by the patents, hold, emphasizing novel methods for rainwater harvesting and injecting treated rainwater directly into aquifers. These patents underscore my relentless pursuit of sustainable water management solutions, aiming to secure a better tomorrow through advanced techniques and practices in the field of water conservation and utilization.

10. Experience related to sustainable mountain development, If any (200 words)
• Having Vast experience In all SDGs during assignment state Planning Commission Gov. of Uttarakhand & Specifically involved with SDG 6 • Major career has been spent on sustainable mountain development

11. Major Awards/ Recognition (if Any) at National / International Level
• "Innovator of the year award" 2006 institute by Uttrakhand State Council for Science & Technology Govt. of Uttrakhandl, given away in the first Uttrakhand Science Congress held at Dehradun on 11th November 2006. • " National Urban Water Award 2008" for my innovation and implementation of Uttaranchal Koop in Uttarakhand.The Uttaranchal koop is a cheap and appropriate source tapping device for mountainous regions of the country .The Award is a National Award given by Ministry of water resources for innovations in the field of Drinking water sector of the country . • "National Urban Water Award 2009" (as Runner up) for successful implementation of River Bank Filtration Technique in Uttarakhand state. • "Certificate of Honour for outstanding and meritorious achievements in the field of water management" from Technocrat Welfare Society of India on 28th December 1997. • "Certificate of Honour for outstanding and meritorious achievements in the field of water management" from Technocrat Welfare Society of India on 28th December 1997.

12. Members of Learned Societies (International and National) if any
• Declared as "Eminent Engineer" for 2013 by Institution of Engineers Uttarakhand State for my innovations and meritorious service to the state and to the society.

13. Major Scientific/ Technological Achievements2 (if any)
• " National Urban Water Award 2008" for my innovation and implementation of Uttaranchal Koop in Uttarakhand.The Uttaranchal koop is a cheap and appropriate source tapping device for mountainous regions of the country .The Award is a National Award given by Ministry of water resources for innovations in the field of Drinking water sector of the country .

(New Methods/ Theory/ Process established, Technology Developed, Socioeconomic issues Addressed, Unique data base/centres established etc

14. Publications/Patents (numbers only)

Scientific Papers		Policy Papers	Books		Technical Reports	Project Proposals for Fund Generation	Patents (if Any)
International	National		Edited	Written			
		2		3			2

15. Experience in Managing Research Projects

No of similar Projects Managed (with details)				
S No	Project Details	Donor Agency	Duration	Project Budget (INR)
1.	Water Sewerage Projects for rural & Urban areas with funding from Gov. of India & State Gov.	GOI/State Gov.	45 years	
2.	**Advisor of Social & Environmental Audit of STPs under Namami Gange**	State Mission for Clean Ganga (SMCG), Namami Gange, Govt. of Utttarakhand	Jan 2025 to cont.	21,68,870
3.	**PI of Affordable Climate-Resilient Water Supply Infrastructure Prototype for the Indian Himalayan Region**	National Mission on Himalayan Studies (NMHS), Ministry of Environment Forest & Climate Change (MoEFCC), Government of India	Mar 2025 to cont.	1,01,00,000

Date: 14.06.2025 Name: Er. Harsh Pati Uniyal

Place: Jolly Grant, Uttarakhand **(Signature of Advisor)**

(CO-PI)

	Submitted CV of CO-PI	PI		Co-PI	✓
2	Name in full (in block letters)	Er. Dharmendra Kumar Singh			
3	Designation of CO-PI	Chief General Manager and Head of Department.Uttarakhand Jal Sansthan, Dehradun			
3	Date of Birth and Age as on Project submission date	2 0 / 1 0 / 1 9 6 7	57 Years	0 Months	10 Days
		d d / m m / y y y y			
5	Nationality	Indian			
4	Sex	Male	✓	Female	
6	Address for correspondence (in block letters with pin code)	Office of Chief General Manager, Uttarakhand Jal Sansthan (UJS), Jal Bhawan, B-Block, Nehru Colony, Dehradun			
7	Contact mobile number/	mobile:	9927027172		
	e-mail id	e-mail	gmtrmujs@gmail.com		
8					

7. Educational Qualification

(a) Details of Examination Passed from Graduation onward to Ph.D)

S No	Exam Passed/ Degree Awarded	University/ Institution/ Board	Year of Passing	Subjects Taken	Result with Division/ Class
	BE in Civil Engineering	Jagadguru Mallikarajuna Murugharajendra Institute of Technology, Karnataka	1995	Civil Engineering	1ST

(b) Details of Ph.D.

Title of Ph D Thesis	Subject /Branch	University/ Organization

(C) Professional Trainings, if any

Organisations	Period		Details of Trainings
	From	To	

9. Research Experience

S. N.	Title	Sponsoring Agency	Period	Achievements
1.	Leak Detection/ Control and Water Management	Rhine Energy Water Company, Cologne Germany/ University of Applied Sciences, Dresden Germany	2007 – 2008	Capacity development in leak detection and management of water supply and leak detection study in Haridwar and Dehradun
2.	Establishment of a Groundwater Monitoring Network in Dehradun	Uttarakhand Science Education and Research Centre (USERC) & Uttarakhand State Council for Science and Technology (UCOST)	2009	Establishment of a groundwater monitoring network in the city of Dehradun comprising 18 existing handpumps and seven new monitoring wells, creating a databse of all existing handpumps & strengthening Indo-German linkages.
3.	Development of Riverbank Filtration in Hill-Regions for Sustainable Quality and Quantity of Drinking Water in Uttarakhand	DST Water Technology Initiative, Govt. of India	2010 – 2013	Development of RBF atfive new sites in Uttarakhand (Srinagar, Satpuli, Augustmuni, Karanprayag & Gauchar)
4.	Saph Pani – Enhancementof natural water systems and treatment methods for safe and sustainable water supply in India	European Union Framework Programme 7	2011 - 2014	Creation of a database of existing RBF sites in Uttarakhand, flood-protection of RBF schemes and cost-benefit analyses of RBF schemes

10. Experience related to sustainable mountain development, If any (200 words)

My experiences in sustainable mountain development focus on enhancing water resource management, ensuring reliable water supply, and promoting eco-friendly practices. Working on water management with the Rhine Energy Water Company and the University of Applied Sciences, I developed expertise in leak detection and control, conducting studies in Haridwar and Dehradun to minimize water losses and improve distribution efficiency.
This was further reinforced in 2009 through the establishment of a groundwater monitoring network in Dehradun in collaboration with USERC and UCOST. This project involved setting up 18 monitoring stations and adding seven new wells to monitor groundwater quality and availability, supporting sustainable water management in mountainous regions.
From 2010 to 2013, I contributed to the development of riverbank filtration (RBF) in hill areas under the DST Water Technology Initiative, establishing RBF sites in Uttarakhand. This technique was crucial in providing high-quality, sustainable drinking water, especially in regions where groundwater was challenging to access or unreliable.
In addition, I was part of the European Union's Saph Pani project from 2011 to 2014, which enhanced natural water systems in India. This project emphasized using natural filtration for water safety and included cost-benefit analyses to ensure economic sustainability of RBF schemes. These efforts contribute to sustainable mountain development by addressing water scarcity and promoting resilient water management practices.

11. Major Awards/ Recognition (if Any) at National / International Level

12. Members of Learned Societies (International and National) if any

13. Major Scientific/ Technological Achievements (2 if any)
(New Methods/ Theory/ Process established, Technology Developed, Socioeconomic issues Addressed, Unique data base/centres established etc.

14. Publications/Patents (numbers only)

Scientific Papers		Policy Papers	Books		Technical Reports	Project Proposals for Fund Generation	Patents (if Any)
International	National		Edited	Written			
3	2					2	

15. Experience in Managing Research Projects

No of similar Projects Managed (with details)				
S No	Project Details	Donor Agency	Duration	Project Budget (INR)

Date: 14-06-2025

Name: Er. Dharmendra Kumar Singh

Place: Dehradun, Uttarakhand

(Signature of PI/Co-PI)

(CO-PI)

1	Submitted CV of CO-PI	PI		Co-PI	✓
2	Name in full (in block letters)	Atul Uniyal			
3	Designation of CO-PI	Scientist			
3	Date of Birth and Age as on Project submission date	2 4 0 7 1 9 9 3	31	10	21
		d d m m y y y y	Years	Months	Days
5	Nationality	Indian			
4	Sex	Male	✓	Female	
6	Address for correspondence (in block letters with pin code)	Swami Ram Himalayan University Swami Ram Nagar, Jollygrant Dehradun-248016			
7	Contact mobile number/	mobile:	9897272021		
	e-mail id	e-mail	er.atuluniyal@gmail.com		
8					

7. Educational Qualification

(c) Details of Examination Passed from Graduation onward to Ph.D)

S No	Exam Passed/ Degree Awarded	University/ Institution/ Board	Year of Passing	Subjects Taken	Result with Division/ Class
1	M.Tech	MDU, Rohtak	2016	Transportation Engineering	I
2	B.Tech	UPTU, Lucknow	2013	Civil Engineering	I

(d) Details of Ph.D.

Title of Ph D Thesis	Subject /Branch	University/ Organization

(C) Professional Trainings, if any

Organisations	Period		Details of Trainings
	From	To	

9. Research Experience
Completed B.Tech from Uttar Pradesh Technical University (UPTU), Lucknow, and M.Tech from Maharshi Dayanand University (MDU), Rohtak in 2016. Academic journey has been characterized by significant contributions to civil engineering as an Assistant Professor, Civil Engineering and Scientist. These encompass a range of topics, from the innovative utilization of waste materials in flexible pavements to the application of steel fiber as reinforcement in cement concrete. Notable publications include works in esteemed journals. Possess practical experience in implementing and researching water and sanitation projects. Successfully completed nine water supply schemes, incorporating solar, electric, and gravity-based supply systems. Furthermore, have expertise in springshed management."

10. Experience related to sustainable mountain development, If any (200 words)
Working experience in Springshed Management in District Pauri, Uttarakhand, Implement Solar pumping water supply schemes in district Pauri Garhwal of Uttarakhand. Design Rooftop Rain Water harvesting system for GHSST, Toli district Pauri.

11. Major Awards/ Recognition (if Any) at National / International Level

12. Members of Learned Societies (International and National) if any
Associated member of Institute of Engineers, India Member ID AM3029415

13. Major Scientific/ Technological Achievements (2 if any)
(New Methods/ Theory/ Process established, Technology Developed, Socioeconomic issues Addressed, Unique data base/centres established etc

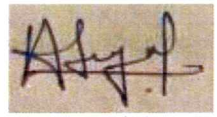
14. Publications/Patents (numbers only)

Scientific Papers		Policy Papers	Books		Technical Reports	Project Proposals for Fund Generation	Patents (if Any)
International	National		Edited	Written			
3	2					2	

15. Experience in Managing Research Projects

No of similar Projects Managed (with details)				
S No	Project Details	Donor Agency	Duration	Project Budget (INR)
1.	Implementation of Water supply, Springshed and Sanitation Scheme.	RIST-THF	2020 – 20223	5,61,00,000

2.	Design the capacity of Underground Rainwater Harvesting tank in GHSST, Toli Campus	SRHU (Purposed)	2022	---
3.	Jal Jeevan Mission	State water and Sanitation Mission Govt. of Uttarakhand	2021 to cont.	3,17,02,000
4	Key Resource Centre (KRC)	Ministry of Jal Shakti, Govt. of India.	2021-cont.	2,37,48,000
5	**Co – PI of Social & Environmental Audit of STPs under Namami Gange**	State Mission for Clean Ganga (SMCG), Namami Gange, Govt. of Utttarakhand	Jan 2025 to cont.	21,68,870
6	**Co – PI Affordable Climate-Resilient Water Supply Infrastructure Prototype for the Indian Himalayan Region**	National Mission on Himalayan Studies (NMHS), Ministry of Environment Forest & Climate Change (MoEFCC), Government of India	Mar 2025 to cont.	1,01,00,000



Date: 14.06.2025

Name: Atul Uniyal

Place: Jolly Grant, Uttarakhand

(Signature of PI/Co-PI)

CV of Co-Principal Investigator (CO-PI)

	Submitted CV of CO-PI	PI		Co-PI	✓
2	Name in full (in block letters)	Lakhpat singh Bisht			
3	Designation of CO-PI	Community Development Specialist			
3	Date of Birth and Age as on Project submission date	2 6 0 9 1 9 7 2	52	08	19
		d d m m y y y y	Years	Months	Days
5	Nationality	Indian			
4	Sex	Male	✓	Female	
6	Address for correspondence (in block letters with pin code)	Swami Ram Himalayan University Swami Ram Nagar, Jollygrant Dehradun-248016			
7	Contact mobile number/	mobile:	9410104768		
	e-mail id	e-mail			
8					

7. Educational Qualification

(e) Details of Examination Passed from Graduation onward to Ph.D)

S No	Exam Passed/ Degree Awarded	University/ Institution/ Board	Year of Passing	Subjects Taken	Result with Division/ Class
1	MA	HNB Garhwal University Srinagar Garhwal	2001	Sociology	1ST
2	BA	HNB Garhwal University Srinagar Garhwal	1992		1ST

(f) Details of Ph.D.

Title of Ph D Thesis	Subject /Branch	University/ Organization

(C) Professional Trainings, if any

Organisations	Period		Details of Trainings
	From	To	

9. Research Experience

S. N.	Title	Sponsoring Agency	Period	Achievements

Qualified trainer social worker having 27 years' experience of community participation Water and Sanitation projects using approach of demand driven and need based. Involved with water projects e.g. Swajal, Sector Reform, NRDWP, Swachh Bharat Mission. Capacity building pf stakeholder in all water projects.

10. Experience related to sustainable mountain development, If any (200 words)

My professional journey is marked by extensive training in community health and development. I completed Maternal and Child Health (MCH) training for field supervisors in May 1996 and honed my expertise in community-led initiatives through a Swajal Community Action Plan (CAP-TOT) Training of Trainer in late 1998. This was followed by a comprehensive HESA, WDI, NFE (TOT) training in early 1999, focusing on health, environmental sanitation, women's development, and non-formal education. I also received specialized training in Village Environmental Action Plan (VEAP) in 2002. My skills in community empowerment were further developed through a Women Empowerment Week in March 2001 and a Swajal – Capacity Building Programme for Operation & Maintenance in April 2001. Additionally, I participated in a Self Help Group (SHG) exposure visit program in May 2001.

Leveraging this extensive training, I have actively organized and facilitated numerous capacity-building initiatives. As a trainer at HIHT, I conducted **9 CAP (Community Action Plan) training sessions** for field staff and village water and sanitation committees, covering critical topics like water supply schemes, latrine and drainage, O&M, and M&E. I also led a **Community Empowerment workshop** sponsored by CDS ATI Nainital. My practical experience extends to organizing **Construction technical training** in Swajal villages. Furthermore, I spearheaded **Community Empowerment training** for village water and sanitation committees and conducted **Operation & Maintenance workshops** for various community groups. My contributions also include facilitating **Financial & Institutional Management workshops**, ensuring sustainable community development.

11. Major Awards/ Recognition (if Any) at National / International Level

12. Members of Learned Societies (International and National) if any

13. Major Scientific/ Technological Achievements (2 if any)
(New Methods/ Theory/ Process established, Technology Developed, Socioeconomic issues Addressed, Unique data base/centres established etc.

14. Publications/Patents (numbers only)

Scientific Papers		Policy Papers	Books		Technical Reports	Project Proposals for Fund Generation	Patents (if Any)
International	National		Edited	Written			
4							

15. Experience in Managing Research Projects

No of similar Projects Managed (with details)				
S No	Project Details	Donor Agency	Duration	Project Budget (INR)
1.	Design the capacity of Underground Rainwater Harvesting tank in GHSST, Toli Campus	SRHU (Purposed)	2022	---
2.	Hans Jaldhara (water supply and sanitation work)	Hans Foundation	2017-2019	5,61,00,000
3	Jal Jeevan Mission	State water and Sanitation Mission Govt. of Uttarakhand	2021 to cont.	3,17,02,000

4	Key Resource Centre (KRC)	Ministry of Jal Shakti, Govt. of India.	2021 to cont.	2,37,48,000
5	Work Order for Conducting Social Audit & Environmental Audit	State Mission for Clean Ganga (SMCG), Namami Gange, Govt. of Utttarakhand	Jan 2025 to cont.	21,68,870

Date: 14.06.2025 Name: L.S. Bisht

Place: Jolly Grant, Uttarakhand (Signature of PI/Co-PI)

CV of Co-Principal Investigator (CO-PI)

	Submitted CV of CO-PI	PI		Co-PI	✓
2	Name in full (in block letters)	Er. Karan Singh			
3	Designation of CO-PI	Civil Engineer			
3	Date of Birth and Age as on Project submission date	0 6 0 8 1 9 9 2 / 33 / 02 / 23			
		d d m m y y y y / Years / Months / Days			
5	Nationality	Indian			
4	Sex	Male	✓	Female	
6	Address for correspondence (in block letters with pin code)	Swami Ram Himalayan University Swami Ram Nagar, Jollygrant Dehradun-248016			
7	Contact mobile number/	mobile:	8755098781		
	e-mail id	e-mail	knegi497@gmail.com		
8					

7. Educational Qualification

(g) Details of Examination Passed from Graduation onward to Ph.D)

S No	Exam Passed/ Degree Awarded	University/ Institution/ Board	Year of Passing	Subjects Taken	Result with Division/ Class
1	M.Tech	Uttarkhand Technical University	2014	Structural Engineering	1ST
2	B.Tech	Uttarkhand Technical University	2017	Civil Engineering	1ST

(h) Details of Ph.D.

Title of Ph D Thesis	Subject /Branch	University/ Organization

(C) Professional Trainings, if any

Organisations	Period		Details of Trainings
	From	To	

9. Research Experience

S. N.	Title	Sponsoring Agency	Period	Achievements
Completed B.Tech from Uttarakhand Technical University in 2014, Lucknow, and M.Tech from Uttarakhand Technical University, in 2017. Academic journey has been characterized by significant contributions to civil engineering as an Assistant Professor, Civil Engineering and Site Engineer.				

10. Experience related to sustainable mountain development, If any (200 words)

Working experience in Springshed Management in District Pauri, Uttarakhand, Implement Solar pumping water supply schemes in district Pauri Garhwal of Uttarakhand. Design Rooftop Rainwater harvesting system for GHSST, Toli district Pauri.

11. Major Awards/ Recognition (if Any) at National / International Level

12. Members of Learned Societies (International and National) if any

13. Major Scientific/ Technological Achievements (2 if any)
(New Methods/ Theory/ Process established, Technology Developed, Socioeconomic issues Addressed, Unique data base/centres established etc.

14. Experience in Managing Research Projects				
No of similar Projects Managed (with details)				
S No	Project Details	Donor Agency	Duration	Project Budget (INR)
1.	Design the capacity of Underground Rainwater Harvesting tank in GHSST, Toli Campus	SRHU (Purposed)	2022	
2.	Key Resource Centre (KRC)	Ministry of Jal Shakti, Govt. of India.	2021 to cont.	2,37,48,000
3.	Co -PI of Conducting Social Audit & Environmental Audit	State Mission for Clean Ganga (SMCG), Namami Gange, Govt. of Utttarakhand	Jan 2025 to cont.	21,68,870

Date:

Name: Er. Karan Singh

Place: Jolly Grant, Uttarakhand

(Signature of PI/Co-PI)

स्वामी राम हिमालयन विश्वविद्यालय

(यूजीसी अधिनियम, 1956 की धारा 2(f) के अंतर्गत उत्तराखण्ड राज्य अधिनियम द्वारा स्थापित)

Swami Rama Himalayan University

(Estd. Under section 2(f) of UGC Act, 1956 vide Uttarakhand State Act)

Dr. Rajendra Dobhal
FNASc
Vice Chancellor

Chairman
The National Academy of Sciences, India, UK Chapter

Swami Ram Nagar,
Jolly Grant, Dehradun-248016,
Uttarakhand, India

Tel.: 91-135-2471142 / 2471143
Email: vc@srhu.edu.in
Website: www.srhu.edu.in

डॉ. राजेन्द्र डोभाल
एफ.एन.ए.एस.सी.
कुलपति

अध्यक्ष
राष्ट्रीय विज्ञान अकादमी, भारत
उत्तराखण्ड अध्याय

SRHU/VC/Ext./2025-29 Date: 13th June, 2025

Endorsement Letter

This is to certify that:

1. The Swami Rama Himalayan University hereby commits to execute the NMHS-funded project entitled **"Community Managed Water Governance Model in Himalayan Villages"**, funded under the National Mission on Himalayan Studies (NMHS), Ministry of Environment, Forest and Climate Change (MoEF & CC), Govt of India, New Delhi.

2. The University welcomes the participation of **Prof. H. P. Uniyal, Advisor, Mr. Nitesh Kaushik, Deputy Director WATSAN – SRHU as the PI and Er. Atul Uniyal, Scientist, SRHU, Mr. L.S. Bisht, Social Expert and Er Karan Singh, Civil Engineer** as Co-PI for the Project supported under NMHS.

3. In case of discontinuance by the Principal Investigator in any unforeseen circumstances, the Co-PI or any other suitable professional staff entrusted with from the organization will resume the responsibility of the fruitful completion of the project with due information to the NMHS, MoEF & CC, Govt. of India.

4. The start date of the project will be considered as specified in the NMHS-Sanction Letter/ Order, issued to the University from the NMHS, MoEF & CC, GoI.

5. The investigators will be governed by the rules and regulations of University and will be under Administrative Control of the University for the duration of the project.

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6. The grant by the NMHS, MoEF & CC, GoI will be used to meet the expenditure on the project and for the period, for which the project has been sanctioned as mentioned in the NMHS-Sanction Letter/ Order.

7. The University will provide basic infrastructure and other requisite facilities to the investigator for undertaking the research project.

8. The University will take into books all assets, if applicable, created in the aforementioned project, and its disposal would be at the discretion of NMHS, MoEF & CC, GoI.

9. The University endorses to undertake the financial and other management responsibilities of the project, and there will be no administrative or other liability attached to NMHS, MoEF & CC, GoI at the end of the project.

Dr. Rajendra Dobhal
FNASc

Swami Rama Himalayan University
Vice-Chancellor

Swami Rama Himalayan University
Director Research