

# SaciWATERs

SOUTH ASIA CONSORTIUM FOR INTERDISCIPLINARY  
WATER RESOURCES STUDIES



**BIENNIAL REPORT  
2019-21**

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**Dear Readers,**

*Greetings from SaciWATERS!*

*I am extremely pleased to introduce the Biennial Report of SaciWATERS for the years 2019-2021. This year we have the Biennial report instead of the usual annual report, because of the challenges faced in our ongoing projects due to Covid-19 which showed its effects right from the end of 2019. However, in spite of the challenging times wherein work slowed down, tasks were carried out with care and caution in the ensuing months. The year was marked by a consolidation of projects continuing from the years before.*

*Whole-hearted congratulations to the entire SaciWATERS team who could accomplish research deadlines, organize online workshops, training programmes and publications. As it is reflected in the Annual Report, SaciWATERS focused on major thematic areas such as Water Policy and Governance, Peri-urban water security, Climate change and water, Water and gender, Water, sanitation and Hygiene and Water quality.*

*Let me briefly outline in the form of bullets some of the accomplishments of the SaciWATERS team for the benefit of our readers.*

- **South Asian Water (SAWA) Leadership Program on Climate Change:** *This project is a follow up of an earlier project coordinated by SaciWATERS namely the CB (Crossing Boundaries). SAWA project was started in November 2017 and will continue until 2021. This is one of the major initiatives of the organization funded by International Development Research Centre (IDRC), Canada. This project has partners in major South Asian countries which has a focus on SAWA Leadership Program in the context of Climate Change. The basic idea is to create group of interdisciplinary women leaders in south Asia by awarding fellowships to 36 women enrolled in master's-level Integrated Water Resources Management (IWRM) programs.*
- **H2O-T2S in Urban Fringe Area:** *This is an action-research project funded by International Science Council, with partner funding by NWO and BMBF for research partners at TUDelft and University of Cologne respectively. This project was initiated this last year in September 2018 and will continue till August 2021. The project aims at understanding how water institutions and access to water as a consumption good and a resource for livelihoods is changed during the urbanisation process and in periurban spaces. It also aims to identify pathways towards the development of sustainable future cities and contribute to the knowledge on the sustainable use of water as an increasingly scarce resource.*

- **Civil Society Voices, Vulnerable Communities, and Localised Platform for Addressing Water Quality Challenges:** *This new project was initiated in this past year in May 2018. The project is a four year initiative to enable/improve access to safe drinking water and health for marginalised and vulnerable communities in selected arsenic and fluoride districts of India through the approach of building people-centric district platforms. The project is implemented in partnership with INREM, Anand and funded by EU.*
- **SaciWATERS Cap-Net Network (SCaN):** *SaciWATERS joined the UNDP Cap-Net in 2009 as one of its South Asian networks to create the SaciWATERS Cap-Net Network (SCaN). SaciWATERS hosts the network and acts as its legal, administrative and financial umbrella. It is a platform for partnership towards capacity building in Integrated Water Resources Management (IWRM) across the South Asia region. SCaN through its capacity building activities provides a platform to academics, researchers, and professionals from government, non-government, public and private sectors to work together towards strengthening the integrated approach within water sector through education & training; research; knowledge development; advocacy; and networking in South Asia.*
- **Assessment of WAPRO project:** *To evaluate project – “Increase water efficiency and food production in key commodity value chains through multi stakeholder partnership applying a Push-Pull-Policy strategy” - in order to assess the degree of achievement, it’s potential for replicability, consolidation of project learnings, and documentation of case studies in 6 villages of Almora district, Uttarakhand.*
- **Compendium of Best Practices on Sanitation and hygiene in South Asia:** *To develop resource material by way of collecting/documenting best practices and scalable solutions/success stories based on papers presented in the Conference on Sustainable Sanitation Solutions (3S).*
- **Creation of Model Water, Sanitation and Hygiene Secure Slums, Schools and ICDS Centres in Hyderabad:** *To ensure and increase access to improved and sustainable WASH services amongst marginalised communities of urban slums and schools in Hyderabad, ensuring sustained behaviour change, and mobilizing government funds for demonstrating a sustainable model of WASH infrastructure service delivery.*
- **Access to Safe and Clean Drinking Water in Schools of Hyderabad:** *To provide safe and clean drinking water to School children.*

*Besides these, two short period projects were launched and completed in this year which provided documentation and monitoring support to larger projects.*

*UNICEF- Technical Assistance to Buxar and Bhagalpur district administration to work on arsenic mitigation in select 50 districts: To strengthen the capacity of community & Govt. in 5 habitations of two districts- Buxar and Bhagalpur of Bihar to work on Arsenicosis mitigation. To develop capacity building module for front line workers and for schools. Develop community based mitigation strategy through promotion of use of water from safe sources.*

*Pilot Scale Demonstration and Popularisation of Some Sustainable Technology for the Supply of Safe Water in Fluoride and Arsenic Affected Areas: To support CSIR-NEIST in community mobilization, organizing training cum workshop about the technology and about the issues of fluoride and arsenic for Govt. Technocrats and Bureaucrats and Industrialists*

*SaciWATERS will continue to strive to bring together the concerned South Asian communities / institutions for a sustainable use of water. The scenario is expected to remain uncertain in the aftermath of the COVID-19 pandemic even as the need for carrying out the activities in new ways mostly online, becomes the new focus. As always, the pathways ways are research, training and capacity building, knowledge mobilization and networking, dissemination / advocacy and implementation whenever required. This institution is always and will continue to be committed to inter-disciplinary and multi-disciplinary approach in all its activities. Most important, SaciWATERS is committed to accomplish “Water Secure South Asia” in which in the institute’s focus has been to build capacities (though workshops and training programmes) of different civil society groups such as students / academics, NGOs, farmers, policy makers (both politicians and bureaucrats) and other professionals with a view to promoting or enhancing their abilities to participate or engage in policy dialogues for a meaningful and purposeful water governance.*

*As I always put on record, all this is possible only because of the continued trust and support to SaciWATERS from several funding organizations across globe. In particular, IDRC (Canada), CAPNET, EU, NORFACE, ACIAR, UNICEF, UNDP, International Science Council, Water Aid, without whose support our continued growth would have been impossible.*

*Let me take this opportunity to express my sincere pleasure and pride in congratulating every one of the SaciWATERS family for making this year very productive.*

*I am extremely glad that SaciWATERS has started realizing the positive impacts of building and sustaining valuable partnerships across South Asia. The organization has grown bigger and more visible across the globe, thanks to all the funders who have made this a possibility. The biggest blessing of our organization is the young-qualified, committed and motivated team of SaciWATERS personnel. Nevertheless, it is important at this stage to mention once more that we shall continue to focus our work around the broad themes of water policy and governance, climate change and adaptation, drinking water and sanitation, water resources accounting and urban water. And, the issue of gender cuts across all the themes. Furthermore, our overarching emphasis continues to be research, education, capacity building, advocacy, partnership and knowledge mobilization and sharing.*

*Once more, let me take this opportunity to express my sincere pleasure and pride in congratulating every one of the SaciWATERS family for making this year very productive.*



**Prof S. Janakarajan**

*President, Executive Board*

## ABOUT SaciWATERS

SaciWATERS, South Asia Consortium for Interdisciplinary Water Resources Studies, was formed as a project on the theme “water for food and rural development” after the 2000 World Water Forum at The Hague and was established with the aim of bringing a paradigm perspective. Based in Hyderabad, India, the consortium comprises of accomplished scholars and activists from Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka. In its initial phase, the organization created a new group of professionals and experts across South Asia through its Crossing Boundaries Project and later through South Asian Water Fellowship programme, which aims to contribute to the paradigm shift in water resources management in South Asia. This involved building capacity of water professionals, primarily those with a science background, mainly women, through innovative and interdisciplinary higher education, and social learning focused research facilitated through networking and exchange of ideas across four South Asian countries, Bangladesh, India, Nepal and Sri-Lanka. SaciWATERS produces new knowledge to address the pressing issues in the water sector in South Asia through research, education and advocacy. Over time, the consortium has diversified substantially to areas related, but not restricted to water, that address concerns with respect to climate change, peri- urban spaces, river-basin environments and gender.

SaciWATERS’ primary mandate is being a think-tank with respect to policy issues and for this reason it derives its primacy from being a policy research institute. Since its inception in 2001, it has focused on critical issues related to water resources management in South Asia and have since undertaken a number of comparative studies across South Asian countries. A key endeavour at SaciWATERS has been to enhance the dominant water resources management paradigm in the region using a pro-marginalized people-centric interdisciplinary lens. Though the emphasis and strength of SaciWATERS is accumulation of new knowledge through action-oriented research, it undertakes a combination of other activities like capacity building, advocacy, partnerships, knowledge mobilization, as well as implementation. These elements feed into each other, making it a multi-faceted organization, different from most other NGOs in the country.

Accordingly, it partners with universities and academic institutions from across global north and south to fundamentally reshape water resources knowledge systems in South Asia. Its solutions- oriented strategy is based on a platform of improved exchange, interaction and collaboration at a regional level. South Asia is endowed with vast water resources, yet there seems to be a perpetual shortage and uneven water distribution. Moreover, phenomena such as urbanization and climate change are contributing to plural manifestations of profound water insecurities. Responding to the above, SaciWATERS attempts to adopt a solution-oriented approach by bringing together the scientific and societal issues on board that include both holistic and spatially differentiated frameworks.





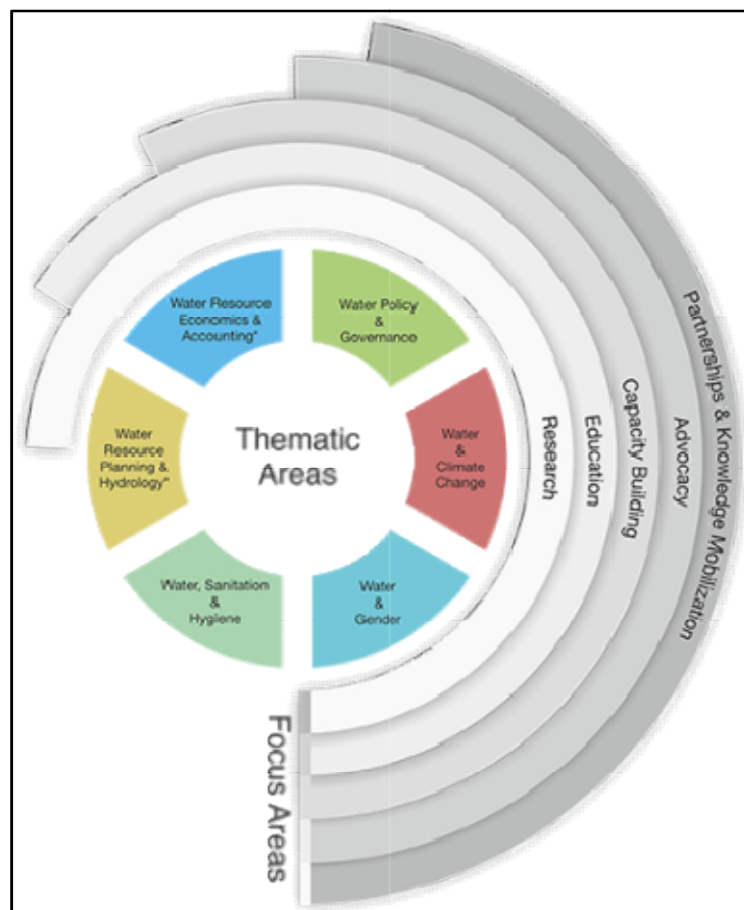
## THEMES AND FOCUS AREAS

SaciWATERS currently works within six broad themes—

- **Water Policy & Governance,**
- **Peri-urban Water Security**
- **Climate Change & Water,**
- **Water & Gender,**
- **Water, Sanitation, & Hygiene (WASH)**
- **Water Quality**

Within the existing six themes, SaciWATERS designs, supports and implements integrated water resource management research projects to bridge the gap between science, policy, and practice.

These themes have emphasis on five focus areas - *research, education, capacity building, advocacy, partnership and knowledge mobilization.*



# OVERVIEW OF PROJECTS



## Water Policy and Governance

*Water systems are typically complex, with the relationship between water and development being particularly dynamic. In this context, conflicts are increasingly determining the interactions between water policy and governance. Working in partnership, SaciWATERS focuses on the characteristics of water institutions in South Asia, evaluates their influence on reform processes, analyses disputes over divergent water uses and assesses the impact of salient actors in promoting or obstructing institutional change.*

### PROJECTS:

TITLE	FUNDER	DURATION	AIM	FOCUS AREA
Assessment of WAPRO project	Intercooperation Social Development India (ICSD)	December 2018- May 2019	To evaluate project - “Increase water efficiency and food production in key commodity value chains through multi stakeholder partnership applying a Push-Pull-Policy strategy” - in order to assess the degree of achievement, it’s potential for replicability, consolidation of project learnings, and documentation of case studies in 6 villages of Almora district, Uttarakhand.	Research, Monitoring and Evaluation
SaciWATERS Cap-Net Network (SCaN)	Cap-Net UNDP	January 2019 - December 2019	<p>The SaciWATERS Cap-Net Network (SCaN) is a platform for partnership towards capacity building in Integrated Water Resources Management (IWRM) across the South Asia region. It comprises of autonomous regional and national institutions and individuals committed to capacity building in the water sector.</p> <p>SaciWATERS joined the UNDP Cap-Net in 2009 as one of its South Asian networks to create the SaciWATERS Cap-Net Network (SCaN). SaciWATERS hosts the network and acts as its legal, administrative and financial umbrella. It is a platform for partnership towards capacity building in Integrated Water Resources Management (IWRM) across the South Asia region. SCaN through its capacity building activities provides a platform to academics, researchers,</p>	Partnerships & KM, Capacity Building & Advocacy

			and professionals from government, non-government, public and private sectors to work together towards strengthening the integrated approach within water sector through education & training; research; knowledge development; advocacy; and networking in South Asia.	
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## Periurban Water Security

*The expansion of the urban metropolises into rural regions has led to the creation of buffer zones or peri-urban regions around these big cities. These zones experience a unique process of urbanization that alters the dynamics of migration, employment and, most importantly, the use of natural resources. Recognizing this as a significant area of research, SaciWATERS works with partners to study the peri-urban areas of some major cities of South Asia. In particular, the change in water use strategies, water governance structures, water pollution, and spatial flows of water are being studied.*

### PROJECTS:

TITLE	FUNDER	DURATION	AIM	FOCUS AREA
H2O-T2S in Urban Fringe Area	International Science Council (ISC) (in collaboration with BMBF Germany and NWO Netherlands)	Sep 2018 - Aug 2021	To understand how water institutions and access to water as a consumption good and a resource for livelihoods is changed during the urbanisation process and in periurban spaces and identify pathways towards the development of sustainable future cities	Research, Advocacy

## Climate Change and Water

*Climate change events in the region, coupled with population growth, are degrading natural resources while making South Asia particularly vulnerable to conflict. As climate change impacts finely balanced social, economic and ecological systems adversely, ripple effects are already being felt in terms of negative pressures on food security, livelihood security and energy security. Acknowledging this, SaciWATERs works to transform existing paradigms in natural resource management, simultaneously considering climate change mitigation and adaptation with food, energy and livelihood optimization strategies.*

### PROJECTS:

TITLE	FUNDER	DURATION	AIM	FOCUS AREA
South Asian Water (SAWA) Leadership Program on Climate Change	International Development Research Centre (IDRC), Canada	Nov 2017 - Oct 2021	To facilitate the formation of a group of interdisciplinary women leaders in south Asia, having a common understanding of the crosscutting scientific and societal issues of water resource management through intensive trainings in the application of research methods, internships, mentorship, and common curriculum development.	Capacity Development

## *Water, Sanitation and Hygiene (Wash)*

*The fundamental role of women in the communal and household management of water resources is now widely accepted. However, unequal access to and control over these resources remains a continuing dilemma. SaciWATERs endorses a better understanding of the complex issues underpinning water and gender, with the aim of improving women's access and choices related to water.*

### PROJECTS:

TITLE	FUNDER	DURATION	AIM	FOCUS AREA
Compendium of Best Practices on Sanitation and hygiene in South Asia	Centre for Policy Research (CPR)	Feb 2019 - May 2019	To develop resource material by way of collecting/documenting best practices and scalable solutions/success stories based on papers presented in the Conference on Sustainable Sanitation Solutions (3S)	Knowledge mobilisation
Creation Of Model Water, Sanitation And Hygiene Secure Slums, Schools And ICDS Centres In Hyderabad	Bank of America Continuum India Pvt Ltd (BACL) (Supported by WaterAid)	Apr 2018- Dec 2019	To ensure and increase access to improved and sustainable WASH services amongst marginalised communities of urban slums and schools in Hyderabad, ensuring sustained behaviour change, and mobilizing government funds for demonstrating a sustainable model of WASH infrastructure service delivery.	Advocacy, Capacity Building, and Implementation
Access to Safe and Clean Drinking Water in Schools of Hyderabad	Tata Capital Housing & Finance Limited (TCHFL) (Supported by WaterAid)	Nov 2018 to Dec 2019	To provide safe and clean drinking water to School children.	Advocacy, Capacity Building, and Implementation

<p>Creation Of Model Water, Sanitation And Hygiene Secure Slums, Schools And Aanganwadi Centers</p>	<p>WaterAid</p>	<p>Jan 2019 - Dec 2019</p>	<p>Improving coverage of SWM through community monitoring mechanisms.</p> <p>Filling the immediate gaps in WASH infrastructure in schools as per the priority identified by the school management ;</p> <p>Inculcation of Hygiene practices among school children through IEC programmes;</p> <p>Developing O&amp;M models for school WASH infrastructure through School Management committees and ChildCabinet’s participation.</p>	<p>Capacity Development, Implementation, Infrastructure support Advocacy</p>
<p>Action Research on Mutual Accountability in, around and for WASH in development and emergency settings</p>	<p>IRC</p>	<p>July 2020 - Feb 2021</p>	<p>The proposed research aims to examine the MAM and provide evidence, insight and ideas to Progress its implementation.</p> <p>The findings aim to inform sector processes, leading to better understanding of mutual Accountability in the WASH sector in the participating countries.</p> <p>Through collaborative work, the research aims to build mutual learning between in-country institutions and those based in the global north, and links for future collaborations with the SWA constituency as well as intra-constituency collaboration among the R&amp;L constituency partners.</p>	<p>WASH</p>

## Water Quality

***Water Quality is one of the emerging areas of work which is acquiring significance given the need for safe drinking water. Apart from biological contaminants which make drinking water unsafe, chemical contaminants like arsenic, fluoride and other heavy metals etc. pose serious public health concerns. SaciWATERS engages with multiple stakeholders across government, civil society and market in domain of water quality in general and with arsenic contamination in particular with a view to enabling and improving access to safe drinking water for the affected communities.***

### PROJECTS:

TITLE	FUNDER	DURATION	AIM	FOCUS AREA
Civil Society Voices, Vulnerable Communities, and Localised Platform for Addressing Water Quality Challenges	European Union	Jan 2018 – Dec 2021	To enable/improve access to safe drinking water and health for marginalised and vulnerable communities in selected arsenic and fluoride districts of India. Through the approach of building people-centric district platforms, the projects aims to complement the National Water Quality Sub-Mission (NWQSM) floated by the Ministry of Drinking Water and Sanitation.	Capacity Development, Implementation, Advocacy
Technical Assistance to Buxar and Bhagalpur district administration to work on arsenic mitigation in select 50 districts	UNICEF	September 2019- July 2020	To strengthen the capacity of community & Govt. in 5 habitations of two districts- Buxar and Bhagalpur of Bihar to work on Arsenicosis mitigation. To develop capacity building module for front line workers and for schools. Develop community based mitigation strategy through promotion of use of water from safe sources.	Capacity Building and Implementation



<p>Pilot Scale Demonstration and Popularisation of Some Sustainable Technology for the Supply of Safe Water in Fluoride and Arsenic Affected Areas</p>	<p>DST (CSIR-NEIST)</p>	<p>December 2020- November 2022</p>	<p>To support CSIR-NEIST in community mobilization, organizing training cum workshop about the technology and about the issues of fluoride and arsenic for Govt. Technocrats and Bureaucrats and Industrialists especially the Cement Sector Industrialists., arrange exposure visit to the project sites for the multiple stakeholders, dissemination of technology at districts and state level, popularization and reaching out with the technology to 50 habitations, awareness building through cultural programmes, audio visual documentation of fluoride and arsenic affected areas .</p>	<p>Advocacy and Capacity Building</p>
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## ACTIVITIES UNDER PROJECTS

**PROJECT: South Asian Water (SAWA) Leadership Programme on Climate Change 2nd Regional Workshop on ‘Leadership and research methods for interdisciplinary water research’**

A Regional workshop on ‘Leadership and research methods for interdisciplinary water research’ was held in Chennai from August 26th to September 7th 2019. The workshop was a part of the South Asian Water (SAWA) Leadership Programme on Climate Change, a fellowship project funded by IDRC and coordinated by SaciWATERS. The aim of the workshop was to train the SAWA fellows in the application of research methods that include gender and social approaches, in leadership skills development through activities such as team-building sessions, communication skills, application of negotiations and conflict resolution in the field. The participants of the workshop were the awardees of the SAWA Fellowship who are pursuing Masters in Integrated Water Resources Management (IWRM) in four institutions in Bangladesh, India, Nepal and Sri Lanka.

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**PROJECT: South Asian Water (SAWA) Leadership Programme on Climate Change 3rd Regional Workshop on ‘Leadership and research methods for interdisciplinary water research’**

A Regional workshop on ‘Leadership and research methods for interdisciplinary water research’ was held in Anna University, Chennai from December 7th to December 15th 2020. The workshop this year was conducted remotely with lectures, field methods training, questionnaire design, and research poster preparation supervised online. The workshop was a part of the South Asian Water (SAWA) Leadership Programme on Climate Change, a fellowship project funded by IDRC and coordinated by SaciWATERS. The aim of the workshop was to train the SAWA fellows in the application of research methods that include gender and social approaches, in leadership skills development through activities such as team-building sessions, communication skills, application of negotiations and conflict resolution in the field. The participants of the workshop were the awardees of the SAWA Fellowship who are pursuing Masters in Integrated Water Resources Management (IWRM) in four institutions in Bangladesh, India, Nepal and Sri Lanka.

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**PROJECT: South Asian Water (SAWA) Leadership Programme on Climate Change Training of Trainers: Curriculum teaching for ‘Gender and Water’ and ‘Interdisciplinary Field Research Methods’**

An online training programme was conducted for trainers and students of the four consortium partners for the South Asian Water (SAWA) Leadership Programme on Climate Change, funded by IDRC and coordinated by SaciWATERS. The aim of the training program was to provide multidisciplinary insights to the engineering faculty and post-graduate students (SAWA Awardees) from universities to ensure a greater degree of interdisciplinary element in the IWRM research. The training programme was conducted for the training of professors and students of the four partner Universities for accurate teaching methods and content for two courses – ‘Gender and Water’ and ‘Interdisciplinary Field Research Methods’. The lecture series was held online over 5 weeks from September 29th till October 29th 2020. There were a total of 10 two-hour lecture sessions.

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**PROJECT: South Asian Water (SAWA) Leadership Programme on Climate Change Rainwater Harvesting Methods: Experiences from Field NGOs across Andhra Pradesh and Telangana**

SaciWATERS met with partner organisations EFFORT, FES, Navjeevan Organisation, Samata, Harita, and SNIRD on September 30th 2020 to share and collect field experiences and knowledge regarding rainwater harvesting initiative and technologies in different districts of Andhra Pradesh and Telangana. Differences in rainwater harvesting initiatives in contexts of urban, periurban, and rural contexts were shared in order to prepare a structure for information material for knowledge dissemination in accordance with requirements of the National Water Mission. SaciWATERS was identified as a lead NGO for south India by the Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Govt. of India in 2018.

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**PROJECT: Technical Assistance to Buxar and Bhagalpur district administration to work on Arsenic Mitigation in Selected 50 habitations – UNICEF project**

**Training for Frontline workers, Community, School teachers, Panchayati Raj Institutions, NGOs - December 2019- March 2020**

The level of awareness on arsenic and arsenicosis is very low in general. Baseline surveys, PRA's, training of health frontline staff trainings carried out have all indicated that the percentage of both men and women who were aware of arsenic in drinking water was negligible. There was an urgent need to build the awareness levels of the various stakeholders on the issue of arsenic and arsenicosis to be able to bring about a major change in the way it is addressed.



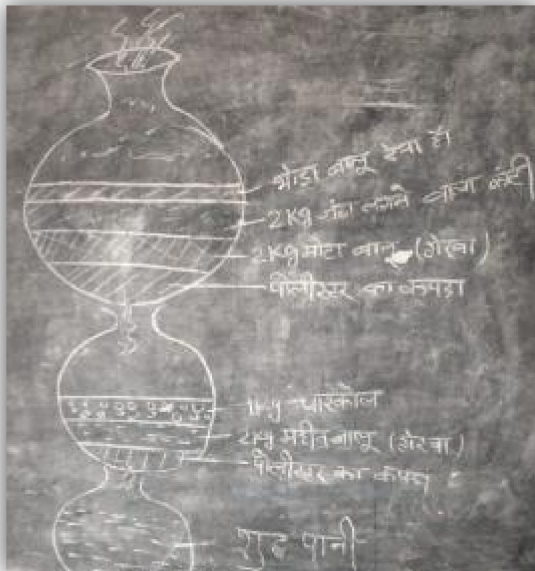
30 half-day training across Bhagalpur and Buxar districts of Bihar were organized for FLW, community, school teachers PRIs and NGOs during December 2019 and March 2020. Though, initial plan was to conduct a common training for all above categories at a single venue but field reality showed that organizing such training programs was difficult. Instead we identified regular department/organizational level training and tapped into their time to create awareness among the various target audience.

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**PROJECT: Technical Assistance to Buxar and Bhagalpur district administration to work on Arsenic Mitigation in Selected 50 habitations – UNICEF project**

**Bhagalpur- School level awareness sessions in all schools in catchment -December 2019- March 2020**

An attempt was made to reach out to communities through younger generation & bring about change. 36 programs have been completed till mid-March 2020. The children in the age group of 10 to 17 ages are the target audience. In addition to creating awareness about the issue of Arsenic and the resulting arsenicosis issues, the children are shown how the arsenic tests are conducted, and mainly on the mitigation options. A simple 3 pot filter technique was being shared with the school children. Discussion was on with the team to make a few water filters to be placed in the schools for use by the school children.



**PROJECT: Technical Assistance to Buxar and Bhagalpur district administration to work on Arsenic Mitigation in Selected 50 habitations – UNICEF project**

**Rain Water Harvesting - June, 2020**

The main objective of Rainwater harvesting systems repair work at schools is to provide children arsenic free water throughout the year and to educate them about the benefits of conservation of scarce natural resource like water and to encourage an environmentally responsible attitude in the next generation.

Schools would be the ideal place to create awareness about water conservation and efficient usage. During one of the interventions of SaciWATERs, it has been found there was a dysfunctional rainwater harvesting structure. Renovating an existing structure for serving the need is more efficient that creating a new structure, which involves time and space.

The existing RWH at Baldev Tiwari middle school, Kamat Tola, Bhagalpur was built by PHED, Bihar in 2005 solely for the purpose of ground water recharge. After the construction of RWH in 2005 it worked for 2-3 years and served the purpose of groundwater recharge. Later the tank started leaking and connection pipe from roof to tank was broken. The existing structure was not in good condition and needed a good amount of repair work.

School children were drinking tube well water which has arsenic contamination beyond permissible limit. Now, the repair work is planned in such a way that during the rainy season, the rainwater will be filtered and used for drinking while rest of the year when there is no rain, the tube well water will be pumped up and filtered so that all children can avail arsenic free water throughout the year.



**PROJECT: Technical Assistance to Buxar and Bhagalpur district administration to work on Arsenic Mitigation in Selected 50 habitations – UNICEF project**

**Well Cleaning - June, 2020**

In rural habitations of Bihar, hand-pumps are the most preferred sources of water. The hand-pumps are preferred, due to the perception that the ground water is pure and free from contamination. In research, it is found that open wells are found to be an alternative for hand-pumps or tube-wells for arsenic free drinking water. If the wells are constructed, so as to prevent leakage between the upper and lower aquifers, it is likely that they will be free of arsenic (and other undesirables) in future.



SaciWATERS with financial support from UNICEF, has identified 6 dug wells in habitations worst affected with arsenic in Buxar and Bhagalpur districts of Bihar, for intervention of cleaning and rejuvenation of defunct wells. This rejuvenation activity has been done along with support from the community, so that they would take up the ownership of those revived wells. Well rehabilitation (including disinfection) should be applied if the yield of well is decreasing and/or the quality fails to meet drinking water criteria. It is proven that for the well development, simple and basic rehabilitation procedures can be highly effective. About the well cleaning, elderly people mentioned

that they use to do the well cleaning regularly at one point of time but later all these practices stopped. While the younger generation was excited about the process since they have never ever seen yet.



*Well cleaning process and Cleaned well with iron net covering and awareness message on the wall*

**PROJECT: Civil Society voices, vulnerable communities and Localised platforms for addressing water quality - European Union Project**

**Training on Prevention, Detection & Management of Arsenicosis - April 2019**

Training and field visit for medical practitioners and frontline community workers was organized by SaciWATERS in collaboration with Bihar Health Society and Mahavir Cancer Sansthan in Pirpanti block, Bhagalpur and Simri block of Buxar. The main objectives of this training programme were to 1) create awareness towards using arsenic free water and its linkage with the improved health and Arsenicosis free future; 2) Respond to arsenic hazard through consistent application of health risk



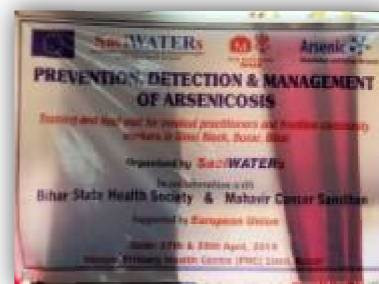
paradigm of exposure assessment, risk characterization and risk management through health personnel and; 3) Build capacity through behavioral change and increase human awareness towards the FLW to drink arsenic free safe water. The frontline worker such as ASHA, ANM and Aanganwadi workers were selected for this training because these frontline workers are working in the different habitation or village and go to each and every household in the particular village.

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**PROJECT: : Civil Society voices, vulnerable communities and Localised platforms for addressing water quality - European Union Project**

**District Platform for Arsenic Mitigation: Training and Capacity building of stakeholders -September 2019**

SaciWATERS has been working with the district administration and different relevant stakeholders of 4 districts viz. Jorhat, Nalbari, Buxar and Bhagalpur to establish District level People Centric Platform for addressing the arsenic challenges. It is established that, there are various mitigation options available, but due to the lack of awareness and capacity to deal with it, inadequate knowledge about its impact on surrounding environment and lack of dissemination and understanding, the appropriate mitigations options haven't been able to reach to the needy one. In line with that for strengthening the capacity of the stakeholders of the people centric district platform a series of workshop were conducted in Buxar, Bhagalpur (Bihar) & Nalbari, Jorhat (Assam). The workshop was conducted for 2 days in each of the mentioned place in between 13th to 28th September, 2019 with the support of SCan (SaciWATERS-Cap Net Network), European Union and local partners (Bihar Agriculture University, UNICEF-BIHAR, Nalbari College).



The objectives of the program were to 1) Understand arsenic as a pollutant of water and it's effect on human health; 2) Learn about individual and community level arsenic mitigation measures as well understand the various local level alternative water sources; 3) Understand the roles and responsibilities of different stakeholders and institutions for the sustainable mitigation of arsenic.

**PROJECT: Civil Society voices, vulnerable communities and Localised platforms for addressing water quality - European Union Project**

**Field visit to a PWSS at Jorhat for getting hands on experiences about O&M and sustainability components**



Discussion cum demonstration of Bio sand filter at Bhagalpur, Bihar

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**PROJECT: Civil Society voices, vulnerable communities and Localised platforms for addressing water quality - European Union Project**

**Capacity building program on bridging the gaps among Technological innovations, policy interventions and ground realities for the stakeholders - 12-16 October 2020**

The Capacity Building Programme towards Mitigation of Arsenic in Drinking Water in Assam & Bihar under Project Civil Society Voices, Vulnerable Communities and Localised Platform for addressing Water Quality Challenges were coordinated and organized by the Arsenic Knowledge and Action Network of SaciWATERS with financial support from European Union and Cap-Net using an online platform. It was a three part series, from 12-16 October 2020.

The first session aimed at disseminating potential technologies to mitigate Arsenic and to create awareness of the supporting schemes that exist. The aim of the training was to build the capacity of Executive Engineers, Assistant Engineers, and Junior engineers or officials of similar rank from the various departments, CSO representatives etc. The state-specific sessions for Bihar and Assam were platforms where the expert speakers on the panel were government officials and CSO representatives. The workshop sessions 2 and 3 provided the insights from officials from water, health, nutrition and other relevant departments on state-specific water quality policies. Officials from CSO and NGO representatives shared their treasure of knowledge from the ground realities, the opportunities, gaps and challenges they face as they work at the ground level. Executive engineers, local CSOs/NGOs people, ASHA and Anganwadi workers, ANMs, Rural Water user association and other stakeholders from the state were invited to benefit as participants in this workshop.

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**PROJECT: Civil Society voices, vulnerable communities and Localised platforms for addressing water quality - European Union Project**

**Other field activities under Capacity building program on bridging the gaps among Technological innovations, policy interventions and ground realities for the stakeholders**

**a. Baseline Survey**

A complete baseline household level survey was conducted in selected habitations in chosen four districts of the project- Jorhat, Nalbari, Buxar and Bhagalpur. The survey sought information such as socio-economic status of households, sources of drinking water and gendered perceptions on arsenic-related risks. At pilot scale, to capture People's sensitivity and willingness to respond to the issue collectively the idea was to develop a Local Habitation Profile (LHP) that would in turn help us select the 10 habitations (out of the shortlisted 15) and also aid in the formation of people centric district level platform by understanding about the past/existing/potential for local level collective action (refer to the flowchart on water contamination) at the level of habitations. Along with the profile, an analysis of the 15 arsenic affected habitations would be done after village level survey (to understand individual level response/perception) to complement the profile.



At launch scale, a detailed set of information was collected for 40 habitations in each of the four study district which includes- demographic profile, information on water sources and public water supply scheme, food and nutrition and different kinds of institutions near to the habitations.

**b. Need Assessment**

To build capacity of target groups for the purpose of enabling the formation of district platform as an approach to address the issue of arsenic there was a need to Understand 1) scope of convergence between relevant government departments and other stakeholders such as Health and family Welfare, Social Welfare, PHED, District Admin/Planning Dept/ DWSC/DSBM/DISHA; Rural Development/ DRDA (DRDC); Gram Panchayat; Schools; civil society organisations in the region; 2) existing level of capacities towards addressing the arsenic problem through community action. Need assessment was done in all 50, pilot and launch scale habitations.



**c. Water assessments**

One of the major activities of the project is to execute community based water quality assessment. The testing will helped us to understand the extent of arsenic problems in the habitation and to ascertain and mark which sources within the habitation are contaminated and would work as an evidence in execution of the water quality mitigation plan and create awareness among the community people.

The water assessments for the 10 pilot habitations in each villages were done using Kobo collect app during the first quarter of the 2019 using Field Test Kits (FTKs). At least 15 samples with varying depth were collected from each of the pilot habitation. The 5 samples from each habitation showing highest arsenic contamination been sent MCSRC and PHED for laboratory testing. Water assessments for 13 launch scale habitations from Nalbari and 8 from Jorhat is also finished.





**d. Health assessments**

Health camps were organised at 6 places in Jorhat where people from 10 habitations came to get them checked. Only 10-12 arsenicosis suspects were found. In Nalbari, there are total 23 arsenicosis suspects were found. In Buxar and Bhagalpur health assessments were supposed to be conducted with the help of State Health Society but it couldn't happen.



**e. Participatory Rural Appraisal**

This exercise in each of the habitation with the entire cross section of the village community such as village head man, panchyat member, teacher, ASHA, ANM, Anganwadi workers, PHED (pump operator, sectional assistant etc.) religious leader, member of various village committees or institutions, members of NGO or SHG, members of youth club, water champions etc. help to build a sustainable mitigation plan for the habitation. It starts with informing the gathering about the purpose of the activity and sharing the water assessment FTK results, information about the disease burden of the habitation and let them know about the safe drinking water sources. Indicate the safe and unsafe sources of drinking water on the PRA map (safe sources: As level <math><0.01\text{mg/l}</math>).

**Mitigation plans**

There is no 'one-size-fits-solution' for addressing the water quality challenges. According to the geographic location, nature of the community, size, different water sources the problems are diverse and hence community oriented local plans are very much necessary for addressing the same. The local water quality mitigation plan would draw on the inputs from different sectors such as safe drinking water, improved access to health, and equitable access and enhancement of sustainable nutrition. The output from this activity would be these plans in two distinct and inter-connected formats - one that is in a simple localized pictorial form which the community understands and the other as formal documents which can be the interface to government program. Water quality mitigation plan would also be used as one of the tools for community capacity building (through wall painting, street play etc.). Water quality mitigation plan doesn't mean to provide new technology or infrastructure, but to manage available resources in a sustainable and equitable way.



Inputs from key people of the habitations and information gathered from Participatory Resource Appraisal, need assessment, water and health assessments the mitigation plans were made for 10 habitations of Buxar, Bhagalpur, Jorhat and Nalbari. After understanding the need of the habitation mitigation plans were catalysed in few of the habitations.

**PROJECT: Creation of Model Water, Sanitation and Hygiene Secure Slums, Schools and Anganwadi Centers**

**a. Solid waste management in Kapra Mandal**

Demonstration of Biomethanation unit for effective management of food waste, promoting and demonstration of appropriate methods of food waste management in Kapra, Mandal, Hyderabad



**b. Life straw water filter to ensure safe drinking water in schools**

Life Straw filters were installed at Anjaiahnagar Government Primary schools at Bowenpally, Hyderabad, to ensure safe drinking water as per the standard norm, in an effort to ensure every child has an access to safe drinking water in school



**c. Converted abandoned bore well to recharge structures**

Ground water was recharged at Musheerabad Circle at NagamaiahKunta by making use of an abandoned bore well to recharge from nearby public taps and buildings.



**d. Solid waste management at community level – 3 pot Bio Composter Bin**

Demonstration of the 3 Pot Bio Composter Bin to communities before distribution of the bins to individuals for ensuring decentralised waste management at household level by segregation and composting of organic from the waste generated from each household. The distribution was done at Kukatpally and Bolakpur circles among the Basti communities.



**e. Improving access to toilets in communities**

Hardware construction such as construction of new units and repairing of toilets which were dysfunctional at government schools at Bholakpur, Kukatpally and Kapra circles were undertaken to help the community to access community toilets.



**f. Community Water Storage structure connected to bore well power pump**

Borewell hand pump converted to power bore so that the community can make a regular use of this water with a facility to store water to ensure improved access to water in the community at Bholakpur.



**g. Roof-Rain Water Harvesting Structures**

Construction of roof rain water harvesting structures were done at potential sites/places where water could be stored and made available for use, after filtering, for drinking and for direct use in toilets at schools of Musheerabad, Kukatpaly, Kapra circles. Some structures were made at community halls and individual members at the Bastis.



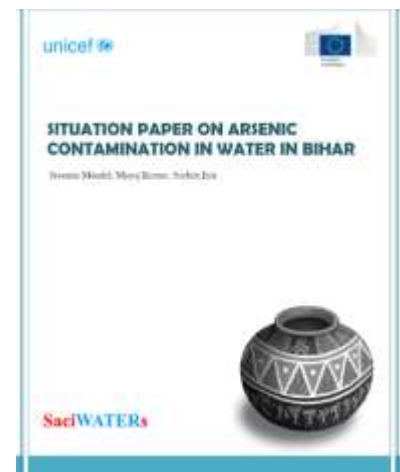
**PROJECT: Technical Assistance to Buxar and Bhagalpur district administration to work on Arsenic Mitigation in Selected 50 habitations – UNICEF project**

**Situation paper on arsenic contamination in water in Bihar**

*Sreenita Mondal, Manoj Kumar, Suchita Jain*

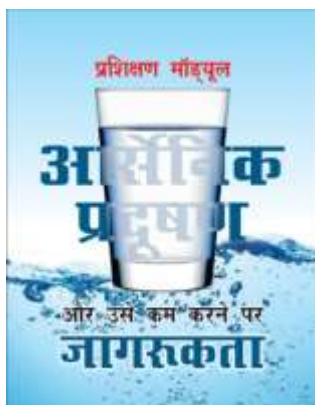
July 2020

The Situation Paper on Arsenic Contamination in Water in Bihar provides the detailed information on arsenic occurrences in the ground water of Bihar as they affect public health. Groundwater arsenic contamination has affected millions of people in the Middle-Gangetic Plain in India. In Bihar, 18 districts have been reported to be affected with groundwater arsenic contamination in which majority of the affected population belongs to rural areas. This paper has provided the details of spatial distribution of arsenic contamination in Bihar and how the geological formation of the region has affected the quality of groundwater in this region.



**PROJECT: Technical Assistance to Buxar and Bhagalpur district administration to work on Arsenic Mitigation in Selected 50 habitations – UNICEF project**

**Training module for outreach and field workers for Arsenic Mitigation interventions**



Targeting affected communities, front line staff under water, health, PRI and ICDS departments, a training module on Arsenic Mitigation interventions was prepared. This will serve as the basis for training for stakeholders and will also serve as an awareness building measure in the community for the selected affected habitations. It will serve as an integral tool for advocacy. The training module contains information about water quality and health impacts, Arsenic in water – source, biogeo chemical introduction, Arsenicosis – symptoms, identification, treatment, Mitigation options – small, medium and large (can be locally managed, need technical input of manufacturer, parts replacement by manufacturer only), Govt. Programmes and support for arsenic mitigation, Role of various stakeholders in the system towards safe/clean water supply. The training module is prepared in English

and Hindi languages.

**PROJECT: Technical Assistance to Buxar and Bhagalpur district administration to work on Arsenic Mitigation in Selected 50 habitations – UNICEF project**

**Flip book on Arsenic mitigation interventions**

The flipbook on Arsenic mitigation and awareness on awareness program in schools, targeting middle and high school teachers and students so as to have the future generation involved in resolving issue. This flipbook is available in the local common language i.e. in Hindi language.



### Technology Brochure

Arsenic impacts millions of people globally through various points of contamination, there are various technological solutions, but in few cases these solutions are inaccessible for those who need them the most as a result of lack of common repository of information of source of contamination at habitation level.

This brochure is a compilation of few latest technologies discussed during the online technical session on arsenic mitigation such as Algal technology, Arsenic mitigator bacterial technology and other sustainable technologies for arsenic mitigation organized by SaciWATERS in October, 2020.



### Documentary- Arsenic MukhJal – EkSamuhikPrayas



A documentary aimed to build awareness on arsenic contamination, impact and mitigation of Arsenicosis among key stakeholders and Integrated Arsenic Mitigation Platform (IAMP) groups including current situation and importance of convergence for arsenic mitigation, to advocate with garner support with State and District policy and programme officials for formation and operationalizing (IAMP) and Build capacities to work with communities to find sustainable solutions suitable to their context by themselves and

leveraging the schemes and projects of various Departments. The target audience for this documentary could be state and district level policymakers and officials of relevant departments, Civil Society members, NGOs, CBO and communities and IAMP Members and volunteers.

### WAPRO-ICSD Report

An assessment report of the project on increased water efficiency and food production in key commodity value chains through multi stakeholder partnership applying a Push-Pull-Policy strategy submitted to Intercooperation Social Development, India. This evaluation report on efficiency of project interventions under the three project pillars provides a detailed list of recommendations based on suggestions received through multiple interactions with the project beneficiaries, government officials, project team members, and other relevant stakeholders. These recommendations provide a roadmap for replication of the project in other districts in Uttarakhand and other states as well, further it will also provide future policy directions in the water sector given the competing demands of this depleting source.



**Book Review: Climate Change and Agriculture in India: Impact and Adaptations**



**Prithvi Ram Bommaraboyina, John Daniel and Kumar Abhishek**

This is a Critical review of the book “Climate change and agriculture in India: Impacts and Adaptations.” edited by Mahdi (2019)

Published on 26 October 2020

Front. Clim.

doi:<https://doi.org/10.3389/fclim.2020.576004>

**Brochure on Success stories**

A Brochure on success story is developed through interactions with the field staff at the first level and subsequently from the field visits and through in-depth interviews and observations from the field. The brochure is designed to reflect the project achievements through case studies, while communicating effectively the process followed to facilitate up scaling to other states or regions.

Brochure on success story is developed through interactions with the field staff at the first level and subsequently from the field visits and through in-depth interviews and observations from the field. The brochure is designed to reflect the project achievements through case studies, while communicating effectively the process followed to facilitate up scaling to other states or regions.

Rapid Assessment of Menstrual Hygiene Management (MHM) Among Adolescent Girls in Government Schools of Hyderabad 2019



Supported by WaterAid

Supported by SachiWATERS



**Rapid Assessment of Menstrual Hygiene Management (MHM) Among Adolescent Girls in Government Schools of Hyderabad 2019**



A report on a study made on rapid assessment of MHM among adolescent girls who study in the Government Schools of Hyderabad.



**Video film on Water Use Efficiency**



Similar to brochure the video film aiming at reaching larger audience with clear messages on how to improve the water use efficiency and productivity by promoting Water Stewardship plans at village level. The team interacted with the projects staff to clearly understand the strategy, timeline, story line and budget. Script was developed through in-depth discussions with the field team and the production team identified the shooting locations based on the field visits and in consultation with the WAPRO project team.

[Link to articles written by staff of SaciWATERS](#)

Bihar Flood with Coming Rains and Continued COVID -Asif Shahab, Suchita Jain and Dr. Mansee Bal Bhargava - Published on 01 August 2020

<https://counterview.org/2020/08/01/bihar-flood-with-coming-rains-and-continued-covid-19-pandemic/>

Fieldwork during COVID-19 and Floods: Experiences from Assam and Bihar - Prithvi Ram Bommaraboyina, Asif Shahab, Suchita Jain and Judith Darcus Christiana, Published on 06 September 2020

<https://www.eleventhcolumn.com/2020/09/06/fieldwork-during-covid-19-and-floods-experiences-from-assam-and-bihar/>

Do Bihar migrants have the choice to not go back to cities?North Bihar’s unique geo-physical settings and hydro-meteorology make it one of the most vulnerable regions to environmental forces to floods

<https://www.downtoearth.org.in/blog/agriculture/do-bihar-migrants-have-the-choice-to-not-go-back-to-cities--72897>

Open Letter – Inputs on the Draft EIA 2020 from SaciWATERS;Published on 2020/8/12

<https://www.indrastra.com/2020/08/OPEN-LETTER-Inputs-on-Draft-EIA-2020-by-SaciWATERS-006-08-2020-0018.html>

[References to Papers](#)

- Shreya Chakraborty (accepted/upcoming in 2021): “*Periurban Water: Recognising the Margins for Sustainable Urban Water Futures*”, in Leal Filho .W et.al (ed.) “*Encyclopedia of the UN Sustainable Development Goals - Clean Water and Sanitation*”, Springer Nature International Publishing AG.
- Shreya Chakraborty, Subrato Banerjee (2021): “*Blood Money - From Compensation to Transformative Justice for Peace and Sustainability*”, in Leal Filho .W et.al (ed.) “*Encyclopedia of the UN Sustainable Development Goals - Peace, Justice and Strong Institutions*”, Springer Nature International Publishing AG.
- SucharitaSen, Anshika John, Shreya Chakraborty, Manoj Jatav (2019): “*Geographies Of Drinking Water In(Securities) In Peri-Urban Hyderabad: A Political Ecology Perspective*”, Economic and Political Weekly, Volume 54 (39): pp 42-50



### CONFERENCES ATTENDED

- (25<sup>th</sup>-27<sup>th</sup> November, 2019): Shreya Chakraborty, presented paper “*Governance and Transitions in Water Access in Periurban Areas*” at the National consultation on “**Sustainable Urban Water Management Systems**”organised by Transdisciplinary Research Cluster on Sustainability Studies, Jawaharlal Nehru University, in New Delhi
- (6<sup>th</sup> March, 2020): Shreya Chakraborty, invited to speak on a panel on the “*Impact of Climate Change on Women*” by the British Deputy High Commission at Taj Deccan, Hyderabad
- (22<sup>nd</sup> October, 2020): Shreya Chakraborty, Invited to present on the panel on “*Urban Water Stress: Hiding Behind Climate Change?*” webinar organized by INHAF Habitat Forum as part of Studio INHAF webinar series on ‘**Rethinking Cities**’
- (25<sup>th</sup>-27<sup>th</sup> November, 2020): Shreya Chakraborty, presented poster on “*Burden of the Urban: Co-producing Water and Gender in the Drinking and Domestic Water Realm in Periurban Hyderabad*”, at the hybrid conference “**Sustainable & Resilient Urban-Rural Partnerships - URP 2020**” at Leipzig Germany
- (25<sup>th</sup> May, 2020): Shreya Chakraborty, participated in and completed 1-day *training workshop* on “*Transdisciplinary co-design, integration and implementation*” organized by the Belmont Forum
- (17<sup>th</sup>-24<sup>th</sup> November, 2020): Shreya Chakraborty, participated in and completed 3 day *training workshop* on “*Media Skills Training for Transformations to Sustainability Researchers*”, conducted by International Science Council in partnership with SciDev.net

## DONORS AND PARTNERS

### Donors

1. Australian Centre for International Agricultural Research (ACIAR)
2. International Centre for Integrated Mountain Development (ICIMOD), Nepal
3. International Development Research Centre (IDRC), Canada
4. Netherlands organization for scientific research (NWO)
5. The United Nations International Children's Emergency Fund
6. The United Nations Development Programme (UNDP)
7. WaterAid India, Hyderabad, India
8. Intercooperation Social Development India (ICSD)
9. International Science Council (ISC) (in collaboration with BMBF Germany and NWO Netherlands)
10. Academy of Gandhian Studies (AGS)
11. Centre for Policy Research (CPR)
12. European Union
13. Bank of America Continuum India Pvt Ltd (BACL) (Supported by WaterAid)
14. Tata Capital Housing & Finance Limited (TCHFL) (Supported by WaterAid)

### Donors (Previous)

1. Arghyam Foundation, Bangalore, India
2. Australian National University, Australia
3. Bordeaux Metropole, France
4. British Deputy High Commission (BDHC), Hyderabad, India
5. Consortium of International Agricultural Research Centers (CGIAR)
6. Department of Science and Technology
7. East West Center, USA
8. Government of The Netherlands
9. Honkong and Shanghai Banking Corporation (HSBC)
10. South Asia Water Initiative (World Bank Group)
11. Social Sciences and Humanities Research Council of Canada
12. The Asia Foundation, New Delhi, India
13. The United Nations International Children's Emergency Fund
14. United States Consulate General, Hyderabad

## **Partners**

1. Anna University, Chennai, India
2. Delft University of Technology (TU Delft),
3. Institute for Water and Flood Management, Bangladesh University of Engineering and Technology (BUET), Bangladesh
4. International Centre for Integrated Mountain Development (ICIMOD), Nepal
5. MetaMeta, Nepal & The Netherlands
6. Nepal Engineering College, Nepal
7. The Hague Institute for Global Justice, The Netherlands
8. University of Peradeniya, Sri Lanka
9. Wageningen University

## **Partners (Previous)**

1. Aaranyak, Guwahati
2. Akvo Foundation
3. Bangladesh Agricultural University (BAU), Bangladesh
4. BasthiVikasManch, Hyderabad
5. Both ENDS, The Netherlands
6. Centre for North East Studies and Policy Research (C-NES), Guwahati
7. Center for Economic and Social Studies (CESS), Hyderabad
8. Gujarat Institute of Development Research (GIDR), Ahmedabad
9. Indian Institute of Technology (IIT), Guwahati
10. Institute of Chinese Studies (ICS), Delhi
11. Institute for Resource Analysis and Policy (IRAP), Hyderabad
12. International Water Management Institute (IWMI)
13. Lancang-Mecong Cooperation
14. Nepal Madhesh Foundation (NEMAF), Nepal
15. North Bengal University (NBU), Darjeeling, India
16. Royal Society for Protection of Nature (RSPN), Bhutan
17. Society for Promoting Participatory Eco-system Management (SOPPECOM), Pune
18. State Government of Telangana
19. Tata Institute of Social Sciences



CA VENKATESWARA RAO. T.

B.Sc., LLB, FCA, DISA

CHARTERED ACCOUNTANT

### INDEPENDENT AUDITOR'S REPORT

**THE MEMBERS of SaciWATERS,**

**Report on the Financial Statements**

#### **Opinion**

I have audited the accompanying financial statements of South Asia Consortium for Interdisciplinary Water Resources Studies, ("SaciWATERS"), a registered Society having its office situated at B -87, 3<sup>rd</sup> Avenue, Sainikpuri, Secunderabad – 500094, which comprise the **Consolidated** (Foreign Contribution Books as well as Local Contribution Books) Balance sheet as on 31.03.2021, the **Consolidated** Income and Expenditure account and the **Consolidated** Receipts and Payments account for the year then ended and a summary of significant accounting policies, notes to the accounts and other explanatory information, if any.

In my opinion and to the best of my information and according to explanations given to me, I report that aforesaid financial statements give information required by applicable statutes and give a true and fair view in conformity with accounting principles generally accepted in India, of the state of affairs of the Society as at 31.03.2021, its statement of Income and Expenditure and of the funds flow for the year ended on that date.

#### **Basis for opinion**

I conducted my audit in accordance with the Standards on Auditing (SAs) specified by the ICAI, as applicable. My responsibilities under those Standards are further described in the auditor's responsibilities for the audit of the financial statements section of my report. I am independent of the entity in accordance with the code of ethics issued by the Institute of Chartered Accountants of India and I have fulfilled my other ethical responsibilities in accordance with the code of ethics, laid down by the ICAI. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion on the accompanying Financial Statements.

#### **Responsibilities of Management and Those Charged with Governance for the Financial Statements**

Management of SaciWATERS is responsible for the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flow of the entity in accordance with the accounting principles generally accepted in India including Accounting Standards issued by the ICAI, as applicable thereto. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of statutes for safeguarding the assets of SaciWATERS and preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies, making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance



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Hyderabad-500 044. Cell : 9849898979, E-mail : lakshmi\_v\_thallamraj@yahoo.com

of adequate internal financial controls that were operating effectively for ensuring the accuracy and completeness of accounting record, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so. Those charged with governance are responsible for overseeing the entity's financial reporting process.

#### **Auditor's Responsibility for the Audit of the Financial Statements**

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Standards on Auditing (SAs) will always detect a material misstatement when it exists. Misstatement can arise from fraud or error and are considered material if, individual or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken based on these financial statements.

As part of an audit in accordance with SAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- a) Identify and assess the risks of material misstatement of the accompanying financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentation, or the override of internal control.
- b) Obtain an understanding of internal financial controls relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- c) Evaluate the appropriateness of accounting policies used and reasonableness of accounting estimates and related disclosures made by the management.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.



**Report on other Regulatory Requirements, I report that:**

- a) I have obtained all the information and explanations which to the best of my knowledge and belief were necessary for the purpose of my audit.
- b) In my opinion proper books of account as required by various Statutes have been kept by the SaciWATERS so far as appears from my examination of those books.
- c) The Consolidated Balance Sheet, statement of Income and Expenditure, dealt with by this Report are in agreement with the books of account.
- d) In my opinion and to the best of my information and according to the explanations given to me, subject to the notes forming part of the accounts attached herewith, the said accounts give a true and fair view:
  - 1) In case of Consolidated Balance sheet, of the state of affairs of the society as at 31st March 2021.
  - 2) In so far as it relates to the Income and Expenditure Account, of the Income and the Expenditure of the society, for the year ended on that date.

*T. Venkateswara Rao*

**T. Venkateswara Rao**  
**Chartered Accountant**  
**M No.: 212098**

**Place: Hyderabad**

**Date: September 09, 2021**



**SaciWATERS**  
B 87, Sainikpuri, Secunderabad - 500094  
**CONSOLIDATED BALANCE SHEET AS ON 31.03.2021**

PARTICULARS	Schedule No.	Current Year Amount INR	Previous Year Amount INR
<b>SOURCES OF FUNDS:</b>			
<b>Capital Fund (Assets Value)</b>	XI	10,03,492.28	13,46,179.70
<b>General Fund</b>	VIII		
Restricted Project Funds		72,67,157.65	79,22,846.79
Unrestricted General Fund		1,13,60,057.93	1,39,23,667.97
		<b>1,86,27,215.58</b>	<b>2,18,46,514.76</b>
<b>TOTAL</b>		<b>1,96,30,707.86</b>	<b>2,31,92,694.46</b>
<b>APPLICATION OF FUNDS:</b>			
Current Assests, Fixed Assets, Loans & Advances			
Fixed Assets	XI	10,03,492.28	13,46,179.70
Loans and Advances	IX	6,07,683.64	7,66,092.75
Closing Balances	I	1,84,58,890.17	2,23,16,005.09
		<b>2,00,70,066.09</b>	<b>2,44,28,277.54</b>
Less: Current Liabilities & Provisions			
<b>Current Liabilities &amp; Short term Provisions</b>	X	4,39,358.53	12,35,583.08
<b>TOTAL</b>		<b>1,96,30,707.56</b>	<b>2,31,92,694.46</b>

The schedules referred to above and the notes thereon form an integral part of the accounts

As per our report of even date

For SaciWATERS

*T. Venkateswara Rao*

(T.VENKATESWARA RAO)  
Chartered Accountant  
M.NO.212098

Place : Hyderabad  
DATE :: Sep 9, 2021



*Shreya Chakraborty*

(SHREYA CHAKRABORTY)  
Officiating Executive Director

*C. Ramachandraiah*

(C. RAMACHANDRAIAH)  
Treasurer

(S.JANAKARAJAN)  
President



SaciWATERS  
B 87, Sainikpuri, Secunderabad - 500094  
**CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT  
FOR THE PERIOD FROM APRIL 1, 2020 TO MARCH 31, 2021**

PARTICULARS	Schedule No.	Current Year Amount INR	Previous Year Amount INR
<b>INCOME :</b>			
Funds received towards Project Implimentation	V	1,16,81,181.78	3,04,83,838.65
Other Reciepts and Contributions	VI	44,222.30	4,13,034.81
Interest on Gratuity fund		1,13,390.89	
Bank Interest	XII	9,35,099.00	13,11,544.00
<b>TOTAL</b>		<b>1,27,73,893.97</b>	<b>3,22,08,417.46</b>
<b>EXPENDITURE :</b>			
Project Implimentation cost	VII	1,23,05,626.92	2,41,07,911.00
Office and Administrative expenses	VII	27,83,628.53	41,13,189.35
<b>TOTAL</b>		<b>1,50,89,255.45</b>	<b>2,82,21,100.35</b>
Surplus / (Deficit) for the Year		(23,15,361.48)	39,87,317.11
<b>Transfer to Balance Sheet</b>	<b>VIII</b>	<b>(23,15,361.48)</b>	<b>39,87,317.11</b>

The schedules referred to above and the notes thereon form an integral part of the accounts

As per our report of even date

For SactWATERS

*T. Venkateswara Rao*

(T.VENKATESWARA RAO)  
Chartered Accountant  
M.NO.212098

Place : Hyderabad  
DATE :: Sep 9, 2021



*Shreya Chakraborty*

(SHREYA CHAKRABORTY)  
Officiating Executive Director

*C. Ramachandraiah*

(C. RAMACHANDRAIAH)  
Treasurer

(S.JANAKARAJAN)  
President





## SaciWATERS

B 87, Sainikpuri, Secunderabad - 500094

**CONSOLIDATED RECEIPTS AND PAYMENTS ACCOUNT  
FOR THE PERIOD FROM APRIL 1, 2020 TO MARCH 31, 2021**

PARTICULARS	Schedule No.	Current Year Amount INR	Previous Year Amount INR
<b>RECEIPTS:</b>			
Opening Balance	I		
Cash in hand		37,137.47	30,473.47
Cash at Bank		40,36,959.62	21,46,954.43
Cash at Bank (FD A/c)		1,82,41,908.00	1,84,92,600.00
		<b>2,23,16,005.09</b>	<b>2,06,70,027.90</b>
Funds / reimbursements received towards Implementing the projects	II	1,16,81,181.78	3,04,83,838.65
Other Receipts and Contributions	III	2,05,801.30	3,95,089.81
Bank Interest (including int on IT refund)	XII	8,73,523.00	12,06,046.00
Loans and Advances		3,33,376.00	6,79,711.00
<b>TOTAL</b>		<b>3,54,09,887.17</b>	<b>5,34,34,713.36</b>
<b>PAYMENTS:</b>			
Project Implimentation cost	IV	1,31,56,714.00	2,61,67,196.92
Office and Administrative expenses	IV	28,90,345.00	44,08,188.35
Capital Expenditure	XI	-	2,57,143.00
Unspent funds transfer back to SaciWATERS Gen		9,03,938.00	-
		<b>1,69,50,997.00</b>	<b>3,08,32,528.27</b>
Out standing Liabilities paid (previous year)		-	2,86,180.00
Loans , Advances and deposits	IX	-	-
<b>Closing Balances:</b>			
Cash in hand	I	8,547.47	37,137.47
Cash at Bank		1,18,89,695.70	40,36,959.62
Cash at Bank (FD A/c's)		65,60,647.00	1,82,41,908.00
		<b>1,84,58,890.17</b>	<b>2,23,16,005.09</b>
<b>TOTAL</b>		<b>3,54,09,887.17</b>	<b>5,34,34,713.36</b>

The schedules referred to above and the notes thereon form an integral part of the accounts

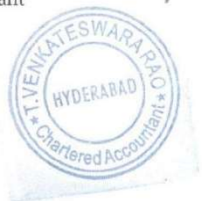
As per our report of even date

For SaciWATERS



(T.VENKATESWARA RAO)  
Chartered Accountant  
M.NO.212098

Place : Hyderabad  
DATE :: Sep 9, 2021




(SHREYA CHAKRABORTY)  
Officiating Executive Director



(C. RAMACHANDRAIAH)  
Treasurer

(S. JANAKARAJAN)  
President





**CA VENKATESWARA RAO .T.**

B.Sc., LL.B., FCA, UISA

CHARTERED ACCOUNTANT

**INDEPENDENT AUDITOR'S REPORT**

**THE MEMBERS of SaciWATERS,**

**Report on the Financial Statements**

**Opinion**

I have audited the accompanying financial statements of South Asia Consortium for Interdisciplinary Water Resources Studies, ("SaciWATERS"), a registered Society having its office situated at B -87, 3<sup>rd</sup> Avenue, Sainikpuri, Secunderabad – 500094, which comprise the **Consolidated** (Foreign Contribution Books as well as Local Contribution Books) Balance sheet as on 31.03. 2020, the **Consolidated** Income and Expenditure account and the **Consolidated** Receipts and Payments account for the year then ended and a summary of significant accounting policies, notes to the accounts and other explanatory information, if any.

In my opinion and to the best of my information and according to explanations given to me, I report that aforesaid financial statements give information required by applicable statutes and give a true and fair view in conformity with accounting principles generally accepted in India, of the state of affairs of the Society as at 31. 03. 2020, its statement of Income and Expenditure and of the funds flow for the year ended on that date.

**Basis for opinion**

I conducted my audit in accordance with the Standards on Auditing(SAs) specified by the ICAI, as applicable. My responsibilities under those Standards are further described in the auditor's responsibilities for the audit of the financial statements section of my report. I am independent of the entity in accordance with the code of ethics issued by the Institute of Chartered Accountants of India and I have fulfilled my other ethical responsibilities in accordance with the code of ethics, laid down by the ICAI. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion on the accompanying Financial Statements.



# 2-2-1130/24/A, 1st Floor, Varalakshmi Satyanarayana Nivas, Sivam Road, New Nallakunta  
Hyderabad - 500 044. Cell : 9849898979, Email : lakshmi\_v\_thallamraj@yahoo.com

### **Responsibilities of Management and Those Charged with Governance for the Financial Statements**

Management of SaciWATERS is responsible for the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flow of the entity in accordance with the accounting principles generally accepted in India including Accounting Standards issued by the ICAI, as applicable thereto. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of statutes for safeguarding the assets of SaciWATERS and preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies, making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the accuracy and completeness of accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so. Those charged with governance are responsible for overseeing the entity's financial reporting process.

### **Auditor's Responsibility for the Audit of the Financial Statements**

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Standards on Auditing (SAs) will always detect a material misstatement when it exists. Misstatement can arise from fraud or error and are considered material if, individual or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken based on these financial statements.

As part of an audit in accordance with SAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- a) Identify and assess the risks of material misstatement of the accompanying financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a

Page 2 of 3



material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentation, or the override of internal control.

- b) Obtain an understanding of internal financial controls relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- c) Evaluate the appropriateness of accounting policies used and reasonableness of accounting estimates and related disclosures made by the management.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

#### Report on other Regulatory Requirements

Further, I report that:

- a) I have obtained all the information and explanations which to the best of my knowledge and belief were necessary for the purpose of my audit.
- b) In my opinion proper books of account as required by various Statutes have been kept by the SaciWATERS so far as appears from my examination of those books.
- c) The Balance Sheet, statement of Income and Expenditure, dealt with by this Report agree with the books of account.
- d) In my opinion, the Balance Sheet, Income and Expenditure Account comply with the relevant Accounting Standards.

*T. Venkateswara Rao*

**T. Venkateswara Rao**  
Chartered Accountant

M No.: 212098

Place: Hyderabad

Date: December 29, 2020



## SaciWATERS

B 87, Sainikpuri, Secunderabad - 500094

## CONSOLIDATED BALANCE SHEET AS ON 31.03.2020

PARTICULARS	Schedule No.	Current Year Amount INR	Previous Year Amount INR
<b>SOURCES OF FUNDS:</b>			
Capital Fund (Assets Value)	XI	13,46,179.70	14,13,370.95
General Fund	VIII		
Restricted Project Funds		79,22,846.79	45,49,787.38
Unrestricted General Fund		1,39,23,667.97	1,35,66,553.27
		<b>2,18,46,514.76</b>	<b>1,81,16,340.65</b>
<b>TOTAL</b>		<b>2,31,92,694.46</b>	<b>1,95,29,711.60</b>
<b>APPLICATION OF FUNDS:</b>			
Current Assets, Fixed Assets, Loans & Advances			
Fixed Assets	XI	13,46,179.70	14,13,370.95
Loans and Advances	IX	7,66,092.75	13,22,360.75
Closing Balances	I	2,23,16,005.09	2,06,70,027.90
		<b>2,44,28,277.54</b>	<b>2,34,05,759.60</b>
Less: Current Liabilities & Provisions			
Current Liabilities & Short term Provisions	X	12,35,583.08	38,76,048.00
<b>TOTAL</b>		<b>2,31,92,694.46</b>	<b>1,95,29,711.60</b>

The schedules referred to above and the notes thereon form an integral part of the accounts

As per our report of even date

For SaciWATERS

T. Venkateswara Rao

(T. VENKATESWARA RAO)  
Chartered Accountant  
M.NO.212098

Place : Hyderabad

DATE :: December 29, 2020



(SHREYA CHAKRABORTY)  
Officiating Executive Director

(C. RAMACHANDRAIAH)  
Treasurer

(S. JANAKARAJAN)  
President



SaciWATERS  
B 87, Sainikpuri, Secunderabad - 500094  
**CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT  
FOR THE PERIOD FROM APRIL 1, 2019 TO MARCH 31, 2020**

PARTICULARS	Schedule No	Current Year Amount INR	Previous Year Amount INR
<b>INCOME :</b>			
Funds received towards Project Implimentation	V	3,04,83,838.65	3,36,91,879.52
Other Reciepts and Contributions	VI	4,13,034.81	10,79,706.60
Bank Interest	XII	13,11,544.00	12,28,275.00
<b>TOTAL</b>		<b>3,22,08,417.46</b>	<b>3,59,99,861.12</b>
<b>EXPENDITURE :</b>			
Project Implimentation cost	VII	2,41,07,911.00	2,81,67,427.02
Office and Administrative expenses	VII	41,13,189.35	59,24,810.30
<b>TOTAL</b>		<b>2,82,21,100.35</b>	<b>3,40,92,237.32</b>
Surplus / Deficit for the Year		39,87,317.11	19,07,623.80
<b>Transfer to Balance Sheet</b>	<b>VIII</b>	<b>39,87,317.11</b>	<b>19,07,623.80</b>

The schedules referred to above and the notes thereon form an integral part of the accounts

As per our report of even date

For SaciWATERS

*T. Venkateswara Rao*

(T.VENKATESWARA RAO)  
Chartered Accountant  
M.NO.212098

Place : Hyderabad

DATE :: December 29, 2020



*Shreya Chakraborty*

(SHREYA CHAKRABORTY)  
Officiating Executive Director

*C. Ramachandralal*

(C. RAMACHANDRALAL)  
Treasurer

*S. Janakaraman*  
President



## SaciWATERS

B 87, Sainikpuri, Secunderabad - 500094

CONSOLIDATED RECEIPTS AND PAYMENTS ACCOUNT  
FOR THE PERIOD FROM APRIL 1, 2019 TO MARCH 31, 2020

PARTICULARS	Schedule No.	Current Year Amount INR	Previous Year Amount INR
<b>RECEIPTS:</b>			
Opening Balance	I		
Cash in hand		30,473.47	23,112.47
Cash at Bank		21,40,954.43	32,00,714.63
Cash at Bank (FD A/c)		1,84,92,600.00	1,35,55,828.00
		<b>2,06,70,027.90</b>	<b>1,67,79,655.10</b>
Funds / reimbursements received towards Implementing the projects	II	3,04,83,838.65	3,36,91,879.52
Other Receipts and Contributions	III	3,95,089.81	6,85,572.60
Bank Interest	XII	12,06,046.00	11,23,217.00
Loans and Advances	IX	6,79,711.00	3,46,339.00
<b>TOTAL</b>		<b>5,34,34,713.36</b>	<b>5,26,26,663.22</b>
<b>PAYMENTS:</b>			
Project Implementation cost	IV	2,61,67,196.92	2,53,74,291.02
Office and Administrative expenses	IV	44,08,188.35	48,61,547.30
Capital Expenditure	XI	2,57,143.00	7,69,376.00
Unspent funds transfer back to SaciWATERS Gen		-	3,01,582.00
		<b>3,08,32,528.27</b>	<b>3,13,96,796.32</b>
Out standing Liabilities paid (previous year)		2,86,180.00	4,41,711.00
Loans, Advances and deposits	IX	-	1,18,128.00
<b>Closing Balances:</b>			
Cash in hand	I	37,137.47	30,473.47
Cash at Bank		40,36,959.62	21,46,954.43
Cash at Bank (FD A/c's)		1,82,41,908.00	1,84,92,600.00
		<b>2,23,16,005.09</b>	<b>2,06,70,027.90</b>
<b>TOTAL</b>		<b>5,34,34,713.36</b>	<b>5,26,26,663.22</b>

The schedules referred to above and the notes thereon form an integral part of the accounts

As per our report of even date

For SaciWATERS

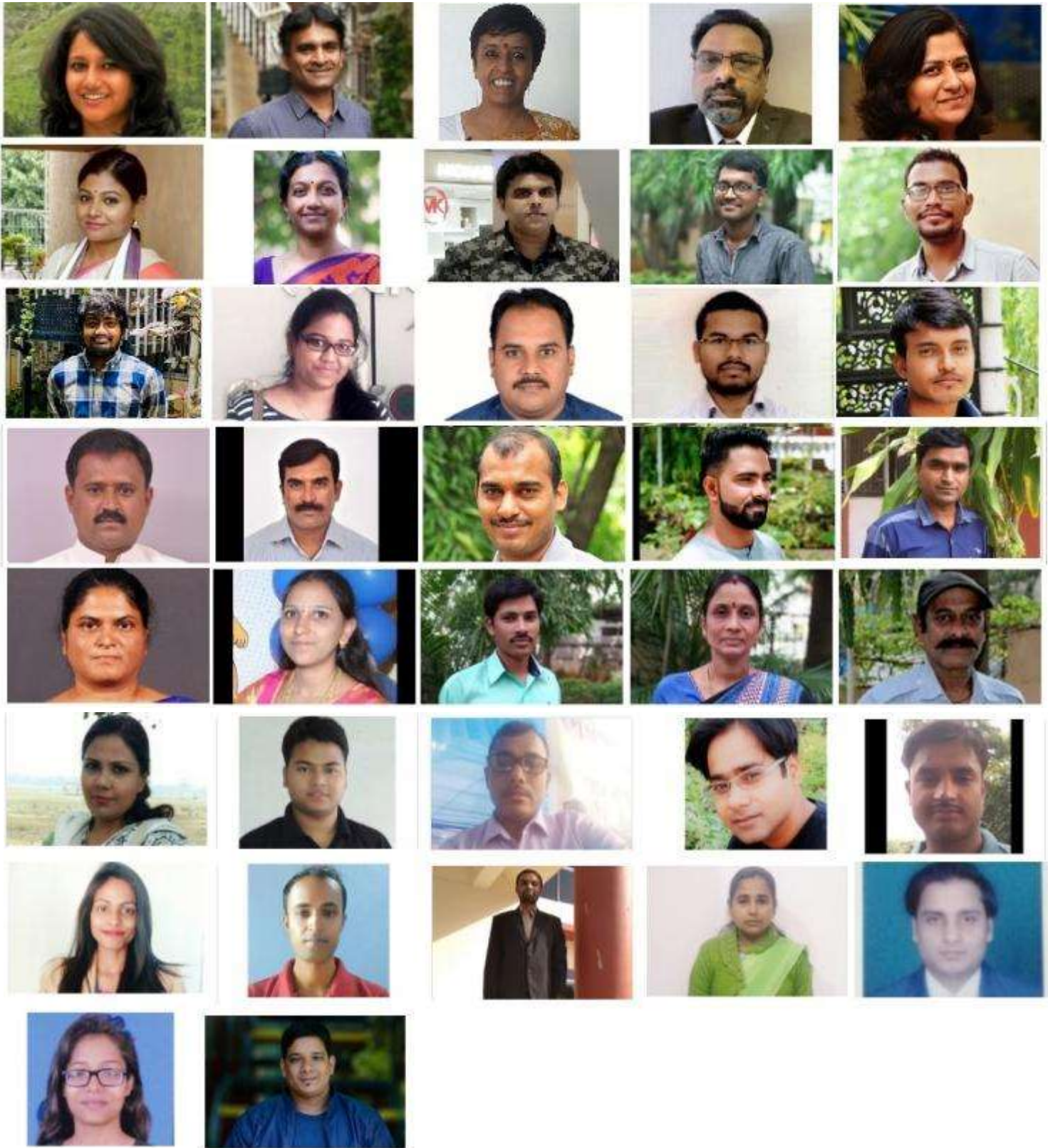
T. Venkateswara Rao

(T. VENKATESWARA RAO)  
Chartered Accountant  
M.NO.212098Place : Hyderabad  
DATE : December 29, 2020

(SHREYA CHAKRABORTY) (U. RAMACHANDRAIAH) (S. JANAKARAJAN)  
Officiating Executive Director Treasurer President



TEAM







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Email: [info@saciwaters.org](mailto:info@saciwaters.org); Website: [www.saciwaters.org](http://www.saciwaters.org)

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