

# A Systemic Approach to Water Quality Problems in India

*Towards a Rashtriya Jal Swasthya Mission*



INREM and SaciWATERs

27<sup>th</sup> and 28<sup>th</sup> Feb, 2019, YMCA, New Delhi



## Context and Objective of the Meet

The water quality networks i.e. Fluoride Knowledge and Action Network (FKAN) coordinated by INREM Foundation and Arsenic Knowledge and Action Network (AKAN) coordinated by SaciWaters are involved in a European Union supported initiative which aims to address the fluoride and arsenic contamination issues in the 8 vulnerable districts in 6 states of the country. But the problem of water contamination such as fluoride and arsenic continues to threaten the entire country.

Hence there is a need to create a momentum on water quality issues by mobilising support for it. A national mission on water quality and health is need of the hour which will bring different stakeholders together and make a significant effort to save millions of people suffering from these life threatening diseases. The objective of these 2 days' program was help build this momentum and articulate this idea which could form building blocks for moving towards a Rashtriya Jal Swasthya Mission (RJSM).

## Proceedings

On the first day, around 70 participants from organisations like Arghyam, Water Aid, UNICEF, WASSAN, Samaj Pragati Sahayog, GRASS, Oxfam, Foundation for Environmental Monitoring, KPC Medical College, India Water Portal, Piramal Sarvajal, Sputnik, People's Science Institute, ACWADAM, Sattva (Safe Billion Initiative), Aga Khan Development Network, Socion, SaciWaters, INREM, European Union and other independent consultants attended the partner's meet.

The locations of Chikballapur (Karnataka), Nalgonda (Telangana), Dungarpur (Rajasthan) and Balasore (Odisha) are those which are the fluoride affected districts of the initiative, and Buxar (Bihar), Bhagalpur (Bihar), Nalbari (Assam) and Jorhat(Assam) are the Arsenic affected districts. The UNICEF co-supports action in Dungarpur as the Integrated Fluorosis Mitigation (IFM) Initiative. Also present were representatives who are part of Assam govt's Water Supply and Sanitation Organization (WSSO), four district initiative on fluoride issue.

The program began with the screening of the short documentary named Citizen's X, focusing on the problems of fluoride and arsenic contamination and how INREM and SaciWaters are trying to build systemic approaches to solve these issues by engaging with the community and government departments alike by establishing people centric district platforms.

The session on water quality problem and different approaches was initiated by Dr. Sunderrajan Krishnan from INREM who shared ideas on building blocks and put down reasons to have a national focus for water quality. First, it is worth to focus on water and health problems given the millions of lives at stake. Second, these problems have the power to unite people from different sectors to work on a common goal of safe water and good nutrition to all. Lastly, there water and health problems have many sub-problems where the approach of scale can be tested out.



This was followed by presentation by Vidya Ramesh and Churamoni Saikia of SaciWaters on Arsenic contamination and responses in the state of Bihar and Assam. They shared learnings on PHED involvement in water quality assessments, experience of working with the state health committee in Bihar, developing health cards which are used for patients' identification and so on.

Later, Mala from Arghyam shared their experiences about Arghyam's journey on societal platform thinking and how this approach can help tested solutions reaching population scale using technology as a catalyst.

This session concluded with Kiran Kumar Sen from INREM sharing the process, thinking behind the Safe Water Crusade fellowship program and announcing the winners, Amit Tandon, Vrunda Bansode, MV Ram Chandrudu and Pradeep Balkunde. They were felicitated by Manu Srivastava from Arghyam who handed them the certificates. This was followed by group discussion about the possible approaches on scaling the work. Broadly following key points and questions emerged

- Where is the approach of scale possible? – Government, central or state level
- To understand what are the issues/challenges when working at scale and then solving it as different problems.
- There is need to create awareness and empower people who are within the system i.e. water mans, ASHAs, water user's committee to leverage help at scale.
- How much % of loss of GDP due to fluorosis and arsenicosis? This will help in identifying the investment needed for short and long term planning

Post lunch, the participants were divided into three groups namely **Practise, Policy** and **Data & Technology**. Each group were asked to brainstorm guidelines and principles which will form building blocks for a national mission like RJSM. The following are the key points which emerged from three groups in same order.

- Operation & Maintenance of the physical infrastructure in water purification plants/rural water supply should be a prime focus.
- Appropriate content to help train frontline workers, school children and CRPs to enable convergence between water and health issues.
- Community needs information about safe water sources and related health implications. This can be done by involving them for water quality testing and displaying information at village level.



- It is important to understand who implements policy both at the central and state level.
- Identify and leverage opportunities in the existing structure. Opportunities to explore and implement nutritional intervention in existing schemes is immense.
- There is need to treat water as a resource and focus on recharge in exploited regions.
- Safe water education needs to be included and practised in schools.
- The data needs to follow certain principles and protocols i.e. open data, broadness, quality, authenticity, timeliness, convergence of water & health data, community driven and so on.
- There should be a strong emphasis on Information, Education and Communication on the issues and solutions within all stakeholders.

The following discussion by partners working on water quality helped build the template for the RJSM.

FKAN and AKAN with the partners organisations together are working in more than 20 districts in India. But given the magnitude of the problem, a national focus on water quality is required. To advocate this need at the national level, NITI Aayog, Ministry of drinking water and sanitation and other relevant ministries were invited to this consultation on the second day.

Members from UNICEF, Water Aid, Arghyam, WASSAN, INREM, SachiWaters, Sattva, GRASS, PSI formed the water quality network (WQN). Representatives from the ministry of drinking water and sanitation (MDWS) i.e. Mr. Muralidharan and Miss Ranjitha were present. Mr. Biswaswar Rath from ministry of Agriculture joined the consultation.

Dr. Sunderrajan Krishnan from INREM shared the experiences from District level water and health engagements from the WQN, where 3 guiding principles motivated the work. They are as follows.

1. Safe drinking water for everyone
2. Support system for the disease affected people
3. Disease prevention for future generation.

He set the context by providing details about 3 different districts (Dungarpur, Balasore and Nalgonda) where the district platform approach is institutionalised with government being active stakeholders. Such experiences have learnings which are common and context specific, which can be expanded to other vulnerable districts in the country. After hearing from all members of the WQN, Mr. Muralidharan and Miss Ranjitha from MDWS made the following suggestions, which formed the next steps for WQN.

## Next Steps

- The ministry has recently initiated the Swajal Scheme. There is focus on schools and anganwadis, where the learnings of WQN on water quality, health and nutrition can be integrated. WQN to share list of districts where Swajal is working and understand opportunities for integration.

WQN to share list of districts where there is active district model for convergence. MDWS to verify the district platforms in these states and recommend to other states where NWQSM is implemented.

- Compendium/Manuals/short videos of 'Best Practices' in the recent experiences which has enabled district level convergence and 'Policy Asks' for water quality issues to be shared with the ministry. Given UNICEF's experience of sharing best practices, compendium of best practices to MDWS can be coordinated by UNICEF, with the country WASH specialist Manish Wasuja being entrusted with this communication.
- Regular medium of communication can take place at periodic intervals of 3 months between MDWS and WQN.

### List of Participants for Workshop on February 27, 28, New Delhi

Name	Institution
A. Murlidharan	Director, Ministry of Drinking Water and Sanitation
M H Renjitha	Deputy Secretary, Ministry of Drinking Water and Sanitation
Bisweshvar Rath	National Rainfed Area Authority
Manish Wasuja	National WASH Specialist, UNICEF Delhi
Nanakkumar T Santdasani	State WASH Officer, UNICEF Rajasthan
Shouvik Dutta	Senior Programme Manager, European Union
Mala Subramaniam	Chief Executive Officer, Arghyam
Bishwadeep Ghose	Director, Programmes, Arghyam
Asad Umar	Senior Programme Officer, Aga Khan Development Network
Avinash Kumar	Director, Programmes and Policy, Water Aid
Sunderrajan Krishnan	Executive Director, INREM Foundation
Sneha Latha D	Executive Director, SaciWATERS
Anita Kumar	Head , Solutions, Sattva Media and Consultancy
Bimal Prasad Pandia	OXFAM, Bhubhaneshwar
Kunal Kanti Majumdar	KPC Medical College, Kolkatta
Himanshu Kulkarni	Executive Director, ACWADAM, Pune
Vargish Bamola	People's Science Institute
Kesar Singh	India Water Portal
Minakshi Arora	India Water Portal
Amita Bhaduri	India Water Portal
Pradeep Balkhunde	Foundation for Environmental Monitoring, Bangalore
Anand Arkalgud	Socion, Bangalore
K Subhash	GRASS, Nalgonda
MV Rama Chandrudu	WASSAN



Raghav Chakravarthy	Samaj Pragati Sahyog
Akshat Shukla	Piramal Sarvajal
Sunil Panchal	Piramal Sarvajal
Rajnarayan Indu	INREM Foundation
Vikas Ratanjee	INREM Foundation
Harsh Dave	INREM Foundation
Manhar Upadhyay	INREM Foundation
Pritesh Patel	INREM Foundation
Churamoni Saikia	SaciWater
Ayan Biswas	Independent Consultant
A B Paul	INREM Foundation
Suneetha Sapur	INREM Foundation
Kalpna Bilwal	INREM Foundation
Sumanjita Barman	SaciWater
Sachin Vani	INREM Foundation
Arvind Singh	INREM Foundation
Kiran Kumar Sen	INREM Foundation
Shreyas S	INREM Foundation
Ghanshyam Sheet	INREM Foundation
Gautam Anand	SaciWater
Abhishek Kumar Prateek	SaciWater
Amrita Barua	INREM Foundation
Sarmila Kokoti	INREM Foundation
Vidya Ramesh	SaciWater
Monikankana Borah	SaciWater
Akshay Roongta	Independent Consultant
Craig D'souza	Independent Consultant
Prachi Butade	Independent Consultant
Kezia Fernandez	Sattva
Karthik Seshan	Arghyam
Sukriti Mehta	Arghyam
Manu Srivastava	Arghyam
Nagendra Varada	Health BCC Specialist, Sattva
Nirma Bora	Water Aid
Anil Sindoor	Development Journalist
Bikash Pati	Water Aid
Satyajit Ghosh	Water Aid
Guneet Narula	Sputznik
Anurag Gupta	Water Aid
Kanika Singh	Water Aid
Nisha Abdulla	Ever After
Deeptha Vivekanand	Ever After