India Philanthropy Initiative

Hosted by: ROHINI NILEKANI philanthropies

Curated by: Arghyam

Providing Safe Water

Fluorosis Mitigation Program

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PEOPLE'S SCIENCE INSTITUTE

Fluoride contaminated groundwater adversely affects the health as well livelihoods of millions of Indians today

60 million+

suffer from dental and skeletal fluorosis

230 districts

across India are suffering from a fluorosis endemic

This scourge will continue to spread...

Several challenges with techniques existing today

Available techniques

- Bone Charcoal
- Electrolytic Defluoridation
- Activated Alumina
- Reverse Osmosis

Our Initial Approach

2005 - 2008

- Activated Alumina Kit
- Fluoride Mitigation Plans

(41 villages across five states)

Challenges

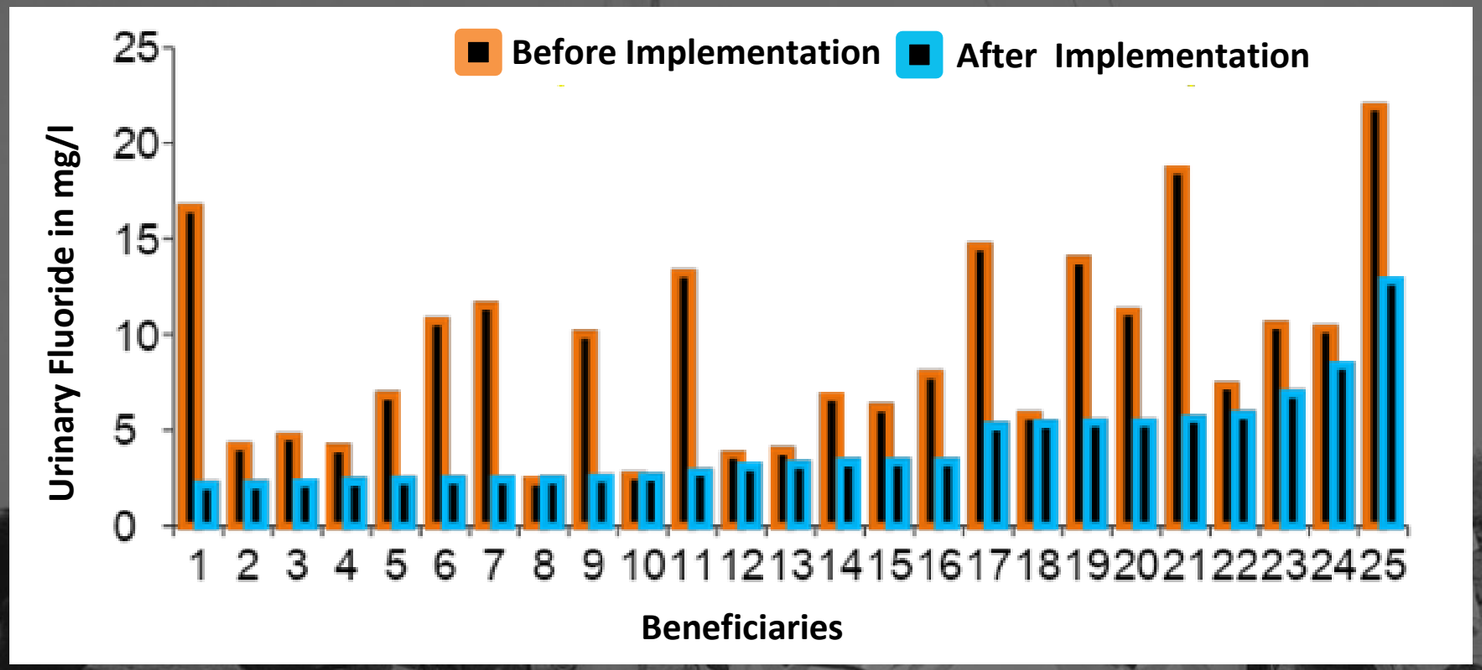
- Operation and Maintenance
- Accessibility
- Acceptance
- Affordability
- Sludge generation and disposal

Community-based Integrated Water Resources Management

Sustainable and equitable solution implemented in **17 villages** (1,348 HHs) of Dhar district, MP during 2013-18 for safe water with support of Frank Water @ ₹9700/HH ~Rs. 1,500/capita)

Surveys for Situation Analysis → Collection of Scientific Evidence → Approaches for Community Mobilisation → Development of Village Level Institutions → Agreements and Documents → Implementation through Institutions

Significant improvements seen on-ground



Health improvements: Reduction in human urinary fluoride

Name: Santosh
Age: 8 years (2014)
Village: Kalapani

Noticeable straightening of legs after consuming fluoride safe water for 18 months

"My life is almost over but at least there is some hope for my children and grandson. They will be able to use safe water and lead a healthier life."

- Bandu Singh, Kalapani, Manawar block of Dhar district

Major Achievements

- Community-managed drinking water **supply systems**
- **Sharing of water sources** within village and trans-boundary
- **Increased accessibility** to safe drinking water
- Groundwater **recharge**
- Increased WASH **awareness**
- **Convergence** with MGNREGS

धार

प्रेरणा मिली तो ग्रामीणों ने कर लिया स्वच्छ पानी का इंतजाम

फ्लोराइडयुक्त पानी से मुक्ति मिली

मप्र युवा कांग्रेस की बैठक 15 को

कुक्षी . सरदारपुर

गांव में लगाई पानी की टंकी, पेयजल की हुई सुविधा

निजी संस्था डेढ़ साल से कर रही जनहित में कार्य

Way forward for scaling up

Integrated approach of safe drinking water supply, WASH and groundwater recharge *along with* ***defluoridation techniques*** needs to be adopted at a cluster level with following components:

- Nutritional interventions
- Rooftop rainwater harvesting
- Capacity building of stakeholders
- Local water governance
- Convergence with govt. programs

Adoption of this approach will help reach out 70-80% of fluoride affected areas.

Manpower, training & implementation costs (@ Rs. 10 lakhs/village ~ Rs. 12K/household) required

To know more, you can contact us!

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