## **BHUNGROO**

Saving Water, Saving Life



n developing nations and low-income countries, smallholders grapple with inadequate and poorly timed irrigation, exacerbated by unpredictable rainfall and waterlogging. In India, over 6.72 million hectares suffer from salinity and seasonal waterlogging, affecting nearly 5 million smallholders. Globally, around 260 million farming families endure over 15 days of waterlogging, depriving them of crucial irrigation during lean periods (FAO 2011). This leads to crop failures, financial crises, and, tragically, farmer suicides.

## **BHUNGROO**

BHUNGROO, a preoperatory knowledge of Naireeta Services is a revolutionary solution, which adeptly filters, injects, and securely stores surplus farm or stormwater within adaptable subsoil formations, ensuring its judicious reuse during periods



About the **AUTHOR** 

Biplabketan Paul, Director (Technical), Naireeta Services Pvt. Ltd of water scarcity. This innovation facilitates optimal irrigation without leaving a discernible water footprint, achieved through the meticulous reutilization of stored rainwater.

Operating within a minimal surface area of just one square meter, each BHUN-GROO unit has the capacity to augment and conserve an impressive one to four million liters of water annually within its subsurface zone. With a diverse portfolio comprising 17 technical designs, BHUN-GROO serves the unique needs of women smallholders in various agro-climatic zones across India, Bangladesh, Vietnam, and Ghana. The entire system is intricately designed to leverage locally available resources, skills, and, critically, locally manageable maintenance processes.

## **Women Climate Leaders (WCLs)**

Naireeta's BHUNGROO technology, com-

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plemented by the support of Women's Climate Leaders (WCLs), has been pivotal in uplifting ultra-poor women smallholders and their families from abject poverty and food insecurity. This initiative addresses climate shocks like irregular rainfall and floods, empowering communities to withstand disasters, notably droughts.

Over 5,000 BHUNGROO units have been distributed, benefiting approximately 250,000 individuals in economically challenged rural areas. Collaboration with governmental, private, and corporate entities has been instrumental in achieving these milestones. Beneficiary farmers have experienced improved food security and a significant rise in annual family income, from \$197 to \$700, over five years. They've also been relieved of debt burdens, fostering economic stability. WCLs have seen their yearly income surge from \$180 to \$500, enhancing their financial independence and leadership roles in their communities.

The program's emphasis on genderdriven initiatives, like BHUNGROO's Water Rights, has empowered women farmers, reinstating their land rights and social dignity. This inclusive approach fosters equity in agriculture, leading to tangible benefits in economic prosperity, food security, and empowerment for ultra-poor women smallholders and Women Climate leaders in targeted regions.

## Recognition

BHUNGROO's impactful work has garnered numerous prestigious awards, affirming its dedication to sustainability and innovation. Notably, they have earned the United Nations Framework Convention on





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Climate Change's Climate Action Award at COP20, demonstrating leadership in addressing climate issues. Their commitment to gender equality in climate technology was recognized with the Gender Just Climate Technology Solution Award at COP24. Collaborations with esteemed institutions like the World Bank, Indian Government, and Indo-US Science and Technology Forum underscore their strategic partnerships. Support from entities such as USAID and Lockheed Martin further enhance their global initiatives. Their accolades include the Cartier Women Initiative Awards, showcasing empowerment of women in entrepreneurship.