

Creating Innovative Solutions for a Sustainable Future





Water Sustainability Awards

WATER SUSTAINABILITY

# AWARDS Key initiative

2021-2022



# ABOUT THE WATER SUSTAINABILITY AWARDS



Water is one of the most vital components of our living environment. It regulates economic growth, social and political change, technical and scientific advances and progress, in partial and/or totality. In India, water acts as a backbone of livelihood to more than 70% of the population engaged in the agriculture sector. Also, approximately 10-15% of the population is engaged in industries directly dependent on water such as textile, leather, food processing, etc. Water, therefore, has a multitude of linkages with the country's economic health. Furthermore, through its role in food security, energy security, and health, water ensures the right to life for all citizens.

of clean water. Considering this, the United Nation's Sustainable Development Goals recognize water as the key element of sustainable development by setting a dedicated global goal for water. Goal 6 of SDGs, further specifies targets to be achieved by 2030. The significance of these targets is emphasized by the interlinkages among them, and the achievement of every target depends on the achievement of others. Hence, it is necessary that all the stakeholders equally share the responsibility of water management, water use efficiency, and water conservation, to facilitate the achievement of water security for all. Encouragement and recognition would be an effective way to build the culture of water resource protection and conservation. With this perspective, the TERI-IWA-UNDP Water Sustainability Awards will cover the various dimensions related to the achievement of Sustainable Development Goals on water.

United Nations recognizes that national priorities on reliable energy, economic growth, resilient infrastructure, sustainable industrialization, consumption and production, and food security, are all inextricably linked to a sustainable supply



# AGRICULTURAL SECTOR



### Key focus areas under the theme:

- Reduction in irrigation water use
- Improving physical/economic water productivity
- Micro irrigation systems
- Flow measurement mechanism for fields
- Awareness generation activities
- Other areas focusing on improving WUE in the agricultural sector





## **Place of Implementation**

Nation wide

42

### Agency/ Company / Organisation

ICAR-Sugarcane Breeding Institute, Coimbatore 641007, Tamil Nadu, India

Applicants: Drs K. HARI, D. PUTHIRA PRATHAP, P. MURALI, A. RAMESH SUNDAR,

### **About the Initiative**

"Soil Moisture Indicator" (SMI) was developed and tested in farmers' fields for irrigation scheduling. This resulted in conservation of water resources, higher farm profit, electricity and labour saving, which is in agreement with Sustainable development Goals and National Development Priorities. Continual scaling-up and scaling-out efforts ensured the

B. SINGARAVELU and BAKSHI RAM; ICAR-Sugarcane Breeding Institute, Coimbatore 641007, Tamil Nadu, India

### Year of Implementation

From 2008 and continuing

technology reach to stakeholders.

### Key features

- Sensitisation of stakeholders on 'irrigation scheduling' based on soil moisture
- Improved water conservation and higher farm productivity



- New business opportunity to Agri-preneurs, start-ups and innovators
- Widely adopted for water conservation in Central and State Government schemes

### Outcomes

- Successful development of a simple and easy to use soil moisture indicating device
- Demonstration of water conservation through irrigation scheduling using SMI without compromising farm productivity
- Nationwide adaptation of SMI for water conservation

### **Sustainability Measure**

Depletion of water resources in agriculture being a serious cause for concern, employing SMI in farm will positively help in achieving 'More crop and income per drop of water'.

From 2008, sustained efforts ensured wider reach of this technology to the target population. Besides sugarcane, this versatile device is being used in most cultivated crops making this technology sustainable on social, economic and environmental fronts.

### **Contact Details**

Name: K. HARI, Principal Scientist, ICAR-Sugarcane Breeding Institute, Coimbatore 641007, Tamil Nadu, India Email: (Per.) hari1967@gmail.com; (Off.) k.hari@icar.gov.in Mobile: 9443911632; Phone (O): 91 422 2472621 Exn No. 303 Team: Drs K. HARI, D. PUTHIRA PRATHAP, P. MURALI, A. RAMESH SUNDAR, B. SINGARAVELU and BAKSHI RAM, ICAR-Sugarcane Breeding Institute, Coimbatore 641007, Tamil

Nadu, India.





### Published by:

The Energy and Resources Institute (TERI) Darbari Seth Block,IHC Complex, Lodhi Road,New Delhi -110 003, INDIA

Tel: (+91 11) 2468 2100 Fax: (+91 11) 2468 2144, 2468 2145 Email: mailbox@teri.res.in Web: www.teriin.org