Date of 1st publication on IRRI website	18 April 2024
Title of the Application	AutoMonPH -Irrigation Advisory System for Rice
Application Dates	Utility model (Philippines): 08 November 2023 Trademark (Philippines): 13 September 2023
Application Numbers	Philippines: Utility Model: 2-2023-051519 Trademark: 4-2023- 523857
Publication Number	Not yet available
Publication Link in the WIPO Website	Not yet available

THE TOOL AND THE PROBLEM IT ADRESSES

Irrigation Advisory System for Rice (AutoMonPH) is an Internet-of-Things (IoT)-based decision support tool that provides a platform for information sharing on efficient water management, including real-time water monitoring and reporting and verification of management practices

Farmers frequently rely on manual checks to gauge water levels, which can be time-consuming. Additionally, they require collaboration with irrigation managers and policymakers to enhance irrigation efficiency. Hence, there's a necessity for a real-time water level monitoring and alert system. AutoMonPH system is a combination of hardware with a decision-supporting system, able to determine water levels at one or more sites allowing for a better irrigation management system. The system will allow various stakeholders to monitor field water level in real time, as it operates through sensory objects using a wireless network to gauge water level and automatically sends information to a central database that can be used to determine which areas need to be irrigated. It also alerts farmers about their fields' water level via SMS.

This irrigation advisory system automates the current Alternate Wet Drying (AWD) system of irrigation, which is widely considered as one of the sustainable practices of rice cultivation. This system supports the water districts to allocate the water rights depending upon the need or demand. AWD is one of the important interventions considered for greenhouse gases (GHG) mitigation too. So, the AutoMonPH system is expected to also have implications on GHG mitigation.

DEVISING OF THE TOOL

The intellectual property (IP) was an output of a collaborative project between IRRI, DA-BAR (Department of Agriculture, Bureau of Agriculture Research, The Philippines), and PhilRice (Philippine Rice Research Institute) for the project entitled 'Water efficient and risk mitigation technologies for enhancing rice production in irrigated and rainfed conditions' (WateRice). The resulting tool is based on a technology already existent in the Philippines. Yet this irrigation advisory system constitutes an improvement over the existent technology, as it automates the mentioned AWD system and supports swift and efficient intervention of water stakeholders.

As an output of the Institute, project partners, and the funding agency, the application for a utility model property right was jointly filed before the Intellectual Property Office of the Philippines. Based on the project agreement among the co-applicants, intellectual assets arising from the project are to be managed in accordance with the CGIAR Intellectual Assets Principles, meaning that their further development and exploitation can't be limited by fully exclusive licenses, and they must remain available in all countries for non-commercial research conducted by public sector organizations, among other conditions.

DISSEMINATION PLANS AND THE ROLE OF THE IP RIGHT

Given that IRRI's capacity on IoT hardware development and manufacturing is limited to prototyping, the Institute and the partners decided that collaboration with third party entities for potential prototyping, manufacturing and commercialization is of utmost importance. Applying for a utility model type of IP right was deemed crucial to secure some control over the improved technology before engaging with industry partners at local and international levels, who are expected to invest in any of the mentioned activities and scale the technology to make it available to wider farming communities in the Philippines or elsewhere, meeting in this way the demand for the technology.

The promotion of the innovation will be through its inclusion in knowledge materials (i.e. Learning modules, Knowledge Bank, etc.), demonstrations/field days, and digital spaces via social media. It will also be recommended for its inclusion in future collaborations addressing irrigation use and as a greenhouse gas monitoring, reporting, and verification (MRV) tool.

Also, it has been tentatively decided that IRRI may not look for any benefit sharing from the possible industry partners but care for the scaling and impact of the technology.

CURRENT STATUS OF THE IP APPLICATIONS

The utility model application was made for the protection over the technology while a trademark registration was sought for the protection over the brand AutoMonPH, both in the Philippines. In comparison with a patent, the utility model has less stringent requirements on novelty and industrial applicability, has simpler examination procedures, and offers a shorter term of protection of 7 years. Thus, applying for a utility model can provide a strategic, cost-effective, and swift route to protect incremental and less complex innovations.

The tradename “AutoMonPH” was filed for trademark protection under classes covering data processing and measuring devices, and agricultural services. The utility model and trademark applications have been filed with the Intellectual Property Office of the Philippines last November 8, 2023 and September 13, 2023, respectively and are currently under review.

By securing both the utility model and trademark registrations, IRRI gains a strategic advantage, particularly when collaborating with third parties for commercialization activities. This comprehensive approach enhances IRRI's position in negotiations for both the technology and brand, in addition to the possibility of assuring the quality of the technology as it becomes further developed and manufactured by industrial stakeholders, and offered to farmers.

As a non-profit international organization, IRRI promotes responsible technology transfer and intellectual property management in accordance with its Intellectual Property and Commercialization Policy (IP&C Policy) and with the CGIAR Principles on the Management of Intellectual Assets (“CGIAR IA Principles”). This utility model application and the associated trademark conforms with the CGIAR IA Principles concerning intellectual property applications in furtherance of the CGIAR Vision.