

Indonesia expands intermittent irrigation technology for rice cultivation to improve water management accuracy and efficiency

21 April 2025 | News

IPHA utilizes intermittent irrigation, which alternates between wet and dry cycles in rice fields.



IPHA utilizes intermittent irrigation, which alternates between wet and dry cycles in rice fields.

Indonesia's Minister of Public Works, Dody Hanggodo, has instructed all regional centers to implement water-saving rice irrigation (IPHA) technology to boost agricultural efficiency and productivity.

"This technology enhances agricultural efficiency through modern methods. It not only reduces water consumption but also improves crop quality and yield. This technology enables more accurate and efficient water management. With consistent yields above 6 tons per hectare, this technology offers a sustainable solution for Indonesian agriculture," said Hanggodo.

The initiative involved optimizing existing irrigation infrastructure managed by River Basin Centers across various regions.

According to Hanggodo, IPHA utilizes intermittent irrigation, which alternates between wet and dry cycles in rice fields. This method has been shown to save up to 30% of water and increase rice productivity by up to 169% compared to traditional irrigation techniques.

To support IPHA implementation, the ministry has also developed a digital water management system to help farmers and field officers schedule irrigation, monitor water discharge, and receive early warnings about potential droughts.

As part of its outreach efforts, the ministry will hold a demonstration plot harvest and technology exhibition on **April 22** in the Rentang Irrigation Area (DI) in West Java. The Rentang Irrigation Area, which covers districts in Indramayu, Cirebon, and

Majalengka, is one of Indonesia's key rice-producing regions that has adopted IPHA technology. Three of the 208 demonstration plots established in the region will be harvested during the event.

As of April 17, 15 out of 208 plots in the area had been harvested, yielding between 6.5 and 16.9 tons of rice per hectare. The average yield reached 10.35 tons per hectare, significantly higher than traditional methods.

In addition to increasing rice productivity, Hanggodo said the success of IPHA demonstrates its potential to support national food self-sufficiency. The ministry plans to continue collaborating with local governments, farmer groups, and other stakeholders to ensure successful national adoption of IPHA.