

Alternate Wetting and Drying (AWD)

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Vietnam farmers are adopting the **alternate wetting and drying (AWD)** technique to reduce methane emissions from rice paddies.



[Ref: ET]

About Alternate Wetting and Drying (AWD):

- **AWD** is a water-saving strategy designed for lowland rice farmers to manage water use more efficiently in irrigated fields.
- This method involves **irrigating the field after a specified number of days** following the disappearance of **ponded water**, leading to **periods of flooding** alternated with drying.
- The intervals between irrigation can range from **1 to over 10 days**, depending on the soil's characteristics.
- A crucial component of AWD is the use of a **perforated tube** inserted into the soil, which helps farmers monitor the water level that should be maintained at about **15 cm below the soil surface**.
- AWD is a relatively **simple and low-cost approach** that effectively reduces water usage in rice cultivation by **30%**.

Benefits of Alternate Wetting and Drying (AWD)

- **Significantly lowers methane emissions** by 30-70%, contributing to a reduction in greenhouse gases without impacting rice yields.
- The precision in water management helps maintain the productivity of rice fields while **saving on water and production costs**.
- Utilizing drones for fertilization not only reduces labor costs but also enhances the **precision of fertilizer application**.
- Accurate fertilizer application helps avoid excessive use, preventing the release of nitrogen gases that can exacerbate global warming.

