

Water management practices at different growth stages [Water Management]

The water requirement of the rice plant and the effects of water stress vary at different growth stages. Water supply is more critical in some growth stages such that moisture stress at these stages reduces yield.

Seedling stage

- For transplanted rice, maintain around 2-3 cm pond water depth to prevent hardening of the soil during seedling pulling.
- For direct seeded rice, drain the field from 0-9 days after sowing (DAS) to have good seedling emergence.

Seedling stage (1 week after transplanting or 10-35 DAS)

- For transplanted rice: Within the week after transplanting, saturate the soil (do not flood) to control snail infestation and establish better soil-root contact. One week after transplanting or 10-35 DAS, irrigate the field to about 3-5cm.
- For direct seeded rice: Irrigate the field at about 5cm from 10-35 DAS to facilitate fertilizer application and weed management.

Tillering to booting stages

- Occasionally, allow the water to subside to aerate the soil to stimulate root penetration, tiller production, firm root anchorage, correction of micronutrient imbalances, and removal of toxic substances from the soil.

Flowering stage

- Maintain 2-5 cm flood water to avoid drought stress

Ripening phase

- Stop irrigation and drain field if there is still any standing water one week before the expected harvest time to hasten uniform grain maturity and facilitate harvest and postharvest operations.

Note: *Water management during the first 30 days should conform with the weed management program. Apply water-saving options after the weeds had been managed and rice canopy is almost closed.*

Source: Field Operations Manual. 2007. Philippine Rice Research Institute.