

Evidences

Study #2284

Contributing Projects:

- P258 - Climate-smart rice technologies to enhance resilience of smallholder rice farmers in Burkina Faso

Part I: Public communications

Type: Other MELIA activity

Status: Completed

Year: 2020

Title: The effects of Alternate Wetting and Drying (AWD) on water use, rice production and weed infestation in four irrigated rice systems in Burkina Faso

Commissioning Study: BMZ

Part II: CGIAR system level reporting

Links to the Strategic Results Framework:

Sub-IDOs:

- Reduced smallholders production risk

Is this OICR linked to some SRF 2022/2030 target?: Yes

SRF 2022/2030 targets:

- Increased rate of yield for major food staples from current 1%/year

Description of activity / study: The effects of Alternate Wetting and Drying (AWD) on water use, rice production, and weed infestation were evaluated in several irrigated rice systems during four growing seasons in 2018 and 2019 in Burkina Faso. AWD was compared to farmer' irrigation practice (FP) in 155 pairwise comparisons of AWD and FP plots. Compared with farmers' practice (FP), irrigation water input with AWD technology was reduced by 32 % in the dry and by 25% in the wet season. With no significant effects on grain yields (mean of 4.9 Mg ha⁻¹), AWD increased the irrigation water productivity by 64%. AWD appears to be an effective strategy to save irrigation water with no rice yield penalty in rice irrigation schemes of the dry Savannah zone.

Geographic scope:

- Sub-national

Country(ies):

- Burkina Faso

Comments: <Not Defined>

Links to MELIA publications:

<Not Defined>