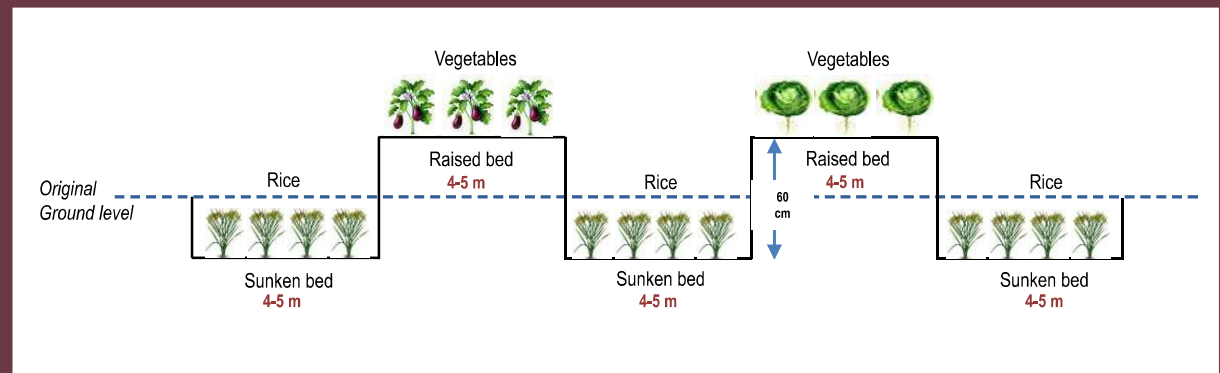


IFS using the Alternate Raised and Sunken Bed System



Alternate raised and sunken bed system at Balipatna, Khordha, Odisha



Layout design of alternate raised and sunken bed system.

Developed by _____

Dr. R. Singh | Dr. D.K. Kundu | Dr. Rajeeb K. Mohanty | Dr. Amod K. Thakur | Dr. K. Kannan | Dr. S. Ghosh

RELEVANCE

- In high rainfall areas, rice mono-crop is the only option due to waterlogging, which results in low productivity and income.
- The alternate raised and sunken bed system helps crop diversification and increases cropping intensity, year-round employment opportunities, and profitability.

DESCRIPTION

- Growing rice + fish in sunken beds (30 m length & 5 m width) of an alternate raised and sunken bed system instead of rice alone can enhance yield and return.

BENEFITS

- Combining rice-fish in sunken beds (rice: 5.23 t ha⁻¹; fish: 3.7 t ha⁻¹ 150 d⁻¹) with cabbage (28.5 t ha⁻¹), pointed gourd (4.7 t ha⁻¹), and snake gourd (20.2 t ha⁻¹) crops in an adjacent raised bed can give the highest rice equivalent yield (48.8 t ha⁻¹).
- Improve WUE(174.54 kg ha-cm⁻¹) & net water productivity (₹ 10.3 m⁻³).
- B:C ratio: 4.78.
- Enhance production by 6- 7-fold and save up to 20% water.
- This replicable system can be adopted in irrigated canal command, medium, and low-land rice ecosystems.