



# Inclusive Sustainable Rice Landscapes

Securing multiple environmental benefits and improved farmer welfare



Food and Agriculture  
Organization of the  
United Nations



wbcasd



Implemented by  
**giz** Technische Dienstleistung  
für internationale  
Zusammenarbeit (GIZ) GmbH







# Why Rice?

- Daily **staple** for >3.5 billion people
- **19%** of global **calorie** supply
- **Livelihoods** for >1 billion people
- Produced on **160 million hectares**
- **15%** of world's **wetlands**
- Uses **40%** of world's **irrigation** water
- 10% of global **methane emissions**







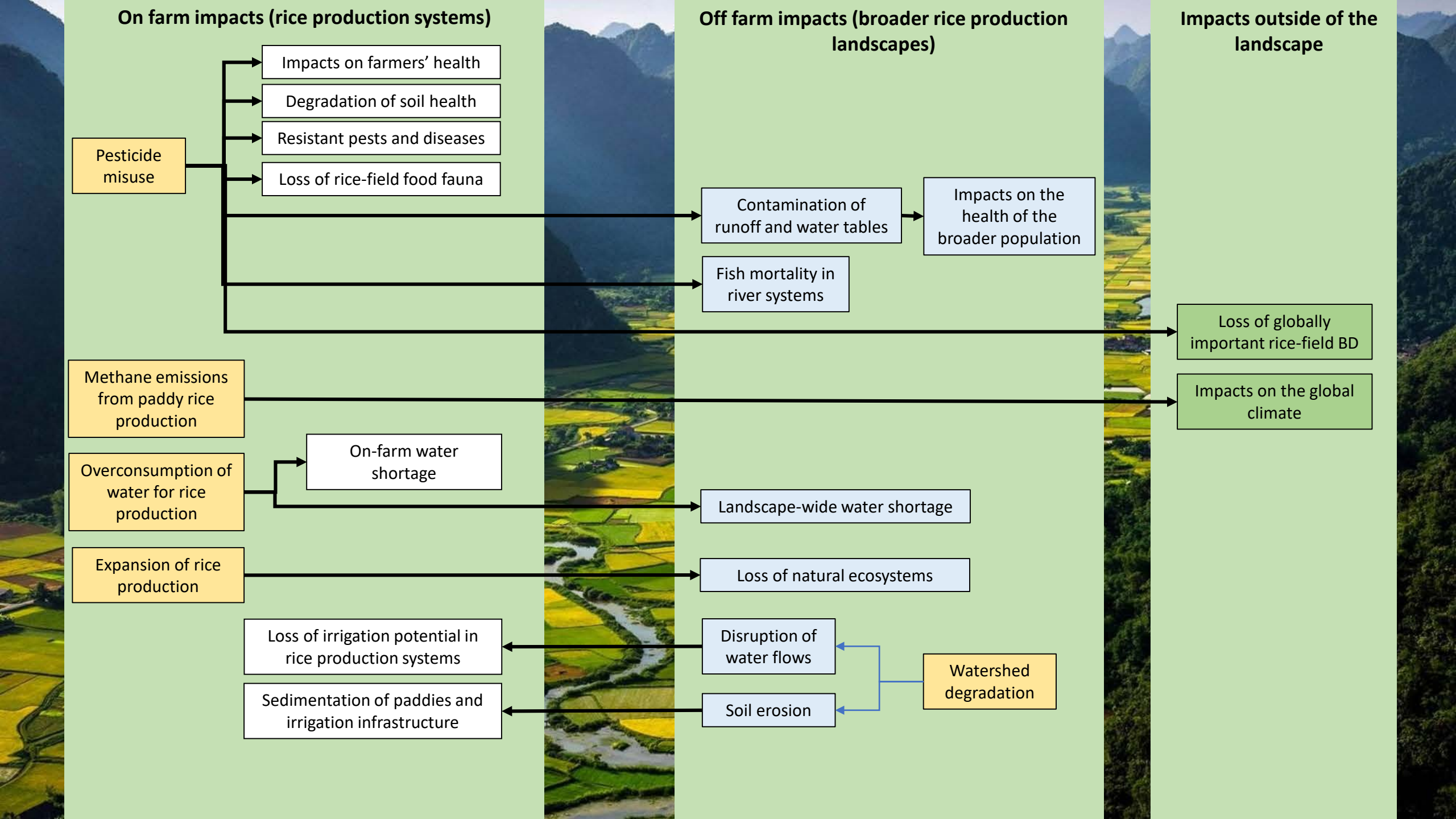
# Why Rice?

**By 2050:**

- **Production** needs to **increase** by **25%** to meet demand
- 15-20 million hectares may suffer **water scarcity**









*Food Systems, Land Use  
and Restoration*  
Global Impact Programme

- Promoting **sustainable food systems** to meet growing global demand
- Promoting **deforestation-free agricultural commodity supply chains** to slow loss of tropical forests
- Promoting **restoration of degraded landscapes** for sustainable production and to maintain ecosystem services

*Inclusive Sustainable Rice  
Landscapes*  
County Programmes

- **Sustainable management practices** in rice-based production systems
- **Market-based instruments** supporting sustainable production
- **Landscape management** for ecosystem services







# Value of a landscape approach

- Recognition that the **root causes** of problems may **not** be **site-specific**
- **A combination of natural resource management** with environmental and livelihood considerations
- Consistent with a **systems view** of environmental management
- Encourage early assessment of **trade-offs** and **innovation** in applying solutions



# Inclusive Sustainable Rice Landscapes Approach

Value chains

- Commodity platforms
- CSR
- Marketing and value adding
- Improving farmer linkages
- Certification systems

Water  
accounting

Restoration

## Markets

- Sector sustainability standards
- Public awareness/brand building
- Green value chains

Green  
infrastructure

Farmer-based  
approaches

- Direct investments
- Financial instruments
- Land use planning
- Governance
- Technical capacities

**Landscapes:**  
Protected and  
restored landscapes  
providing ecosystem  
services

## Crop management

- Alternate wetting/drying
- Fertilizer management
- Improved seed (including traditional)
- Sustainable diversification
- Traditional production systems

- Extension services
- Farmer capacities
- Farmer field schools
- Seed supply
- Seed fairs

Land use  
planning

Agro-pollutant  
management



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# Inclusive Sustainable Rice Landscapes = Environmental and Social Benefits

Healthy watersheds,  
biodiversity protection

Agricultural  
biodiversity

Diverse,  
sustainable  
livelihoods

Water use efficiency

Resilience

Reduced  
agrochemical  
pollution

GHG reductions



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# Country Programmes Under Development

India



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Thank you