



**Sustainable and Resilient Farming Systems Intensification in the Eastern  
Gangetic Plains (SRFSI) Project**

**An Overview of Conservation Agriculture in  
Nepalese Context**  
(July 06-07, 2017)

**Bedanand Chaudhary**

National Rice Research Program, Hardinath, Dhanusha



**Date: 06 July 2017**  
**NARC Hardinath, Dhanusha**



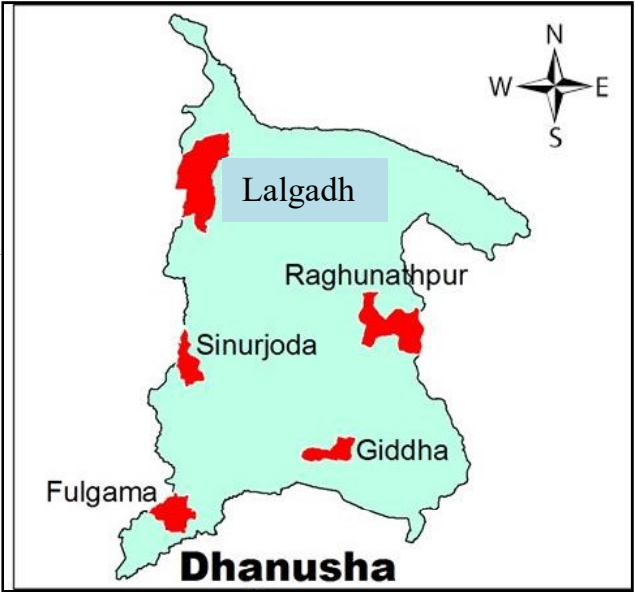
# Background

- Eastern Gangetic Plains of Bangladesh, India and Nepal: densely populated, dominant rice-wheat system; poor production; high out-migration; food deficit areas
- Vulnerability to climate change risk, poorly developed markets, sparse agricultural knowledge and service networks, inadequate development of available ground and surface water resources
- CIMMYT-led/ ACIAR funded SRFSI project

# SRFSI

- **Sustainable and resilient farming systems intensification project**
- **Conservation Agriculture:** Minimum tillage or no tillage, residue management, use of agri-machinery, conservation of natural resources, farming systems intensification
- **Increase production** per year per unit of land by addressing labor shortage and mitigating environment pollution in context with climate change

# SRFSI- Dhanusha Nodes



# On-farm Trials

- **Several trials**
- **Long term trials:** Rice-wheat; Rice-lentil
  - ZT-DSR; Un-puddled rice and puddled rice
- **Cropping pattern trials:** R-W-Mung; R-L-M
- **Opportunity trials:** CT lentil, ZT lentil, ZT wheat, CT wheat

# Opportunity

- Reduction in tillage cost
- Increase in crop intensification
- Crop diversification
- Reduction in labor cost
- Reduction in irrigation cost
- Lowering drudgery
- Improvement in soil structure and fertility

# Issues and Challenges

- Weed management
- Skill and knowledge in Machine operation
- Knowledge for agricultural practices
- Service providers
- Seeding and seedling raising
- Un-leveled land
- Fragmented land
- Availability of agricultural inputs
- Markets
- Social structure

# Advantages

- Improve water infiltration
- Decrease weed dynamics
- Reduce production cost and increase profitability
- Reduce soil erosion
- Improve soil organic matter
- Reduce soil compaction
- Save time, energy and money
- Increase production and enhance food security
- Improve livelihood



**Thank you**

---

**End of Presentation**