

# ADM Institute for the Prevention of Postharvest Loss



## Funded Case Studies in India

- Rice in Tamil Nadu
- Pigeon Pea (Red Gram) in Maharashtra
- Black Gram in MP (Madhya Pradesh) and Maharashtra



## Understanding Rice Losses, Tamil Nadu: Marketplace Literacy Project

- Postharvest losses of rice in India amount to a loss of 5-7 million tonnes of rice annually
- Partners:
  - Marketplace Literacy Project (USA)
  - Subsistence Marketplace Initiatives (UI)
  - Madura Micro Finance
- Community to build literacy, skills, awareness of rights, and self-confidence needed to function in the marketplace. It will support roughly 100 self-help groups of 15-20 women each.
- Work completed so far:



Quantitative Survey	
Number of farmers	54
Number of villages	10
Sizes of villages, other variables	238.5-500 hectares
Population	750-3000

**Mapping the production system and the supply chain and study the crop losses of Black Gram in Maharashtra and MP:**  
MART

- India is the largest producer of black gram in the world, but domestic demand exceeds production.
- Maharashtra and Madhya Pradesh produce 20% and 13% of India's total black gram production respectively.
- Study will
  - Understand the causes of crop loss
  - Map technologies currently available to prevent crop loss and reasons why they are not broadly adopted
  - Identify potential for new technologies and opportunities for innovations in black gram supply chain



## **A study on pigeon pea postharvest loss in Maharashtra:**

Maharashtra Hybrid Seed Company (Mahyco)

- India is the world's largest producer of pigeon pea (75% of global production)
- The study: Conducted primarily in Maharashtra during August 2011 and focused on a random sampling of villages. Two villages were selected from each taluk with five farmers from each village participating in the study for a total sample of 30 villages and 150 farmers.
- Findings:
  - Average age of a farmer is 46; education levels of farmers increased with the size of the farm
  - Pigeon is being raised as a subsidiary inter-crop
  - Pigeon pea has a relatively high market price and is suitable to marginal farms
  - 30% of crop damages is due to shortage of labour
  - Most loss occurs at storage - clear need for construction storage facilities at the village level

## Farmer Surveys on Postharvest Loss in Pigeon Pea Findings

S.No	Stages and Factors	Loss % of yield	Loss (Kg/q)
1	Maturity stage	0.2	1.2
2	Weather impact	0.4	4
3	Harvesting	1	0.5
4	Threshing	1	1
5	Labor unavailability	0.3	1.5
6	Drying	0.1	0.03
7	Storage	10	5
8	Transportation	0.5	0.2
9	Processing	1	1
10	Total	14.5	14.43