

Agricultural Mechanization in Bangladesh: What have we learnt and unlearned?

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CIMMYT Workshop on Agricultural Mechanization in Bangladesh – The Future
Pan Pacific Sonargaon, Dhaka, Bangladesh
March 21-22, 2022



Learning, Relearning and Unlearning

- ❖ **Small firm size and tiny plots-** no big problem, efficiency question remains
- ❖ **Agri. Machinery market has been somewhat competitive, largely unsubsidized**
- ❖ **Capital constraints remains**
 - NCBs need to gain speed
 - Private banks need more agri-focus
 - Self financing – remittance diversion



Learning, Relearning and Unlearning

- ❖ **Agripreneurs:** Young, small and medium farms, educated and some machine orientation, **informal training is as important as formal training**
 - **Land ownership** – av. 9.4 acres, 60% own LT 2 ac, 18% leased- in land.
 - **Age group-** 64% below 40 years
 - **Education-** 44% SSC+, 56% below SSC, some training
 - **Source of funds-** subsidy 63%, own 14%, ACI 23%
- (Source: Compiled from 118 combine harvester owners, ACI Ltd. Data, 2018.)



Learning, Relearning and Unlearning

- ❖ Business knowledge comes from family, apprenticeship, partnerships, and peer groups
- ❖ Gradual withdrawal of capital subsidy helps competition
- ❖ Local manufacturing capacity grew
- ❖ Combine harvester being developed
 - BRRI, Janata, Alim
 - Cheaper



Learning, Relearning and Unlearning

❖ High profitability of rice farming

- Research
- Varieties- Hybrid
- Improved crop husbandry
- Fair rice price

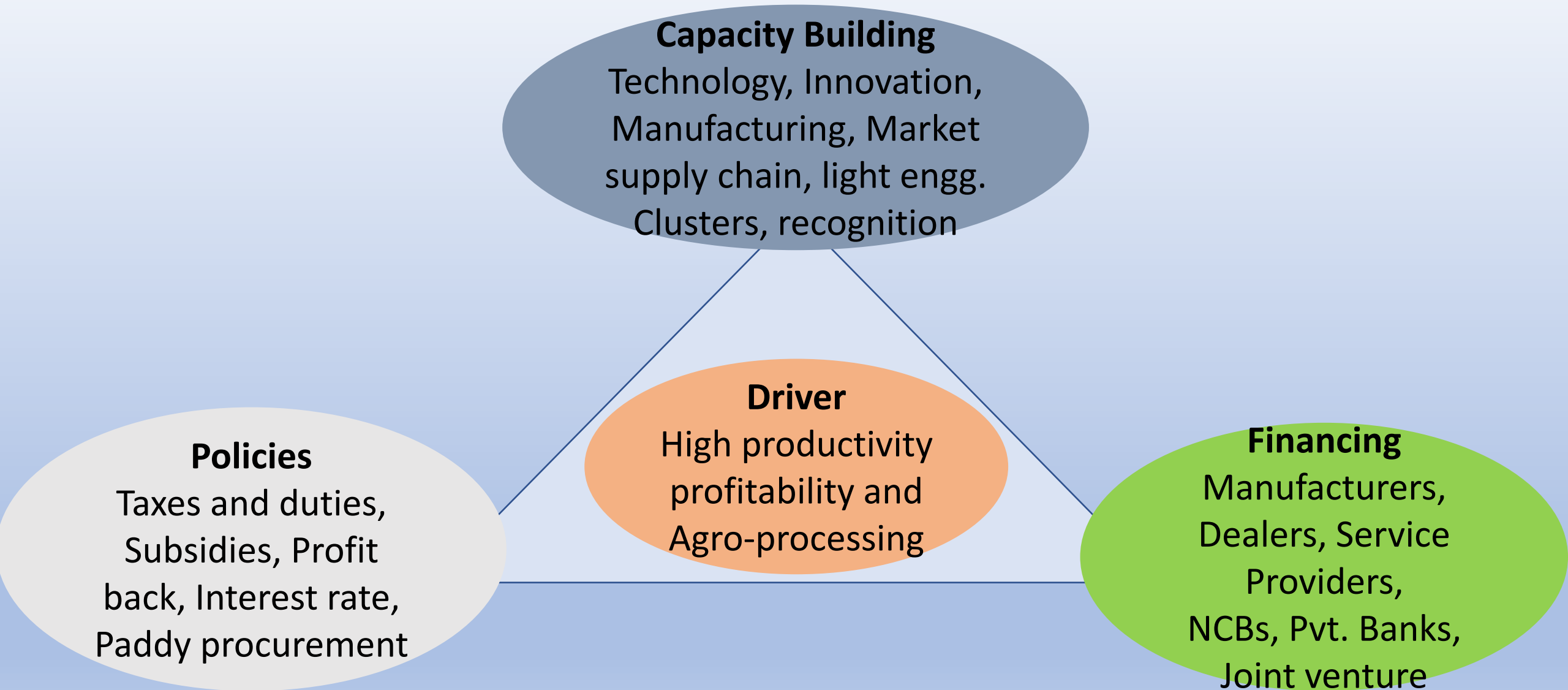




Profitability of Boro Paddy (2021)

Cost and return (Per acre)	BDT
1. Land preparation (PT)	2310
2. Seedlings	1500
3. Transplanting by hand	5600
4. Irrigation (1/4 crop share)	13,200
5. Fertilizer/ Weedicide	5,000
6. Weeding	3,300
7. Harvesting by hand	4,900
a. Total variable cost	35,860
b. Total return (3/4 crop @2000/quintals)	39,600
c. Return over VC (b-a)	3740
d. Net return (c-Fixed cost - land rent - family labor)	??
e. Sensitivity test: Higher paddy price Lower paddy price	Increased profit Decreased profit

Agricultural Mechanization Triangle



Action points

❖ Manufacturing capacity enhancement

- Physical facilities, zoning
- Capital machinery, CNC
- Training
- **Joint venture**

❖ Strategies

➤ Coalition

- Research, Manufacturing companies, Financing institutions, NBR, Central bank, Ministry of Industry

➤ Dialogue

- Manufacturers association, financing institutions, dealers etc.

➤ Collaboration

- Government, Private sector, Academia, DPs



Thank You

