# Good & Bad Practices in Promotion of Agricultural Mechanization

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### **Outline**

<Good Practices>

Case 1 – Ethiopia

Case 2 – Uganda

Case 3 – Kenya

<Bad Practices>

Case 4- Tanzania

Case 5 – Cote d'Ivoire





### **Case 1 – Ethiopia (Linking Mechanization Chain Actors)**

### <EDGET project>

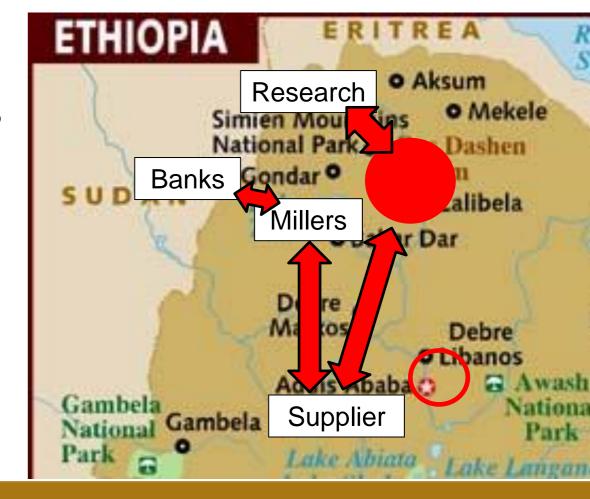
- Ethiopians Driving Growth, Entrepreneurship & Trade
- Implemented by MEDA Mennonite Economic Development Association with Canadian fund
- 2010-2015 (second phase is being implemented as of 2017)



### **Case 1 – Ethiopia (Linking Mechanization Chain actors)**

### <EDGET project >

- Development of models of combination of milling accessories together with Agriculture Research Institutions (R&D)
- Partnering with an Addis Ababa-based machinery importer and retailers that can supply accessories
- Linking the machinery supplier with millers in project areas
- If there is interested millers for machinery purchase, the project facilitated financing (linking millers with financial service providers, and help negotiation, provision of loan guarantee (15%) and cost sharing/ grant (15%)



# **Good Practices**Case 1 – Ethiopia (Linking Mechanization Chain actors)

### <Impacts of EDGET project (As of 2013) >

- Upgrading of Rice Mills by 5 millers (covering 13 districts)
  - → Increased milling capacity and improved rice quality
- Increased profit for Rice Millers
- Competitive rice product → better price also benefits rice growers as well
- Sustainable and stable supply of spare parts and repair services
- Expansion of market for the machinery supplier
- Expansion of financing services for banks

### <Key for Success>

- 1. Project focused on linkage building and facilitation, instead of playing roles that are to be played by private sector
- 2. Project worked with those who are already in business

# Good Practices Case 2 – Uganda (Provision of Advisory Services)

### <JICA Support to interested Entrepreneurs in Mechanization Biz>

- Free consultation for interested entrepreneurs (Provision of advisory services on their business plan in terms of technical and business management aspects)
- Objective is for entrepreneurs to obtain loan from financial institutions such as banks - No financing from JICA

#### <Critical Elements>

- Importance of good business plan to ensure profit that helps sustain mechanization
- 2. Existence of Human Resource with strong capacity (Advisors)
- Combination with financial arrangement such as loan guarantee maybe more effective

### Good Practices Case 3 – Kenya (Successful Tractor Service Provider)

#### <General information of Successful Tractor Service Provider >

- Mr. Kingali is a business person who provides Tractor-Hire Service as well as Tourism bus service.
- He lives in Kabete near Nairobi, owning 2 acres of farm land
- Purchased a 80HP tractor with disk plow and hallow through dealers' (retailers) loan – total amount was USD42,000: 30% down payment, with 15 annual interest for the rest.

Mr. Guideon KINGALI





### Case 3 – Kenya (Successful Tractor Service Provider)

<Operation Calendar>

**Nov-Jan:** Maize in Kabete

**Dec-Apr:** Wheat and Maize

in Nyhululu

**Apr-May: Maize in Lamu** 

**May-Jun: Beans and Maize** 

in Taveta

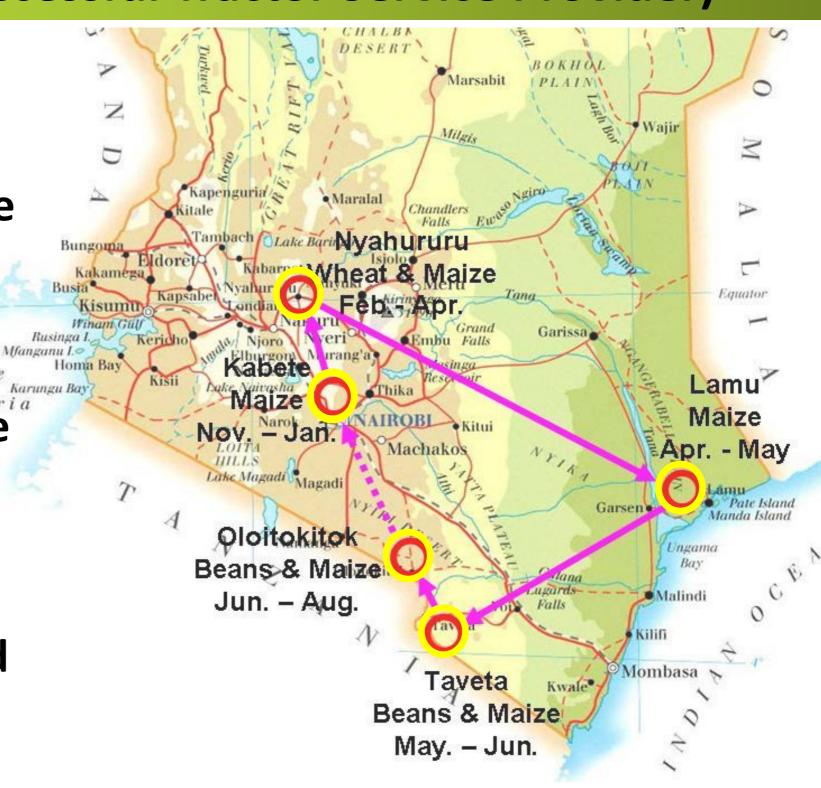
Jun-Aug: Beans and Maize

in Oloitokitok

**Sep-Oct:** Maintenance and

repair in Kabete





# Good Practices Case 3 – Kenya (Successful Tractor Service Provider)

#### <Performance and Results>

- The tractor has been operated 280-300 days per year on average, cultivating approximately 1,500 ha per year.
- Tractor service generated income of more than USD50,000 per year
- Mr. Kingali paid back loan to tractor retailer in 2 years
- Tractor was used for another 4 years, and the renewal was done without loan
- With the profit, Mr. Kingali purchased a truck and started animal feed transport business as well

#### <Key for success>

- 1. High capacity of the owner in biz planning and operation
- 2. Using experienced operators (more than 5 years)
- 3. Incentive mechanism for operator (reward good performance)
- 4. Good Access to spare parts and maintenance service (Nairobi)

### **Bad Practices**



# Bad Practices Case 4 – Tanzania (Bad Government Intervention)

#### <Government program for mechanization >

- Government of Tanzania decided to import and distribute 1,500 tractors to farmer groups in 2011
- Procurement was done through open tender, and a Chinese company won the bidding (this company had never operated in Tanzania before).
- 1,500 tractors were distributed to farmers groups at subsidized price
- 50% of tractors got broken down in 6 months, and 90 % in 1 year
- No spare parts or repair service available, because this Chinese supplier does not have supply chain in Tanzania



# Bad Practices Case 4 – Tanzania (Bad Government Intervention)

### <Negative impact>

- Farmers investment on machinery was wasted
  - → Farmers became "anti-mechanization" from bad experience
  - → This affected farm machinery market for long time (negative feeling on mechanization persisted for a few years)
- Private suppliers lost their markets (some of them got out of business)
- The country lost some permanent suppliers of machineries, spare parts and repair services

### <Recipe for Failure >

- Government did what private sector was doing and competed with them (Disturbance of existing business)
- Working with new comers (Chinese supplier)
- Introduction of low quality machinery

### Bad Practices Case 5 – Cote d'Ivoire (Bad Intervention by Project)

#### <Introduction of High Capacity Rice mills >

 APRAO project implemented by FAO and Ivorian government 2010-13 (4 years)

 One of the project areas was Gagnoa where small mills are under operation with low milling capacity (high unit cost and low quality

of milled rice)

 Supply of 3 rice mill plants with provision of loan guarantee to millers who plan investment for upgrading/introduction of high capacity rice mills (1 for private rice miller— upgrading, 2 for newlyestablished rice mill cooperatives)

\_Odřenné Korhogo\* GUI. \_Katiola Bondoukou Touba Séguéla \_Bouaké Man **GHANA** Divo\* LIBERIA

# Bad Practices Case 5 – Cote d'Ivoire (Bad Intervention by Project)

### <Performance of introduced mills and Impact of support>

- The rice mill was fully operated, generating profit by the private miller (more than 10 hours per day during harvest season)
  - → Long queue of customers to sell paddy
  - → Miller is busy getting more customers, making good profit
  - → Loan can be repaid in 4 years
- Rice mills were under-operated at milling cooperatives
  - → Few customers, and not much efforts to get more customers
  - → Operated 5 hours per day during harvest season
  - → Loan can be repaid only in 10-12 years
- Small-scale millers lost customers and get out of business

#### <Recipe for failures >

- 1. Working with new comers (killing existing private business)
- 2. Group ownership and operation

### **Summary of Lessons**

- Government/ project should not do what private sector is supposed to do (don't compete with them)
- Instead, focus on creating conducive business environment through facilitation and linkage building among stakeholders, as well as implementation of relevant policies
- Support those who are already in Business, not new comers
- Good business plan and operation is necessary for successful mechanization business – Let's think about how government can support private sector for them to have this capacity
- Don't jump on low quality machinery (even when it is cheap)
  - -This will hold back mechanization process in the long run
- Group ownership is a bad idea (It hardly works)

### Thank you

