Facilitating Efficient Mechanisation Delivery Models: Lessons from the Private Sector

Kalongo Chitengi- Senior Manager AGCO FUTURE FARM

28 September 2020
Mechanization – Sub Saharan Africa Context
Sources of power for land preparation

- **Human muscle power**
- **Draught animal power**
- **Engine power**

**Sub-Saharan Africa**
- 59% Engine power
- 32% Human muscle power
- 9% Draught animal power

**South Asia**
- 40% Engine power
- 30% Draught animal power
- 30% Human muscle power

**East Asia**
- 40% Engine power
- 50% Human muscle power
- 20% Draught animal power

**Latin America and the Caribbean**
- 25% Engine power
- 25% Human muscle power
- 50% Draught animal power

Source: FAO, 2006
Some Key Challenges to Mechanization

- Distance to dealers
- Lack of maintenance knowledge
- Language/market dynamics
- Affordability perception
Facilitating Access to Farm Mechanization
How is AGCO facilitating Access to Farm Mechanization?

1. Appropriate Mechanization Solutions

2. Equipment, After Sales Services and Technology

3. Training, Capacity building and On-farm Demonstrations and Trials
1. Appropriate Mechanization Solutions for Farming Communities

Appropriate Mechanization Solutions
Smallholder farmer mechanization solution delivered through the AGCO Future Farm

- AGCO’s Global Series Tractor
- Matched Implements
- Spares
- After sales support, Training
2. Improving Access to Equipment, Services and Technology
3. Training, Capacity building and On-farm demonstrations and Crop Trials

- Crop Establishment
- Crop Nutrition
- Harvesting
- Operator and Mechanics Training
- Crop Storage
- Farm Business Mgt & Marketing
- Crop Protection
- Digital Training
Lessons from AGCO FF Rural Mechanization Pilot (FIAB)

- Having access to mechanization, smallholder farmers were able to increase their farm yields by 30% in the first cropping season of the pilot.
- Demand for mechanization services in doubled in the second year of the pilot.
- Despite AGCO support, the equipment experienced regular breakdowns due to low operator skills.
- Introduction of mechanization requires comprehensive theoretical and hands-on operator and mechanics training.
Lessons from AGCO FF Rural Mechanization Pilot (FIAB)

- Smallholder farmer training must be practical, more learning by doing and consider literacy and language constraints
- Mechanization only viable with availability of spares, aftersales support and well trained operators
- Mechanization must be promoted on the principles of environmental sustainability
- Improving agronomy practices and farm business management key to ensuring farmers realise surplus income to invest in mechanisation
Challenges to Mechanization
Private Sector Challenges and Recommendations

- High import taxes and duties especially on tractors 100hp and above not favourable for business
  - Requires deliberate government policy to set favourable tax rates and duties to promote mechanisation

- Market distortions caused by poor quality/ unsuitable equipment and mechanization products especially tractors
  - Government mechanisation programmes to engage with private sector to draw on their technical experience before they procure equipment.

- Lack of trained operators and a lagging behind in agricultural technologies
  - Agricultural training curriculum should include comprehensive equipment and machine operator training, updated modules on agricultural technologies to expose learners before they enter industry.

- Unfavourable agriculture policy environment e.g controls on Maize prices, low investment in the sector, lack of controls on imports of foods and agricultural produce etc
  - Government to promote favourable agricultural policies that will make farming more profitable.
Thank you for your attention

www.agcofuturefarm.com