Agricultural Mechanization in Kenya

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Role of Agricultural Sector In the Economy

- Contributes 26% of country’s GDP
- Contributes 65% of total national exports
- Contributes 18% of formal and 70% informal employment.
- 70% of the rural population depend on the sector for their livelihoods
- Major source of raw materials for industry
- Key driver to realization of Vision 2030
Key Agricultural Commodities

The main commodities includes:

• Food crops (Cereals, pulses, Root and Tubers)
• Industrial crops (Coffee, Tea, Sugar, Sisal, Pyrethrum, Bixa)
• Horticultural crops (Fruits, Vegetables, Flowers)
• Livestock (Dairy, Beef, Small ruminants, Poultry)
• Aquaculture
Contribution of Agricultural Mechanization to the Sector

- Increase labour productivity
- Increase land productivity
- Decrease cost of production
- Enhance quality of produce/products
- Remove of drudgery
- Involvement of youth in agricultural mechanization to replace ageing farmers
Contribution  Cont.

- Strengthen entrepreneurship
- Conservation of soil and water
- Industrialization through cottage industry
- Value addition through agro-processing
- Create employment and incomes
Sources of Power and Level of Agricultural Mechanization

Agricultural production systems in Kenya rely on the following sources of power:

- Human labour at 50%
- Animal Draught power at 20%
- Motorized power at 30%
Draft Animal Power (DAP)  
Walking Tractor
DAP in Ploughing

Farm Tractor
Key Players in Agricultural Mechanization

- Government Institutions (AMS, ATDC, ADC, NYS)
- Manufacturers, dealers and distributors
- Service Providers
- Farmers
- Research Institutions
The 24AMS offers hire services to farmers across the country in:-

- Dam construction and de-silting
- Open up new land to agriculture through bush clearing, ripping, levelling, and ploughing, harrowing, planting, spraying and harvesting.
- Construction of farm access roads
- Construction of soil conservation structures
Agricultural Technology Development Centres (Atdc)

There are 10 national stations established based on various agricultural ecological zones and their main role is to:

- Identify, test and integrate agricultural technologies to farming systems.
- Capacity building and promotion of adoption of appropriate tested and validated agricultural technologies.
Challenges Facing Mechanization

• Inadequate machinery
• Inadequate staff; plant operators and mechanics
• Inadequate mechanization extension
• Inadequate access to mechanization technologies
• Lack of adequate credit and finance to farmers and private contractors
• Inadequate aftersales and service back-up
Challenges Cont.

• Decreasing land sizes
• Enterprises that does not support mechanization business model.
  ◦ Vast area of coverage for the Govt. mechanization stations
  ◦ In adequate resources/ funding for stations
  ◦ Gender and youth imbalance in agriculture
  ◦ Aged farming citizens
INTERVENTIONS BY STATE DEPARTMENT OF AGRICULTURE (SDA)

- The Ministry is developing an agricultural mechanization policy to guide the sub-sector.
- Strengthening of agricultural mechanization stations and ATDCs
- Support farmer cooperatives in rice growing irrigation schemes.
- Community Marketing infrastructures
- Establishment of Agricultural Mechanization Research Institute under KARLO
- Irrigation Development
- Capacity building for county Staff
Pillars of Mechanization Policy

- Research and Technology Development
- Local Manufacturing and Distribution
- Agricultural Mechanization Quality Assurance
- Investments in Agricultural Mechanization
- Extension and Technology Adoption
- Soil and Water conservation,
- Youth in Agricultural mechanization
- Environment and Climate Change
- Institutional and Legal Framework
Way Forward

- Reform and transform agricultural mechanization extension services
- Develop framework for Public Private Partnership in service delivery.
- Increase access to affordable credit for acquisition of agricultural machinery and equipment.
- Promote local manufacture and distribution
- Capacity building for staff and other stakeholders to be enhanced
ASANTE SANA.