

Agriculture mechanization in Somalia

Project context

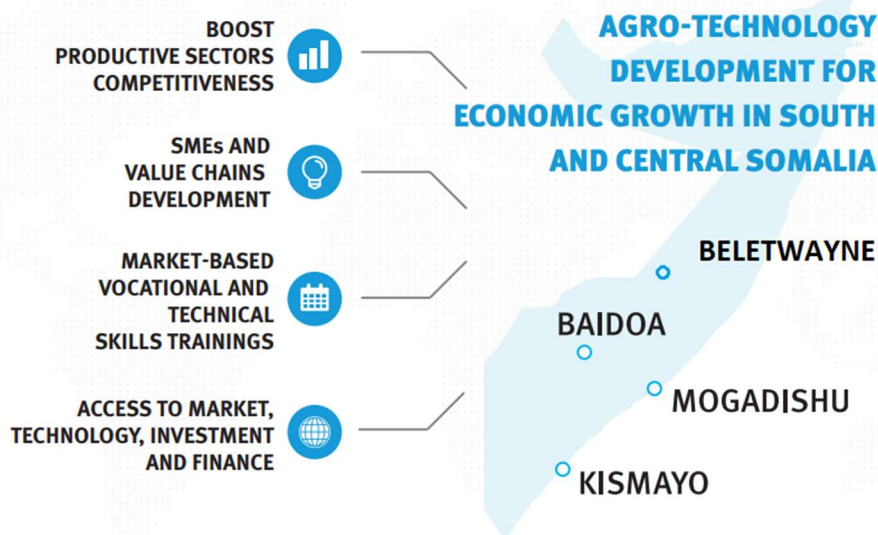
AGRO-TECHNOLOGY DEVELOPMENT FOR ECONOMIC GROWTH IN SOUTH AND CENTRAL SOMALIA

This UNIDO project (2018-2021) is designed to assist the revival of productive sectors in Central and South Somalia regions by establishing a network of three agro-technology and enterprise development units to support Somali businesses in starting, rehabilitating and upgrading agro-industrial operations, accessing new technologies, markets and financing facilities.

The project is providing technical assistance for the delivery of technical and vocational skills trainings to meet the local needs of mechanization, production of tools, and in installing, operating, maintaining and repairing old agro-industrial equipment.

A credit facility to facilitate access to finance to project supported entrepreneurs has been established and deployed within the framework of the project. Overall, the project aims at increasing the potential for economic opportunities and job creation in the productive sectors of the Central and Southern regions of the Somalia by focusing on four key actions: i) promotion of agro-technology upgrading and entrepreneurship development; ii) delivery of vocational and technical skill trainings; iii) facilitate access to technology, markets and finance; and iv) provide institutional support in the area of agro-industrial technology transfer, investment promotion, entrepreneurship development.

The project has been implemented in four locations: **Mogadishu, Kismayo, Baidoa** and **Beletwayne**.



MOGADISHU

Type of Crops

Tomatoes, Onions, and Cucumber
Watermelons, tangerine, and bananas
Maize, Beans and Sesame
sugar cane, guava, lemon, mango and papaya.

Average size of the land

3 to 8 hectares

Land cultivable in Gedo, Hiran, Bakool, Bay, Middle and lower juba/ Shabelle rivers- estimated to be more than 25,650 hectares.

Purchasing power in Mogadishu

The purchasing power in Mogadishu is estimated to be \$15-30,000+ for a tractor, \$100-300 for a knapsack sprayer and \$1,000+ for Irrigation pumps. The price will depend on the model/make, size of the engine, and if the spare parts can be found in Mogadishu.

Moreover, re-Sellers of Agro-Machineries are interested in modernized farm equipment that is not available in Somalia, these are gas powered well water Sprinkler pumps, pivot system, farm accessories, inputs and other irrigation machineries for larger farms.

Type of Machineries requested

Tractors

The tractors should raise above high-crops, slide underneath low hanging branches and preserve delicate fruits and vegetables.

Technical specifications:

4-cylinder Diesel engine with cultivator

4WD drive Dimensions:

70,80 or 85 HP

Speed-20/30km/h

Injector pump-Rotary

Fuel tank capacity-94+Litres

Fuel consumption-10+hours

Cooling-Water cooled

Knapsack sprayers

Chemical tank capacity (Large): 20 l

Nozzles: 20

Pump Type: Plunger type

Pump discharge: Not less than 50 l/min

Centrifugal pump - Water Systems

Petrol

Oil

Volute- Rigged mounted cast

Impeller- Cast Iron

Mechanical Seal-Silicone

KISMAYO

Type of crops

Maize, Sesame, Melon and Banana.

Average size of the land

The average land size used by farmers is usually 3-5 hectares.

Purchasing Power in Kismayo

The purchasing power is around \$25,000 for a tractor, \$1,500 for power tiller, \$1,100 for irrigation pumps (complete) and \$100 for the knapsack sprayer.

Type of Machineries requested

Tractors

Application: Plough, seeding, trailing, animal feeding, baling, front loader, dozing, municipalities (trash handling, roads, etc.)

Model: 866A

Drive: 4 Wheel Drive

Engine size: 140 HP

Injector Pump: Rotary

Open Canopy: Yes

Tyre Size Front: 14.9 – 28

Tyre Size Rear: 18.4 – 38

Power tiller/walking tractor

Engine Power 8 HP

Engine Type Diesel engine

Knapsack sprayers

Chemical tank capacity (L): 20

No. of nozzles: 20

Nozzles type: Hardened thermoplastic or chemical

Pump Type: Plunger type

Pump discharge: Not less than 50 l/min

Irrigation pumps

Engine: Petrol

Oil Alert: Yes

Pump type: Centrifugal, Self

Volute: Rigid Mounted Cast

Impeller: Cast Iron

Mechanical Seal: Silicone

BAIDOA

Type of crops

Maize, sesame, sunflower, forage, and vegetables

Average size of the land

Medium scale farmers in Baidoa use about 5 to 10 hectares of land and the small-scale farmers use below 5 hectares.

Purchasing power in Baidoa

The purchasing power is about \$10,000 to purchase tractors, \$150 for knapsack sprayer and sesame harvester (price can be negotiated since this is a new machinery request).

Type of Machineries requested

Tractors

Application: plough, seeding, animal feeding, baling, front and loading, dozing etc.

Drive: 4wd, Engine size:140 HP

Injector pump: rotary

Tyre size: 18.4-38

Sesame harvester

Diesel sesame harvesting machine for medium and small-scale farmers

Pesticides knapsack sprayer

Chemical tank capacity (L): 20

Nozzles types: hardened thermoplastic or chemical

Pump types: plunger type

BELETWAYNE

Type of crops

Papaya, Lemon, Banana, Tomatoes, Maize, Sesame and Mango

Average size of the lands

In Belatweyne, the average land size owned by farmers for the production of Papaya, Lemon, maize, Sesame, Tomatoes, Mango, Banana, etc. is 3-5 Hectares.

Purchasing power in Belatweyne

The purchasing power is around \$28,000 for a tractor, \$2500 for irrigation complete pumps and \$110 for the knapsack sprayers.

Type of Machineries requested

Tractors

Applications: plough, seeding, trailing, animal feeding, baling, front loader, dozing, municipalities (trash handling, roads, etc.)

Model: 70-66

Drive: 4 Wheel Drive

Engine size: 69 Hp

Tyre Size Front: 7.50-18

Rear size: 13.6-36

Knapsack sprayers

Model (PJBc 20/16)

Capacity tank: 20L/16L

Residual volume: None

Material: Polyethylene

Open flow: 1.9 L/min

Recharge time: 6 hours

Irrigation pumps

Product Name: Gasoline Suction water pump

pump head: 38m

Flow rate: 20m³/h

Pipe diameter: 50mm

net weight: 20kg

Products include: Gasoline Suction water pump × 1