



# Family Farm Mechanization Program

Designed to grow your future.

# Introduction

The project “ Family Farm Mechanization Program” (FFMP) has as its main objective to transform small farms that develop rudimentary and subsistence agriculture into productive, mechanized farms with low-cost systems and innovative production systems, that increase production, generate income for families, changing the quality of life and encouraging young people to stay in the countryside.

# INSIDE, FAMILY FARM MECHANIZATION PROGRAM

This project is a program implemented in small municipalities in rural Brazil area, which was very successful. Farmers obtained great improvement in production and also quality of life.

The program name in Portuguese is CIRCULO DE MAQUINAS, in free translation into English is called, MACHINERY CIRCLE.

The authorities organize farmers into groups, the farmers elect a board and receive a booklet with the rules of the group. The authorities buy the machines, and rent these farmers groups.

This program was so successful in Brazil, approximately 10 years of the program, all farmers were able to buy their own machines and today have modern properties, mechanized production and excellent quality of life.

# Advantages, FAMILY FARM MECHANIZATION PROGRAM

The mechanization on farms enables farmers to have:

- Planting security
- Better soil preparation
- Greater agility in planting
- Increased production
- Reduced losses and soil conservation.

This project is developed with innovative methods of soil preparation, planting and crop management. The whole production system has no-till concept. Farmers do not need to plow the land every new crop season and it creates a layer of straw on the surface of the soil, this layer of straw protects the soil on strong sun, rain erosion and maintains the humidity in the earth reducing the risk of losses with miss rainfall, besides forming a layer of natural fertilizer increasing the production of the farm.

# The Program includes three modules with different sizes of farms

## First module

It contemplates mechanization on union of the small farms a total area 2 to up 6 hectares to crop.

## Second module

Includes mechanization on union of the small farms a total area 7 to up 15 hectares to crops.

## Third module

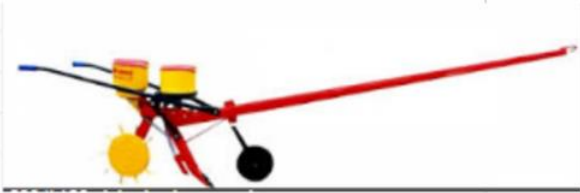
Includes mechanization on small farms a total area a 16 to up 30 hectares to crop.

# FAMILY FARM MECHANIZATION PROGRAM

2 to up 6 hectares

# FAMILY FARM MECHANIZATION PROgram - 2 to up 6 hectares (Equipment for soil preparation and planting)

Description	Power work	Production per day	Avarage Há/day	Qty equipment/farm	Price unit	Total
Planter and plow fertilizer distributor	Bulls or Horses	30 kg	1.5	1	USD 1,321.25	USD 1,321.25
						<b>USD 1,321.25</b>



This equipment the farmer can plant corn, soybeans, beans and other crops with thick sides. It can grow up to 1 hectare and a half in a period of 8 hours, which will give you the security planting.

## FAMILY FARM MECHANIZATION PROGRAM - 2 to up 6 hectares (Equipment for handling of farm)

Description	Power work	Productio per day	Avarage Há/day	Qty equipament/farm	Price unit	Total
Spray Knapsack	Handwork	160 Lts	1.5	2	USD 30.00	USD 60.00
Hoe	Handwork	Variant	Variant	4	USD 10.00	USD 40.00
Hoe fork	Handwork	Variant	Variant	4	USD 10.00	USD 40.00
Slasher	Handwork	Variant	Variant	4	USD 10.00	USD 40.00
Machete	Handwork	Variant	Variant	4	USD 10.00	USD 40.00
						<b>USD 220.00</b>





# FAMILY FARM MECHANIZATION PROGRAM - 2 to up 6 hectares (Equipment for thresh crop)

Description	Power work	Productio per hour	Qty equipment/farm	Price unit	Total
Thresh mobil corn and soyben	Diesel engine	500 kg	1	USD 1,925.00	USD 1,925.00
					<b>USD 1,925.00</b>



# FAMILY FARM MECHANIZATION PROGRAM - 2 to up 6 hectares (Equipment for storage)

Description	Power work	Storage capacity	Qty equipment/farm	Price unit	Total
Silo Kikapu	Solar energy	2,5 ton	1	USD 3,500.00	USD 3,500.00
					<b>USD 3,500.00</b>



**Total investment USD 6,966.25**

Important begin the farmers awareness work to product storage. They have many advantages, such as;

Loss reduction after the harvested product, with attack of the insects, pests and climate weather, also enable them to stock the product to choose the time that the market is paying a higher price for the product. Because usually at harvest time the price this low.

# **FAMILY FARM MECHANIZATION PROGRAM**

**7 up to 15 hectares**

# FAMILY FARM MECHANIZATION PROGRAM - 7 to up 15 hectares (Equipment for soil preparation and planting)

Description	Power work	Production per day	Avarage Há/day	Qty equipament/farm	Price unit	Total
Planter and plow fertilizer distributor	Bulls or Horses	120 kg	6	1	USD 4,132.50	USD 4,132.50
						<b>USD 4,132.50</b>



# FAMILY FARM MECHANIZATION PROGRAM - 7 to up 15 hectares (Equipment for tilled)

Description	Power work	Production per day	Avarage Há/day	Qty equipament/farm	Price unit	Total
Spray 200 Lts	Bulls or Horses	1200 Lts	6	1	USD 3,325.00	USD 3,325.00
						<b>USD 3,325.00</b>



# FAMILY FARM MECHANIZATION PROGRAM - 7 to up 15 hectares (Equipment for handling of farm)

Description	Power work	Productio per day	Avarage Há/day	Qty equipament/farm	Price unit	Total
Spray Knapsack	Handwork	160 Lts	1.5	1	USD 30.00	USD 30.00
Hoe	Handwork	Variant	Variant	4	USD 10.00	USD 40.00
Hoe fork	Handwork	Variant	Variant	4	USD 10.00	USD 40.00
Slasher	Handwork	Variant	Variant	4	USD 10.00	USD 40.00
Machete	Handwork	Variant	Variant	4	USD 10.00	USD 40.00
						<b>USD 190.00</b>



# FAMILY FARM MECHANIZATION PROGRAM - 7 to up 15 hectares (Equipment for thresh crop)

Description	Power work	Productio per hour	Qty equipment/farm	Price unit	Total
Thresh mobil corn and soyben	Diesel engine	1000 kg	1	USD 2,100.00	USD 2,100.00
					<b>USD 2,100.00</b>



# FAMILY FARM MECHANIZATION PROGRAM - 7 to up 15 hectares (Equipment for storage)

Description	Power work	Storage capacity	Qty equipment/farm	Price unit	Total
Silo Kikapu	Solar energy	6 ton	1	USD 4,000.00	USD 4,000.00
					<b>USD 4,000.00</b>



**Total investment USD 13,747.50**



# **FAMILY FARM MECHANIZATION PROGRAM**

**16 up to 30 hectares**

# FAMILY FARM MECHANIZATION PROGRAM

Description	Power work	Job performance	Avarage Há/day	Qty equipament/program	Price unit	Total
Tractor 50 hp	Diesel engine			1	USD 23,000.00	USD 23,000.00
Subsoiler	Tractor	Chisel plow	10	1	USD 4,200.00	USD 4,200.00
Disk Harrows	Tractor	To harrow	15	1	USD 6,430.00	USD 6,430.00
Planter andfertilizer distributor	Tractor	Planting	13	1	USD 5,920.00	USD 5,920.00
Sprayer	Tractor	Spray	15	1	USD 4,800.00	USD 4,800.00
						<b>USD 39,550.00</b>

Equipmento Chisel plow



# FAMILY FARM MECHANIZATION PROGRAM

Equipment To harrow



# FAMILY FARM MECHANIZATION PROGRAM

## Equipment Planting



# FAMILY FARM MECHANIZATION PROGRAM

Equipment for spary



# FAMILY FARM MECHANIZATION PROGRAM

Description	Power work	Productio per hour	Qty equipment/farm	Price unit	Total
Thresh mobil corn and soyben	Diesel engine	2400kg	1	USD 6,800.00	USD 6,800.00
					<b>USD 6,800.00</b>



Total investment USD 46,350.00



**thank you**

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