

333/1
OYO

D
D
D

**OYO STATE AGRICULTURAL DEVELOPMENT PROGRAMME IN
COLLABORATION WITH SAFGRAD**

**TOPIC: PRODUCING AND UTILIZING CASSAVA TO BOOST INCOME
AND INDUSTRIAL GROWTH OF NIGERIAN ECONOMY. OYO STATE AS A
TEST CASE**

INTRODUCTION

Cassava (*Manihot Utilisima*) is one of the major source of food items that is very commonly easily produced, processed and utilized as food as well as a source of income for the average West African farm family.

Different food items with high energy level are produced from cassava. Among these are, cassava flour of different grades, Ta pioca etc.

Industries, both cottage and large enterprise one are developing around cassava. Examples of these industries include ethanol production, industrial starch and glue for textile and pharmaceutical industries. Industrial starch is now exportable with cassava chips and flakes. High grade cassava flour are now being introduced into baking industries.

However, in Oyo State perfection of technology of production of cassava as a crop, processing into a primary food and industrial products, its marketing are still very low and needs to be developed.

With rapidly growing animal production industry in Oyo State and this is welcome to increase the low protein intake of the populace, a highly developed raw material source for feed is very important. Cassava has been integrated into feed formulation taking up to 40-50% as against the earlier use of maize.

Development, perfection and integration of production, processing and utilization technology of cassava into our economy will definitely boost the economy. The raw material producers will be better equipped and encouraged, the processors will be constantly producing the raw materials for the industries which will be running at full capacity thereby providing job opportunity in the economy.

JUSTIFICATION:

1. Development of cassava based industries in Nigeria will compete favourably with any other industry, in terms of foreign exchange earning and provision of employment opportunity for a sizeable number of the jobless.

Problems of cassava based industries include seasonal, unstable cassava production. This will make the raw materials (cassava tuber/cuttings) saturate the market with attendant low price, this will discourage the producers and as such bring scarcity and high price the following season. This situation does not make the price of the raw materials for the dependent industries available. Subsequently, there will be close of the factories or production at high cost with very low capacity production.

2. Poor knowledge of agronomic practices involved in production. This has led to high cost of production through pest damage, use of unsuitable variety eg. high quality cassava flour production needs special variety of cassava eg. TMS 4 (2)1425. Synchronizing of the time of production in the to the period of least weed and pest

attack.

Non-availability of cassava cuttings at the right time of planting. Cassava multiplication needs large quantity of cassava cuttings eg. 50 bundles of 25 sticks is needed to produce 1 hectare of farm. This problem can be solved through rapid cassava cutting multiplication system. This method reduces cutting requirement by 40-50%.

3. Right method of processing is lacking or not fully perfected. Cassava is highly perishable. Without the right knowledge and equipment for processing it is possible to loose more than 40% of the tubers. Also the nutritive value of the food is also lost easily.
4. A good market outlet for the processed good will encourage the primary producers-farmers. There should be a good awareness of demand.

OBJECTIVES:

The objective of this proposal is to remove all the earlier enumerated impediments to production, processing and utilization of cassava and cassava products.

This is to be carried out through physical and financial intervention in three major phases viz

- a. Production
- b. Processing/Packaging
- c. Marketing

Activities involved: Time duration for activity: 24 months

A. Production:

The target groups include 3 Cassava Growers Association from 3 locations. Akufo in Ibadan, Saki and Arowomole in Ogbomosho. Each group has average membership of 25 farmers with an average of 30 hectares per group.

Among the production activities are :

1. Land preparation
2. Cassava cutting preparation including treatment against pests
3. Planting
4. Weed control

B. Processing:

This activity include:

1. Harvesting
2. Transporting
3. Peeling/washing/grating

C. Product Specialization:

- C1. High quality cassava flour
- C2. Cassava chips/flakes preparation

Bibliothèque UA/SAFGRAD
01 BP. 1783 Ouagadougou 01
Tél. 30 - 60 - 71 / 31 - 15 - 98
Berké a Faso

D. Machinery Procurement

E. Packaging

F. Marketing/Advertisement

Work Plan (Production)

Agriculture is a time-bound business. Every aspect of production should be carried out to time. Even the processing of the business is time conscious. Delay in processing of cassava into high quality flour may lead to loss of inherent nutrient and even may affect the physical quality of the flour. This will again affect the market value.

The best time for cassava establishment is late season, which commences from July-August .

1. land preparation should be in June/July.
2. Planting would be immediate
3. Rapid cassava cutting multiplication should be carried out between fourth week of June and second week of July. This will allow for good seedlings ready for transplanting immediately after land preparation.

However, using whole cutting system we shall plant not later than 2 days after cutting preparation. The nodes in a cutting should be between 3 and 4 and facing upwards.

4. Weed control through herbicides.
 - a. Pre-emergence herbicide sprayed after planting
 - b. Post-emergence herbicides to control weeds after the establishment of the crop. This is carried out with a lot of supervision.

Work Plan (Processing)

- a. Erection of new processing sheds or refurbishing of the existing ones.
- b. Erection of processing materials like driers, grinders, drying slabs
- c. Sinking of deep wells for processing
- d. Erection of over head tanks and installation of water pumps.

Time-Line Chart

	2001					2002													
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
Land preparation	_____																		
Cutting preparation	_____																		
Maintenance	←_____																		
Erection of processing shed	_____																		
Erecting of processing equipment	_____																		
Sinking of wells and storage tanks	_____																		
Processing	_____																		
Drying of peels for animal feeds	_____																		
Market survey and advertisement	_____																		

BUDGET AND COST ANALYSIS

Production	Material	Qty
Target per group	land	30
Variety	TMS 4 (2) 1425	
Expected yield per Ha	15MT/Ha	

Target 30 Hectare per group = 90 hectares

A. Materials	Variety	Unit/Ha	Qty
1. Land	30	Ha	30
2. Cassava cuttings	TMS 4 (2) 1425	50 bundles	4500
3. Ploughing	-	2	2 x 90
4. Ridging	-	1	1 x 90
5. Planting			
5i Rapid Cassava Multiplication		Ha	90
5ii Conventional cutting		Ha	90
6i Herbicide	Pre-emergence	5lt/Ha	900Lt
6ii Herbicide	Post-emergence	10lt/ha(2ce)	900lt
7. Insecticide	Cutting treatment	5lt	100lt
8. Supply of vacant plots	TMS 4 (2) 1425	50	100 bundles

B. Labour

Operation	Qty	Unit of operation	Total qty
Ploughing	2	Hectare	180ha
Ridging	1	Hectare	90ha
Planting	1	hectare	90ha
Weed control	1	3	90ha
Harvesting	1	1	90ha
Transporting	1	various	1350MT
Processing	1	15MT/Ha	1350MT
Transporting	1	various	various
Packaging	1	various	various

Machineries Procurement

	Capacity	Qty/group	Total
Refurbishing of processing shed		2	6
Curinder	2MT/ha	2	6
Drier	5MT/ha	2	6
Chippers	2MT/ha	2	6
Packaging		various	various
Sealer		2	2
Bags		various	various

Marketing/Advertisement

Scouting for market through contact of various industries

COST ESTIMATES

Materials	Unit	Qty	Unit cost	amount
1. Ploughing	2	90ha	2000/ha	360,000
2. Ridging	1	90ha	2000/ha	180,000
3. Planting	1	90ha	2000/ha	180,000
4. Weed control	3	90ha	1000/ha (labour)	270,000
5. harvesting		90ha	5000/ha	450,000
6. Transporting		various	500/MT	67,500
7. Packaging		various		50,000
8. Miscellaneous	various			20,000
Sub Total				₦ 1,557,500

Materials	Qty	Unit cost	amount
Herbicide	1350lts	860/lt	1,161,000
Insecticide	100lts	200/lt	20,000
Cassava cuttings	4500 bundles	50/bundle	225,000
Grinder 5 MT/Ha	2(diesel)	170,000/unit	340,000
Drier	2	60,000/unit	120,000
Packaging	various	various	300,000
Market survey	various	various	50,000

Sub total ₦ 2, 216,000
 ₦ 3, 773,500

Grand total ₦ 3,793,000

AFRICAN UNION UNION AFRICAINE

African Union Common Repository

<http://archives.au.int>

Department of Rural Economy and Agriculture (DREA)

African Union Specialized Technical Office on Research and Development

2003

PRODUCING AND UTILIZING CASSAVA TO BOOST INCOME AND INDUSTRIAL GROWTH OF NIGERIAN ECONOMY. OYO STATE AS A TEST CASE

AU-SAFGRAD

<http://archives.au.int/handle/123456789/2701>

Downloaded from African Union Common Repository