



# Kenaf Production

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# INTRODUCTION

- Kenaf belongs to the family malvaceae.
- It grows up to 4m in height.
- It originated from Africa.
- It grows well between latitudes 45°N and 30°S.
- It requires temperatures of between 15° to 26°C.
- It requires rainfall of about 500-600mm spread over a period of 4-5 months.

# VISION STATEMENT

- Liberalization of our economy led to removal of subsidies on agricultural inputs.
- This has made it difficult for small-scale farmers to grow maize as a cash crop.
- This calls for Alternative Agricultural Enterprises such as Kenaf.
- With the resumption of operations at the Kabwe Industrial Fabrics (KIFCO) farmers are assured of local market for kenaf fiber.

# USES OF KENAF

- Making ropes
- Making fishing nets
- Making coarse sacks
- Making bags
- Making canvas
- Making paper and hard boards

# HISTORY AND GENERAL DESCRIPTION



- Kenaf is a common wild plant in Africa..
- There are differences between the wild and cultivated forms.
- Kenaf has slender stems which may be green, red or purple.
- The flowers are pale yellow often with a crimson spot at the base.
- The fruits are rounded capsules g containing numerous seeds.

# **RECOMMENDED VARIETIES**

## **B 18**

- This variety matures in about 150 days
- It is sensitive to day length and therefore it should be planted early
- It has high resistance to Anthracnose, but susceptible to root nematodes
- Yields are about 2.5 tons of fiber/ha

## **B/9**

- Matures within 90-120 days.
- It is so far the most insensitive to day length.
- It is highly resistant to anthracnose.
- It yields about 2-3tons of fiber/ha.

## **EX BG 52/75**

- It matures within 90-120 days
- It is highly resistant to Anthracnose.
- Yields about 2-2.5 tons of fiber/ha

# **PRODUCTION FACT SHEET**

## **Land preparation/Sowing**

- The land should be cleared of vegetation including roots of trees.
- The land should then be ploughed and harrowed to obtain a fine tilth .
- Seeds are sown directly in the soil at the rate of 28-30kg/ha and 15kg/ha for fiber and seed production respectively.
- The best time to sow is December to mid January

# POST PLANTING OPERATIONS

## **Weed control**

- Young plants usually grow rapidly such that weeding may not be necessary.
- Where necessary, weeding may be done 3 weeks after planting.
- Herbicides such as Treflan or Dual 720 EC may be applied before planting .

# Fertilizer application

- Fertilizer rates depend on nutrient components of the soil.
- Recommended rates are 200-300kg of compounds 'D' or 'X`.
- The crop may not require any top dressing fertilizer.



# HARVESTING OF KENAF



- The crop is harvested 3-5 months after sowing.
- The stems are cut at the ground level.
- The stems are then made into bundles of 15-20cm in diameter at butt end.

# RETTING AND STRIPPING

- Stem retting may be done in water.
- Sometimes ribbons (barks) are retted rather than whole stems.
- All in all stem retting is preferred to ribbon retting as at present.

# Gross margin analysis/ha

|                      | <u>Small scale</u> | <u>Medium</u> | <u>Large</u> |
|----------------------|--------------------|---------------|--------------|
| Yield (Kg)           | 800                | 1500          | 1800         |
| Gross Income (K)     | 430,000            | 806,250       | 967,500      |
| Total V.C (K)        | 29,500             | 550,375       | 575,250      |
| GM (K)               | 200,500            | 555,875       | 392,250      |
| B.E.Y (Kg)           | 427                | 1,030         | 1,070        |
| GM return on V.C (%) | 87                 | 46            | 68           |

# CONSTRAINTS IN PRODUCTION

- Pests and diseases
- Chemicals
- Machinery
- Credit
- Post harvest handling facilities

# Transportation, refrigeration and storage requirements

- This may not be a problem as KIFCO is ready to transport the fiber.

# **MARKET RESEARCH**

## **International markets**

- Japan, USA, Germany, France etc are the potential customers.
- In the US companies that buy kenaf products include;

## **Phytosanitary requirements**

- Being a fiber crop, it is expected that there is very little or no phytosanitary regulations.
- No quarantine may be required for kenaf products.

# **MINIMUM SHIPPING REQUIREMENTS**

- Shipping quantities vary from 20-400 pounds in weight per bale.
- The minimum shipping quantities would be a track load or shipping container load.

## **PRICES**

- Prices vary from country to country.
- It is thus difficult to quote the exact prices for kenaf products on the international market.

## **MAJOR PRODUCERS (Competitors)**

- Competitors include; USA, China, Thailand, Bangladesh, Nigeria, Soviet Union, South Africa, Egypt, Mexico, India, and Cuba.
- Within Africa competition may come from Nigeria, South Africa and Egypt.

## **Selling of kenaf products**

- Kenaf fiber may be sold through contracts.
- In Zambia the fiber is sold on per kg basis.
- Currently the fiber is fetching the same price regardless of the grade.

# **VALUE ADDED**

## **Type of middlemen required**

- Middlemen involved are those dealing in seed, chemicals and fertilizers (credit co-ordinators)
- When fiber is produced, businessmen may buy the product and then sell to KIFCO.

## **Kind of transportation**

- Kenaf products may be transported by rail or road.

## **Barter trade**

- KIFCO is ready to barter trade the raw material for inputs.