KWALE - QUALITY OF LIFE DEVELOPMENT PROJECT

SUMMARY

1. Darad farm execute the role of a nucleus facility for Kwale development, through

- 1. Collection
- 2. Storage
- 3. Marketing

of horticultural produce from Kwale outgrowers on commercial basis.

2. The schools approach to development to be used for extension to the outgrowers. Schools along two major road loops from Ukunda are to be used as the extension centres to the community.

BACKGROUND

The major economic activity in Kwale district is tourism. Its eastern border is the waters of the tropical Indian Ocean. The attractive scenery of palm fringed beaches, clear waters, marine life with a series of coral reefs and natural serenity attracts tourists from all over the world.

The Kenya coast is divided into three major tourist areas. Two major areas from Nyali beach to the south of Kilifi and the area between Watamu to Malindi and its environs form the "north coast", principally in Kilifi district.

The "south coast" in Kwale forms the third tourist area, ranging from Tiwi through Diani to Msambweni.

The tourist industry earned Kenya Ksh. 432m in 1989 (Economic Survey 1990 Sinclair (1990)). Although this is a large sum of money the benefits to the base districts is minimal. Economic benefits are reaped by foreigners and immigrants from other districts, towns and countries.

Generally the low level of education leads to employment in the lowly paid jobs in the industry. Secondly low production, unreliability has led to small producers being shunned by merchants who supply the industry in favour of more stable supplies from upcountry.

AGRICULTURAL POTENTIAL OF KWALE

Although shunned by suppliers, Kwale district has a land area of 832,700 ha.,

of which 776,700 ha or 93% can be used for agricultural activities. Table 1 below shows various agroecological zones in terms of agricultural potential.

 Table 1
 AGRO ECOLOGICAL ZONES BY POTENTIAL

| Area (000 Ha) | : | 832 |
|-------------------------------|------|-----|
| % Total | | 100 |
| Agricultural Area (000 Ha) | | 777 |
| % of Total | 93.0 | |
| Potential (000 Ha) | | |
| High | | - |
| Medium | | 120 |
| Marginal | | 147 |
| Range | | 530 |

Source: Kwale District Data Sheet (1983) adopted from Socio-Economic Profiles GOK/UNICEF 1990.

Thus the district has approximately 33% of its total land amenable to cropping while 60% is mainly range lands with 7% being forest, hills or not amenable to agricultural activity.

PHYSICAL CHARACTERISTICS OF KWALE

Kwale like all the coastal lands in Kenya is characterised by a coastal plain, a foot plateau, a coast range and a semi arid hinterland called the Nyika plain running parallel to the coast. The coastal plain is a narrow belt 10-15 km wide which does not rise above 50 m above sea level. The foot plateau ranges between 50 to 150m above the sea level. West of the foot of the plateau is the coastal range rising up to 400m. The Shimba Hills which form a part of this range in Kwale are partly covered by natural forest. At the western foothills of the coastal range is the Nyika plain. This is covered by bush vegetation, has poor soils and little rainfall. This land is suitable for drought resistant crops and as rangelands.

RAINFALL IN KWALE

The climate and rainfall of Kwale is determined by monsoonal air currents and influenced by the movement of ITCZ.

Along the coast the long rains occur in April and May and the short rains in October and November. The coastal plain and the coastal range receives a rainfall of 750 - 1250mm per annum. To the west of the coastal range the average annual rainfall diminishes.

According to Jaetzold, the coastal plain the foot plateau and coastal range are in Agroecological zone L2, L3 and L4, whilst the Nyika plain is in AEZ L5 and L6. All land in AEZ L2, L3 and L4 can be used for cropping.

NUTRITIONAL STATUS OF KWALE

Kwale agricultural production is poor and the district is considered at nutritional risk. Most of the people are undernourished and nutritional stunting is prevalent.

HEALTH STATUS OF KWALE

The most common diseases in Kwale are malaria, worms, diarrhoea, bilharzia, anaemia, respiratory infections, eye infections urinary tracts infections and accidents. Most of the diseases are preventable a large number are due to poor quality water and poor nutritional status.

EMPLOYMENT OPPORTUNITIES IN KWALE

A large proportion of the population is employed in agriculture and related agro-oriented activities.

Outside agriculture employment opportunities are in the public sector, tourism, private sector, small business, informal sector and migrant labour.

Exploitation of the available labour in the coastal area which is more productive than the hinterland is the basis for the development of Kwale.

DARAD FARM AS AN ENGINE FOR DEVELOPMENT OF KWALE

As the Nyika plains separate the coastal lands from the highlands in land similarly they separate the agricultural practices applicable in the different areas. The Darad Farm was instituted as a trial farm for suitable cultural practices for the production of fruit and vegetable to supply the tourist hotel market. The farm is attached to the Leisure Lodge.

With the facilities at the farm it can act as a focal point for collection and marketing of horticultural produce from Kwale district.

From the national point of view there would be an enormous saving of foreign exchange which is expended as fuel for trucking farm produce from upcountry to the south coast hotels. The loss for upcountry producers would be a boom for Kwale agriculture which would serve as the vehicle for development in the district. This would be fair for the district. This would be fair for the district would reap a reasonable benefit from tourist hotels based there.

The Darad farm in this scheme would be viewed as a nucleus producer taking in additional supplies from the surrounding farms as outgrowers. For ease, reliability and cost effective collection of produce from the farmers and distribution to the consumers would be a function of Darad. This would overcome the greatest problems facing Kwale producers which are transport and organized markets.

Darad farm has pioneered sustainable agriculture at the coast. It should continue this pioneer role in the experimentation of cultural practices particulary suited for the humid coastal region. It should serve as a model and a demonstration farm for any innovations in coastal agriculture.

DARAD REQUIREMENT TO FILL THE ROLE OF A MARKETER

Darad farm is situated at a strategic point in relation to the south coast tourist hotels and facilities. It would be an easy and convenient supply point to the hotels.

To fulfil the collection role Darad needs to provide trucks which would pick up produce from Kwale district. The distances involved are not large but the roads are treacherous when it rains. However a few major roads are all weather. It is along these that the collection points would be based.

Two collection route loops are envisaged. One loop starting from Darad farm at Ukunda proceed on tarmac to Mwanbugu turn-off then to Muhaka, Shimba Hills, Kichakasimba, Lukore, Mkongani Kwale, Kombani, Ukunda.

The second loop would be Ukunda Msambweni, Mafisini, Makambani Kikoneni, Mrima, Ramisi Msambweni Ukunda.

To facilitate effective distribution the produce must be held in adequate

storage to achieve stability in supply. This would also space out the collection timing from the out farms ensuring always a full load for the transports rather than partial loads collected at shorter intervals.

As the coastal climate is characterised by high temperatures throughout the year, annual average 22°C, and high humidity, food spoilage would be very rapid. To combat this spoilage for fruits and vegetables to be used in the hotels, cold houses are essential. Cold houses would effectively extent the shelf life of fruits and vegetables to a week or more as opposed to two days under the prevailing conditions.

Collection and distribution of produce by Darad should be at commercially viable costs.

APPLICATION OF SCHOOLS APPROACH TO DEVELOPMENT IN KWALE (See Appendix 1)

Basically the schools approach to development aims at changing attitudes and channelling new information into a community. Children are receptive to ideas and their future survival will depend on their ability to process scientific, technical and financial information which would be necessary for progress.

The schools approach to development can thus be instrumental towards forming inquisitive, receptive minds allowing new ideas and technical information to circulate freely. It would thus facilitate grey revolution as a precursor of the green revolution on the farming community.

Further as the majority of the present youth will find employment opportunities in agriculture and agro-based industries. The currently employed low technologies and state of knowledge would not be able to support this new influx of labour leave alone improve their standard of living. To alleviate the movement in towns, the young must be equipped to achieve a reasonable standard of living in the rural areas. This ideal can be achieved through training in the use of technical skills necessary to cope effectively in the rural area.

The school has a national catchment from which the children are drawn. Information imparted to the children in the school can quickly infiltrate into the community as the parents of children have a close association with the school. This association allows for an ideal forum for learning and participation in the school activities to be created. The school then becomes an asset for the community not only in the long run but in the short term too. Parents and students learn together and reinforce each others knowledge. The school can thus be used for the promotion of fruit and vegetable growing in Kwale to give a compliment of parents as outgrowers. Through the school approach by training students, teachers and parents in sustainable agriculture pioneered by Darad farm at the coast together with introduction of new technology on the farm to strengthen the subsistence base, the basis for development in Kwale would be laid.

THE SCHOOLS ON THE PROGRAMME

LOOP 1

| MWANBUNGO - SHIMBA HILLS | C 108 |
|--|-------|
| Muhaka Mwapala Jorori Msulwa Majimboni Shimba Hills | |
| SHIMBA HILLS - LUKORE | E 960 |
| Makobe Kichakashimba Mkanda Lukore | |
| TIRIBE KWALE | D 548 |
| Magwashini Tiribe Mkongani Bahakanda Burani Serezani Mtsangatamu | |
| KWALE KOMBANI | C 106 |
| Kwale Vuga Vinuni Matuga Kombani | |
| KOMBANI - UKUNDA | A 14 |

Tiwi Mwachema Ukunda

LOOP 2

| MWANBUNGO - MSAMBWENI | A 14 |
|--|-------|
| Galu Gazi Kenyatta Primary Msambweni | |
| MSAMBWENI - MWANANYAMALA | D 547 |
| Milalani Mwachande Kivulini Mafisini Kikoueni Masimbani Mwananyamala | |
| MWANANYAMALA - MRIMA | C 108 |
| Mamba Mrima | |
| MRIMA - MSAMBWENI | A 14 |
| Majoreni | |

Majoreni Ramisi

OUTGROWERS

With the schools as the focal points of penetration into the community, the basis of penetration into the community, the basis for establishing outgrowers is established. The parents from a given school parents association can select initial extension farms through a community based selection system (see appendix 2).

These selected farmers would serve as a foundation for the extension of horticultural production (vegetable and fruit) in Kwale.

It is sensible to start with a few contact farmers rather than an expansive array of outgrowers to enable Darad to sort out any marketing hitches which might be experienced in the beginning of the programme. Many a good project has failed due to the delay in establishment of marketing outlets. This has led to the rejection of any further participation in the programme.

BUDGET

- 1. Grant to Darad
 - 1. Purchase of suitable transport (two canters).
 - 2. Construction of cold storage.
- 2. 40 schools programme

| | | | PY1 (x 10 | 00) | | PY2 (x 10 | 00) |
|---------------|-------------------------|---|--------------|------|--------|--------------|-------------|
| Stage | e 1 | | 840 | | | - | |
| Stage | e 2 | | 1080 | 0 | | 5000 | |
| Stage BUDC | | | 1080 | | | 1080 | |
| 1. | 2 Col (Each 5 ton | t to Darad d storage units n unit 2.7 x 3 x 5m n produce | I | | | | Ksh. x 1000 |
| | 3ºC.) | | | | | | 3000 |
| 2. Kw | ale So | chools programme | 5 yea | rs. | | | |
| | | | | | x 1000 | | x 1000 |
| Stage | e 1 | Capital costs | | | 5938 | | |
| | | Operational cost | | 1569 | 3 | | |
| | | Total cost | | | | | 21631. |
| Stage | e 2 | Total cost | | | | | 30905 |

| Stage 3 | Total cost | | | 5375 |
|-----------------|--------------------|-----------|-----|--------|
| Overhead | Capital | | 440 | |
| | Personnel recurred | cost 1707 | | |
| | Transport | | 48 | |
| | Office Operation | 235 | | |
| | Total cost | | | 2430 |
| TOTAL PROGRAMME | | | | 63341. |