

TANA MANGO PROCESSING INDUSTRY

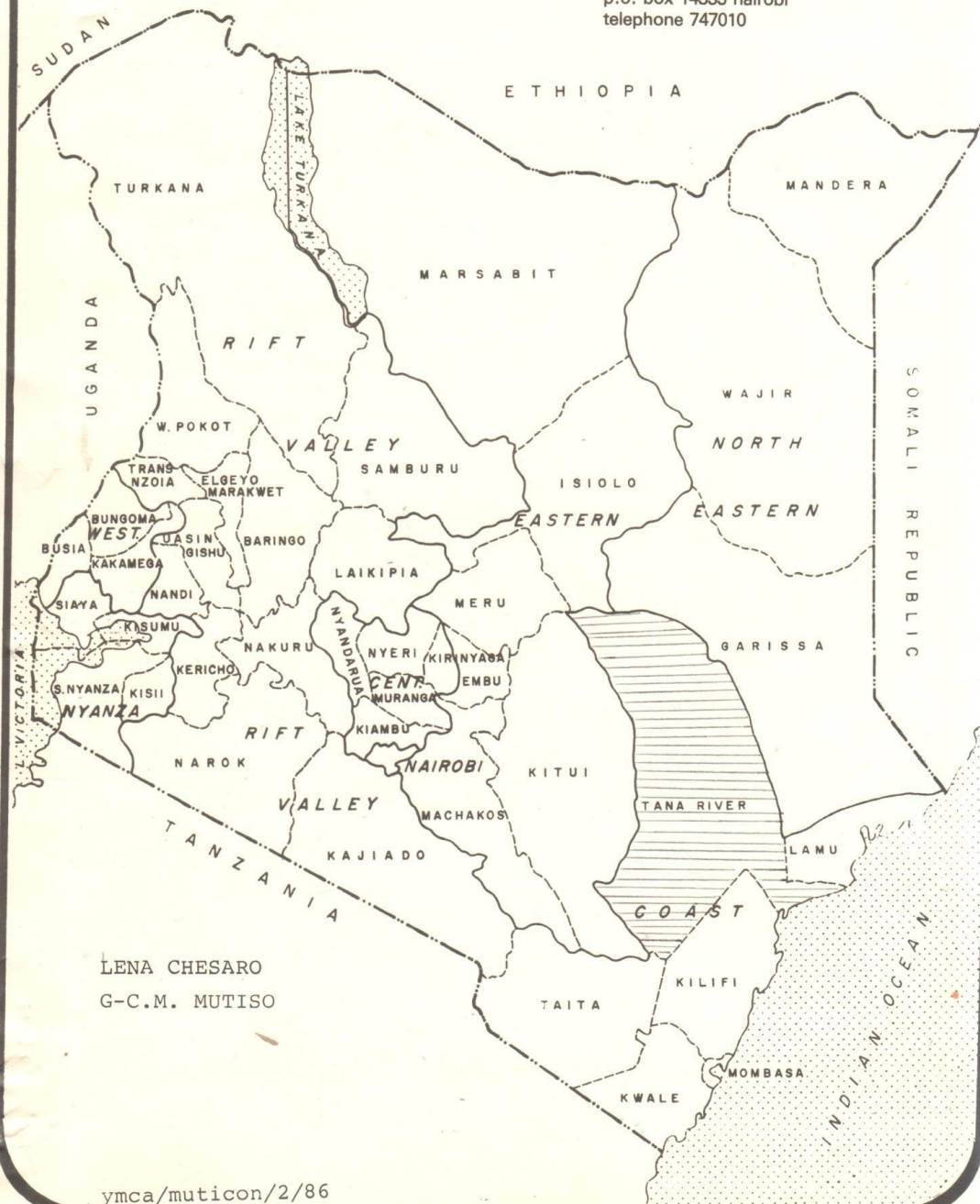


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Final Report Submitted to YWCA

by

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1. Introduction:

This report is an integration of two separate reports by Lena Chesaro and G-C.M. Mutiso. The separate reports were discussed with Kenya Rural Enterprises and Young Women Christian Association in a joint meeting. A further full-day review of the two separate reports were undertaken by the Acting National YWCA Secretary Mrs. L. Owiti and the National YWCA Program Secretary Mrs. P. Omondi and the two consultants.

This day long meeting was useful in clarifying some policy and organizational issues to the Consultants. We, the Consultants, recommend that the separate reports be circulated for they cover more details than is possible to include in this summary report.

Several further points need to be made in this introduction. To begin with, the Mombasa Branch of the YWCA has capable policy leadership as the office bearers come from diverse fields as social work, administration, banking, management of tourism industry etc. They are committed to the Tana Project. They however, should coopt volunteers whose background is food processing/marketing so as to ensure expertise in the sector at the policy level. Such individuals can easily be found in Mombasa and its environs as there are many professionals who would gladly volunteer their time.

The second point relates to the secretariat. The Mombasa Branch is possibly the busiest outside the National Office.

If they are to administer the data gathering and general information to make coherent decisions on the Tana Project, which has the potential for becoming bigger than the existing operations, the secretariat will need a person to handle this expansion for the Branch Secretary and Programme Secretary seem to have a full load.

We have chosen to deal with these matters at the introductory level for they are part of gearing for the project and need to be handled and soon.

Both the officials and secretariat will need to get on top of a lot of information for policy-making about the project on alternative technologies, markets, cargo handling, economics, government commercial and health regulations in Kenya and elsewhere not to talk about consulting reports! They must be able to digest this mass of information, discuss it with their members and then decide what they envisage for Tana Project in short and long run frameworks. They can only do this effectively if data is systematically collected. Besides, this will enable them to evaluate different proposals made to them by traders, consultants, and donors.

## 2. Conclusions and Recommendations:

1. A fruit growing, processing and marketing project run by YWCA women groups in Tana River to fulfil developmental and commercial needs is viable.
2. The project should not only be based on mangoes but must embrace other food products like citrus, bananas and pawpaws.
3. There should be two clear phases of the project. Phase One, to run for 3 years, ought to be improvement of seedling availability, introduction of better husbandry and handling (harvesting, packaging and storage) techniques, introduction of new products made at the home and group level and expansion of fresh fruit marketing overseas by intermediaries.
4. Phase Two of the project to begin in year 3, ought to concentrate on processing at home, group and factory levels as well as direct marketing by the groups and company.
5. To organize and manage the project, the YWCA should initially incorporate a company to handle grant funds and to employ the needed staff. It should be run on commercial basis.
6. Shares in the Company should be bought by women groups but each group must buy at least a share for each member. Men and individual women or companies should not be shareholders.
7. The price of a share should be K.Shs. 250.00.
8. To develop the project, YWCA will need at least the following personnel:
  - a. District Coordinator
  - b. Project/Production/Factory Manager
  - c. Field supervisor



- d. 4 Field officers
  - e. 1 Book-keeper
  - f. 1 Driver
9. The board of the company should have 11 members as follows:
- a. YWCA National Chairman
  - b. YWCA Mombasa Branch Chairman
  - c. YWCA National Secretary
  - d. YWCA Mombasa Branch Secretary
  - e. 1 Woman from each of the 5 Project locations
  - f. 2 Others appointed by YWCA Mombasa Branch.
10. YWCA groups should initially be given 6 months for purpose of raising share funds.
11. For purposes of soliciting donor development funds, both phases of the project ought to be costed, and planned together.
12. Commercial, marketing and financing details ought to be supplied by the marketing consultants to give finite and detailed data on:
- a. Unit costs
  - b. Operating plans and costs
  - c. Proper amortisation schedules
  - d. Proper identification of local and overseas markets
  - e. Different costs of pickled, chutneyed versus fresh mangoes, bananas and citrus fruit marketing chains.
  - f. Differential costs of the two alternative site (Malindi/Mijila) suggested per fruit/product.

### 3. Objectives of the Project:

The overall objectives of the project is to eventually create a structure that provides the women of the Lower Tana River Division with a support system that enables them to maximize the utility value and gain of resources available to them, and to enable them to become active participants, agents, and beneficiaries of the development process of their areas.

In more specific terms, the objectibes include inter alia:

To reduce losses currently incurred by farmers and to look for markets, usage and gain from the fruit crops;

Determine the technology that reduces women's domestic burdens and that which promotes women's potentials in order to improve women's income generation capacity to enable them to acquire a degree of economic independence.

Encourage grassroot measures to organize gainful employment scheme for rural women in fruit processing.

To create a situation where the women farmers are supplied with relevant technology, adequate inputs and reasonable machinery for production and marketing of fruits so as to fully contribute to their development and that of the Division by organizing marketing outlets.

To facilitate training that improves the productive capabilities of the members, and to create necessary attitudes that are conducive to the promotion of linkage with other economic activities in the area.

### 4. Project Location:

The project would be in the Southern Division of the Tana River District, which has three Divisions. It is one of the six Districts of the Coast Province. At its southern part are the Kilifi and Taita-Taveta Districts.

Kitui District borders it to the West. To the North is Garissa District, while Lamu and the Indian Ocean complete its borders to the east.

Administratively, Tana River South Division has Ndera, Salama, Bilisa, Ngao and Chara locations with 11 sub-locations. There are 28 women groups, twelve of whom are affiliated to YWCA.

The major occupation of the people of the South Tana Division, who numbered 35,000 in the 1979 census is agriculture. Women undertake agriculture as a major occupation and the only major source of income.

Women have formed groups at village level with membership ranging from 20-50. The Lower Tana is occupied by the Pokomo, and Orma mainly. The Pokomo have sub-groups like the Malachini, Mwina, Ngatsana, Yunda, Ngao and Kalindi which have settled in specific areas. The Pokomo are riverine agriculturalists.

The Orma, the second largest group, are predominantly pastoralists. A few are in the project area.

Other groups include Somali, the third largest group, Wata, Giriama, Wadegabra, Dorobo, Malakote, Waridehi, Korokoro and the Sanya.

There are 12 YWCA women groups. Other women groups have requested for affiliation to YWCA. Their activities include agriculture, handicrafts, small scale trading on tomatoes, fruits, firewood and agriculture produce.

Administrative Locations of the South Tana River Division  
and Their Women Groups

Locations	Sub-locations	Women Groups	
Ndera	Baomo	Mnazini Kitere*	
Salama	Wema	Wema* Kulesa* Hewani* Uvumbwe	Sera* Maziwa* Sailon
Bilisa	Garsen Kibao Alsa	Peponi Garsen	
Ngao	Tarasaa	Ngao YWCA* Ngao W. Group Tarasaa Hiari* Mazingara Dalu Oda*	Majaribio Golbanti* Kibusu* Idzowe*
Chara	Kipini Semikaro	Kipini Kao Ozi Nduru Semikaro Wazi	Kilelengwa Mpeketoni Ngava Shirikisho Chamwanamu

\* Denotes YWCA groups as at December 1985.

#### 5. YWCA Objectives:

The objectives that guide the activities of the women of the South Tana Division of the Tana River District are mainly those of the organizations they are affiliated to. YWCA constitution states,

"The Association believes in God the Father Almighty and in Jesus Christ His only Son our Lord and Saviour and the Holy Spirit, and has the following purposes:

- a. To build a fellowship of women and girls devoted to task of realising in common life those ideals of personal and social life to which the members are committed in faith as Christians and in this endeavour. The Association seeks to follow Jesus to share His love for all people and to grow in the knowledge and the love of God.
- b. To promote community service amongst all people and to encourage formation of groups and branches of the Association.
- c. In furtherance of the above object, the Association shall have power to raise money by public means and to accept donations and gifts and to borrow money to ensure financial support for the Association's work to secure or discharge any debt of obligation of or binding on the Association by charges upon any of the assets or properties of the Association.
- d. To do all such other things as may be conducive or incidental to the attainment of the Association's objects".

#### 6. Long Term Objective of the Tana River Women Development Programme:

In fulfilment of the above mentioned objectives, the YWCA initiated the Tana River Women's Development Programme with the following objectives:



- a. "To improve quality of life of Tana River Women and through them their families and community through development programmes e.g. skills training, modern farming, access to clean water, literacy, appropriate technology devices, children's programmes etc.
  - b. To help prepare them for the approaching time when they will have both opportunity and responsibility for making decisions which will help shape their own future.
  - c. To ensure that the new programmes with rural women may become self supporting through income generation activities within the country."
7. Short Term Objectives of the Tana River Women Development Programme:
- a. "To provide the staff with offices and housing with enough accommodation to enable them to live and work comfortably and efficiently.
  - b. To provide facilities for conference, seminars, courses and meetings for the much needed education for women in Tana River District and other people who may need such facilities."
8. Agencies in the Division That Assist Women:

The Kenya Government through the various ministries, especially that of Agriculture and Culture and Social Services assist women in the Division.

Local leaders, councillors, religious leaders and Kanu leaders recognize that women have potential and are a strong force behind women activities that are undertaken. Hardly a women group exists without close contact with leaders who continually sustain the women interest in development.

The National Council of Churches of Kenya through its Village Improvement Programme, in conjunction with the Ministry of Agriculture, give direct technical and material input to the women and the people of Tana River South involved in irrigation. NCCCK also provides health services.

Maendeleo Ya Wanawake Organization has a large membership in the area.

Family Planning Association of Kenya has a branch in the division. Tototo Industries give direct input to the women's groups in terms of technology and materials.

The YWCA, which is the most known NGO by women and men alike, has a high reputation through its assistance to women's groups.

9. Activities of the Women in South Tana Division:

In this division, women apart from undertaking their duties to the community as mothers, wives and community participants carry out income generation projects.

They mostly engage in agriculture, planting horticultural crops for sale. In all villages, agriculture is the premier income generation activity for women.

Handicrafts production and marketing is also a major cash earner. Petty trading in tomatoes, porridge, mangoes, firewood also fetch some money. The community is rich in traditional skills. This is portrayed in the varieties of handicrafts produced all over the division. It is to be noted that the products mentioned are made mostly by Pokomo, Somali, a few Orma and Swahili.

In the following table are mentioned crafts that can easily be produced with locally available raw materials using traditional skills. The crafts names are in English, Swahili and Pokomo.

Talengo	Matresses	Straw mat	Walking sticks
(Misarafa)	Baskets	Palm leafmat	(Visigo)
(Mahanga)	Bed covers	Table clothes	(Kawa)
(Kipunju)	Hats	Knit work	Tray
(Mkubfu)	Table mats	Brooms	(Kipawa)
(Kihumba)	Pots	(Kumba chungu)	
(Miyaa)	Patche work	Cooking sticks	
(Misali)	Bead work	(Kitunga)	(Ufigo)
(Usitu)	(Kipindo)	Fan	
(Kifumbu)	(Ukili)	Mat lining	
Ropes	(Toto)	(Ulingo)	
		(Ukanda)	

Generally, there are quite a large variety of crops that do well. These include:

Maize	Cassava
Beans	Mangoes
Cowpeas	Pawpaw
Potatoes	Sugar cane
Sweet potatoes	Onions
Bananas	Rice
Green grams	Avocado
Tomatoes	Quavas
(Sukumawiki)	Pepper
Simsim	Cashewnuts
Spinach	Sorghum
Cabbages	(Biringanya)
Tobacco	(Vibali)
Coconut	(Mikaju)
Cotton	(Mabenda)
Pumpkin	(Mayungu)
(Matabali)	(Mitambuu)
(Matango)	

Women do not own mangoes. The trees are mainly inherited by the male heads of the family. Men, women and children have use rights on the mangoes.

The women spend most of their time in agricultural work. Their contributions however is not quantified as there are no statistics showing Kenya rural women's contribution in agriculture.

In the coastal districts, especially at the South Tana Division, women contribution to development has been affected by the culture. Little significance is attached to the education of girls by their parents. Among both the Pokomo and Orma communities, men dominate the system of knowledge, they control the financial system and to a large extent control the social system of the community. This situation is one of the major constraints affecting agricultural productivity, the contribution of women to general development and women's role as beneficiaries of development.

Women have the responsibility of tilling the land and handling all the housework chores without adequate education, without knowledge of appropriate technologies, without finances and decision making power. It is obvious that there is potential for the development of the district locked up in cultural and religious taboos that are no longer beneficial to the community.

#### 10. Mangoes in South Tana Division:

Men handle mangoes sales mostly. Some women handle the sales.

Major buyers of mangoes in Tana River South are agents of distant traders. Local Arabs, Mombasa traders and Indians are known to be the main buyers.

In Tana River South Division, there are scattered plants that affect the production and marketing of mangoes.

The Catholic Parish of Wema with the help of an agronomist, plans to start up a demonstration fruit and vegetable nursery. Mangoes will be included.

The Ministry of Cooperative Development showed interest in mobilizing the farmers to pool their resources in order to benefit more from mangoes farming.

The A.F.C. too is available to give loans to any viable agricultural venture.

Table II shows average ownership of mango trees.

Women's Groups	0-5	6-10	11-15	16-20	21 and Over	Average Income From Mangoes Per Year
Maziwa (23)	X					N/A
Kibusu (28)	X					K.Shs. 614
Sera (18)	X					K.Shs. 30
Kulesa (20)	X					K.Shs. 926
Hewani (13)		X				K.Shs. 123
Idzowe (32)		X				K.Shs. 556
Golbant (29)		X				K.Shs. 127
Wema (49)			X			K.Shs. 1,847
Hiari (18)			X			K.Shs. 111
Kitere (38)			X			K.Shs. 294
Oda (26)			X			K.Shs. 168
Ngao (29)			X			K.Shs. 639
Semikaro (23)				X		K.Shs. 3,219
Kipini (36)					X	K.Shs. 119,392



From Table II, the average number of trees per member does not exceed five at Maziwa, Kibusu, Sera, and Kulesa villages. In Hewani, Idzowe and Golbanti, members have on average five to ten trees. Around Wema, Hiari, Kitere, Oda and Ngao, people on average have 10-15 trees. In Semikaro, the average is 15-20 trees and at Kipini where the average is the highest, there are about 26 trees per person.

The same table shows that it is at Kipini where the average income per member from mangoes per year is the highest. It is over K.Shs. 119,000 followed by Semikaro, Wema and Idzowe recording not less than K.Shs. 2,000 per person per year. Ngao, Kulesa and Kibusu reports over K.Shs. 400. In most of villages (7), despite the usual impression that mangoes are very many, farmers report receiving less than K.Shs. 300 from mangoes per person per year on the average. This underscores the need to plant more mangoes.

#### 11. Problems Affecting Mangoes Activities as Seen by Women:

Drought is seen to be a major problem affecting the yield of mangoes. Excess rain during flowering time reduces fruit yield.

When there is drought, fire is a big danger. Wild animals too eat the fruits. Insects affect them at times.

When there is a good harvest, there is no stable market. Middlemen collect fruits without paying and do not return to pay. Some harvest fruits especially those belonging to widows and elderly persons. When harvested, there are no storage facilities that delay ripening.

The high cost of transportation reduces the income from mangoes.

During floods, transportation becomes a problem due to impassable roads. Riverine transportation is also hazardous because of dangerous animals like hippos and crocodiles.

There are also large logs that can easily knock down canoes.

The farmers get indebted to the buyers due to the practice of paying large sums of money for unripe fruits (uncounted). In essence, the fruit tree is leased for a harvest season or two. Women see this as a kind of slavery.

Varieties of mangoes like the Dodo, Punda, Baribo etc. bring no financial gain, since buyers claim there is no market.

Wastage occurs when mangoes are neither used nor sold. Weeds affect mango yield and proper cultivation is essential before planting hence there is need for teaching proper land preparation.

12. The Beneficiaries of the Proposed Mango Processing Industry:

The beneficiaries, according to the 23 field workers and 97 leaders of the division, will be a large number of people from the community. The following is the detailed view of the respondents.

MEN, who usually are in charge of selling mangoes, will have their transportation problem reduced. They will enjoy good income which will accrue from a better organized buying agent (YWCA) who has no intention of swindling the farmer. This situation will enable farmers to employ more workers (men) to plant more mangoes.

WOMEN will, apart from being owners and managers, enjoy the opportunities for employment. The industry will earn them some money from the sale of mangoes and other fruits so that in the end, there will be significant economic advancement of women creating self reliance, self confidence and a sense of value in society.

CHILDREN will benefit through their parents. When parents gain financially they are able to satisfy home requirements.

The parents will be able to improve the school facilities for their children. During holidays, children will help their parents in making handicrafts that could be sold.

FARMERS in general, in Tana River South Division will benefit from getting a sure constant market for their mangoes. They will for once gain true value of their fruits and will in turn be encouraged to make full use of the land available to them so that they may expand not only mango growing but agriculture in general.

PEOPLE WITHOUT MANGOES will enjoy, together with all other consumers, high quality, hygienically processed fruits at a reasonable rural price.

GOVERNMENT will earn taxes and foreign exchange when processed or fresh mangoes are exported. At Tana River an average of higher per capita income will be realised. Rural-urban migration and unemployment, a problem Government is worried about, will be reduced and the people of Tana River will enjoy higher standard of living.

THE COUNTY COUNCIL will earn higher transport cess and other taxes from increased commercial activities in the area. From the acquired abilities of leadership by both men and women, local leadership quality will improve with the residents having better political insight to elect good leaders.

BUSINESSMEN dealing with mangoes on getting reliable services from the industry will increase their commercial activities and employ more people providing them with higher purchasing power. In consumer areas, businessmen will enjoy supplying well selected products of mangoes.

LEARNED SKILLED PEOPLE will find employment and market for their produce.

THE ELDERLY AND YOUNGEST PEOPLE will enjoy a higher quality of life with their relatives earning more.

THE YOUNG PEOPLE will inherit a fully developed property.

THE ENTIRE COMMUNITY of Tana River South will enjoy the pride of achievement having established and managed a plant that the entire country would enjoy its fruits.

13. Organization of the Beneficiaries: Respondents' Views:

In the view of interviewees, the beneficiaries are varied groups ranging from the farmers to the consumer.

Out of the 11 administrative officers who responded, six suggested that YWCA should handle the work, three suggested a cooperative society, one suggested a Company while one did not respond.

Eighty four leaders from the Division responded to the ownership question, they were asked to give three best suggestions, 71 responses suggested that the cooperative form of business is the only acceptable business form in rural areas for it has the Government support and supervision is done frequently. It was felt further that the cooperative bank loan requirements are reasonable and that a cooperative will not discriminate. Further more, a cooperative will get rid of middlemen who have been the main beneficiaries of the mango trade. It is believed that a cooperative has a system of fair distribution of profits.

Of the women members of YWCA, 336 responded to the question of ownership, only two said they would not like to have shares. The following table shows preferred share prices.



## Suggested Level of Share Contribution

Shares in Kenya Shillings	No. of Responses
10 Kenya shillings	46
50 Kenya shillings	49
100 Kenya shillings	52
200 Kenya shillings	50
500 Kenya shillings	5
1000 Kenya shillings	32
2000 Kenya shillings	6
5000 Kenya shillings	12
10000 Kenya shillings	2

From the table above, it can be seen that the 334 respondents prefer to pay an average of K.Shs. 443 in form of shares. 34 leaders responded to the same question out of whom 5 said they were not interested. 29 were positive with an average of K.Shs. 363.

The following suggestions were given as ways and means of how the potential beneficiaries can acquire shares in the proposed mango venture.

<u>Suggestions</u>	<u>Respondents in favour</u>
1. Beneficiaries to work in the industry and have their salaries deducted to meet share requirements.	197
2. Would like the beneficiaries to make handicrafts and sell them at the industry or elsewhere either as a team or singly, to raise shares	47
3. Potential beneficiaries should deliver mangoes and build capital through being paid partly.	46



<u>Suggestions</u>	<u>Respondents in favour</u>
4. Women to grow and sell vegetable and fruits either jointly or separately at the venue of the mango venture and shopping centres.	28
5. The women's groups should carry out fund raising campaigns to raise funds for all the members through Harambee, dances, etc.	31
6. Leaders suggest individual potential beneficiaries should raise their own capital in their own way.	26
7. Women suggested carrying out small businesses like selling onions and tomatoes.	13
8. Members of one group to raise funds for one another.	9
9. Leaders and women suggest loans to be taken and used to start the industry, then members work work with salary deductions until the loans are repaid.	14
Other suggestions from members of YWCA and leaders include the following:	
10. Women to build and rent houses.	
11. Women groups to rent land and cultivate jointly.	
12. Livestock to be contributed as shares.	
13. One could work elsewhere (contract) to raise money.	

14. Women to form cooperatives that buy mangoes and sell to the industry.
15. Individuals and women groups to separately and jointly make and sell clothes, bread, firewood and agricultural goods.
16. Potential members should grow more mangoes to be able later to buy shares.
17. Women's groups should buy shares on behalf of their members.
18. External donors should be approached for aid.
19. Government should be approached for aid.

14. Technical Resources Available in the Community for Use:

The level of education among the membership is quite low. The majority of the members in Kipini, Semikaro, Ozi have not acquired any education. The Adult Education Department is not very active in the division. Due to this situation, only general labour could be derived from the women.

Within the District, there are three village polytechnics, one at Tarasaa, one at Ngalu and one at Hola. The table below shows 'skilled' manpower within the Division. In the division, there are only maize grinding mills at Kipini, Wema, Kulesa, Garsen and Ngao.

Table of Skilled Manpower in Tana River South

Sub-location	Name	Skill
Kipini	Hiriba	Stone cutter
Kipini	Ismael Omar	Motor mechanic
Kipini	Rhamadhani Dheyee	Making doors
Kipini	Abdul Rehemani	Mason
Kipini	Mhamad Athman	Carpenter (doors)
Kipini	Sotoru	Grinding maize
Kipini	Bohola Tono	Carpenter making doors
Kipini	Many women	Making handicrafts
Kipini	Abdala Mgona	Making palm leafs, roofing materials
Garsen	Mbarusu	Blacksmith
Garsen	Jilo	Tailor
Garsen	Hussein	Mason making furniture
Garsen	Paskal	Mechanic
Garsen	Sakaria	Beehive making
Garsen	Mwanga	Radio repairer
Garsen	Hussein	Watch repairer
Garsen	Hobwolo	Mason
Ngao	Omar Said	Grinding maize
Ngao	Shadrack	Making clothes
Ngao	Hangerera	Tailor
Ngao	Charo Masha	Tailor
Ngao	Twewako	Mason
Ngao	Mushinda	Mason
Ngao	Badili	Mason

Sub-location	Name	Skill
Ndera	Haluva Mara	Potter
	Maro Banisa	Canoe builder
	Gomora Hirbao	Making pounding tools
	Mfurweni Wayu	Uteo (palm leaf trays)
	Dhodho Mara	Making mats (straw)
Tarasaa	Women	Make handicrafts
Wema	Soka	Mason
	Martin	Basket making
	Zakaria	Mason
	George	Mason
	B. Dhidha	Mason
Ozi	Bakari	Tailor
	Kimeya Faraji	Carpenter
Semikaro	Kafo Galama	Carpentry
	Hiyssa Ali	Tailor
	O. Saidi	Tailor
	Bakari Salim	Tailor
Ozi	Amisi	Tailor
	Salimu	Making milking gouds
	Bakari	Shoe-maker
	Shehe	Hat-maker
	Said	Making mattresses
	5	Making mats

15. Possible Impact of Projected Increase in Income on the Beneficiaries:

To achieve an impact on the mango activity, there will have taken place a variety of activities by various categories of people at the division. Such activities will put together the people of the South Tana Division to work jointly for one goal. The following are the likely impacts:

SOCIALLY the increase income will reduce financial stress on the heads of families so that family and village problems (domestic) arising from earning low income and being frustrated will be reduced.

Working together for a common goal and achieving an increase in income, the beneficiaries will mutually support each other, building confidence for tackling more complicated development activities. There will be released more community vigour to work out of the experience of working together in the mango venture. Men, women, children, villagers and all beneficiaries having cooperated together will enjoy a sense of belonging.

Improved incomes and self esteem satisfaction should lead to greater social interaction. Such a level of interaction should generate demand for social facilities.

It is foreseen that socially the place will change for better with residents having some sense of value for one another, a situation that is a precondition to planned development.

Women who are disadvantaged, both culturally and financially, will for once enjoy much respect having initiated a successful activity. They should manage their affairs with higher managerial confidence having acquired the leadership and managerial skill practically.

ECONOMICALLY: With the introduction of processing plants, market outlets, sources of transportation and training facilities which are some of what is expected of this venture by those concerned, there will be more employment in the area. This will increase per capita incomes.



There will also be realised through training and by experience a higher qualified group of technicians and managers who will assist in programs which minimise loss of food that has always occurred due to lack of proper planning and implementation of harvesting, processing, storage and marketing of agricultural produce.

The beneficiaries will without doubt improve their farms. With savings, the beneficiaries will be able to buy shares either at the mango industry or invest elsewhere.

The presently predominant subsistence economy will shift to a commercial economy that will, through higher earnings, cause a higher standard of living.

Generally, there will be realised development with more schools, and social facilities constructed. The success of the mango industry will be a springboard for further development in the area.

Due to improved standard of education, there will emerge higher ability on selection of leaders. There will be a general understanding and value for good leadership that appreciates community leadership of non-politicians.

16. The Role the Beneficiaries Would Play in the Mango Industry:

Delivery of raw materials is the major task of the beneficiaries. They will work as employees of all levels ranging from ordinary labour to managerial and technical level staff on acquisition of abilities. Farmers, women and traders will deliver mangoes to the factory. On realisation of the benefits of the industry, farmers will grow more trees. Women's groups may also have group owned mango estates.

The women may jointly buy lorries to transport mangoes. They will improve storage and handling practices.

17. How Beneficiaries Would Earn More Income from Mangoes:

There is a general impression that farmers have not exploited the soil by growing enough mangoes. It is suggested therefore that the Division should insist that all primary schools start mango and other fruit nurseries. The Ministry of Agriculture should teach both young and old the best ways of handling mangoes. This will enable more people to grow more mangoes using modern technology in order to earn more from the sale of the fruits.

Women's groups would cultivate farms for mangoes and other crops communally at village level. They would introduce other varieties of fruits and vegetables that would improve their farm incomes. All efforts of production should aim at higher quantity, quality and eventually higher incomes from fruit farming.

There would be need to provide transport, storage facilities and acceptable chemicals. Storage facilities will reduce wastage. Using correct chemical inputs will reduce pests. On achievement of the above, there would arise need to seek for better market starting with the local ones and avoiding marketing interventions by middlemen. It will also be essential to seek ways and means of reducing animal destruction of fruits.

## 18. Incomes:

The following information was derived from the village leaders. 23 out of 31 responded.

## Annual Income for Men and Women

	K.Shs. 0-5000	K.Shs. 5001-10000	K.Shs. 10001-15000	K.Shs. 15001-20000	K.Shs. Over 20000
Men	9	2	2	0	2
Women	11	1	0	0	0

The majority of the people of Tana River South earn less than K.Shs. 5,000 in a year, i.e. less than K.Shs. 416 in a month.

This figure however, is too high for the average women to earn. In the month of July, August and September 1985, the members of YWCA reported having earned between Shs. 8 and Shs. 1,527. At Semikaro, Idzowe, Kulesa, Hiari, Ngao, Sera, Maziwa and Hewani, the average monthly income from all activities by women is less than K.shs. 100. At Kibuso, earnings are below Shs. 500. It is only at Oda, Kitere, Kipini and Golbanti where the average monthly earning was reported to be above K.Shs. 500 but less than K.Shs. 2,000.

## 19. Organization of the Beneficiaries; Consultants Recommendations:

Considering the reasons given by the respondents for the kind of organization that would be adopted for the running of this venture, looking at the advantages and practicality of both the cooperative system, the YWCA and the women groups, the recommendation is that a rural women's income generating company be formed by YWCA. That the YWCA continues to be the trustee of the venture until such time that the venture is fully operational. The following are suggestions of the components of the organization.

1. That the ideas of cooperative operation should be incorporated in the company, omitting whatever is seen to be detrimental to the company.
2. That a Board of directors be drawn from National and Branch YWCA offices and from all five locations in South Tana River Division. Each location is to produce one Board member.
3. That the general meeting of the shareholders become the supreme authority of the company.
4. That the YWCA provides leadership training, managerial training, provision of field services, the marketing of the products, processing and storage facilities, transportation facilities and technical requirements for the administration of the company. That all the above services be provided through departments of the company that operates in a commercial manner.
5. That while YWCA utilizes commercial practices to produce the regulations governing the operations of the industry and subsequent activities, the view and suggestions of the women should be incorporated.

20. Possible Ways of Beneficiaries Owning the Industry:

It became difficult to determine the abilities of the potential beneficiaries to own the industry without having a finite report from the commercial consultants on how much the project would cost. However, the respondents were given options on how much money they would like to give as shares. The response ranged from K.Shs. 10 to Shs. 10,000. Majority of the members suggested that they pay Shs. 100. 50 members suggested Shs. 200. 197 out of 254 respondents



wanted to pay from Shs. 10-200 each. Only 57 suggested paying Shs. 500-10,000. The average amount is Shs. 443. The leaders that responded suggested paying an average of Shs. 363. Considering the range of the abilities of the majority of members, the level of income of women as was found out, a level of Shs. 250 per share per person would be reasonable.

The women groups would be allowed to buy as much shares as they would like so that the company would generate capital.

21. Capital to be Raised from Women:

In 1979, the population of Tana River South Division was 35,000. In 1986, at the understood 4% increase, the population is 46,000. Women would form  $\frac{1}{2}$  of this, i.e. 23,000. When  $\frac{1}{3}$  of the elderly, young and disabled women are reduced, one remains with 15,000 active women capable of raising Shs. 250 each for one share. If each bought just one share, Shs. 3,750,000 could be raised.

It was observed that even none YWCA members are interested in buying shares on the grounds that they did not know of the way to become members and that YWCA is operating with very few groups, that they should involve more women in their activities. This was proved when sub-DDC persuaded YWCA to visit Kipini and Semikaro areas where on visiting, 10 more groups requested registration.

Although the average income of women per month is very low, there were indications that the men will pay for their wives. At Kibusu, one old man paid Shs. 100 for his wife to demonstrate willingness to pay. However, many ways and means were suggested that would complement the direct cash share contribution by members. The following are the 6 most recognized approaches as per the 411 responses.



## 22. Available Human Resources for Development by Industry:

The members of the YWCA who expressed willingness to be employed in the industry are a potential human resources for development. This is in consideration of the main objectives of the activity the consideration of the poor situation of women and the abilities women in Tana River have portrayed in working together.

Technicians having relevant qualifications to what would be needed for a mango venture may not be obtained at Tana River. However, people with basic skills and industrial interests could always be trained. Priority in employment should be given to the people of the South Tana Division so that they may get the required skills, abilities and experiences.

School drop outs, majority of whom are girls, also form potential young trainable human resources in the area who should be given priority while considering semi-skilled manpower requirements. Boys, who have completed Form IV and are available for employment are more than girls at Tana River Division. 54 are known and the majority are in Bilisa and Ngao locations.

Outside the academic fields are people with attributes that would be useful in the Industry. The leaders stated that:

1. Mango farmers themselves have experiences which need to be used to improve the quality/quantity of mangoes produced in the area.
2. The already established farming groups and village life style could be used to form collection centres.
3. The traditional mango spicing and drying could be exploited so that the art is used for drying mangoes at village level so that already dry ones are packaged and marketed.

4. The people who collect and sell mangoes are a potential experienced resource which could be used to collect and deliver mangoes to the plant.
5. The canoe manufacturers and river transporters are a resource that is already trained and are potential for training to use modern boat transport in the river.
6. Women having sold mangoes, other crops and handicrafts have marketing experience. Their village group kiosks could form distribution point for local consumers.
7. The level of education of many people make them available for unskilled labour while their village lifestyle is by itself an advantage in organization as they are used to working together.
8. The Indians, Arabs and rich merchants within the community though viewed as exploiters by the producers are a source of trading experience.

23. Other Income Improving Activities; Respondents' Views:

400 members responded to the question on activities which would improve incomes. The leaders also gave their views. The following is a list of suggested income generation activities in order of members' own experiences and those of the 98 leaders. The order of preference was reached through the use of the 98 leaders' responses.

1. 52 out of 98 leaders suggested that handicrafts had the greatest income earning potential. This includes small industries like pottery, dressmaking and tie and dye work.

2. Vegetable growing (either individually or communally in villages) had 49 respondents. Elsewhere (in the country) vegetable growing is the highest income earning activity for women.

The leaders, government officials, YWCA members and village elders felt that women growing mangoes in large estates in their villages with the use of tractors will ensure higher success. The village elders felt that with added irrigation, support and training from the Ministry of Agriculture and YWCA, the women would soon produce enough for export.

Members suggest communal cultivation (cultivation by contracting teams) of rich farmer's plots for group income.

3. Third on the list of priorities is keeping poultry. 45 responses supported this project with emphasis on traditional poultry.
4. Building rental houses were suggested by 22 leaders, and members. The demand of rental houses at villages for Government staff and residents has pushed the rent per room to Shs. 100 per month.
5. Running of kiosks at village level for supplies of charcoal, tea, food, firewood, vegetables, fruits, porridge and handicrafts was suggested by members quite strongly. 22 leaders had the same opinion.

#### 24. Creation of the Company:

For women to enjoy the fruits of the venture as beneficiaries in a fuller manner, they should be accorded the challenge of owning the company. The management of the company could be hired and women after training should be given priority to be the employees of the industry whenever they qualify.

To supplement the benefits women would reap from the industry, it will be essential to consider other fruits produced in the area for production, processing and marketing.

It is recommended therefore that YWCA create a company that will run with borrowed cooperative practices and initial management should be hired to form the nucleus of the company.

25. Shareholding in the Company:

Many people, in all meetings unanimously said that they are ready to buy shares as soon as direction and amount is established. This therefore suggests that the costs of the intended venture could be established so as to determine the average shares available for sale to the potential beneficiaries. The conditions of success depends on:

1. The YWCA groups being given a fixed minimum figure, that is expected of every member and the deadline for the collection of shares. In this way, the potential beneficiaries will buy shares and own the industry.
2. For those groups who do not manage to raise the minimum shares and are employable, their group shares would be deducted on monthly basis from their salaries.
3. Considering the abilities of the beneficiaries, it is evident that enough funds may not be raised for a reasonable operation. In this case, an external source would be sought (from donors, Government of Bank) to top up the collection shares in order to start up the company. The loan or donation would then be used. The members produce could be supplied with a part of pay being withheld for purposes of purchasing shares.



#### 27. Commercial and Developmental Activities Interaction:

The Branch officials and Secretariat are clear that the main rationale for the Tana Project is to contribute to the development of Tana women first, the community second and generate income third. It is clear that their preference is a project system which will involve women at the ground level and thus have spill over effects in the community which are not just commercial. This view is shared by the district administration and local communities.

Given this preference, the project must not be:

1. Mono-crop based;
2. Only continuing processes which have taken place in the past which are perceived by the YWCA officials, secretariat and district administration and communities as exploitative.

The Agricultural Report concentrates on mangoes only. This is not in keeping with the preferences found in the field. Preference was for improving and getting the project to handle all fruits. But, at a minimum, mangoes and bananas must be the centre piece of the project. This must be clear to all and sundry who have anything to do with project design.

The second point is that organizing project entry in terms of just packing mangoes (albeit with improved handling in harvesting, packing, and storage) was seen by those interviewed as continuing commercial relationship which in the past have led to Tana people not benefiting much. Of course the Agriculture Report does not specify a marketing chain. This it must do for all varied products like fresh fruit, dry fruit, chutneys and pickled products. Profit margins for the sale of fresh fruits and that of processed fruits need to be shown as it is essential for decision making.



26. Other Alternative Income Generating Activities Ranking:

The activities that would bring more income to women in Tana River South Division are those activities needing little special techniques, little input and could be carried out around the homes. In order of priorities, handicrafts, vegetable growing, poultry, rabbit and bee-keeping, building rental houses, running village kiosks and small scale industries like bread making are viable alternatives.

Starting with the skills and materials known and available to the women, a parallel activity to the fruit industry either at a centre or at a village could lead to significant incomes.

Products like the following could be produced locally:

1. Soap
2. Clothes/dresses/suits/children clothes/uniforms etc.
3. Pots/ceramics/models/modern clay jikos etc.
4. Mirrors/umbrellas/glippers/belts/buttons etc.
5. Hair dressing/beauty saloons/keep-fit exercises
6. Embroidery/mackramay/crochet/knitware
7. Juice/chutney/saltextraction/oil production/food drying and packaging/bread making/biscuit making etc.

Conceivably, a marketing system could be set up so as to guarantee a decent price, but, project entry through just improving collection and packing (especially at Malindi) will be hard to sell to Tana people. It denies the developmental aspect and only supports commercial interests outside the district. All plant must be in Tana River. It is therefore suggested that the following be the sequence of the project activities so as to maximize both the developmental and commercial concerns.

Phase I, Year 1 to Year 3

1. Establishment of the company/recruitment and training of the relevant staff.
2. Acquisition of fruit tree nurseries by project in all riverine settlements.
3. Introduction of improved seedlings and husbandry (including harvesting, packing and storage techniques) by project.
4. Introduction of making of chutney and pickled products at:
  - a) Homestead
  - b) Group levelfor Kenya market by project.
5. Expansion of fresh fruit products marketing overseas by intermediaries.

Phase II, Year 3 to Year 7

6. Introduction of group produced wood/(solar?) dried fruit products to local and overseas markets by intermediaries.
7. Intermediary overseas marketing of chutneys and pickled products.

8. Direct project marketing of dried fruit products locally and overseas.
9. Direct project marketing of chutneys and pickled product overseas.
10. Direct project marketing of fresh products overseas.
11. Centralised Project Factory for:
  - a) Handling fresh products;
  - b) High volume of chutneys and pickled products;
  - c) Dried fruits;
  - d) Canning;
  - e) Juicing.

The logic of the above sequence is first simply that it will introduce improved fruit varieties and products, create developmental activity at the homestead and women group level, expand already ongoing fresh fruit markets, create new ones and ultimately locate a major plant in the area. Care has been taken to ensure that the women beneficiaries will not just be faced with a purely repacious commercial activity as heretofore.

Secondly, the logic is derived from the need to have activities of increasing organizational and technological complexity introduced after less complicated ones have been introduced.

Thirdly, it is important that the first activities be clearly new and under the control of the women groups so as to get community support.

Fourthly, the new activities must be both developmental and commercial. Developmental in the sense that they will cover under-exploited niches and resources (product and organizational) and not just expand fresh mango sales only. Commercial in the sense that they will generate incomes readily.

In organizing nurseries, YWCA will fulfil its developmental need of organizing some resource to be under the control of women.

The women will also sell the improved and new varieties of fruits thereby earning income readily. The women will learn and extend new techniques of husbandry and handling as well as increasing total fruit production.

In introducing chutneys and pickled products, women will be able to do the work in their homesteads. The products will be marketed centrally by the project. This will be a good system establishing an activity done at the woman's convenience and later linked to more complex local and overseas marketing where the women can be introduced to complex organizing.

Fresh mango sales expansion is afoot with new entrants. Firms and individuals are now buying at source. Many of the village middlemen are being marginalised as buyers come directly to the field. New techniques of harvesting and packing are being introduced. Yet these are identified with the commercial operators. The project by taking these and spreading them will legitimize techniques which are of major value to the fruit industry. Other techniques not yet extensively introduced for growing and handling citrus and bananas should be introduced by the project perhaps in conjunction with other NGOs.

In spite of the clamour for Tana River people to start handling fresh fruit exports NOW, commercial intermediaries will continue to flourish until the community is organized. The project though, could begin to train the women beneficiaries, and the community in general, on better husbandry and handling techniques for fresh fruit export as knowledge about this is still seen in the community as exotic and mystified - only for the foreign exporters.

In our view, that project entry by YWCA women to overseas marketing should be through selling chutneys and pickled and dried products given the risks and high costs of fresh fruit overseas marketing. We believe this will need less capital than a fresh fruit marketing of chain. YWCA should insist that the commercial consultants costs the chutney and pickled fruit and fresh fruit chain of activities.

It is clear also from the field interviews that the Tana community, the YWCA and the administration have set themselves the ultimate objective of creating a fruit industry in Tana River under local control. This precludes any shares being sold to companies outside the district.



## 28. Community Views and Project Support:

There is support for the project by local leaders, the administration and the community in general.

The only opposition is by people who in the past have been agents of the commercial buyers. However, even they dare not come out in opposition publicly for they are seen as part and parcel of the past where farmers got very low prices or lost their product.

The overwhelming support for the project can be explained by the fact that the District now has a strong political movement for controlling its resources. This is reinforced by the politicians and administrators who openly emphasise district oriented development in stark and vivid terms. This has undermined the historical trading networks where local agents of 'Arab' traders were the dominant community voices.

More specifically, the locational development committees and the Garsen divisional development committee have accepted the project. The District Development Committee has also specifically given the project district top priority and wide publicity.

The communities visited - even in Chara location, where the YWCA does not as yet have viable groups - the leaders and public support the project.

Having said all this, one must also state categorically that it is still support for an idea. Details are anxiously awaited by the leaders, administration and community at large. Some commercial interests are also agitating through their agents who cast doubt on the project's viability particularly given cultural traditions and past cooperative society failures. But other commercial interests support the idea and are willing to take part in

aspects of the project. There is also support within the key NGOs working in the District. These are:

1. The Catholic Diocese of Garissa who have just got an agricultural volunteer to be based at Wema.
2. The Methodist Church which has had a development office - related to NCK Rural Development Department - for a long time in the District. It has supplied new varieties of fruits including apple mangoes. The YWCA would be well advised to find a formula for coordinating with these NGOs in organizational and technical matters especially on supervision of scattered nurseries.

More specifically, hereunder are specific types of support to be given or needed from specific institutions.

1. Provincial Administration

To date, all levels of Provincial Administration from Sub-chiefs, Chiefs, DOs, DDO and DC have openly supported the idea of a fruit industry in Tana controlled by people of Tana. This support has been clearly expressed in development committees.

Future support will be freely given in:

- a. community mobilization for the project;
- b. support of ancillary activities like campaigning for roads, electricity and plans which allow fruit growing in the Lower Tana Village Irrigation Programme and the Delta Irrigation Programme.
- c. allocation of nursery plots and deeding them to YWCA.
- d. campaign against commercial interests who want to monopolise their historical fresh fruit marketing,

2. Ministry of Agriculture, National Irrigation Board and Athi Tana Development Authority.

Several large agricultural schemes are found at Bura, Hola and Lower Tana. One is planned for the Delta. There are a few officials particularly in the mango concentration areas of Lower Tana. However, for the future:

- a. technical inputs on fruits can be supplied by the District Horticultural Office;
  - b. a policy review is required to allow fruit growing in all schemes existing and planned. It is clear communities prefer mixed rice and fruit tree agriculture rather than being stuck in the rice monoculture. Such a policy change will be a major source of support for the project;
  - c. support for training and/or supervision of nursery attendants will be given;
  - d. support for extension, research and propagation of new varieties will be given;
3. Horticultural Crops Development Authority (HCDA)

Nationally, this is the institution required by law to develop markets for horticultural products. It could be relied for support on for:

- a. overseas marketing;
- b. development of cold storage export infrastructure;

There are two key policy changes which are needed to support the project:

a. Air Charters to Moi Airport Mombasa

At the moment, most fresh fruit export is dependent on scheduled airlines cargo space out of Jomo Kenyatta Airport in Nairobi. Air charters which serve the tourism industry and land at Moi Airport in Mombasa are not allowed to take horticultural cargo. There are 8 existing and planned charters into Moi weekly. If they are allowed by Civil Aviation Board, this would make cargo space available at Mombasa which would be significant support for the project's overseas marketing. The Horticultural Crops Development Authority in conjunction with Provincial Administration at District and Provincial level, and the DDC should support this policy change. The YWCA should organize lobbying.

b. Refrigerated Containers

Most countries exporting fresh fruit have developed refrigerated containers infrastructure at their ports and collection points for the industry. It is cheaper to ship through them than aircargo and it gives marketing flexibility. Such a development would be of tremendous value for the Tana Project. Support for this would tremendously help the project whose shipping lines and therefore costs are very high. The YWCA should organize lobbying efforts among the institutions identified above.

4. Ministry of Transport and Communications

The DDC in its plans has identified construction of feeder roads and bridges into the Lower Tana as priority as produce cannot get out most of the year.

The Malindi-Garsen Road is a killer road and thus has impact on transport costs and reliability. Plans are underway for construction of Garsen bridge.

To support the project:

- a. All major fruit collection points will need dependable all weather roads. Perhaps by introduction of Rural Access Roads Programme, unavailable in the District at the moment, this can be facilitated.
  - b. The Malindi, Garsen, Hola, Garissa and Garsen Kipini road will have to be maintained to better standard if not tarmacked as indicated in the 1984/88 Plan.
  - c. It is worth considering riverine transport (ferries and/or boats) to improve communication at the Tana Delta. Proposals have been made for moving the Garsen ferry once the bridge is up to Golbanti. The Ozi area deserves some service too.
  - d. Overall, to support the project, the whole district needs many crossing points beyond the planned (1984/88) Bura and Garsen bridges to link the West and East banks. This will reduce farmer and transport operating costs.
5. East African Power and Lighting Company Ltd. and Ministry of Energy.

Electric power was slated to get to Garsen and Hola Malindi during 1984/88 plan period. The DDC still has this on priority.

EAPL states that power will be available at Garsen within the plan period. If so, it will be tremendous



support to the project for large scale cold storage in Tana River - key to expanding fresh fruit exports - is totally dependent on power.

Ministry of Energy could give tremendous support to the project through the rural electrification programme for Tana District.

6. Prisons Department

One of the best sources for improved varieties and research on fruit trees is the Prisons Department. It usually bulks them at prisons. There is not a reason why the project should not lobby to get this service from the prisons in the district for Mtwapa and Malindi are too far for effective transportation of seedlings. Besides, last year all seedlings were hijacked from these centres and did not get to Tana.

7. Tana River County Council/District Development Committee

Support for the project will be forthcoming on:

- a. Making land for nurseries and other facilities available to the YWCA and women groups for both institutions have jurisdiction significant amounts of state and trustlands.
- b. Support will also be forthcoming in making presentations to other government, and non-governmental organisations.

#### 8. Ministry of Lands and Settlement

It is important to seek land adjudication under Chapter 300 for the fruit growing areas from this Ministry for such adjudication and receipt of individual title deeds is the only assurance for significant long-term farm credits. This is needed for production expansion.

#### 9. Non-Governmental Organizations

There are two broad categories of NGOs which could give significant support to the project. These are NGOs already operating in the district and NGOs with specialised programmes not working in the district.

Of the first, we have already identified the Diocese of Garissa and the Methodist Church. Their personnel in the district are already supporting introduction of new fruit tree varieties, better husbandry, and community organizing. This support is available for use if coordination is instituted by YWCA.

Of the specialised NGOs outside the district, the project will need to solicit support for specific specialised sub-project activities. These are:

- a. Horticulture
- b. Fuel wood
- c. Marketing and,
- d. Business management.

Among possible NGOs to supply this are:

- a. Undugu Society, Partners for Productivity, Kenya Rural Enterprises Programme etc. - for business management and marketing.
- b. Kenya Energy Non-governmental Organisation and CARE - for fuel wood extension.
- c. Mennonite Central Committee and others - for Horticulture.
- d. The Greenbelt Movement - for development of tree nurseries.

These are only suggestions. We have not asked them, but they have had significant programmes elsewhere.

A whole host of other NGOs would be responsive if requested to provide either specialist personnel, project vehicles or funding.

#### 10. Fruit Trading Commercial Concerns

In spite of some hostility towards them, commercial concerns are already part and parcel of the Tana socio-economic web and have a role to play in the project but not the dominant one as in the past. The fact that many are coming to buy at the source rather than using middlemen means that they are adjusting. As more have entered the market and mangoes have been short, prices have improved to the advantages of the farmer. One commercial concern - Retief and Company - has introduced new mango harvesting and packing techniques. It is willing to extend these. This support should be welcomed by the project and utilized - perhaps by training project personnel.

This same commercial concern has skills in selection and propagation of new mango varieties and other fruit trees. In some ways this company has the only systematic production experience on the mangoes and citrus in the region.

It also has the only marketing experience in the river based collection and transportation of fruit.

These different sets of experience can become important support for the project. They should not be negated by the company's other interests in land and tourism which have gone to the County Council and the DDC and were rejected.

The company claims that it will gladly support the project.

Retief and Company support for horticultural production parameters, handling and storage should be sought by the project. So should support by any other commercial outfits who are willing to provide technical knowledge to the project within its objectives.

Other companies who are in the mango business, e.g. Vaso, Palestina, Karama and Sons, and Greenfields, apparently only buy mangoes and have not been interested in improving picking, packaging, storage and production extension. There is no reason to leave them out of the project if they want to make and finance innovations as Retief and Company are doing.

#### 11. Special Institutions

- a. Bohrania Women Finishing College;

In Mombasa, members of the Bohra community have a finishing college which trains women in chutney and pickled products preparation.

Members of the Branch Executive and Secretariat are in touch with the college and the principal. They have considered using this college as a technical resource for recipes on chutneys and pickled products as well as costing of the products and training.

This college could form an important support resource for the project.

b. Kenya Tourism Development Corporation/Hotel Keepers Association

All tourists hotels serve at least two major curry meals a week. They also serve salads extensively. Thus this could become major sources of supporting the chutney, pickled products and dried fruit components of the project thereby creating local demand for these products. Their support should be canvassed. The marketing component of the consultancy should pay special attention to this aspect.

c. House of Manji and the Baking Industry

House of Manji have been major innovators in using local products in their production of biscuits and sweets. They use fruits extensively. They should be approached for support in utilization of dried fruit products for if they decide to take Tana products, they will be a significant source of commercial support perhaps taking all that can be supplied.



Similarly, the baking and bread industry is fragmenting nationally and it could be an important source of commercial support. It should be investigated by the marketing study.

d. Vipingo Estates - Kilifi

This estate has an extensive programme in improved fruit trees - especially mangoes under quarantine. As soon as they are cleared the project ought to liaise with them to get the new strains. The horticultural person at Vipingo is David Hirst.

## 29. Community Socio-Economic Activities:

The women of Lower Tana essentially fall into two clear groups. These are the Muslim tradition dominated and Traditionalists-cum-Christian influenced.

Muslim tradition dominated women have very little farm production responsibilities. The tradition dictates that they stay in partial purdah and all production responsibilities are with their husbands or employees. These women are therefore not likely to be involved in farm production but there is no reason to keep them from participating in the chutney, pickling and dried fruit products aspects of the project which will be homestead based. This consultant cannot yet make a judgement on how involved they will be for the YWCA as yet to organize groups in the heavily Muslim areas of South Chara.

In the areas which are dominantly traditionalist and/or Christians, women take part in farm activities. As is the case in most rural Kenya, no time use studies for rural women exist for the area. However, there should be ample time for all women to take part in project activities for several reasons.

First, there is little commercial penetration of the project area. There also is very poor communication. Thus women do not indulge in extensive petty trade which in more penetrated rural areas occupies significant proportions of women's time.

Secondly, settlements are relatively near sources of water. Little time is therefore spent on water drawing unlike many areas of rural Kenya.

Thirdly, although the fuel crisis is fast approaching in parts of the project area, it has not reached crisis proportion where significant proportions of women's time is spent on wood-fuel gathering.

Other than farm work, women and men spend time in preparing reed and palm leaves products like mats, trays etc. These need detailed costing and the project outputs ought to be compared to these in the marketing consultancy.

However, my conclusion is that there will be time for project activities for the existing peasant farming of rice, bananas and tree crops does not fully tie up all the women labour time available. As project activity outputs are likely to command higher incomes than other minor activities, they will be preferred.

It is important to comment about the stereotype of Lower Tana as an area of continuous public feasts and celebrations. This stereotype is present in colonial writing on the area and among many outsiders working in the area. Feasts and celebrations are part and parcel of primary societies related to social obligations and production processes. Introduction of commercial/market relations automatically reduces them and they should not be used as an argument against the project being located in the area.

We talked to men and women and put the idea that aspects of the project could be organized in such a way that some activities will take place at a particular woman's convenience and others as group activities. None had reservations about availability of time for both categories of activities.

However, given the poor communication existing, women group labour time will be unavailable for central factories. Our further judgement is that the central factories will have to employ regular labour.

Group activities e.g. a wood fruit drying system, may attract some members to become regular employees. More details are needed by processing consultants before these issues can be resolved finally.

### 30. Traditions:

There are several cultural traditions which are relevant to development activities in the area which the project must take account of. These are the veneer of Islam, the feeling of domination by Ngao location, the past dominant role of trader agents in village life, the commercial domination in the district by Washiiri ('Arabs') and the interdependence of riverine agricultural Pokomo and pastoral Orma.

#### 1. Islam

The introduction of Islam as a religion, a ruling ideology and later as the epidemic of culture has led to a tradition of strong male domination of all matters public. Up to now, women are not supposed to have publicly expressed views. Organizationally, this will mean most of the project work will have to be done in separate male and female set ups. It will also mean that the project cannot assume that female employed labour will be easily available particularly for tasks which will be carried in mixed settings. Even if female labour will be available, it will be for tasks and settings where the sexes operate separately. This tradition will also mean that more time must be spent in organizing.

Access to the fruit resource by women will also be problematic in some areas where the feeling that permanent fruit trees belong to the man is strong. We are aware that other consultants think otherwise on this point but our field work supports the view that women do not own these trees. They further do not have use access decision powers. They also do not have strong trading traditions.



Because of these access problems for women, we would strongly recommend that there be rapid expansion of fruit tree planting by women to generate in the community other categories of fruit tree ownership.

Incidentally, women have total access and control over bananas. This fact strengthens the importance of the project processing both mangoes and bananas.

Another implication of the Islamic tradition is that chutney and pickling activities which women could do in their homesteads and which use 'waste' mangoes would be more likely to succeed than 'trade' in fresh mangoes. In field of work, we did not see one single woman selling fresh mangoes to the buyers who were in the area.

## 2. Ngao Location 'Domination'

Ngao location has produced most of the literate people in the district who are in most 'modern' sector activities. It is cynically called London! The implications of this for the project are several:

First, project field personnel must be recruited from ALL AREAS and not just Ngao, particularly since it is not the major mango producer, although given its aggressiveness it may plant more of the new varieties than all other areas.

Second, it is absolutely crucial that the current major producer area - Chara location - be the first area organized by the project. To start elsewhere will mean getting trapped in the Chara/Ngao rivalries. Besides, Chara location has more mangoes now than any other location.

Thirdly, the labour force of the proposed industry must be recruited from as diverse areas as possible.

### 3. Trader Agent Domination of Villages

In Lower Tana, the big men have been agents of Washiiri ('Arab') traders. They did so by having access to Lamu, Malindi, Mombasa etc. They were not only monied but more often than not they were agents of the colonial government. These agents were not necessarily of Washiiri or Arab extraction but more often than not they were Pokomo. They acquired resources like wives, land and permanent trees. In short, they formed Robert Chamber's 'net' which trapped every resource coming into the village. They are now under attack because of development forces unleashed by more education and employment.

It will be deadly for the project to come into these communities through these agents or their wives, daughters or daughters in law. The project will only succeed if it distances itself from the established old order for communities are vocal about these agents and their kin. The project staff will need to study each village in great detail to establish ways and means of bypassing this dying order. If they cannot get the capacity to do this in-house, they should contract it out to consultants. More competent and sensitive field workers will be needed so as to ensure that YWCA is not just being used for local trade-offs only.

### 4. Washiiri Trader Domination

Commerce in the bigger towns in the district is completely dominated by Washiiri traders. There is thus love/hate relationship between village folk and

these traders who are often accused of buying influence with village leaders and officials.

The project should clearly avoid getting project products of the beneficiaries handled by these 'established' traders as of the objectives of the women beneficiaries in other YWCA projects in the districts has been to build shops to free their communities from the trader clutches.

#### 5. Pokomo-Orma Interdependence

The pastoral Orma and the sedentary riverine Pokomo have co-existed with fantastic relationship for a long time. This is now beginning to fall apart for several reasons. Populations are increasing. The traditional ecosystem is under stress. Land is being taken out of traditional use and production by large scale settlement of 'foreigners'. Thus there is developing serious competition over the natural resource - land - especially in the delta. Pastoralists are becoming marginalised and they settle. Riverine agriculturalists are investing in cattle ranches.

The project will have to straddle this sociological turbulence by ensuring that it is not seen as just a Pokomo affair for some Ormas are settling.

As the Delta Irrigation Scheme comes on stream, the rights of Orma access to the Delta grazing lands, particularly during drought periods, will become more critical. This is why one expects the project to introduce grafted fruits (especially mangoes) to improve production in areas already settled and not

### 31. Organizations' Roles:

To systematically define the organizational/managerial roles of various agencies in a consultancy like this, one needs to have ALL the technical parameter proposals, in this case, they are the agricultural reports and the marketing reports. They are as yet incomplete in our opinion for they do not give details. The YWCA asked RIDT to undertake the technical agricultural marketing consultancies.

It has been indicated that no formal decision has been made that RIDT will be the only source for supplying technical agriculture, marketing and management resources.

The implications of this are that RIDT will supply two consultancy reports. Whether they or their related companies do anything else later is thus an open question. They should thus give YWCA enough technical details to enable it to make basic project design decisions.

### 32. The Role of YWCA - Women Groups in Tana River:

The YWCA women groups in Tana River should have roles which among other things involve:

- a. Homestead (individual woman) production of chutneys, and pickled products.
- b. Group production of dried fruit products.
- c. Ownership of nursery plots and related equipment.
- d. Employment of nursery attendants.

- e. Organization of community support for the project.
- f. Management of project through selection of group leaders and locational board representatives.

33. The Role of YWCA Branch Secretariat:

The secretariat should have roles which involve:

- a. Planning the project (including consultants' supervision, preparation of project proposals for donors and liaison with government, parastatal organizations, commercial sector and donors).
- b. Field implementation of the project.

The Branch secretariat is thin as it has only an acting branch secretary, no programmes secretary, an accountant and two field workers in Tana River. To handle as complex project activities as suggested under COMMERCIAL AND DEVELOPMENT ACTIVITIES SECTION, all branch secretariat staff will need upgrading in terms of planning skills, field project supervision, budget control and management of rural development projects. None of them have had any experience in supervising as a complex project as envisaged. This upgrading should be done before and more complex project activities are put on stream.

Such a person will have also to systematically gather more specialised field data as when detailed project planning activities start, masses of finite field data (sociological, economic, agricultural and political) will be essential for decent programming. The existant secretariat does not have capacity for handling this.



Early recruitment of this person may allow the YWCA to develop him or her into the field General Manager of the Tana River operations.

Recruiting such a person is possibly the most important project decision. The person must be from Tana River. There are early retirees and others from the district working elsewhere who can be attracted to the post. Given the paucity of women from Tana River with such extensive rural development or related area experience, it may be a good idea to specifically look out for a man. A man in this position will also help in developing community support for the project.

What extra personnel are needed will depend on activities phasing but clearly the secretariat needs to start planning for expansion of numbers of field workers, to include at least a high level district coordinator, a field supervisor, 5 location field workers, a book-keeper and a driver.

34. Roles of YWCA Branch Executive:

The Mombasa YWCA Branch will have roles in:

- a. Supervising secretariat activities.
- b. Evaluating the hiring of technical personnel/consultants.
- c. Project fund-raising from donors.
- d. Making project policy.
- e. Hold funds in trust for the project.
- f. Liaising with government donors and commercial sector.

35. Roles of YWCA National Office:

The national YWCA office should have roles in:

- a. Supporting liaison relations with government and donors.
- b. Following up major policy changes desired by the project in activities at District, Provincial and National levels.
- c. Liaising with the global YWCA organization to generate information on technical resources, overseas marketing and assistance. It may well turn out to be that other YWCAs have done similar projects and can supply technical assistance and financing more cheaply than NGOs in Kenya, commercial companies and individuals.

36. Role of RIDT and other Technical Resource Companies/ Individuals:

Having finished the consulting reports on agriculture and marketing RIDT should be treated by the YWCA as just another company selling consultancy and possibly equipment through allied organizations.

RIDT and other technical resource companies or individuals should not have more than advisory roles which may be extremely valuable for they have implemented projects in rural areas.

However, where the YWCA need particular service, it should put them to tender.

Where such service are bought from a company or an individual, those individuals or companies or their personnel should have absolutely no ownership or policy-making powers. The YWCA executives at various levels and their secretariats need to get on top of most details of the project to bar technical resource personnel making policy decision by default.

Furthermore, as far as marketing is concerned, those who want to should buy at source (farm, project, cold store etc). We do not support an agency role by RIDT or anybody else for that matter. Our interviews in the field clearly showed that agency relations are no longer acceptable to the wider community.

In our overall phasing of the project, we have indicated that some functions will be done by intermediaries initially and later directly by the project.

The training of project personnel - direct employees of YWCAs company - should be treated as a service to be contracted out to RIDT or other technical resource companies/individuals with heavy penalty clauses for defaults.

RIDT and personnel related to it may have a role in extension of better husbandry, harvesting, packaging etc. but even this should be put to tender or be purely commercial.

### 37. Structure of Industry:

In our overall phasing, there are activities which will be handled by individuals and some by groups.

Products made at these levels should be owned by individuals or groups.

Nursery and building plots should be deeded to be held in trust by the YWCA as is practice nationally.

As more complicated marketing and contralised production activities come on stream, they should be run by a Registered Company for Tana River people are extremely dissoluted with the record of cooperatives in the district.

Such a company should be owned by Women Groups (not individual women).

The chief executive of the company should be the Project Manager and should act as company secretary to the Board but be a non-voting Board member.

## Appendix:

Terms of Reference for the Feasibility Study of the Proposed  
Mango Processing Industry at the Lower Tana River

## General

To evaluate the social, economical and political implications and impact of a Mango Processing Industry at lower Tana.

## Specific

1. To identify the beneficiaries of the Mango Processing Industry.
2. To establish how such beneficiaries will be organised, mobilized and participate in the day to day running of the Industry.
3. To determine the role of RIDT, YWCA, and the beneficiaries and recommend how the organization would be structured to ensure its ability to meet both economic and developmental objectives.
4. To establish how the Commercial aspect will interact with the development based activities of YWCA and the beneficiaries.
5. To do a needs assessment study, to determine the possible ways in which the beneficiaries would own the Industry.
6. To establish the human resources available among the beneficiaries groups, and local community, which can be trained by RIDT to eventually run the Industry.
7. To determine the present levels of income of the beneficiaries and establish what impact the projected increase in income (from the feasibility study by RIDT) will have on the beneficiaries socially, economically and politically).
8. To find out how the local leaders, the administration and the Lower Tana Community would view the establishment of such an Industry, and whether the project would receive support from the Community and all the relevant sectors.



9. To establish present social and economic activities of the would-be beneficiaries, and how their participation in the proposed industry would affect these activities.
10. To determine the local culture traditions and establish how these would be taken into account in determining the methods of group formation and group participation in the proposed Industry.

MARKETING OF FRESH MANGOES  
BY TANA RIVER WOMEN



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## EXECUTIVE SUMMARY

Data on supply of mangoes in Tana River, within the pilot groups villages and their families is presented. The data suggests that mango trading and pulping activities, as well as extension of improved mangoes are possible during phase one of a three phase program leading to a mango products factory and extensive trading in fresh mangoes and their products.

Costs of training and better handling and production as well as trading mangoes are also established.

The report also establishes that there is firm demand of mangoes in the tourism market.

A project proposal is generated out of the data collected in the field during the consultancy as well as data from related earlier consultants reports.

Six sub-projects which, together form phase one of the Tana Mango Projects are recommended. These and their costs (under normal depreciation) are:

<u>SUB-PROJECT</u>	<u>COST</u>
a. Training on Picking and Packing	K.Sh. 153,802
b. Improved Mango Extension	K.Sh. 489,110
c. Mango Export Trading Through HCDA	K.Sh. 375,491
d. Mango Export Trading through Traders	K.Sh. 253,523
e. Mango Trading in Tourism Market	K.Sh. 563,217
f. Mango Pulping	K.Sh. 224,923



(ii)

If these projects are implemented, net income to YWCA women per project are estimated as follows:

<u>SUB-PROJECT</u>	<u>INCOME TO WOMEN</u>
a. Training in Picking and Packing	K.Sh. 0
b. Improved Mango Extension	K.Sh. 1,710,890
c. Mango Export Trading Through HCDA	K.Sh. 1,620,349
d. Mango Export Trading Through Traders	K.Sh. 23,677
e. Mango Trading in Tourism Market	K.Sh. (135,537)
f. Mango Pulping	K.Sh. <u>120,077</u>
TOTAL	K.Sh. 3,339,456

To realise this net income to YWCA women, investment in staff and vehicles and hiring of transport and management services as well as trading capital will be necessary. The costs of these have been spread in all the projects as necessary.

Trading capital requirements are K.Sh. 2,357,340 and the proposal is that K.Sh. 2,297,340 be sought from donors and that YWCA members raise Sh. 60,000. Staff, Training, Equipment and Operating capital needed is for K.Sh. 3,124,626. Thus total financing needed is K.Sh. 5,481,966.

It is recommended that the financing of the interrelated sub-projects be sought simultaneously for the mix forms the best income package.

 10/7/87

A. TERMS OF REFERENCE I: SUPPLY OF TANA RIVER MANGOES

1. National Mango Production Statistics

No data exists for the nation as a whole on mango production for it is not a scheduled crop thereby forcing Ministry of Agriculture to keep statistics. Data on estimates of production is worked backwards from the firm HCDA export statistics by assuming that the national production is twice the export figures. It is also assumed that 80% of the production comes from Tana River. The statistics found in the RIDT Report, Mango Feasibility Study in Tana River District, Kenya, are based on this method. Table I, National Mango Production and Exports is based on these assumptions.

2. Tana Mango Supply

Ideally to establish mango supply, the number of trees in Tana should have been counted, which was not possible in the time allocated. I have had to rely on interview data, Ministry of Agriculture and HCDA statistics. Using the assumptions specified above, we have worked out probable supply from Tana as shown in Table II, Tana Mango Production and Markets.

For the year 1986, using the HCDA assumptions, Tana River produced 2,442,836 kgs (2,442 tonnes).

For the same year, Ministry of Agriculture Field Officers at Hola and Mombasa argue that there were 4,000,000 kgs (4,000 tonnes) produced. Their production data is based on 600 hectares of mature mangoes as estimated by field staff.

The two sources (and methods) show that there is a difference of 1,557,164 kgs (1,557 tonnes).

TABLE I: NATIONAL MANGO PRODUCTION AND EXPORT (KGS)

	TOTAL PRODUCTION	TANA RIVER PRODUCTION	TOTAL EXPORT	EXPORT THROUGH JOMO KENYATTA	EXPORT THROUGH MOI
1978	1,755,468		877,734	877,734	-
1979	N/A		268,821	268,821	-
1980	N/A		1,308,651	1,308,651	-
1981	N/A		1,758,250	1,758,250	-
1982	N/A		1,735,333	1,735,333	-
1983	N/A		1,445,606	1,445,606	-
1984	N/A		2,472,311	2,472,311	-
1985	3,052,550		1,526,275	1,526,275	-
1986	5,882,464		2,941,232	2,505,042	435,190
1987*	5,600,000		2,800,000	-	-
1988	6,000,000		3,000,000	-	-
1989	6,400,000		3,200,000		

\* 1987-1989 based on RIDT Projections

TABLE II: TANA MANGO PRODUCTION AND MARKETS (KGS)\*

	TOTAL (KGS)	EXPORT**	DOMESTIC
1978	1,404,374	1,263,936	140,437
1979	430,113	387,101	43,011
1980	2,093,841	1,884,457	209,384
1981	2,813,200	2,531,880	281,320
1982	2,776,533	2,498,879	277,653
1983	2,312,969	2,081,672	231,297
1985	3,955,697	3,560,127	395,570
1986	4,000,000 ***		1,802,164
	2,442,040	2,197,836	244,204
1987	4,480,000	4,032,000	448,000
1988	4,800,000	4,320,000	480,000
1989	5,120,000	4,608,000	512,000

\* 80% of National Production

\*\* 90% of Tana Production according to HCDA Estimates

\*\*\* 100% of Tana Production according to MOA Estimates

As shown in Table II, Tana Mango Production and Markets, the two sources and methods show that between 244,204 kgs and 1,802,164 kgs are available for the domestic market.

When we asked traders how much mangoes they move from Tana, the top 6 companies claim that in 1986 they moved on average 20 tonnes a week during the season. This works out to 3,360 tonnes over the 7 month production period. This data tends to confirm the Ministry of Agriculture estimate that Tana River District Mango Production is within the range of 4,000 tonnes, for other minor traders still move some mangoes, locals consume them and some drop/rot.

### 3. Supply Within Riverine Villages

RIDT in their report counted the trees within villages abutting the river for they were committed to the riverine based buying system. The following are the villages and numbers of trees:

Kilelengwani	2,250
Kao	1,800
Ozi	750
Shirikisho	1,250
Mrafa	600
Anasa	800
Chamwanamuma	2,000
Semikaro	1,250
Ndune	800
Laini	750
Oda	600
Galbanti	1,800
Ngao	1,100
Garsen	1,250
Hewani	500



Wema	750
Kinyandu	1,000
Mnazini	2,100
Kitere	750
Baomo	800
Makere	1,250
Maroni	1,200
Total	25,350

Using their conservative figure of 200 fruit per tree annually, these trees right next to the river would produce 5,070,000 pieces which is 2,281,500 kgs (2,281 tonnes). This is more than half of the Ministry of Agriculture estimate of total Tana River Production. There are villages away from the river bank with significant mango groves as anyone with experience in Tana River will attest. Furthermore, given the very conservative figure of only 200 fruit per tree per year, it seems to me that accepting Ministry of Agriculture 1986 estimate of Tana Mango Production i.e. 4,000,000 kgs (4,000 tonnes) is rational.

#### 4. Mangoes within Women Pilot Group's Villages

The Consultant, 3 YWCA Tana River Field Workers and the Mombasa Branch Secretary evaluated groups for inclusion in the pilot project. The criteria used were:

1. strong group leadership
2. group stability
3. access to river and land based buying system
4. access to mango treees in group catchment area, and
5. access to family trees.

The groups selected to participate in the Mango Pilot Project and trees in their villages are shown hereunder:

YWCA Group	Location	Membership	Trees in Catchment
1. Idsowe	Ngao	45	1,250
2. Kibusu	Ngao	24	
3. Ngao	Ngao	35	1,100
4. Hiari	Ngao	20	
5. Kau	Chara	24	1,800
6. Golbanti	Ngao	25	1,800
7. Oda	Ngao	32	600
8. Chamwanamuma	Chara	42	2,000
9. Ozi	Chara	26	3,000
10. Mpeketoni	Chara	24	
11. Kilelengwani	Chara	24	
		321	11,550

The trees within the villages of the 11 groups produce 2,310,000 pieces or 1,039,500 kgs (1,039 tonnes).

#### 5. Trees Under YWCA Women Groups' Families

In preparing the Tana Mango Processing Industry, Lena Chesaro and G-C.M. Mutiso collected data on family ownership of mango trees from YWCA members. For the pilot groups selected, the following is the data on average mango trees per family in group villages:

YWCA Group	No. of Members	Average No. of Family Trees	Total No. of Trees Per Group
Idsowe	45	8	360
Kibusu	24	5	120
Ngao	35	12	420
Hiari	20	12	240
Kau	24	18	432
Golbanti	25	8	200
Oda	32	12	384
Chamwanamuma	42	18	756
Ozi	26	18	468
Mpeketoni	24	18	432
Kilelengwani	<u>24</u>	18	<u>432</u>
	321		4,244

The total number of trees is 4,244 which is 36.74% of the total number of trees in the riverine villages. The 4,244 trees should produce about 848,800 pieces or 381,960 kgs (381 tonnes) a year.

These figures check with data collected from the YWCA women members in May 1987, about the amounts of mangoes they can pick daily. Those in Chara location estimate that on average during the peak season, they pick from family trees on average 1,500 pieces. Those in Ngao pick on average 150.

Mangoes needed for export and tourism industry as will be shown later are about 1,584,000 pieces. Thus women will be able to get just about half of their fresh trading mangoes outside family owned trees.

## 6. Summary

In summary then the villages of the YWCA members chosen in the pilot project own 11,550 trees producing 1,039,500 kgs (1,039 tonnes) of mangoes in Tana River. Depending on how one arrives at total Tana River production, calculations, this production is between 26% and 43% of all production in the district in 1986.

The families of members own 4,244 trees which produce 381,960 kgs (382 tonnes) which is 37% of the production in their villages.

Given that members families control significant production and that their villages control a major portion of district production, a viable project is possible. One should further note that the trees are within reach of the river based transportation system, essential as an alternative to the extremely bad road system which floods during the heavy marketing seasons.

B. TERMS OF REFERENCE II: MALINDI AND MOMBASA DEMAND

1. Introduction

In discussion of the terms of reference with YWCA, we pointed out that the major market would be in the tourism industry and not other fresh mango markets.

2. Coastal Tourism Mango Consumption

Major Coast Hotels and Daily Mango Consumption, Table III, shows the amounts of mangoes consumed in tourist hotels.

Of the 44 tourist hotels we got actual data from records provided by either bevearages managers or chefs for 38. Only in 6 cases was data provided by individuals who are neither chefs nor bevearages managers. Since formal records were not presented for scrutiny in the six cases, we treat them as estimates.

For the minor holiday chalets and camps, most of which were closed when we were doing the interviews, we assumed similar consumption to the hotels and working out of number of beds arrived at the figure reflected in the table.

The data is highly reliable therefore. It shows daily consumption of 8,077 pieces which at 0.45/piece works out to 3,634.65 kgs (3.64 tonnes) of mangoes. For a year demand will be for 1,326,775 kgs (1,327 tonnes). This demand is expected to grow at a rate of 10% yearly which is equivalent to the growth of the industry. The four month tourist peak season would require 436,200 kgs (436.2 tonnes).



Table III: Major Coast Hotels and Daily Mango Consumption

Hotel	Location	Daily Consumption (Pieces)
1. Nyali	Northcoast	80
2. Mamba Village	Northcoast	10
3. Silver Beach	Northcoast	100
4. Bahari Beach	Northcoast	170
5. Mombasa Beach	Northcoast	210
6. Reef Hotel	Northcoast	100
7. Oceanview	Northcoast	60
8. White Sands	Northcoast	160
9. Bamburi Beach	Northcoast	100
10. Kenya Beach	Northcoast	130
11. Neptune	Northcoast	200
12. Plaza	Northcoast	110
13. Severin	Northcoast	200
14. Dolphin	Northcoast	100
15. Serena	Northcoast	100 est.
16. Intercontinental	Northcoast	150 est.
17. Oceanic	Town	20
18. Castle	Town	10
19. Robinson	Southcoast	500
20. Two Fishes	Southcoast	1,000
21. Leopard	Southcoast	100
22. Diani Sea Lodge	Southcoast	150
23. Leisure Lodge	Southcoast	160

Hotel	Location	Daily Consumption (Pieces)
24. Golden Beach	Southcoast	160
25. Jadini	Southcoast	80
26. Africana	Southcoast	80
27. Safari	Southcoast	80
28. Diani Reef	Southcoast	100
29. Lagoon Reef	Southcoast	120
30. Trade Winds	Southcoast	60
31. Nomad Beach	Southcoast	30
32. Shelley Beach	Southcoast	100
33. Lawfords	Malindi	125
34. Sindbad	Malindi	30
35. Eden Rock	Malindi	100
36. White Elephant	Malindi	30
37. Coconut Village	Malindi	25 est.
38. Palm Tree	Malindi	40 est.
39. Silve Sand Villas	Malindi	40 est.
40. Sulisuli	Malindi	35 est.
41. Driftwood Beach	Malindi	35
42. African Dream	Malindi	35
43. Seafarers	Malindi	60
44. Turtle Bay	Malindi	<u>100</u>
	Subtotal	5,385
45. Chalets, Holiday camps etc.		<u>2,692</u> est.
	Total	8,077 pieces daily

### 3. Fit Between Mango Seasons and Tourism Seasons

There are two major mango production seasons in Tana River. These are May to July and October to January. Coastal tourism has operated in the past with a clear low season from April to July. Its high season is from August/ March. On the surface an argument could be made that the low season would limit selling to the tourism industry. We put this point to those in the industry. They argued that with the promotion of domestic tourism, bed occupancy rates during the 1986 low season, were 80% of the high season. Thus there should not be great variation in coastal tourism consumption. When Tana mangoes are not in season, the sector uses less quality mangoes from the interior or imports from neighbouring countries.

### 4. Possible Tana Mango Supply to Coastal Tourism

Table II, Tana Mango Production and Markets, shows calculations based on two different assumptions. HCDA estimates that 90% of all Tana mangoes are exported and only 10% are available for in country consumption. Those available for domestic market, following the HCDA export based extrapolation, were 244,204 kgs in 1986.

On the other hand, Ministry of Agriculture Field Staff at Hola and Mombasa, estimate that in Tana River there are 600 hectares of mature trees which in 1986 produced 400,000 kgs. Our inclination is to trust their figures, which are collaborated by traders, more than the HCDA figures for the latter do not have field staff. There may well be 1,802,164 kgs of mangoes in Tana River available for the domestic market. This is more than enough mangoes to supply the Coastal tourism market, which demands 1,326,775 kgs annually and 773,952 kgs for the seven months when mangoes are in production in Tana River i.e. May, June, July, October, November, December and January.

#### 5. Structure of Selling Mangoes to Coastal Tourism

In our hotel interviews, we were informed that the main suppliers to the hotels are itinerant sellers. None of the large mango trading outfits supply the hotels for export trade has been more rewarding financially. Small jobbers have moved into the niche, where hotels do not buy at the Mwembe Tayari retail market in Mombasa, which is dominated by four trading concerns.

Out of this, we conclude that the YWCA can move into this market with relative ease if it organises regular and reliable delivery for some of the hotels argued they have to do panic buying when supplies are not forthcoming.

#### 6. Other Markets in Malindi and Mombasa

In interviews in Malindi and Mombasa wholesale markets, we were not able to establish that 80% of the mangoes bought end up in the tourism market as informed earlier by HCDA, Ministry of Agriculture and Association of Tour Operators, basically because mangoes were not in season to enable us to estimate what was going through the market.

Considering Table II, Tana Mango Production and Markets, we have shown in Section A, that the tourism sector demands 773,952 kgs of Tana Mangoes in the seven months they are in production, and assuming that since the tourism industry is a better client and gets filled before other markets, the coastal retail and upcountry market may account for the remainder of Tana Production i.e. 1,028,211 kgs.

We do not recommend YWCA getting into the generalised Malindi/Mombasa and upcountry market now for several reasons. First, we do not know the demand structure. Second, we know that four wholesale traders whose networks stretch to

neighbouring countries monopolise that market and for more than ten years have bankrupted every new entrant. Third, it will be expensive organising such market for many outlets will have to be setup, not to mention problems with transport and its management.



C. TERMS OF REFERENCE III: MAJOR BUYERS IN TANA RIVER,  
MALINDI AND MOMBASA

The major buyers in the last three seasons have been:

1. H & R Ratief
2. East African Growers Ltd.
3. Greenfields Exporters Ltd.
4. Jakal Services Ltd.
5. Kenya Horticultural Exporters (1977) Ltd.
6. Karama and Sons
7. Malindi Farmers Cooperative Society
8. Coastal Growers and Packers Ltd.

Some of the companies listed above are both traders in mangoes within the country, buyers for others to export, and at times exporters.

Historically, the trade in Tana mangoes was dominated by Karama and Sons of Mombasa but lately their position is not as dominant for new companies have moved into the trade and aggressively pushed their operations. Significant among these have been Coastal Growers and Packers Ltd. which dominated the field three years ago; Greenfields Exporters Ltd. which moved into mango trade three years ago and in the second 1986 season, was reputedly the biggest buyer for export. It together with H.R. Retief has insisted on very sophisticated picking and packing at source to assure quality and longer shelf life. This practice is now being copied by all major export traders. Karama and Sons have been buying for Kenya Horticultural Exports (1977) Ltd. They dominate the fresh mango market in Mombasa although Jakal Ltd. are encroaching on it. They do not extend picking

and packing technology. H & R Retief has been buying for East Agrican Growers Ltd.

The companies with infrastructure in Tana River to operate buying networks based on river and land collection are H.R. Retief and Greenfields Exporters Ltd. (Vegair is a new entrant). Their infrastructure consists of large lorries for transportation from Tana River, four wheel drive pickups for collection at points unreachable by trucks, boats for riverine collection and finally established sheds for truck/pickup points. These two companies and HCDA are the innovative ones which in my opinion should participate in the pilot phase of the YWCA mango project. Commercial operating decisions will need to be made even during the pilot on whether other companies, i.e. Jakal Services Ltd., Malindi Farmers Cooperative Society Ltd. and Coastal Growers and Packers Ltd., will establish the sophisticated picking and packing operation in Tana River necessary for selling in the upmarket. If they do, there is no reason why then YWCA should not cooperate with them.

Special relationship should be established by the YWCA with Coastal Growers and Packers Ltd. who are set to start a mango pulp factory in Mombasa. YWCA could supply those mangoes below export quality to them, if Greenfields cannot take all of them at Tana River, subject to a good return being negotiated. Since Greenfields has worked out detailed plans for pulping in Tana River, we recommend initial relationships with them.

#### D. TERMS OF REFERENCE IV: TRADING SYSTEM AND COSTS

##### 1. Trading Costs

The following three tables show in detail the trading data for mangoes over the last six months (January to June 1987). This (averaged) data collected from 7 major traders shows fluctuating returns to traders first. Second, it shows that most significant costs in the trading chain is air freight. Produce purchase is the second most expensive item. Transport costs from Tana River to Nairobi are comparable to packing material (cartons) costs if one is exporting. The other point is that agent fees are more expensive than either labour or collection costs within the District.

Agent fees are there since the local marketing process is still underdeveloped and many males act as proxies for buyers. They make substantial amounts of money for doing no work. Traders have been held hostage by them in the past.

One of the most successful agents make K.Sh. 87,000 in the 1986 second season fronting for a major exporter.

Elsewhere, we recommend that YWCA groups become agents for they can earn substantive amounts of money without investing money.

Several general points about the overall trading system need to be made clearly. Traders agree on prices to the producer. Up to four years ago, one trader practically dominated the price structure. Since then, aggressive new entrants have pushed the price up but to date they have not managed to break the agents. Since the main market for the new entrants is export, they have also introduced new picking and packaging and collection

technologies. The second general point is that Tana people are insisting that labour for the industry be hired locally and not even from Malindi in the next district, Kilifi. Thirdly, as the system evolves, the position of a trading agent will become more precarious for traders are hiring shambas. There is a nascent idea that the agency fees should go to community groups and finally new marketing strategies (e.g. traders controlling picking) will lessen dependence on agents.

Trading Data

(Carton 10 pieces = 5.5kg)

1986 Tana Second Season (Ngowe Mangoes)

a. Buying Sh. 2.50 piece	Carton Sh. 25.00
b. Agent Fees Sh. 0.30 piece	Carton Sh. 3.00
c. Labour (picking/packing/ supervision) Sh. 0.20 piece	Carton Sh. 2.00
d. Collection (vehicles/boats and personnel) Sh. 0.20 piece	Carton Sh. 2.00
e. Carton - Empty	Carton Sh. 8.00
f. Transport Carton - Tana-Nairobi	Carton Sh. 8.00
g. Airfreight Carton - Middle East Sh. 6.60 piece	<u>66.00</u>
Total	144.00
	US\$ 7.125
Carton Price Middle East	US\$ 8.00
Traders' Margin Carton	US\$ 0.88
Traders' Margin Piece	US\$ <u>0.088</u>
	Sh. 1.40

May 1987 Malindi (Apple Mangoes)

a. Buying Sh. 2.50 piece	Carton Sh. 25.00
b. Agent Fees K.Sh. 0.30 piece	Carton Sh. 3.00
c. Labour (picking/packing, supervision) Sh. 0.20 piece	Carton Sh. 2.00
d. Collection (vehicles, boats) Sh. 0.20 piece	Carton Sh. 2.00
e. Carton Empty - Sh. 8.00 each	Carton Sh. 8.00
f. Transport Malindi/Nairobi/ Carton	Carton Sh. 6.00
g. Airfreight - Middle East Sh. 6.60 piece	Carton Sh. <u>66.00</u>
Total	Sh. 112.00
	US\$ 7.00

Carton Price Middle East

US\$ 12.75

Traders' Margin Carton

US\$ 5.75

Traders' Margin Piece

US\$ 0.575

K.Sh. 9.20



May 1987 Malindi (Ngowe Mangoes)

a. Buying Sh. 2.00 piece	Carton Sh. 20.00
b. Agent Fees Sh. 0.30 piece	Carton Sh. 3.00
c. Labour (picking, packing, supervision) Sh. 0.20 piece	Carton Sh. 2.00
d. Collection (vehicles, boats) Sh. 0.20 piece	Carton Sh. 2.00
e. Carton - Empty Sh. 8.00 each	Carton Sh. 8.00
f. Transport Malindi-Nairobi/ Carton	Carton Sh. 6.00
g. Airfreight - Middle East Sh. 6.60 piece	Carton Sh. <u>66.00</u>
Total	Shs. 107.00
	US\$ 6.18

Carton Price - Middle East	US\$ 8.75
Traders' Margin Carton	US\$ 2.57
Traders' Margin Piece	US\$ <u>0.257</u>
	K.Sh. 4.11

2. Producer Costs

No data is available on producer costs. This limits generating data on producer returns which are now determined by traders. However, as improved trees are planted and husbandry improves, data should be collected by the YWCA to enable it to intervene in the market and negotiate better returns for its members.

If pulping operations by Greenfields and Coastal Growers and Packers get on stream, and export traders continue to expand mango exports, the return to the producer will improve.

This is reflected in trader budgets for the Second Season in 1987 where they show that farm gate prices to producers may rise to Sh. 3.00 a piece, for top quality export mangoes. It is on the basis of this fact that we expect export quality mangoes to be bought at Sh. 2.00 on average.

### 3. Mangoes for Tourism Market

The following is a Table showing Unit costs for tourism market quality mangoes.

Unit Cost - Mangoes for Tourism Market

	Per Piece	Per Carton 10 mangoes = 5.5kg.
Buying Price	Sh. 2.00	Sh. 20.00
Agents Fees	Sh. 0.30	Sh. 3.00
Labour (picking, packing)	Sh. 0.20	Sh. 2.00
Collection	Sh. 0.20	Sh. 2.00
Cartons	Sh. 0.80	Sh. 8.00
Transport - 1. Tana-Malindi	Sh. 0.20	Sh. 2.00
2. Malindi-Hotels	Sh. 0.20	Sh. 2.00
	3.90	39.00
Less cartons	.80	8.00
	Sh.3.10	Sh. 31.00

Selling Price to Hotels 3.00 to 3.50

Note that packing in cartons is expensive and local material substitute is needed as a saving.

Most of the hotels indicated that they only buy perfect mangoes at K.Sh. 3.50 thereby suggesting a profit of only Sh. 0.40 if mangoes are bought at Sh. 2.00. It is recommended

that mangoes for tourism trading be bought at between Sh. 1.00 and 1.50 and sold at Sh. 3.00 to Sh. 3.50 thereby assuring a profit margin per piece of between Sh. 0.90 to Sh. 1.40 per piece.

Clearly, there will be no market for mangoes in the tourism industry if mangoes are bought at more than Sh. 2.00 per piece.

#### 4. Trading Projects Assumptions

In following pages, the various sub-projects and their financial implications are covered. In this section, we want to point out matters which relate to over all policy.

First, to keep the costs down, no new facilities are envisaged for Malindi or Mijila other than provision of an office at Mijila and storage space from a trader in Malindi. This decision was arrived after reviewing the new (since 1985) practices in the buying chain where traders organise picking, packaging and transport in Tana River. There is thus no need to burden the YWCA with transport and management activities which will take a lot of money.

The second set of assumptions relate to opportunities which did not exist when the 1985 studies were done. HCDA had not offered to market YWCA produce. Other traders were not as interested in getting women as suppliers for export, the tourism market was not seen as important.

It is assumed that of the fresh mangoes traded by women groups during the first year:

35% will be exported by HCDA for them

35% will be exported by traders

30% will be traded in the tourism industry.

This mixture should be reviewed during the year as trading patterns become clear. The YWCA should always focus on increasing exports for the returns are highest there. As more traders invest in transport to Tana, YWCA will be in a position to dictate trading relations. Given the rapidity of change in the trading system over the past year, there may be opportunities even during the first project year for exporting much more than reflected hereunder.

Stemming from the basic assumptions, and data presented above, several other points ought to be made. The first is that women groups ought to collect the agency fees for all mangoes they trade. The second point is that transport from Tana to Malindi for tourism market mangoes can be hired at Sh. 2.00 per carton. Thirdly, distribution in the tourism can be effected at Sh. 1.00 per carton.

E. TERMS OF REFERENCE V AND VI: TRANSPORT CHAIN AND  
TRAINING PILOT GROUPS

1. Transport Chain

Evolution of the trading system in Tana River has put buyers on the farms. As a result, transportation is needed for selling in the tourism market. Its cost is covered in the sub-project 4, writeup.

Transportation needed for collection is costed under a collection vehicle (4 WD Land Cruiser Diesel) whose costs are spread over sub-projects 3-5. Also to transport fresh mangoes for HCDA export and Tourism market from pickup points along the River a hire budget is developed in sub-projects 3(a) and 4. A pickup for distribution to tourist hotels is budgeted in subproject 4. So is another Land Cruiser for use by the Manager in supervision. Mango pulp will be transported by Greenfields and its transport is not part of the project.

Transport costs are still the major item inspite of our reducing it by hiring riverine collection transport (boats) and road transport. Although donors are sensitive to this we recommend that the YWCA make strong presentations on the issue for failure to get adequate transport as presented will lead to lack of collection and supervision with dire consequences for the project.

In Section F, we load all the purchase and hire costs for transportation on the projects in the first year. This leads to unrealistic financial returns. If transportation costs are spread over four years as is the normal case, the project's financial viability is assured.

2. Training Pilot Groups

The costings of this are shown in the sub-project 1 and 2 writeups in Section F.



F. TERMS OF REFERENCE VII: PROJECT PROPOSAL

1. Introduction

The following diagram, Tana Mango Project: Long-term Activity Plan illustrates what is possible in the long-term.

After reviewing the previous studies and completing the activities required by the terms of reference, this is our distillation. It is based on our judgement on how YWCA members can intervene now in marketing and production operations so as to set them up as the major actors in mango production and trade in the long term.

It should be further pointed out that the sub-projects identified seek to:

- a. increase employment opportunities
- b. increase incomes from trading
- c. make women central actors in the mango chain.

We have deliberately not gone out of our way to initially maximise trading income only for that would have led us to the management pitfall. This will come when the YWCA builds up its management capacity.

The roles for different actors, activities and assets of an inter-related project, made up of five distinct sub-projects are shown in the diagram Project Activity/Assets.

Overhead Expenses necessary for all sub-projects are shown in Appendix I.

# TANA MANGO PROJECT LONG TERM ACTIVITY PLAN

Phase I (Pilot) I Year	Phase II Year 2-4	Phase 3 Year 5
1. Training in picking and packing	1. Planting improved mangoes	1. Marketing fresh mangoes directly
2. Setting up nurseries Extension for Improved Mango Production	2. Drying ripe mangoes	2. Establishing mango factory for all mango products
3. (a) Exporting fresh mangoes through HCDA (b) Marketing fresh mangoes to traders for export	3. Marketing of waste green mangoes Overseas for Chutney acharia etc.	3. Marketing of all factory products directly
4. Marketing fresh mangoes to Tourism Industry		
5. Mango pulping for Export by Trader(s)		

PROJECT ACTIVITY/ASSETS

1	2	3	4	5	6	7
Actors	YWCA Branch Women Groups	Mango Project Staff (Manager, 3 Extension, 2 Drivers)	H.R. Relief	HCDA	Greenfields	Coastal Growers and Packers

Activity	1. Make policy	1. Pick	1. Coordinate Project	1. Train picking & packing trainers	1. Buy for export	1. Buy for export
			2. Manage mango extension	2. Find markets	2. Export	2. Export
	2. Supervise Project	2. Pack	2. Manage collection & marketing vehicles			
		3. Sell	3. Supervise collection and marketing of mangoes in Tourism Industry	3. Export	3. Buy ripe mangoes for pulping	3. Buy for pulping
	4. Run nurse-ries		4. Supervise pulping	4. Transport Tana/Malindi for tourism market	4. Buy pulp	
				5. Store for tourism market		
				6. Train mango extension staff and manager		

Actors YWCA Branch Women Groups Mango Project H.R. Retief HCDA Greenfields Coastal Growers and Packers  
Staff  
(Manager, 3 extension, 2 drivers)

Equipment None 1. Scateurs 1. Office furnishings 1. Supply own pulping equipment None

2. Packing cartons free 2. Type-writer, calculator

3. Wheel-barrows, spades, jembes, pangas, watering cans, polytubes grafting equipment 3. Visual aids

Vehicles None 1. Managers Land Cruiser diesel 1. Own truck for Hireby Project 1. Supply own transport None

2. Collection land-cruiser diesel

3. Marketing Toyota Diesel

3: 3 motor-cycles, Yamaha offroad

2. Sub-Project 1 - Training on Picking and Packing

a. Selection and Number of Trainees

Each of the YWCA groups in the pilot project will choose a member to be trained in modern mango picking and packing techniques. Thus, there will be 11 trainers initially trained. The book-keeper, manager and other YWCA staff ought to participate in this training.

b. Organisation of Trainers Training

HCDA has agreed to send specialists for the training at no cost to the Project as part and parcel of its work. They envisage that over and above their specialists, they would use some of the traders (e.g. H.R. Ratief and Greenfields) and their staff from the community.

The formal training sessions will be scheduled at the YWCA centre at Mijila. Field training will take place in Tana River where trees are traditionally managed. There are better farming systems in Malindi where there are modern mango farms. These will be visited. The detailed activity plans will be made by the Project Manager.

c. Once 11 trainers have been trained by HCDA and traders, they are expected to train all their group members.

d. Cost for the training project has been calculated as K.Sh. 153,802.

e. Note that since training will be initiated before project vehicles are procured, we have budgeted 'hiring' needed transport from the YWCA and others.



PROJECT I

TRAINING ON PICKING AND PACKING (14) DAYS

	<u>K.SHS.</u>	<u>K.SHS.</u>
1. DIRECT/VARIABLE COSTS		
a. <u>ACCOMMODATION AND MEALS</u>		
24 people at K.Sh. 160/= /day x 14 days		53,760
b. <u>STAFF, TRAINEES AND CONSULTANTS ALLOWANCES</u>		
3 YWCA Tana staff at K.Sh. 100/= per day	4,200	
3 YWCA Extensionists at K.Shs. 80/= per day	3,360	
1 Book-keeper at K.Shs. 100/= per day	1,400	
1 Project Manager at K.Sh. 150/= per day	2,100	
1 Branch Secretary at K.Sh. 150/= per day	2,100	
2 Drivers at 100/= per day	2,800	
2 Trade Supervisors at K.Sh. 200/= per day	5,600	
1 Trade Consultant at K.Sh. 1,000/= per day (Retief)	14,000	
11 Trainees allowances at K.Sh. 100/= each	<u>1,100</u>	
		36,660
c. <u>VEHICLE RUNNING COSTS</u>		
1 4WD Consultant and Supervisor. 500 km at K.Sh. 12/= per km.	6,000	
1 4WD YWCA vehicle 500 km at K.Sh. 12/= per km.	6,000	
1 Microbus YWCA vehicle 500 km at K.Sh. 12/= per km.	<u>6,000</u>	
		18,000
d. TRAINEES MATERIALS		5,000
e. PICKING AND PACKING TRAINEE ALLOWANCE (YEAR)		26,400
f. OVERHEAD EXPENSES YWCA:		
10% of (a) to (d) above		<u>13,982</u>
TOTAL COST		<u><u>153,802</u></u>

3. Sub-Project 2 - Improved Mango Extension

a. Selection and Number

The three extension staff will be picked from the best of the original 11 group representatives who will be initially trained for picking and packing. The idea is simply to reward learning and leadership. But, in selecting the three extension staff, they must be distributed in such a way that they will be handling groups near their home group. Each extensionist will be expected to handle about three group nurseries or a total of 100 members.

b. Training

The critical training will be in nursery operations, grafting and horticultural supervision. Since extensionists will be responsible for production of improved mango seedlings, they should be attached to Government nurseries at Mtwapa and attached to a modern mango farm - H.R. Ratief at Malindi for a time.

c. Work Schedules

Each extensionist will be expected to visit each group at least once a week to ensure that nurseries are operated properly. Once planting out starts, they should organise farm visits.

d. The project Manager will coordinate the field work by ensuring that detailed work plans are made and followed.

e. Cost of Training, Staffing and Operations for Mango extension has been calculated at K.Sh. 780,472.

SUB-PROJECT 2

IMPROVED MANGO EXTENSION

	<u>K.SHS.</u>	<u>K.SHS.</u>
1. a. <u>ACCOMMODATION AND MEALS</u>		
14 people at K.Sh. 160/= per day		
x 14 days		33,360
b. <u>STAFF CONSULTANTS/TRAINING ALLOWANCES</u>		
3 Mango Extensionists	3,360	
3 YWCA Tana Staff	4,200	
1 Project Manager	2,100	
1 Branch Secretary	2,100	
1 Book-keeper	1,400	
2 Drivers	2,800	
2 Mango Trade Supervisors	5,600	
1 Mango Trade Consultant (Relief)	7,000	
Government Agricultural Staff	-	
		28,560
c. <u>VEHICLE RUNNING COSTS</u>		
1 Microbus (YWCA vehicle) 1,000 km		
at K.Sh. 12/= per km.		12,000
d. <u>TRAINING MATERIALS</u>		5,000
e. <u>OVERHEAD EXPENSES: (FIRST YEAR)</u>		
3 Mango Extensionists	54,000	
$\frac{1}{5}$ of Project Manager	16,800	
$\frac{1}{5}$ Managers Land Cruiser	160,000	
$\frac{1}{5}$ of Book-keeper	10,800	
$\frac{1}{5}$ of Office Furnishing and Equipment	7,000	

SUB-PROJECT 2

IMPROVED MANGO EXTENSION

	<u>K.SHS.</u>	<u>K.SHS.</u>
1. a. <u>ACCOMMODATION AND MEALS</u>		
14 people at K.Sh. 160/= per day		
x 14 days		33,360
b. <u>STAFF CONSULTANTS/TRAINING ALLOWANCES</u>		
3 Mango Extensionists	3,360	
3 YWCA Tana Staff	4,200	
1 Project Manager	2,100	
1 Branch Secretary	2,100	
1 Book-keeper	1,400	
2 Drivers	2,800	
2 Mango Trade Supervisors	5,600	
1 Mango Trade Consultant (Relief)	7,000	
Government Agricultural Staff	-	
		28,560
c. <u>VEHICLE RUNNING COSTS</u>		
1 Microbus (YWCA vehicle) 1,000 km		
at K.Sh. 12/= per km.		12,000
d. <u>TRAINING MATERIALS</u>		5,000
e. <u>OVERHEAD EXPENSES: (FIRST YEAR)</u>		
3 Mango Extensionists	54,000	
$\frac{1}{5}$ of Project Manager	16,800	
$\frac{1}{5}$ Managers Land Cruiser	160,000	
$\frac{1}{5}$ of Book-keeper	10,800	
$\frac{1}{5}$ of Office Furnishing and Equipment	7,000	

4. Sub-Project 3(a) - Mango Export Trading through HCDA

a. Identification of Markets and Selling for Women Groups

This will be the responsibility of HCDA as discussed with them. Given that deferement of payment is a problem, based on previous experience in Tana River, it is crucial that HCDA marketing must include cash payment. Since HCDA does not have buyers in the field and uses some traders, this should not present problems for the traders can handle HCDA cash and pay members directly at going rates. After international disposal, HCDA will remit to the YWCA Project office proceeds which will be passed to members who had sold to HCDA. This means that proper accounts on mangoes sold to HCDA must be kept by H.R. Ratief and the Project Management office showing shipment by particular members.

b. Total Costs for this sub-project is calculated as K.Sh. 547,228.

PROJECT 3(a) MANGO TRADING EXPORT THROUGH HCDA

	K.SH.	K.SH.
a. <u>SALES PER CARTON - MIDDLE EAST</u>		140
b. <u>DIRECT/VARIABLE COSTS</u>		
One Carton of Mango	20	
Agency fees per Carton	3	
Labour Costs	2	
Collection Costs per Carton	2	
Empty Carton	8	
Transport Tana-Nairobi	8	
Airfreight Nairobi to Middle East	66	
		<u>109</u>
Contribution per Carton		<u>31</u>



c. FIXED COSTS

	K.SH.	K.SH.
$\frac{1}{5}$ Project Manager	16,800	
$\frac{1}{5}$ Managers Land Cruiser	160,000	
$\frac{1}{5}$ Book-keeper	10,800	
$\frac{1}{5}$ Vehicle Collection Costs	160,000	
$\frac{1}{5}$ Drivers Costs	4,800	
$\frac{1}{5}$ Ratief Management Costs (26 days)	26,000	
$\frac{1}{5}$ Truck hire	110,880	
$\frac{1}{5}$ Office Furnishings and Equipment	7,000	
$\frac{1}{5}$ Office Rent	<u>1,200</u>	497,480

d. YWCA OVERHEAD COSTS

10% of (c) above	<u>49,748</u>
Total Fixed Costs	<u><u>547,228</u></u>

2. Break - Even Point =  $\frac{\text{Fixed Costs}}{\text{Contribution per Carton}}$

=  $\frac{547,228}{31}$

= 17,653 Cartons

= 176,530 pieces of Mangoes

3. INCOME TO WOMEN

55,440 Cartons @ K.Sh. 31/= per Carton	1,718,640	
Employment & Agency Income (55,440 x 5)	<u>277,200</u>	1,995,840
Fixed Costs (c) and (d) above		<u>547,228</u>
Net Income to Women		<u><u>1,448,612</u></u>

Please note that Employment and Agency Income is what the Women will get as Agency Fees and their Labour for collecting mangoes.

5. Sub-Project 3(b) - Mango Trading for Export by Traders

- a. Traders will be buying for their own international disposal. They should buy cash also as is practice. During the pilot, we do not recommend that traders sell YWCA mangoes overseas under YWCA label. Above, we have recommended international marketing under HCDA. International marketing under YWCA label may be considered under phase II of the Project. Therefore, all that traders will be doing is assuring YWCA members of outlet for their produce and purchases at the top farm gate prices.
- b. Detailed plans for where various traders will buy need to be worked on by the project manager. In other words, some discussion on what groups will sell to what trader and when is part of the detailed business planning.
- c. The costs for this sub-project are calculated as K.Sh. 425,260.

PROJECT 3(b) - MANGO TRADING FOR EXPORT BY TRADERS

	K.SH.	K.SH.
1. (a) SALES OF ONE CARTON AT MIDDLE EAST		140
(b) <u>DIRECT/VARIABLE COSTS</u>		
One Carton of mangoes	20	
Agency Fees per Carton	3	
Labour Costs per Carton	2	
Collection Costs per Carton	2	
Empty Carton	8	
Transport Tana-Nairobi	8	
Airfreight Nairobi to Middle East	66	
		<u>109</u>
Contribution per Carton		<u>31</u>

	K.SH.	K.SH.
(c) <u>FIXED COSTS</u>		
$\frac{1}{5}$ Project Manager	16,800	
$\frac{1}{5}$ Manager's Land Cruiser	160,000	
$\frac{1}{5}$ Book-keeper	10,800	
$\frac{1}{5}$ Driver	4,800	
$\frac{1}{5}$ Collection Vehicle Costs (Purchase and running Costs)	160,000	
$\frac{1}{5}$ Ratief Management Costs (26 days)	26,000	
$\frac{1}{5}$ Office Rent	1,200	
$\frac{1}{5}$ Office Furnishing and Equipment	<u>7,000</u>	
		386,600
(d) <u>YWCA OVERHEAD COSTS</u>		
10% of (c) above		<u>38,660</u>
Total Costs		<u><u>425,260</u></u>

2. BREAK-EVEN POINT =  $\frac{\text{Fixed Costs}}{\text{Contribution per Carton}}$   
=  $\frac{425,260}{31}$   
= 13,718 Cartons  
= 137,180 pieces of mangoes

3. <u>INCOME TO WOMEN</u>	
55,440 Cartons @ K.Sh. 5/= per Carton	277,200
Fixed Costs (c) and (d) above	<u>425,260</u>
Net Loss to Women	<u><u>(148,060)</u></u>

Note that under this project income to women is only Agency fee and Labour (i.e. Sh. 3 + Sh. 2).

6. Sub-Project 4 - Mango Trading - Tourism Market

a. Marketing Hotels

The initial activity will be to get firm orders from the hotels in Malindi, Northcoast and Southcoast. In this activity, the Project Manager should be assisted by the Mombasa Branch Committee members who have standing in the community and the sector.

- b. Since the pickup for delivery will be based at H.R. Ratief at Malindi, there should be a system of records set to show deliveries from Tana River to H.R. Ratief and deliveries from H.R. Ratief to hotels.
- c. It will be the responsibility of the Project Manager to supervise delivery and finances. If internal control systems are properly set, and packaging is as per destination, no extra personnel will be needed and the pickup driver can be responsible for deliveries and collecting orders.
- d. Detailed work plans, including initial marketing by the Project Manager and Branch Committee members, should be worked out in conjunction with the Branch Secretary.
- e. Cost of this sub-project has been calculated as K.Sh. 941,204.

PROJECT 4 - MANGO TRADING - TOURISM MARKET

	K.S.H.	K.S.H.
1. (a) SALES PER CARTON - TOURISM MARKET		35
(b) <u>DIRECT/VARIABLE COSTS</u>		
One Carton of Mangoes	20	
Agency Fees	3	
Picking and Packing	2	
Collection Costs	2	
Transport: Tana to Malindi	2	
Malindi to Hotels	2	
		<u>31</u>
Contribution per Carton		<u>4</u>
(c) <u>FIXED COSTS</u>		
$\frac{1}{5}$ Project Manager	16,800	
$\frac{1}{5}$ Manager's Land Cruiser	160,000	
$\frac{1}{5}$ Book-keeper	10,800	
Pickup Costs (purchase and running costs)	350,000	
Drivers Costs (distribution pickup)	24,000	
$\frac{1}{5}$ Collection vehicle Costs (purchase and running)	160,000	
$\frac{1}{5}$ Drivers Cost	4,800	
Ratief Management Costs	26,000	
$\frac{1}{2}$ of Truck hire costs (Tana-Malindi transport)	95,040	
$\frac{1}{5}$ Office Furnishing and Equipment	7,000	
$\frac{1}{5}$ Office Rent	1,200	
		855,640
(d) <u>YWCA OVERHEAD COSTS</u>		
10% of (c) above		<u>85,564</u>
Total Cost		<u>941,204</u>



PROJECT 4 (CONT'D)

1. BREAK-EVEN POINT =  $\frac{\text{Fixed Costs}}{\text{Contribution per Carton}}$   
=  $\frac{941,204}{4}$   
= 235,301 Carton  
= 2,353,010 pieces of mangoes

3. <u>TRADING INCOME TO WOMEN</u>	K.SH.	K.SH.
47,520 Cartons @ K.Sh. 4/= per Carton	190,080	
Employment/Agency Income	<u>237,600</u>	427,680
Fixed Costs (c) and (d) above		<u>941,204</u>
Net Loss to Women		<u>(513,524)</u>

Annual tourism market demand is for 240,687 carton per year. This is higher than the break-even point.

The projected sale is only 47,520 Cartons of mangoes, which is what we, using trader judgement, estimate possible in the first year.

7. Sub-Project 5 - Mango Pulping

a. Introduction

Two companies are set to go into mango pulping. After 2½ years study, Greenfields Exporters Ltd., are going to locate a major refrigeration plant in Malindi. They will have a cooling plant in Kipini. This site was selected to be near the Kipini-Kau-Ozi complex, which is by far the major production area. Refrigeration trucks will be sent out to pick pulped mango all over the district.

Greenfields costing show that they will buy ripe mangoes at Sh. 0.20 a piece. They intend to supply all the pulping equipment, and they will train personnel in pulping. They expect to pay the personnel at Sh. 25.00 to 30.00 per day.

The pulping operation cannot compete with selling mangoes for export. It will come at the tail end of the season when most of the mangoes go to waste.

Coastal Growers and Packers have plans to establish a centralised pulping operation at Mtwapa. They want mangoes transported from producer areas to their centralised factory. I do not see how YWCA women can get involved in this for transport is not only costly but demands extra management capacity. If the company wants to buy ripe mangoes in Tana River, the women should consider selling to it.

Greenfields will need 20,000 pieces daily for pulping for a total of 1.5m pieces in June and July and a possibility of some pulping in December. A project for YWCA Pilot Project will be either to sell to Greenfields or to buy mangoes, pulp them and sell the mango pulp to Greenfields.

I recommend the later.

b. Training in pulping and Employment.

Greenfields has indicated that they are willing to train as many YWCA groups as desired for pulping at their cost. This will give them product stability.

c. Equipment

Greenfields have agreed to supply all equipment necessary.

d. Supervision/Marketing and Storage

Greenfields have agreed to supervise market and store at their cost.

e. Mango Buying

YWCA women groups should buy the mangoes. Since the projected price is Sh. 0.20 perhaps they can buy at Sh. 0.15 so as to get a profit margin of Sh. 0.05.

f. Benefits

Benefits to the group will be the profit margin of Sh. 0.05 per piece plus employment for significant number for periods of about 10 weeks every year at Sh. 25 to Sh. 30 daily. Pulping operations will be concentrated in June/July when most mangoes go to waste.

g. Project Costs

The whole project will cost the YWCA K.Sh. 396,660. We recommend that whatever the financing from donors, women groups should utilise their contribution of Sh. 60,000 in this project for the returns will be immediate and not subject to being handled away from the villages.

PROJECT 5  
MANGO PULPING

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales of 1.5m mangoes @ Kshs. 0.20 each		300,000
Purchase of 1.5m mangoes @ Kshs. 0.15 each		<u>225,000</u>
Gross Income		<u>75,000</u>
(b) Fixed Costs:-		
$\frac{1}{5}$ Project Manager	16,800	
$\frac{1}{5}$ Manager Land Cruiser	160,000	
$\frac{1}{5}$ Book-keeper	10,800	
$\frac{1}{5}$ Office furnishing and equipment	7,000	
$\frac{1}{5}$ Collection Vehicle costs (purchasing and running)	160,000	
$\frac{1}{5}$ Drivers Costs	4,800	
$\frac{1}{5}$ Office Rent	<u>1,200</u>	360,600
(c) YWCA Overhead Costs		
10% of (b) above		<u>36,060</u>
Total fixed costs		<u>396,660</u>
2. <u>INCOME TO WOMEN</u>		
Gross Trading Income	75,000	
Employment Income (salaries 300 women @ K.Sh. 30 daily for 30 days)	<u>270,000</u>	345,000
Fixed Costs (b) and (c) above		<u>396,660</u>
Net loss to women		<u>(51,660)</u>

Although the Project shows a net loss of K.Sh. 51,660/= to women, there are other costs such as pulping equipment, equipment maintenance, etc., which will be supplied by traders and are therefore not part of project costing.

8. Mango Buying Support Fund

- a. This is a fund envisaged for supporting women in their efforts to buy mangoes from their villages for:  
(1) export through HCDA, (2) selling to traders for export, (3) selling to the tourism market and (4) mango pulping.
- b. It can be operated on the basis of a revolving fund where groups will be lend money to purchase and trade mangoes.
- c. No funds will be lend to the group if they do not pay back to the fund money advanced before.
- d. It is envisaged that each women member will contribute Shs. 200 each which will be used in the mango pulping sub-project. From this source about Shs. 60,000 will be realised.
- e. Total funds from the donor for trading are calculated as 1/6 of the trading funds for in the opinion of traders that is about the trading capital level necessary. Funds for this operation to back sub-projects 3a, 3b, 4 and 5 are calculated as Shs. 2,279,340.



9. TOTAL PROJECTS COSTS AND FINANCING

The following table summarises project costs.

DETAILS	DIRECT COSTS	FIXED COSTS	TOTAL	FINANCING
	(KSHS)	(KSHS)	(KSHS)	(KSHS)
a. Project No. 1	113,420	40,385	153,802	153,802
b. Project No. 2	78,920	701,552	780,472	780,472
c. Project No. 3a	6,042,960	547,228	6,590,188	1,554,388
Project No. 3b	6,042,960	425,260	6,468,220	1,432,420
d. Project No. 4	1,473,120	941,204	2,414,324	1,186,724
e. Project No. 5	225,000	396,660	621,660	374,160
TOTAL	13,751,380	3,052,289	17,028,666	5,481,966

Please note the following:

- a. Projects 1 and 2 will need financing for both direct and fixed costs.
- b. Project 3a - the whole of fixed costs will need financing while only  $\frac{1}{6}$  of the direct costs will need financing.
- c. Project 3b -  $\frac{1}{6}$  the whole of direct costs will be financed by the traders while the whole of fixed costs will need financing.
- d. Project 4 -  $\frac{1}{6}$  of the direct and the whole of fixed costs will need financing.
- e. Project 5 -  $\frac{1}{6}$  of the direct and the whole of the fixed costs will need financing but women will generate Shs. 60,000.

It may be useful to further note the assumed sources of money for different investments.

Trading Capital requirements are K.Sh. 2,297,340 from donor(s) and K.Sh. 60,000 from YWCA pilot group members.

Training, Equipment, Staff and Operating Capital of K.Shs. 3,052,289 is required and should be sought from donors.

#### 10. Normal Fixed Costs Depreciation

So far all fixed costs have been borne in the first year for in interpretation of terms of reference, the Consultant was informed that preliminary discussions with the donor were for only a commitment of a year.

Below we present costing data whereby we depreciate vehicles and equipment in normal accounting fashion to underscore the financial viability of the project. Out of this exercise, we recommend that YWCA and the donors to consider the project in the normal accounting time frame. We would like to further point out that the heavy cost items in fixed costs like vehicles would be used in the suggested extension of this project into other activities suggested in diagram Tana Mango Project Long-term Activity Plan (p. 26).

Since Sub-project 1, Training and Picking and Packing has no income component, it is not affected by depreciation. In all other sub-projects, there is significant impact on income to women groups. In Sub-project 2, Improved Mango Extension, if fixed costs are depreciated normally, net income jumps from K.Sh. 1,419,528 to K.Sh. 1,710,890. In Sub-project 3a, Mango Trading through HCDA, net income to women improves from K.Sh. 1,448,612 to K.Sh. 1,620,349.

Sub-project 3b, Mango Trading for Export by Traders which has a loss of Sh. 148,060 if all fixed costs are loaded to one year generates a small income of Sh. 23,677 under normal depreciation.

We pointed out in Section F (p. 40) that tourism demand for fresh mangoes is Sh. 240,687 Cartons annually and 140,718 cartons during the seven months Tana River can supply as their mangoes would be in season. Only about a fifth (47,520 Cartons) will be provided by Sub-project 4, Mango Trading Tourism Market, during the first year. This was based on trader judgement on what is possible in terms of business build up. These assumptions showed a loss to women of Sh. 513,524 if fixed costs were loaded in year one. The loss is cut to Sh. 135,537 if fixed costs are depreciated normally. We would further like to point out that if business build up is normal, it is not unrealistic to expect YWCA to provide all mangoes required by the sector when they are in season i.e. 140,720 cartons which is just under the breakeven point of 140,804 within three years. Given that extra income will still be going to women in agency fees and labour, the project is still unable. If women sell 140,720 cartons, trading profit will be K.Sh. 562,880. Their Agency and Labour Income will be K.Sh. 703,600, fixed costs will be K.sh. 872,801 leaving a net income to women of K.Sh. 393,675.

Sub-project 5, Mango Pulping generates income if fixed assets are depreciated normally by moving from a K.sh. 51,660 loss to a net income of K.sh. 120,077.

THE BASIC RECOMMENDATION to the YWCA therefore is that funding for ALL SUB-PROJECTS MUST BE SOUGHT TOGETHER. The reason is simply that the returns are better if all sub-projects are initiated simultaneously. If not overall costs are much higher and income to women unfavourable.

PROJECT I

TRAINING ON PICKING AND PACKING (14) DAYS

1. DIRECT/VARIABLE COSTS	K.SHS.	K.SHS.
a. <u>ACCOMMODATION AND MEALS</u>		
24 people at K.Shs. 60/= per day		53,760
b. <u>STAFF, TRAINEES AND CONSULTANTS ALLOWANCES</u>		
3 YWCA Tana Staff at K.Sh. 100/= per day	4,200	
3 YWCA Extensionist at K.Sh. 80/= per day	3,360	
1 Book-keeper at K.Sh. 100/= per day	1,400	
1 Project Manager at K.Sh. 150/= per day	2,100	
1 Branch Secretary at K.Sh. 150/= per day	2,100	
2 Drivers at 100/= per day	2,800	
2 Trade Supervisors at K.Sh. 200/= per day	5,600	
1 Trade Consultant at K.Sh. 1,000/= per day (Relief)	14,000	
11 Trainees allowances at K.Sh. 100/= each	<u>1,100</u>	
		36,660
c. <u>VEHICLE RUNNING COSTS</u>		
1 4WD Consultant and Supervisor. 500 km at K.Sh. 12/= per km.	6,000	
1 4WD YWCA vehicle 500 km at K.Sh. 12/= per km.	6,000	
1 Microbus YWCA vehicle 500 km at K.Sh. 12/= per km.	<u>6,000</u>	
		18,000
d. Trainees materials		5,000
e. Picking and packing Trainee Allowance (Year)		26,400
f. Overhead expenses YWCA:		
10% of (a) to (d) above		<u>13,982</u>
TOTAL COST		<u><u>153,802</u></u>



SUB-PROJECT 2 - MANGO EXTENSION

	<u>K.SHS.</u>	<u>K.SHS.</u>
1. <u>DIRECT COSTS</u>		
a. Accommodation of meals		33,360
b. Staff, Consultants, Trainee, Allowances		28,560
c. Vehicle running costs		12,000
d. Training materials		5,000
e. Overhead Expenses - First Year:		
Mango Extensionists	54,000	
Project Manager	16,800	
Book-keeper	10,800	
Office Rent	1,200	
Drivers Costs	4,800	
Ratief Management	21,000	
Vehicle Running Expenses (Landcruisers)	120,000	
Motor cycle Running Expenses	<u>50,000</u>	278,600
f. Depreciation:		
- Motor vehicles 25%	50,000	
- Motor cycles 25%	26,250	
- Nursery Equipment 25%	10,000	
- Office Furnishing and Equipment 12½%	<u>875</u>	<u>87,125</u>
		444,645
g. YWCA Overhead Expenses:		
10% of (a) to (f) above		<u>44,465</u>
TOTAL COSTS		<u>489,110</u>
2. <u>INCOME TO WOMEN</u>		
Sale of 110,000 Mango Seeding at K.Shs. 20/= per tree		2,200,000
Total Costs (a) to (g) above		<u>489,110</u>
NET INCOME TO WOMEN		<u><u>1,710,890</u></u>



PROJECT 3(a) MANGO TRADING  
EXPORT THROUGH H.C.D.A.

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales per carton - Middle East		140
Direct variable costs		109
Contribution per carton		<u>31</u>
(b) Fixed Costs:-		
Project Manager	16,800	
Book-keeper	10,800	
Driver	4,800	
Ratief Management	26,000	
Truck Hire	110,880	
Office rent	1,200	
Vehicle running expenses	<u>120,000</u>	290,480
(c) Depreciation:-		
Motor vehicle 25%	50,000	
Office Furnishing and Equipment 12½%	<u>875</u>	<u>50,875</u>
		341,355
(d) YWCA Overhead Expenses:-		
10% of (b) and (c) above		<u>34,136</u>
Total Fixed Costs		<u>375,491</u>

Break-Even POint =  $\frac{\text{Fixed costs}}{\text{Contribution per carton}}$   
=  $\frac{375,491}{31}$   
= 12,113 cartons  
= 121,130 pieces of mangoes

2. INCOME TO WOMEN

55440 cartons at Kshs 31/- per carton	1,718,640
Employment and Agency Income (55440 x 5)	<u>277,200</u>
	1,995,840
Fixed costs (b) to (d) above	<u>375,491</u>
Net Income to Women	<u>1,620,349</u>

PROJECT 3 (b)  
MANGO TRADING FOR EXPORT BY TRADERS

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales per carton- Middle East		140
Direct/variable costs		109
Contribution per carton		<u>31</u>
(b) Fixed Costs:-		
Project manager	16,800	
Book-keeper	10,800	
Driver	4,800	
Ratief Management	26,000	
Office rent	1,200	
Vehicle running expenses	<u>120,000</u>	<u>179,600</u>
(c) Depreciation:-		
Motor vehicles 25%	50,000	
Office furnishing and equipment 12½%	<u>875</u>	<u>50,875</u>
		230,475
(d) YWCA overhead expenses:-		
10% of (b) and (c) above		<u>23,048</u>
Total fixed costs		<u>253,523</u>
Break-Even Point	= $\frac{\text{Fixed costs}}{\text{Contribution per carton}}$	
	= $\frac{253,523}{31}$	
	= 8,178 cartons	
	= <u>81,780 pieces of mangoes</u>	

INCOME TO WOMEN

55,440 cartons (Employment and Agency Income)	
at Kshs. 5/-	277,200
Fixed Costs	<u>253,523</u>
Net Income to Women	<u>23,677</u>

PROJECT 4  
MANGO TRADING-TOURISM MARKET

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales per carton - Tourism market		35
Purchase price per carton		<u>31</u>
Contribution per carton		<u>4</u>
(b) Fixed Costs:-		
Project manager	16,800	
Book-keeper	10,800	
Driver (Distribution Pick-up)	24,000	
Drivers costs	4,800	
Ratief Management	26,000	
Truck Hire (Tana-Malindi)	95,040	
Office rent	1,200	
Vehicle running costs	<u>220,000</u>	398,640
(c) Depreciation:-		
Motor vehicles 25%	50,000	
Pick-up 25%	62,500	
Office furnishings and Equipment 12½%	<u>875</u>	<u>113,375</u>
		512,015
(d) YWCA overhed costs:-		
10% of (b) and (c) above		<u>51,202</u>
Total fixed costs:-		<u>563,217</u>
Break-Even Point	$= \frac{\text{Fixed costs}}{\text{Contribution per carton}}$ $= \frac{563,217}{4}$ $= 140,804 \text{ cartons}$ $= \underline{1,408,040 \text{ pieces of mangoes}}$	

INCOME TO WOMEN

47,520 cartons at Kshs. 4/- per carton	190,080
Employment/Agency Income	<u>237,600</u>
	427,680
Fixed Costs	<u>563,217</u>
Net Loss to Women (First Year)	<u>(135,537)</u>

PROJECT 5  
MANGO PULPING

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales of 1.5m mangoes at Kshs. 0. 20 each		300,000
Purchase of 1.5m mangoes at Kshs 0.15 each		<u>225,000</u>
Gross Income		<u>75,000</u>
(b) Fixed Costs:-		
Project Manager	16,800	
Book-keeper	10,800	
Office rent	1,200	
Driver	4,800	
Vehicle running costs	<u>120,000</u>	<u>153,600</u>
(c) Depreciation:-		
Motor vehicle 25%	50,000	
office furnishing and equipment	<u>875</u>	<u>50,875</u>
(d) YWCA overhead expenses		<u>204,475</u>
10% of (b) and (c) above		<u>20,448</u>
Total fixed costs		<u>224,923</u>
2. <u>INCOME TO WOMEN</u>		
Gross Trading Income	75,000	
Employment Income 300 women at Kshs 30/- per day for 30 days	<u>270,000</u>	<u>345,000</u>
Fixed costs		<u>224,923</u>
Net Income to women		<u>120,077</u>

APPENDIX I

BASE COSTINGS

A. <u>PERSONNEL COSTING</u>		NO.	MONTHLY SALARY	YEARLY SALARY	TOTAL
<u>CATEGORY</u>			(KSHS)	(KSHS)	(KSHS)
(i)	Driver	2	2,000	48,000	
(ii)	Extensionists	3	1,500	54,000	
(iii)	Manager	1	7,000	84,000	
(iv)	Book-keeper	1	4,500	54,000	
(v)	Picking/Packing Trainees	11	200	<u>26,400</u>	226,400
B. <u>TRAINING COSTS</u>					
Mango Extension Training				57,320	
Training of Picking and Packing				<u>79,820</u>	137,140
C. <u>OTHER OPERATIONAL COSTS</u>					
H.R. Ratief Management fee 99 days @ Kshs. 1,000/- per day		)			99,000
(a) 52 days on Mango for export		)			
(b) 21 days on Nurseries		)			
(c) 26 days on Tourism		)			
D. <u>CAPITAL EXPENDITURE</u>			UNIT COST <u>MAY 1987</u>	TOTAL <u>COST</u>	
(i)	Land Cruisers p/ups diesel	(2)	500,000	1,000,000	
(ii)	Pick-up - Toyota Hilux Diesel - 2 wheel	(1)	250,000	250,000	
(iii)	Motor Cycles (Yamaha Off Road 125 c.c.)	(3)	35,000	105,000	
(iv)	Office Furnishing	-	-	20,000	
(v)	Nursery Equipment	-	-	40,000	
(vi)	Calculator/Typewriter	-	-	<u>15,000</u>	1,430,000



E. <u>EQUIPMENT RUNNING COSTS</u>		UNIT COST MAY 1987	TOTAL COST
(i)	Motor Vehicles	3 700,000	
(ii)	Motor Cycles	3 <u>50,000</u>	750,000
F. <u>VEHICLES HIRE</u>			
(i)	Truck Hire - H.R. Ratief	205.920	
(ii)	Office Rent Kshs. 500/- monthly	<u>6,000</u>	<u>211,920</u>
			2,894,460
	USA dollars converted at Kshs, 16/- per dollar		180,904

APPENDIX II

PERSONS INTERVIEWED

1. YWCA National Secretary
2. YWCA Branch Secretary
3. 3 Tana River YWCA Field Workers
4. Managing Director, Greenfields Ltd.
5. Managing Director, Horticultural Crops Development Authority
6. Marketing Manager, Horticultural Crops Development Authority
7. Managing Director, H.R. Relief Ltd.
8. Managing Director, Vegair Ltd.
9. Managing Director, Coastal Growers and Packers
10. Managing Director, E.A. Growers Ltd.
11. Managing Director, Jakal Services Ltd.
12. Managing Director, Kenya Horticultural Exporters Ltd.
13. Managing Director, Karama and Sons
14. General Manager, Malindi Farmers Cooperative Society
15. District Agricultural Officer, Tana River
16. District Agricultural Officer, Kilifi
17. District Agricultural Officer, Kwale
18. Provincial Agricultural Officer, Mombasa
19. District Horticultural Officer, Tana River
20. District Officer, Garsen
21. Divisional Agricultural Officer, Garsen
22. Head, Horticultural Crops, Ministry of Agriculture
23. Project Officer, Ford Foundation
24. Chef, Nyali Hotel
25. Chef, Mamba Village Hotel
26. Chef, Silver Beach Hotel

27. Chef, Bahari Beach Hotel
28. Chef, Mombasa Beach Hotel
29. Chef, Reef Hotel
30. Chef, Oceanview Hotel
31. Chef, White Sands Hotel
32. Chef, Bamburi Beach Hotel
33. Chef, Kenya Beach Hotel
34. Chef, Neptune Hotel
35. Chef, Plaza Hotel
36. Chef, Severin Hotel
37. Chef, Dolphin Hotel
38. Chef, Serena Hotel
39. Chef, Intercontinental Hotel
40. Chef, Oceanic Hotel
41. Chef, Castle Hotel
42. Chef, Robinson Hotel
43. Chef, Two Fishes Hotel
44. Chef, Leopard Hotel
45. Chef, Diani Sea Lodge
46. Chef, Leisure Lodge
47. Chef, Golden Beach Hotel
48. Chef, Jadini Hotel
49. Chef, Africana Hotel
50. Chef, Safari Hotel
51. Chef, Diani Reef Hotel
52. Chef, Lagoon Reef Hotel
53. Chef, Trade Winds Hotel
54. Chef, Nomad Beach Hotel

55. Chef, Shelley Beach Hotel
56. Chef, Shelley Beach Hotel
57. Chef, Lawfords Hotel
58. Chef, Sindbad Hotel
59. Chef, Eden Rock Hotel
60. Chef, White Elephant Hotel
61. Chef, Coconut Village Hotel
62. Chef, Palm Tree Hotel
63. Chef, Silve Sand Villas
64. Chef, Sulisuli Hotel
65. Chef, Driftwood Beach Hotel
66. Chef, African Dream Hotel
67. Chef, Seafarers Hotel
68. Chef, Turtle Bay Hotel
69. 20 Retailers, Malindi and Mombasa

APPENDIX III

TERMS OF REFERENCE FOR YWCA TANA MANGO PILOT PROJECT  
CONSULTANCY

The following are the terms of reference for the YWCA Tana Mango Pilot Project:

The Consultant shall:

1. Establish supply of mangoes in Tana River and more specifically those within reach of the women pilot groups to be identified by consultants.
2. Establish aggregate demand for fresh mangoes in Malindi and Mombasa.
3. Establish and evaluate the major buyers in Tana River, Malindi and Mombasa.
4. Study the mango trading system to establish return to the producers and the traders.
5. Establish costs for picking, packing and transport of mangoes at Minjila or Malindi, any of which can act as a bulking and selling point.
6. Establish costs of training pilot group women in the picking, packing and transport chain.
7. Write a proposal for project funding for transmission to the donors.



ywca/muticon/1/86



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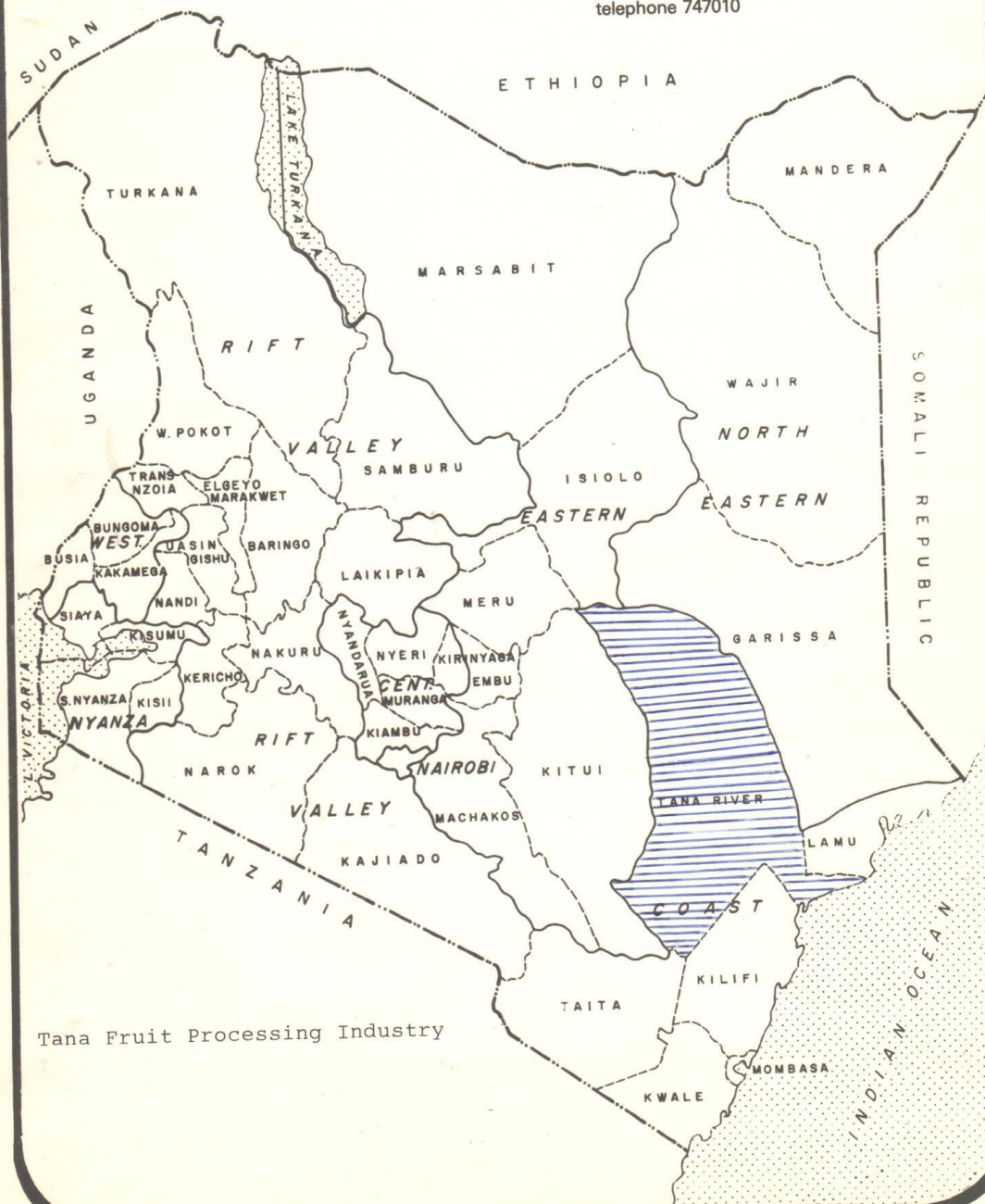


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#### Summary Conclusions.

1. Mombasa YWCA Branch should coopt volunteers familiar with fruit food processing technology and marketing.
2. Mombasa YWCA Branch secretariat is thin and will not cope with as a large project preparation as envisaged in the Tana. It needs to be beefed by a mature volunteer - preferably with food processing/marketing background.
3. The Branch volunteers and secretariat need to familiarise themselves with fruit growing, processing and merchandising so as to play their roles effectively.
4. The project must not only be based on mangoes. It preferably should include other crops like bananas, citrus, coconuts and tomatoes etc. At a bare minimum it must handle and process both mangoes and bananas.
5. The project entry should not just be expansion of fresh mango sales.
6. Project entry should be in nurseries for improved varieties, improved husbandry and handling, chutney and pickled products production, fresh mango sales expansion, dried fruit products and takeover of marketing by the project.
7. There is extensive political, NGO, administrative, and community support for the project.
8. Some commercial fruit buying outfits are in favour of the project.
9. Community socio-economic activities leave women time which can be used in project related activities.

10. The Islamic cultural veneer in the project area will mean that activities will have to be organised with clear female and male roles, space, time and resources.
11. The project must ensure that personnel recruitment, project sites and other activities are not seen as a Ngao phenomena only.
12. In the villages, project staff and activities must distance themselves from traditional trader agents whose formerly dominant roles are under attack.
13. Project products must not be commercially handled by Washiri traders who have historically dominated Tana commerce.
14. The project must seek intensive agricultural land use rather than extensive land tillage which is ecologically disastrous and which will deny the pastoral Orma access to stress period grazing lands especially in the delta.
15. Women YWCA groups in Tana River must have direct production roles as individuals and groups. They also must have project ownership roles as individuals, groups and selectors of locational board members. Only by structuring the project this way will the women be the primary beneficiaries.
16. The YWCA Branch secretariat must have a planning and project implementation role. It needs to upgrade its skills in planning, budgeting, administration and field extension.
17. The YWCA should hire a senior, mature and experienced finance or rural development specialist from Tana River to be incharge of the project. This person must be a native of Tana River.

18. YWCA Branch Executive should have project policy-making, fundraising, donor relations and advisory roles. It should hold donor funds in trust for the project.
19. The National YWCA Office should lobby for the project particularly with respect to desired government and parastatal policy changes at district, provincial and national levels.
20. All technical services needed by the project should be tendered if Technical Assistance volunteers, who are cheaper in the long run, are not available to be employed by the YWCA to manage the project.
21. The Project Industry should be organised in company form where the voting shares are controlled by women groups. Individual women, their groups, men and anybody else should be allowed to buy non-voting shares.
22. Each location's YWCA women groups should elect a Board member.
23. The Chief Executive of the company, who should be a non-voting Board member, should also be the Project Manager.
24. The National YWCA Chairman should be a voting board member and the company's non-executive chairman.
25. The YWCA Mombasa Chairman should be a Voting Board member.
26. The National YWCA Secretary and Mombasa Branch Secretary should be non-voting board members. Their alternative board members should be the National Treasurer and the Branch Treasurer respectively.



## Chapter 1. Introduction.

This consultancy, which is partly data gathering and advisory, was conducted in Tana River - the project site, at Mombasa - the YWCA Branch office and in Nairobi - among the YWCA National Headquarters, commercial sector, donors, and academics.

Seven distinct sets of informants were interviewed. These are women group members and their leaders; YWCA Volunteer officials at Branch and National levels; YWCA employees at Branch and National levels; Government officials in Tana River and Mombasa, and Nairobi; Commercial Sector Individuals in Mombasa and Nairobi; Other Consultants; selected donors in instructional meetings; and finally academics who have studied Tana River District.

The methodology for the consultancy was Rapid Appraisal for Projects. The conclusions reached are the author's and **are** thus not specifically attributed as required by the methodology.

Several further points need to be made in this introduction. To begin with the Mombasa Branch of the YWCA has capable policy leadership as the office bearers come from as diverse fields as social work, administration, banking, management of tourism industry etc. They are committed to the Tana Project. They however should coopt volunteers whose background is food processing/marketing so as to ensure expertise in the sector at the policy level. Such individuals can easily be found in Mombasa and its environs as there are many professionals who would gladly volunteer their time.

The second point relates to the secretariat. The Mombasa Branch is possibly the busiest outside the National Office.

If they are to administer the data gathering and general information to make coherent decisions on the Tana Project, which has the potential for becoming bigger than the existing operations, the secretariat will need a person to handle this expansion for the Branch secretary and Programme secretary seem to have a full load.

Such a person can be a YWCA volunteer or a person seconded to them by a donor agency. Such a person should have responsibility for :

1. Soliciting and collecting data relevant to making decisions on all aspects of Tana Project from within the country and outside especially with YWCAs globally.
2. Circulating such background information to officials/ secretariat.
3. Liaising with the communities served by the branch and coordinating solicitation of support from the business, government and NGO communities for the project.
4. Assisting Branch Officials and Secretary in preparation of documentation of the project.

This person will of necessity work under the guidance of the Branch Secretary who is the executive officer of the Branch.

It would be helpful if such a person comes from the background of either food merchandising, processing, finance, or general sales. A lot of work will need to be done on marketing and generating demand for the output of the project. Somebody needs to do this in a concentrated manner.

The person to do this must be experienced, mature and able to deal with the top commercial, manufacturing, governmental, NGO and research communities.

The third point is the need for the Branch to coopt into its policymaking level greater representation from Tana River. This district has few active groups now, but, if the project takes off, the district ought to be represented at the Branch policy level to give the local views hearing.

I have chosen to deal with these matters at the introductory level for they are part of gearing for the project and need to be handled and soon.

Both the officials and secretariat will need to get on top of a lot of information for policy-making about the project on alternative technologies, markets, cargo handling, economics government commercial and health regulations in Kenya and elsewhere not to talk about consulting reports ! They must be able to digest this mass of information, discuss it with their members and then decide what they envisage for Tana Project in short and long run frameworks. They can only do this effectively if data is systematically collected. Besides, this will enable them to evaluate different proposals made to them by traders, consultants, and donors.

Chapter 11. Commercial and Developmental Activities  
Interaction. (TOR 11)

The Branch Officials and Secretariat are clear that the main rationale for the Tana Project is to contribute to the development of Tana women first, the community second and generate income third. It is clear that their preference is a project system which will involve women at the ground level and thus have spill over effects in the community which are not just commercial. This view is shared by the district administration and local communities.

Given this preference, the project must not be:

1. Mono crop based.
2. Only continuing processes which have taken place in the past which are perceived by the YWCA officials, secretariat and district administration and communities as exploitative.

The Agricultural Report concentrates on mangoes only. This is not in keeping with the preferences found in the field. Preference was for improving and getting the project to handle all fruits. But, AT A MINIMUM mangoes and bananas must be the centre piece of the project. This must be clear to all and sundry who have anything to do with project design.

The second point is that organising project entry in terms of just packing mangoes (albeit with improved handling in harvesting, packing, and storage) was seen by those interviewed and continuing commercial relationships which in the past have led to Tana people not benefiting much. Of course the Agriculture Report does not specify a marketing chain.

Conceivably a marketing system could be set up so as to guarantee a decent price, but, project entry through just improving collection and packing (especially at Malindi) will be hard to sell to Tana people. It denies the developmental aspect and only supports commercial interests outside the district. All plant must be in Tana River. It is therefore suggested that the following be the sequence of the project activities so as to maximise both the developmental and commercial concerns.

1. Acquisition of fruit tree nurseries by project in all riverine settlements.
2. Introduction of improved seedlings and husbandry (including harvesting, packing and storage techniques) by project.
3. Introduction of making of chutney and pickled products at:
  - a) Homestead .
  - b) Group levelfor Kenya market by project.
4. Expansion of fresh fruit products marketing overseas by intermediaries.
5. Introduction of group produced wood/(solar ?) dried fruit products to local and overseas markets by intermediaries.
6. Intermediary overseas marketing of chutneys and pickled products.
7. Direct project marketing of dried fruit projects locally and overseas.
8. Direct project marketing of chutneys and pickled products overseas.



9. Direct project marketing of fresh products overseas.
10. Centralised Project Factory for :
  - a) Handling fresh products.
  - b) High volume of chutneys and pickled products.
  - c) Dried fruits.
  - d) Canning.
  - e) Juicing.

The logic of the above sequence is first simply that it will introduce improved fruit varieties and products, create developmental activity at the homestead and women group level, expand already ongoing fresh fruit markets, create new ones and ultimately locate a major plant in the area. Care has been taken to ensure that the women beneficiaries will not just be faced with a purely rapacious commercial activity as heretofore.

Secondly the logic is derived from the need to have activities of increasing organisational and technological complexity introduced after less complicated ones have been introduced.

Thirdly, it is important that the first activities be clearly new and under the control of the women groups so as to get community support.

Fourthly, the new activities must be both developmental and commercial. Developmental in the sense that they will cover under-exploited niches and resources (product and organisational) and not just expand fresh mango sales only. Commercial in the sense that they will generate incomes readily.

In organising nurseries YWCA will fulfil its developmental need of organising some resources to be under the control of women.

The women will also sell the improved and new varieties of fruits thereby earning immediate income. The women will learn and extend new techniques of husbandry and handling as well as increasing total fruit production.

In introducing chutneys and pickled products women will be able to do the work in their homesteads. The products will be marketed centrally by the project. This will be a good system establishing an activity done at the woman's convenience and later linked to more complex local and overseas marketing where the women can be introduced to complex organising.

Fresh mango sales expansion is afoot with new entrants. Firms and individuals are now buying at source. Many of the village middlemen are being marginalised as buyers come directly to the field. New techniques of harvesting and packing are being introduced. Yet these are identified with the commercial operators. The project by taking these and spreading them will legitimise techniques which are of major value to the fruit industry. Other techniques not yet extensively introduced for growing and handling citrus and bananas should be introduced by the project perhaps in conjunction with other NGOs.

In spite of the clamour for Tana River people to start handling fresh fruit exports NOW, commercial intermediaries will continue to flourish until the community is organised. The project though, could begin to train the women beneficiaries, and the community in general, on better husbandry and handling techniques for fresh fruit export as knowledge about this is still seen in the community as exotic and mystified - only for the foreign exporters.

It is my view that project entry to overseas marketing should be through selling chutneys and pickled and dried products given the risks and high costs of fresh fruit overseas marketing.

It is clear also from field interviews that the Tana community, the YWCA and the administration have set themselves the ultimate objective of creating a fruit industry in Tana River under local control.

Chapter 111. Community Views and Project Support (TOR 111)

There is support for the project by local leaders, the administration and the community in general.

The only opposition is by people who in the past have been agents of the commercial buyers. However even they dare not come out in opposition publicly for they are seen as part and parcel of the past where farmers got very low prices for their product.

The overwhelming support for the project can be explained by the fact that the District now has a strong political movement for controlling its resources. This is reinforced by the politicians and administrators who openly emphasize district oriented development in stark and vivid terms. This has undermined the historical trading networks where local agents of 'Arab' traders were the dominant community voices.

More specifically the locational development committees and the Garsen divisional development committee have accepted the project. The District Development Committee has also specifically given the project district top priority and wide publicity.

The communities visited - even in Chara Location, where the YWCA does not as yet have viable groups - the leaders and public support the project.

Having said all this one must also state categorically that it is still support for an idea. Details are anxiously awaited by the leaders, administration and community at large. Some commercial interests are also agitating through their agents who cast doubt on the projects viability particularly given cultural traditions and past cooperative society failures. But other commercial interests support the idea and are willing to take part in aspects of the project.

There is also support within the key NGOs working in the District. These are :

1. The Catholic Diocese of Garissa who have just got an agricultural volunteer to be based at Wema.
2. The Methodist Church which has had a development office-related to NCK Rural Development Department - for a long time in the District. It has supplied new varieties of fruits including apple mangoes. The YWCA would be well advised to find a formula for coordinating with these NGOs in organisational and technical matters especially on supervision of scattered nurseries.

More specifically hereunder are specific types of support to be given or needed from specific institutions.

1. Provincial Administration.

To date all levels of Provincial Administration from Subchiefs, Chiefs, DOs, DDO and DC have openly supported the idea of a fruit industry in Tana controlled by people from Tana. This support has been clearly expressed in development committees.

Future support, I was assured, will be freely given in :

- a) community mobilisation for the project;
- b) support of ancilliary activities like campaigning for roads, electricity and plans which allow fruit growing in the Lower Tana Village Irrigation Programme and the Delta Irrigation Programme;
- c) allocation of nursery plots and deeding them to YWCA.



- d) campaign against commercial interests who want to monopolise their historical fresh fruit marketing ;

2. Ministry of Agriculture , National Irrigation Board and Athi Tana Development Authority.

Several large agricultural schemes are found at Bura, Hola and Lower Tana. One is planned for the Delta. There are few officials particularly in the mango concentration areas of Lower Tana. However for the future:

- a) technical inputs on fruits can be supplied by the District Horticultural Office;
- b) a policy review is required to allow fruit growing in all schemes existing and planned. It is clear communities prefer mixed rice and fruit tree agriculture rather than being stuck in the rice monoculture. Such a policy change will be a major source of support for the project ;
- c) support for training and/or supervision of nursery attendants will be given ;
- d) support for extension, research and propagation of new varieties will be given ;

3. Horticultural Crops Development Authority (HCDA)

Nationally this is the institution required by law to develop markets for horticultural products. It could be relied for support on for :

- a) overseas marketing;
- b) development of cold storage export infrastructure ;

There are two key policy changes which are needed to support the project:

a) Air Charters to Moi Airport Mombasa.

At the moment most fresh fruit export is dependent on scheduled airlines cargo space out of Jomo Kenyatta Airport in Nairobi. Air charters which serve the tourism industry and land at Moi Airport in Mombasa are not allowed to take horticultural cargo. There are 8 existing and planned charters into Moi weekly. If they are allowed by Civil Aviation Board, this would make cargo space available at Mombasa which would be significant support for the project's overseas marketing. The Horticultural Crops Development Authority in conjunction with Provincial Administration at District and Provincial level, and the DDC should support this policy change. The YWCA should organise lobbying.

b) Refrigerated Containers.

Most countries exporting fresh fruit have developed refrigerated containers infrastructure at their ports and collection points for the industry. It is cheaper to ship through them than aircargo and it gives marketing flexibility. Such a development would be of tremendous value for the Tana Project. Support for this would tremendously help the project whose shipping lines and therefore costs are very high. The YWCA should organise lobbying efforts among the institutions identified above.

4. Ministry of Transport and Communications.

The DDC in its plans has identified construction of feeder roads and bridges into the Lower Tana as priority as produce cannot get out most of the year.

The Malindi - Garsen Road is a killer road and thus has impact on transport costs and reliability. Plans are underway for construction of Garsen bridge.

To support the project :-

- a) All major fruit collection points will need dependable all weather roads. Perhaps by introduction of Rural Access Roads Programme, unavailable in the district at the moment, this can be facilitated.
  - b) The Malindi, Garsen, Hola, Garisa and Garsen Kipini road will have to be maintained to better standard if not tarmacked as indicated in the 1984/88 plan.
  - c) It is worth considering riverine transport (ferries and/or boats) to improve communication at the Tana Delta. Proposals have been made for moving the Garsen ferry once the bridge is up to Golbanti. The Ozi area deserves some service too.
  - d) Overall to support the project the whole district needs many crossing points beyond the planned (1984/88) Bura and Garsen bridges to link the West and East banks. This will reduce farmer and transport operating costs.
5. East African Power and Lightning Co. Ltd. and Ministry of Energy.

Electric power was slated to get to Garsen and Hola Malindi during 1984/88 plan period. The DDC still has this on priority.

EAPL states that power will be available at Garsen within the plan period. If so, it will be tremendous support to the project for large scale cold storage in Tana River - key to expanding fresh fruit exports - is totally dependent on power.

Ministry of Energy could give tremendous support to the project through the rural electrification program for Tana District.

6. Prisons Department.

One of the best sources for improved varieties and research on fruit trees is the Prisons Department. It usually bulks them at prisons. There is not a reason why the project should not lobby to get this service from the prisons in the district for Mtwapa and Malindi are too far for effective transportation of seedlings.. Besides, last year all seedlings were hijacked from these centres and did not get to Tana.

7. Tana River County Council/Development Committee.

Support for the project will be forthcoming on :-

- a) Making land for nurseries and other facilities available to the YWCA and women groups for both institutions have jurisdiction significant amounts of state and trustlands.
- b) Support will also be forthcoming also in making presentations to other government, and non-governmental organisations.

8. Ministry of Lands & Settlement.

It is important to seek land adjudication under Chapter 300 for the fruit growing areas from this ministry for such adjudication and receipt of individual title deeds is the only assurance for significant longterm farm credits. This is needed for production expansion.

9. Non-Governmental Organisations.

It seems to me that there are two broad categories of NGOs which could give significant support to the project. These are NGOs already operating in the district and NGOs with specialised programmes not working in the district.

Of the first, we have already identified the Diocese of Garissa and the Methodist church. Their personnel in the district are already supporting introduction of new fruit tree varieties, better husbandry, and community organising. This support is available for use if coordination is instituted by YWCA.

Of the specialised NGOs outside the district the project will need to solicit support for specific specialised sub-project activities. These are:

- a) Horticulture.
- b) Fuel wood.
- c) Marketing and
- d) Business management.

Among possible NGO to supply this are :

- a) Undugu Society, partners for Productivity,



Kenya Rural Enterprises Programme etc - for business management and marketing.

- b) Kenya Energy Non-Governmental Organisation and CARE - for fuel wood extension.
- c) Mennonite Central Committee and others - for Horticulture.

These are only suggestions. I have not asked them, but they have had significant programmes elsewhere.

A whole host of other NGOs would be responsive if requested to provide either specialist personnel, project vehicles or funding.

#### 10. Fruit Trading Commercial Concerns.

In spite of some hostility towards them, commercial concerns are already part and parcel of the Tana socio-economic web and have a role to play in the project but not the dominant one as in the past. The fact that many are coming to buy at the source rather than using middlemen means that they are adjusting. As more have entered the market and mangoes have been short, prices have improved to the advantage of the farmer. One commercial concern - Retief and Company - has introduced new mango harvesting and packing techniques. It is willing to extend these. This support should be welcomed by the project and utilised - perhaps by training project personnel.

This same commercial concern has skills in selection and propagation of new mango varieties and other fruit trees. In some ways this company has the only systematic production experience on the mangoes and citrus in the region.

It also has the only experience in river based collection and transportation of fruit.

These different sets of experience can become important support for the project. They should not be negated by the company's other interests in land and tourism which have gone to the County Council and the DDC and were rejected.

The company claims that it will gladly support the project.

Retief and Company support for horticultural production parameters, handling and storage should be sought by the project. So should support by any other commercial outfits who are willing to provide technical knowledge to the project within its objectives.

It is important to state categorically that the above comments on Retief and Company are purely professional. I did not know the company until the onset of this job.

Other companies who are in the mango business eg. Vaso, Palestina, Karama and Sons, and Greenfields, apparently only buy mangoes and have not been interested in improving picking, packaging, storage and production extension. There is no reason to leave them out of the project if they want to make and finance innovations as Retief and Company are doing.

# 11. Special Institutions.

## a) Bohrania Women Finishing College.

In Mombasa, members of the Bohra community have a finishing college which trains women in chutney and pickled products preparation.

Members of the Branch executive and secretariat are in touch with the college and the principal. They have considered using this college as a technical resource for recipes on chutneys and pickled products as well as costing of the products and training.

This college could form an important support resource for the project.

- b) Kenya Tourism Development Corporation/Hotel-Keepers Association.

All tourists hotels serve at least two major curry meals a week. They also serve salads extensively. They thus could become major sources of supporting the chutney, pickled products and dried fruit components of the project thereby creating local demand for these products. Their support should be canvassed. The marketing component of the consultancy should pay special attention to this aspect.

- c) House of Manji and the Baking Industry.

House of Manji have been major innovators in using local products in their production of biscuits and sweets. They use fruits extensively. They should be approached for support in utilisation of dried fruit products for if they decide to take Tana products, they will be a significant source of commercial support perhaps taking all that can be supplied.

Similarly the baking and bread industry is fragmenting nationally and it could be an important source of commercial support. It should be investigated by the marketing study.

## d) Vipingo Estates - Kilifi.

This estate has an extensive programme in improved fruit trees - especially mangoes under quarantine. As soon as they are cleared the project ought to liaise with them to get the new strains. The horticultural person at Vipingo is David Hirst.

Chapter IV.) Community Socio-economic Activities (TOR IV )

The women of Lower Tana essentially fall into two clear groups. These are the Muslim tradition dominated and Traditionalists-cum-Christian influenced.

Muslim tradition dominated women have very little farm production responsibilities. The tradition dictates that they stay in partial purdah and all production responsibilities are with their husbands or employees. These women are therefore not likely to be involved in farm production but there is no reason to keep them from participating in the chutney, pickling and dried fruit products aspects of the project which will be homestead based. This consultant cannot yet make a judgement on how involved they will be for the YWCA as yet to organise groups in the heavily Muslim areas of South Chara.

In the areas which are dominantly traditionalist and/or christian, women take part in farm activities. As is the case in most rural Kenya, no time use studies for rural women exist for the area. However there should be ample time for all women to take part in project activities for several reasons.

First, there is little commercial penetration of the project area. There also is very poor communication. Thus women do not indulge in extensive petty trade which in more penetrated rural areas occupies significant proportions of women's time.

Secondly, settlements are relatively near sources of water. Little time is therefore spent on water drawing unlike many areas of rural Kenya.



Thirdly, although the fuel crisis is fast approaching in parts of the project area, it has not reached crisis proportion where significant proportions of women's time is spent on wood-fuel gathering.

Other than farm work, women and men spend time in preparing reed and palm leaves products like mats, trays etc. These need detailed costing and the project outputs ought to be compared to these in the marketing consultancy.

However my conclusion is that there will be time for project activities for the existing peasant farming of rice, bananas and tree crops does not fully tie up all the women labour time available. As project activity outputs are likely to command higher incomes than other minor activities, they will be preferred.

It is important to comment about the stereotype of Lower Tana as an area of continuous public feasts and celebrations. This stereotype is present in colonial writing on the area and among many outsiders working in the area. Feasts and celebrations are part and parcel of primary societies related to social obligations and production processes. Introduction of commercial/market relations automatically reduces them and they should not be used as an argument against the project being located in the area.

I talked to men and women and put the idea that aspects of the project could be organised in such a way that some activities will take place at a particular woman's convenience and others as group activities. None had reservations about availability of time for both categories of activities.

However given the poor communication existing, women group labour time will be unavailable for central factories. My further judgement is that the central factory will have to employ regular labour.

Group activities eg. a wood fruit drying system, may attract some members to become regular employees. More details are needed by processing consultants before these issues can be resolved finally.

## Chapter V. Traditions. (TOR V)

There are several cultural traditions which are relevant to development activities in the area which the project must take account of. These are the veneer of Islam, the feeling of domination by Ngao Location, the past dominant role of trader agents in village life, the commercial domination in the district by Washiiri ('Arabs') and the interdependence of riverine agricultural Pokomo and pastoral Orma.

## 1) Islam.

The introduction of Islam as a religion, a ruling ideology and later as the epidemic of culture has led to a tradition of strong male domination of all matters public. Up to now women are not supposed to have publicly expressed views. Organisationally this will mean most of the project work will have to be done in separate male and female set ups. It will also mean that the project cannot assume that female employed labour will be easily available particularly for tasks which will be carried in mixed settings. Even if female labour will be available, it will be for tasks and settings where the sexes operate separately. This tradition will also mean that more time must be spent in organising.

Access to the fruit resource by women will also be problematic in some areas where the feeling that permanent fruit trees belong to the man is strong. I am aware that other consultants think otherwise on this point but my fieldwork supports the view that women do not own these trees. They further do not have use access decision powers. They also do not have strong trading traditions.

Because of these access problems for women, I would strongly recommend that there be rapid expansion of fruit tree planting by women to generate in the community other categories of fruit tree ownership.

Incidentally women have total access and control over bananas. This fact strengthens the importance of the project processing both mangoes and bananas.

Another implications of the Islamic tradition is that chutneying and pickling activities which women could do in their homestead and which use 'waste' mangoes would be more likely to succeed than 'trade' in fresh mangoes. In my fieldwork I did not see one single woman selling fresh mangoes to the buyers who were in the area.

## 2) Ngao Location 'Domination'.

Ngao location has produced most of the literate people in the district who are in most 'modern' sector activities. It is cynically called London! The implications of this for the project are several.

First, project field personnel must be recruited from ALL AREAS and not just Ngao, particularly since it is not the major mango producer, although given its aggressiveness it may plant more of the new varieties than all other areas.

Second, it is absolutely crucial that the current major producer area - Chara Location - be the first area organised by the project. To start elsewhere will mean getting trapped in the Chara/Ngao rivalries. Besides, Chara Location has more mangoes now than any other location.

Thirdly, the labour force of the proposed industry must be recruited from as diverse areas as possible.

3. Trader Agent Domination of Villages.

In Lower Tana the big men have been agents of Washiiri ('Arab') traders. They did so by having access to Lamu, Malindi, Mombasa etc. They were not only monied but, more often than not, they were agents of the colonial government. These agents were not necessarily of Washiiri or Arab extraction but more often than not they were Pokomo. They acquired resources like wives, land and permanent trees. In short they formed Robert Chamber's 'net' which trapped every resource coming into the village. They are now under attack because of development forces unleashed by more education and employment.

It will be deadly for the project to come into these communities through these agents or their wives, daughters or daughters in-law. The project will only succeed if it distances itself from the established old order for communities are vocal about these agents and their kin. The project staff will need to study each village in great detail to establish ways and means of bypassing this dying order. If they cannot get the capacity to do this inhouse they should contract it out to consultants. More competent and sensitive field workers will be needed so as to ensure that YWCA is not just being used for local tradeoffs only.

4. Washiiri Trader Domination.

Commerce in the bigger towns in the district is completely dominated by Washiiri traders. There is thus love/hate relationship between village folk and these traders who are often accused of buying influence with village leaders and officials.



The project should clearly avoid getting project products of the beneficiaries handled by these 'established' traders as of the objectives of the women beneficiaries in other YWCA projects in the districts has been to build shops to free their communities from the trader clutches.

5. Pokomo-Orma Interdependence.

The pastoral Orma and the sedentary riverine Pokomo have coexisted with fantastic relationship for a long time. This is now beginning to fall apart for several reasons. Populations are increasing. The traditional ecosystem is under stress. Land is being taken out of traditional use and production by large scale settlement of 'foreigners'. Thus there is developing serious competition over the natural resource -land-especially in the delta. Pastoralists are becoming marginalised and they settle. Riverine agriculturalists are investing in cattle ranches.

The project will have to straddle this sociological turbulence by ensuring that it is not seen as just a Pokomo affair for some Ormas are settling.

As the Delta Irrigation Scheme comes on stream, the rights of Orma access to the Delta grazing lands, particularly during drought periods, will become more critical. This is why one expects the project to introduce grafted fruits (especially mangoes) to improve production in areas already settled and not to just continue opening new land especially at the Delta. It is also the reason for advocating allowing for permanent trees in all existing and planned irrigation schemes. Opening the whole delta to farming will be ecologically disastrous also.

Ideally the classical relationship of interdependence should be continued in land use for in Pokomo villages where densities are high and wild proteins rare and access to animal proteins from Orma herds hard, there is obvious malnutrition, particularly of the young. This pattern is likely to be repeated as settled riverine populations continue to explode.

## Chapter VI. Organisational Roles. (TOR VI)

## 1. Introduction.

In my view, to systematically define the organisational/managerial roles of various agencies in a consultancy like this, one needs to have ALL the technical parameter proposals.

As far as this consultancy is concerned I have made this argument as forcibly as I could in all the briefing meetings to no avail.

Unfortunately the YWCA representatives in the various meetings did not get this decision made by either YWCA or KREP. The consequences of this are that I had to go to the field without benefit of having read the women beneficiaries report and the marketing report. I had further to develop my own proposals on possible project activities and their possible sequence to underpin my consultancy report. These are discussed in previous chapters. I have read the technical Agriculture Report done by RIDT (Tucker and Retief).

When the terms were first drafted, I also objected to the specific naming of RIDT in my terms of reference. The reasons were simply that one did not ask an organisation to do bits of the consultancy and ask another consultant to define that organisation's role. The YWCA asked RIDT to undertake the technical agricultural and marketing consultancies. They should not have named it in organisational terms of reference but, should have requested this consultant to evaluate sources of technical resources for agriculture, marketing and management of the project.

I have stated this repeatedly in meetings and never got a formal response to my presentations.

However at the last meeting between KREP (Mutua) YWCA (Owiti), the consultant on women's organisations (Chesaro) and this consultant, it was indicated that "NO FORMAL DECISION HAS BEEN MADE THAT RIDT WILL BE THE ONLY SOURCE FOR SUPPLYING TECHNICAL AGRICULTURE, MARKETING AND MANAGEMENT RESOURCES". As the minutes are unavailable I am quoting my notes of the meeting.

The implications of this are that RIDT will supply two consultancy reports. Whether they or their related companies do anything else is thus an open question.

I will therefore make statements and recommendations on roles without assuming RIDT has been 'anointed'.

## 2. The Role of YWCA - Women Groups in Tana River.

The YWCA women groups in Tana River should have roles which among other things involve :-

- a) Homestead (individual woman) production of chutneys, and pickled products.
- b) Group production of dried fruit products.
- c) Ownership of nursery plots and related equipment.
- d) Employment of nursery attendants.
- e) Organisation of community support for the project.
- f) Management of project through selection of group leaders and locational board representatives.

### 3. The Role of YWCA Branch Secretariat.

The secretariat should have roles which involve :-

- a) Planning the project (including consultants' supervision, preparation of project proposals for donors and liaison with government, parastatal organisations, commercial sector and donors).
- b) Field implementation of the project.

The Branch secretariat is thin as it has only an acting branch secretary, no programmes secretary, an accountant and two field workers in Tana River. To handle as complex project activities as suggested in Chapter 11 ALL BRANCH SECRETARIAT STAFF will need upgrading in terms of planning skills, field project supervision, budget control and management of rural development projects. None of them have had any experience in supervising as a complex project as envisaged. This upgrading should be done before the more complex project activities are put on stream.

I strongly feel that a very senior and experienced rural development manager, able to deal with all levels of this society, should be hired to be stationed in Tana River for purposes of organising support for the project by liaising with communities, government, parastatals and donors.

His role should not be confused with that of a volunteer/TA in Chapter 1. Such a person will have also to systematically gather more specialised field data as when detailed project planning activities start, masses of finite field data (sociological, economic, agricultural and political) will be essential for decent programming. The existant secretariat does not have capacity for handling this.



Early recruitment of this person may allow the YWCA to develop him or her into the first General Manager of the Tana River operations.

I cannot underscore the fact that recruiting such a person is possibly the most important project decision. The person must be from Tana River. There are early retirees and others from the district working elsewhere who can be attracted to the post. There is not a particular reason why such a person has to be a woman although that will be an advantage. Given the paucity of women from Tana River with such extensive rural development or related area experience, it may be a good idea to specifically lookout for a man. A man in this position will also help in developing community support for the project.

What extra personnel are needed will depend on activities planned but clearly the secretariat needs to start planning for expansion of numbers of field workers.

#### 4. Roles of YWCA Branch Executive.

The Mombasa YWCA Branch will have roles in :

- a) Supervising secretariat activities.
- b) Evaluating the hiring of technical personnel/consultants.
- c) Project fundraising from donors.
- d) Making project policy.
- e) Hold funds in trust for the project.
- f) Liaising with government donors and commercial sector.

In the introduction of this report (Chapter 1) I argued for a volunteer or Technical Assistance person to deal with aspects of the whole project. I want to emphasize here that such a person will help to collect and circulate to the branch policymakers and secretariat data on all aspects of the project. Such a person could also be used for project planning and budgeting roles.

5. Roles of YWCA National Office.

The national YWCA office should have roles in :

- a) Supporting liason relations with government and donors.
- b) Following up major policy changes desired by the project in activities at District, Provincial and National levels.
- c) Liasing with the global YWCA organisation to generate information on technical resources, overseas marketing and assistance. It may well turn out to be that other YWCAs have done similar projects and can supply technical assistance and financing more cheaply than NGOs in Kenya, commercial companies and individuals.

6. Role of RIDT and other Technical Resource Companies / Individuals.

Having finished the consulting reports on agriculture and marketing RIDT should be treated by the YWCA as just another company selling consultancy and possibly equipment through allied organisations.

I do not recommend that RIDT and other technical resource companies or individuals should have more than advisory roles which may be extremely valuable for they have implemented projects in rural areas.

However where the YWCA need particular service it should put them to tender.

Where such services are bought from a company or an individual, those individuals or companies or their personnel should have absolutely no policy-making powers. The YWCA executives at various levels and their secretariats need to get on top of most details of the project to bar technical resource personnel making decision by default.

Furthermore as far as marketing is concerned, those who want to should buy at source (farm, project cold store etc). I do not support an agency role by RIDT or anybody else for that matter. My interviews in the field clearly showed that agency relations are no longer acceptable to the wider community.

In my overall phasing of the project I have indicated that some functions will be done by intermediaries initially and later directly by the project.

The training of project personnel - direct employees of YWCAs - should be treated as a service to be contracted out to RIDT or other technical resource companies/individuals with heavy penalty clauses for defaults.

RIDT and personnel related to it, may have a role in extension of better husbandry, harvesting, packaging etc but even this should be put to tender or be purely commercial.

## 7. Structure of Industry.

In my phasing in Chapter 1, there are activities which will be handled by individuals and some by groups. Products made at these levels should be owned by individuals or groups.

Nursery and building plots should be deeded to be held in trust by the YWCA as is practice nationally.

I believe that as more complicated marketing and contralised production activities come on stream they should be run by a REGISTERED COMPANY for Tana River people are extremely dissolutioned with the record of cooperatives in the district. I do not think a cooperative will be viable.

Such a company should have two types of shareholding. Women groups (not individual women) should have all voting shares so as to control policy. Women as individuals and their groups, men and anybody else should buy non-voting shares which would be used in profit sharing only. The voting shares should draw higher returns.

Financing of voting shares can be done by donor funds to be paid back as profits accrue. Individual and group non-voting shares should be bought by individual or group funds and ABSOLUTELY NOT DONOR funds.

The chief executive of the company should be the Project Manager and should act as company secretary to the Board but be a non-voting Board member.

The company, to get stature, should have as non-executive company chairman the National YWCA Chairman.

She and the Branch Chairman should be voting board members. The National Secretary, the Branch Secretary should be alternate non-voting directors to the National Treasurer and the Branch Treasurer.

Each location covered by the project should have a Board member who is a member of a YWCA group and a shareholder. They need not be the group officials. Infact they should be the most competent local members.



Y.W.C.A. Groups January, 1986.

1. Salama Location.

- a) Maziwa.
- b) Sera.
- c) Hewani.
- d) Wema.
- e) Kulesa.

2. Ngao Location.

- a) Idsowe.
- b) Kibusu.
- c) Ngao.
- d) Hiari.
- e) Golbanti.
- f) Oda.

3. Ndera Location.

- a) Kitere.

4. Chara Location.

None.

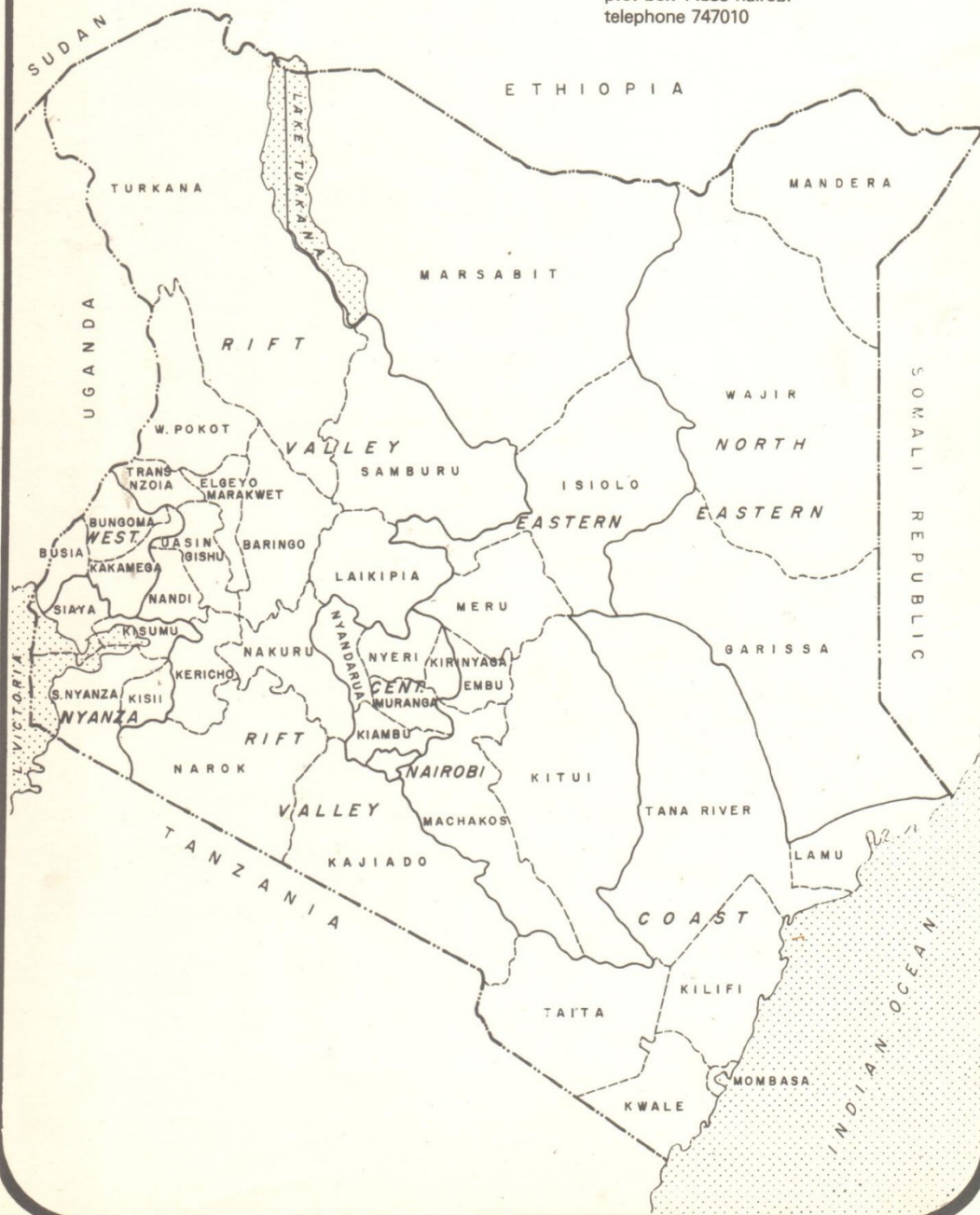
Terms of Reference.

1. To determine the organizational role of RIDT, YWCA and the beneficiaries of the proposed mango processing industry and recommend how the proposed organization would be structured and administered to ensure efficiency in meeting both economic and developmental objectives.
2. To determine/establish and recommend how the commercial aspects of the proposed project will interact with the developmental aspects of YWCA activities and those of the intended beneficiaries.
3. To find out how the local leaders, the administration and the general community of Lower Tana would view proposed project receive support from the community area ? The consultant should specify as far as possible the type of support that could be expected and the magnitude of such support.
4. To establish the present general social and economic activities in the area relating to the would be beneficiaries of the proposed Industry and how the participation of these beneficiaries in the Industry affect their participation in other activities.
5. To determine the local culture traditions and their influences to various development projects in the area and recommend how such traditions could be incorporated into the designing/planning of the proposed Industry to achieve maximum co-operation/participation from the intended beneficiaries and the community at large.

NGOS PARTICIPATORY APPROACHES



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development management  
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## NGOS PARTICIPATORY APPROACHES:

Mutiso Consultants Ltd.

A Consultancy Report prepared for Kenya  
National Council of Social Services

## INTRODUCTION

The purpose of this consultancy was to produce a report to be used by Kenya National Council of Social Services as a background document in discussions with NGO program heads on issues of participation as they relate to their work in view of the policy on District Focus Strategy for Rural Development. The initial ideas on the consultancy called for collecting quantitative data from NGO'S by means of a questionnaire but this was dropped for various reasons.

First, previous attempts to collect operations data from NGO's through this method did not elicit utilisable data. Second, the number of NGO's suggested were too many for the budgeted funds. Finally the temper of the times does not support largescale survey of agencies.

As a result of these points it was decided that in the time available the consultant should only look at three organisations on the ground. These were selected to include a local community development organisation, a church developemnt organisation and an external NGO.

The selection also sought to diversify the sector activities in which the organisations were involved. As a result the consultant looked at Utooni Community Development Project in Machakos District, the Primary Health Care Project of the Christian Community Services in Mount Kenya East Diocese of the Church of the Province of Kenya, and the CARE Siaya Agroforestry Extension Project.

Given the fact that the report end use is to facilitate discussion of issues of participation, it was decided not to write up formal case studies of the various organisations but to utilise the derived data to highlight the issues which could be shared in a dialogic manner by the many agencies under the umbrella of KNCCS.

Towards that end issues of theory and praxis are raised in this report. So are historical, socio-political processes and alternative futures issues since any development work done without raising these is akin to the actions of the proverbial ostrich and its head firmly stuck in muck. These issues are highlighted so as to facilitate thinking about the fit of individual agency activities prior to the proposed meeting.

Key references on matters covered are given at the end of the report.

## COMMUNITY DRIVEN PARTICIPATION: THE UTOONI EXPERIENCE.

Utooni started in 1978 as a simple six family work group based on the



traditional mwethya. Then it was only interested in growing vegetables. By December 1978 the group had attracted other members so it formed a committee to run its affairs.

Utooni was lucky to have leadership in the original group which had some experience outside the community. Through this leadership, the group sought better tomato seeds and within a year they had thought the way to grow was to form a horticultural society. In Kalama Location, there was a coffee cooperative already. The horticultural coop was formed in 1979. In spite of getting a very good crop of tomatoes in the year, the expected help in marketing, by the District Cooperative Union, did not materialise and the coop had tremendous losses. This led to turning away from the cooperative track as a vehicle for development. Utooni has operated as a community development project since.

In 1980 the leadership turned to World Neighbours for assistance in conducting a community development needs survey. This was done the same year. In descending order of priority development needs were identified as: 1. Water 2. Social Problems 3. Family Health 4. Income Generation 5. Food Production 6. Livestock Improvement 7. Tree Planting/Soil Conservation 8. Food Storage and 9. Training.

Having prioritised development needs by 1980, Utooni began the first subsurface dam. It was to be used to expand the vegetable nursery for the expanding group made greater demands on it. It was also to provide water for livestock so that labour would be released for development activities. Small scale funding was provided by the NCKK and Machakos Catholic Diocese Development Office. By 1986 Utooni was to get funding experience with as varied donors as UNICEF, British Embassy, American Embassy, World Neighbours, British Boy Scouts, and individuals.

From 1980 the project decided that all funds got from a donor for some activity would be matched in the community. This is over and above the organisational costs and direct labour contributed by the community. This however does not mean that project benefits only go to members who can come up with the matching funds. The members decide who is to get the benefit. If they cannot pay, the project loans them money from a community fund. It also does not mean that the leadership has priority on donor derived benefits. If anything they tend to be last.

In 1980, 40 water jars were built. Of these, 20 were financed by donor funds and 20 by the community fund. Each member contributed Ksh.300. This was over and above the project membership fee of Ksh. 5 and project share payment of Ksh.20.

To ensure that members participate in all group labour activities, and on time, a fine of Ksh4 is charged for lateness. This goes into the community fund used to match donor funding. Community members who work outside the community are charged Ksh.150 per work day. This high charge is deliberate. It seeks to ensure that the project does not become a place where the rich take advantage of the community labour input. At the same time premium is put on using the labouring days for learning about development.



By 1980/81 the second priority of social problems was extensively discussed in the community. It was concluded that social problems were related to low incomes basically. This could be tackled immediately with community resources through improving agricultural production by learning from the better farmers. A coherent community extension system was started outside the formal MOA system within the community. Traditional food crops like sorghums, millets, sweet potatoes, cassava, and some new ones like amaranthus, soya beans, improved pigeon peas, improved cow peas etc. were introduced. But, perhaps the most important better farming innovation were the reclamation projects of farm and grazing land by terracing and planting of fodder grass and trees.

As the community went down the list of its priorities, it increasingly found that they were interrelated. For example as it sought to handle family health, the problems of access to balanced diets within the resources of the community intruded. The shortage of reliable sources of protein was seen as a major problem. The project decided to activate priority six, livestock, so as to generate milk in the community. The decision was also made to improve local chickens. In 1981 it was able to link up with the Ministry of Agriculture cockrel exchange project. On cattle, project individuals were trained by the MOA so as to locate the experience in the community and outside the formal extension system. World Neighbours were able to fund a revolving fund of Ksh.20,000 for financing the buying of grade animals in July 1982.

Within four years of inception, four of the priorities had programs on the ground. These are water with Galla water jars and subsurface dams, income generating with vegetables, improved food production with better seeds and practices, and livestock with improved cockrels and grade milk animals. The project had learned and evaluated the various technics from the menus offered by various development agencies.

For example it had looked at the limitations of the Galla water jar and had moved on to building bigger (750 gallon) ones. By 1984 it had moved to 1700 and 3,000 gallon tanks developed within the project after evaluating all available designs.

As early as 1983, it had found the synergistic nature of development. For example, when the department of Social Problems was formally started in 1983, it was primarily to handle issues related to the sexual division of labour. An explanation is appropos.

Among the Kamba there are some tasks which are locked into some sexes. For example, drawing water is seen as a female activity. In 1983 the community decided that it was to work five days every week to construct a gravity water system to a primary school where later it was to build a community technology center. To ensure availability of labour in concentrated form, the community had to solve the old problem of some homestead jobs being locked to the man or the woman. The community knew there would be serious family conflicts if there was no dialogue to establish that those who were left home all day would take care of all home activity. Community dialogue got all the members to agree to end the traditional sexist division of labour. This not only

released labour for the gravity water system but also led to more equal distribution of labour among the sexes particularly within project activities.

1984 was one of the worst famine years in Ukambani. In anticipation of the problems in the community, the Utooni project conducted a community food needs survey and procured the needed food from the District Level. This was sold to those in need at cost. This marginalised local speculators who were selling at very high prices. The little relief food available was utilised as food for work in some creative ways. The majority of the project members worked on the subsurface dams to get it. Farmers with poor farms -no conservation structures, low yields etc- were asked to work on their land under the supervision of the community extension system, to qualify for food for work.

The Social Problems and Health Committees surveyed the community during the drought to evaluate the health status, family planning status, seed distribution, and to identify urgent forward planning needs. Their conclusions led to a program of VIP toilets, the need to build a community health facility next to the technology center to handle technical family planning among others, and provision of apparel to poor families whose children did not have appropriate clothes. Between then and 1986, 56 VIP toilets are completed, the health facility is complete, and so is the technology center.

This year of drought matured the project for it was handling all the priorities in ways which will take too long to describe. It was intervening not only on the production system of the society, but, was introducing technics in health, agriculture, reforestation, education, and most basic mediating to the values held by the members about what is possible. It was handling many donors. Perhaps it is more accurate to say it was seeking technics and finances in a style which assured that no donor or institution, external to the community, was setting agenda for the community's development. It was making sure that community derived contributions MATCHED/ SURPASSED donor contributions. Thus there was to be no dependency. Significantly no external personnel were hired.

By the end of 1986, the project had established its own food mill, completed subsurface dams storing about 15 million gallons, built a health center and a technology center, and introduced indigenous and exotic trees, new vegetables, improved chickens and grade cattle to the farming systems. But perhaps most basic, it had energised the community to be arrogantly sure about what was to be done. There are no yoyos in the project.

The project takes part in the DF system through members who are part and parcel of the village, sublocational, locational, and divisional development committees.

The nine identified areas of development needs give the project its management structure of committees which oversee the various sectors. All the committees are coordinated in a supra committee made up of the chairpersons and the two facilitators. This is the planning body. In terms of management style, no major decision is made for the project



without open discussion in a members forum. The individual committees hold these meetings and coordinate with the related or supra committee as necessary. Facilitators or committees can not make any decisions without authority of the public meetings. All project benefits, eg where to build a subsurface dam or who to give a cow, are made in a public meeting usually held during a working day after completion of a job.

#### CHURCH DRIVEN PARTICIPATION.

We included the Diocese of Mount Kenya East in our limited sample since it has one of the most ambitious primary health care systems hooked onto the formal church structure.

The health programme is under the Board of Christian Community Services, a body registered under the companies act although it is part of the Diocese administrative structures. It has 20 members.

Under BCSS are five departments namely, Rural Development, Community Health, Executive Office, Social Welfare and Construction.

Community Health spends about 60% of the development budget. It runs a mobile clinic serving 12 centers, supervises several dispensaries, trains CHWs, and organises Health Committees as well as the training of the church hierarchy in health matters. Community health was started to deal with the health problems of this vast Diocese which covers 12% of the national population and 34% of its area. Its area of coverage ranges from ecological zone 1 to 7 which gives it a wide spectrum of community health problems. However the primary health care program emphasis is in the more humid areas of Kirinyaga, Embu and Meru which form 7% of the Diocese area and more than 98% of the Diocesan population.

The issue which confronted the Diocese in terms of delivery of community health care was how to organise it in the base communities at affordable prices and in a form which would militate against dependency. Since the churches evangelical work was expanding soon after the start of the Diocese in 1975, it was decided to relate community health work to the expanding evangelisation base. So as new congregations were started, and new parishes (grouping several congregations) were formed, it was decided to start health committees under the umbrella of the parish committees. This decision is significant in the sense that it enabled some of the most able leadership in communities, which had been selected to the parish councils, to get farmed to the health committees.

Health committees are responsible for selecting members of the communities to be trained by the Diocese, at its expense, and sent back as Community Health Workers. By adopting this extremely decentralised system, the Community Health Department has ensured that communities select and support mature people they can work with. As a result the department avoids being accused of sending experts from other areas - a major aspect of being effective in this area where many cultural groups interface. Neither would the problems of extremely young CHWs, especially as they venture into family planning activities, the most

sensitive issue in some of the base communities, become overwhelming.

The health committee system has shown steady growth. In 1983 there were 125 health committees. These grew to 255 by 1985 and by 1986 there were 270. Program people attribute this to the employment of a Community Development Assistant whose work is to organise and manage committees.

Community Health Workers, who had undergone training for a period of 8 weeks, were 163 in 1985 and it is expected that there will be a rapid expansion of the numbers in the new parishes so as to have about 422 by the year 1990.

For program management, the formal guidelines are that community health committees meet at least once every month. The CDA makes a visit at least once bimonthly and as required on a problem solving basis. Health committee members are brought together annually to compare experiences and to discuss issues of mutual interest.

Health Committees inform the rest of the Diocesan development programme by setting their community development agenda. What ultimately comes out as the community agenda is arrived at in meetings in the base communities where all participate in dialogue about priorities. It is important to note that these meetings are not just for church members.

In terms of sectorial analysis, water projects seem to be a priority in most of the base communities. However, building health posts -with funds raised in the community- so as to qualify for a mobile clinic is a major activity of the health committees. To undertake this, the community must get land. As land is in premium, most of the time the community health committees have to raise quite a lot of money in their parishes to buy it. Over and above this, funds are raised for purchase of construction materials and labour is organised for construction. Where communities are involved in construction which needs specialised skills, the health department either hires/ supplies or liaises with the Ministry of Health DHMT to supply the technicians. By 1985, 6 health posts had been built by the base communities and it was planned that five new ones would be built every year up to 1990.

The Community Health Department establishment is a Health Coordinator, an Assistant Health Coordinator, a Mobile Clinic Nurse, a CHW Trainer, 3 CHW Supervisors, a Community Development Assistant, a Patient Attendant, a Logistics Officer, a Cashier and 2 Drivers. Given the vast distances to be covered by the Health Team, a major management issue has been the frequency of CHW supervisory visits and whether these are to be group or individual. A project study shows that group supervision of CHWs is as effective as individual supervision and significantly it is 2-3 times cheaper. This finding should be of interest to many NGOs who are running projects whose individual supervision costs are prohibitive.

The health program interfaces with the DF process at various levels. First, some CHW and Health Committee members are involved in the Village Development Committees and the Sublocational Development Committees. Since Parish Church leaders get involved in the Sublocational Development Committees and they are head of the parish committees, who



oversight the Health Committees, this is another channel of interfacing. to mix metaphors. At the design of a major project activity, the Health Coordinator interacts with the Ministry of Health DHMT officials who then represent the department in the relevant levels at the Divisions and districts.

The Executive Director and Secretary to the Board of Christian Community Services -effectively the Development Coordinator- points out the vast communications problem of working in such a large area, which covers 7 districts. It is next to impossible to stay in touch with the DDCs scheduled meetings leave alone continuous program dialogue particularly since there are not uniform arrangements for handling NGOs in all the seven districts. In the DDCs of the proximate districts, the Diocese is represented at the highest level and specific officers coordinate with their technical counterparts who pursue matters in the DDC Executives Committees.

#### TECHNICS VS PARTICIPATION:

The main reasons for looking at the CARE Agroforestry project was to get a flavour of how a supposedly new activity in development -agroforestry- interfaced with base communities and how an international NGO is coping with DF.

CARE's agroforestry program in Kenya can be traced to the turn of the decade when reactions to the Second Oil Shock led to many activities all geared to finding alternative energy sources. The Beijer Institute Study (1979-1982) led to discussion of the energy crisis nationally. New public institutions were created to handle this crisis. Perhaps the most significant is the Ministry of Energy and Regional Development. Old NGOs found the crisis and moved to do something about it. Some were created to handle aspects of the crisis. CARE did not initially jump on the band wagon but was a donor to other NGOs who initiated pioneering activities in the tree sector in general and agroforestry in particular. Later CARE hired some of the participants in those pioneering efforts who were to develop its agroforestry project in 1983.

From this period on, many discussions seem to have been conducted with ministries in Nairobi, donor agencies and District Forest Officers. CARE decided that its first agroforestry field project would be in Siaya. Siaya seems to have been selected because it had already been mobilised for agroforestry since there were not gazetted forests in the district.

By the time the field project begun in March 1984, no agreement had been done with the GoK. No formal agreement was to be signed other than a letter, dated December 7th 1983, from the Conservator of Forests to the CARE Agroforestry Coordinator stating that the department welcomed CARE's proposed activities.

In spite of DF having become operational on June 1983, the project was not presented to the Siaya DDC. By 1985, when the South Nyanza component was beginning, it was presented to the DDC. Apparently not only was the project not presented to the Siaya DDC but it does not seem as if the base communities were consulted about it. In project documents CARE



states that by locating the Project Manager at the district the project was "closer to the community".

Linkage with the GoK system during the project's first year seems to have been in Nairobi. For example, in January 1984, the Project Manager and the DFO Siaya, came to Nairobi to meet the Deputy Chief Conservator of Forests and among other things, agreed on the initial 9 nurseries to be assisted by CARE.

A key decision seems to have been made in 1983 that CARE should not have its own agroforestry groups since another NGO, which had created some in one of the first agroforestry projects, had problems with groups for they were not community initiated and were being asked to do research. This decision is basic for it informs CARE strategy towards community groups to date. Base community groups do not get CARE inputs for building up the groups. Neither do they even select their members to be trained in agroforestry. Those who are selected, trained and hired by CARE for agroforestry extension work respond to advertising and are interviewed outside the base communities. It is young high school graduates who are hired and trained as extensionists to WORK WITH the groups as CARE employees, not group members. CARE's interest is in selling an agroforestry package to existing groups without investing in building group/community processes. This is confirmed vividly by the discipline areas (agriculture and forestry) of the bulk of the personnel hired until recently. Furthermore the project was only to work with those community groups who were to request it. Clearly then the project could not expect to be part of the building of base community knowledge and solidarity processes for where it worked would not be determined by a community dialogue process.

Although the policy of working with groups on request was made at project planning level, it was not systematically followed. For example in 1984, among the 9 nurseries aided were some chiefs nurseries. Many of the demonstration plots were planted during the 1984 long rains without community participation or just using the community as labour. Chiefs nurseries do not get CARE support after this period though.

The project initially attempted to set up nursery management committees separate from the normal management systems of the existing groups. It is difficult to fathom what was behind this since the organisation had made the decision that they did not want specialised agroforestry committees. However CARE found that the so called nursery management committees were replicating the normal management forms of the group. CARE field staff subsequently ignored this aspect of the implementation plan.

By January 1985 CARE was working with 80 assisted group and school nurseries. This was a very dramatic jump from the 9 nurseries which were being supported in January 1984. CARE had also begun to pay attention to local agroforestry knowledge. This could have been more efficaciously done if the decision had been made to work through an extension system based on members of groups. Ironically CARE is now planning a project which will attempt to research local agroforestry presumably by drawing it from the groups.

By 1987 long rains it is projected that 360 nurseries in Siaya will produce 2 million seedlings and 200 nurseries in 4 divisions of South Nyanza will produce 1 million seedlings. The demand for CARE material assistance cannot be met.

CARE reorganised in November 1985 centralising all administrative activities for 6 program districts at Kisumu. The Project Manager and his assistant together with support staff moved from Siaya to be central and to serve the other districts. This office was to be run by an expatriate Regional Administrator. The Regional Office was to get responsibility for program development in mid 1986.

Since the creation of the Regional Office, new staff organisation places District Team Leaders in Districts, Field Officers in Divisions and Extension Workers at the Locational and Group Levels. This gives the project staff parallel to GoK staffing patterns. So they can participate in all DDC levels.

#### PARTICIPATION AS DEVELOPMENT JARGON.

One of the strange things about the international development scene is its ability to create new jargon and to forget what is behind the jargon in terms of specific societies in time and space. I would like to suggest that the notion of participation is the current fashion. Because it is fashionable and given the ephemeral nature of fashion, one has to be slightly suspicious of it. This is not to argue that it has no salience in Kenyan setting as a guide to development. The point is simply that it is part and parcel of the setting of development agenda from without the society, which has to be understood.

Globally the arrival of participation category in the development scene is traceable to works by John Korten in Asia and Latin America, Robert Chambers in Asia and Africa and Goran Hyden in Africa. These are the new trinity among development practitioners. Their work sought to identify those processes which were taking place in the particular development situations which either marginalised the rural and urban poor from the development process. Without getting into great details, the research pointed out that this happened since the development industry (made up of governments, multilateral and bilateral donors and ngos) was set in such a way that it denied access to large numbers of the population who did not take part in deciding what development activities were to be done in their name and by them or with them. In detail the structure of funding, staffing, project identification, planning and implementation were owned outside communities.

This point, that what developers see as the key activities, are done outside communities, is probably the basic contribution of the new trinity to development thought. It should be of interest in the Kenyan setting for all sections of society, in their definition of selves, clearly set development as one of their goals. However not all sections of society put a premium on the participation component of development.

It can be argued that GoK's concern for participation in development



led to the Policy of District Focus Strategy for Rural Development. On their part, varied Kenyan base communities put premium on participation by always venturing forth into development in ways which marginalise and at times are antithetical to processes which deny them participation in development. That this is not widely known is a function of the poor state of basic community research. There are few who would allocate research and project money and time for finding out community processes.

#### DISTRICT FOCUS AS PARTICIPATION

Those who are in development work in Kenya should be aware of the fact that some of the ideas embedded in the District Focus Strategy for Rural Development go back to the founding of modern Kenya in terms of political, planning and community development perspectives.

Too many have harped on the point that District Focus Strategy is majimboism. In my view this is not accurate for majimboism was a particular political strategy specific for the period just before independence. However at the state level, clearly there was a feeling that by going to District Focus, some of the organisational genius and mobilisation of resources at the base communities, which could not be effectively tapped by government, would be mobilised in the districts by non-center dominated processes.

At the political level DF clearly expects that the local communities will participate in the structures for making the formal decisions about the kinds of development projects to be conducted in their areas.

It is true that DF only sets a system for prioritising the development activities and does not say anything about how communities do what in development jargon is called need assessment. It is assumed that any community knows its priority development needs. This position is usually disputed by development workers for they do not know the communities well and more often than not are caught by Chambers' net (local mediators between communities and outsiders) which generates enough tangle to confuse the actual community needs. Incidentally this net generated tangle has become the main justification for most training of development workers in the participatory framework. There is even an NGO in Kenya whose main activity is supposedly organising communities.

Under DF, community priorities are to be made by the village development committees initially. At this level there is not much organisation and in the situations where they are operative, the decisions are reached informally in barazas, work groups, visits etc. In short these decisions are arrived at within the normal social interactions of any primary community.

At the sublocational development committees, several villages (usually 3-9) begin to compete for the support of their village committees preferences. At this level there are the lowest levels of Government paid staff. So there is formal introduction of Government policy and procedures to the deliberations. Since the people interacting are still members of the same community, one can expect the decisions still to

reflect some kind of community consensus for there are not many areas in Kenya where a particular class will be so dominant that it would warp community priorities as is found in situations of extreme landlordism. Political factionalism and infighting is usually so mediated by kin and other social processes that it is not usually a significant factor in determining development priorities at this level.

It is at the the locational development committees level that competition for projects, elements of political factionalism and government departmentalism can be found. And yet one has to point out that this conflict is not necessarily bad for the theories which see conflict as antithetical to development creativity tend to ignore the fact that competition for leadership can lead to clarification of community needs and thus reductions in community investment in misplaced development.

The divisional development committees and the district development committees levels are to some extent too far removed from base communities to concern us here in terms of our focus for participation of the communities. However we would like to point out that it is these levels which are serviced by the DDOs in the districts where the formal planning criteria for development are applied.

Yet it is precisely these two levels that there have been problems with NGOs participation. At the divisional and district levels all projects are supposed to be scrutinised by the Government Staff at those levels to ensure that they are rationally planned and fit into the national policy frameworks. After scrutinising them Government Staff, who form the executive to the DivDC and DDC take part in the full DDC where these issues are passed on. Here both community political leaders (councillors, party and parliamentary), other leaders (eg church), GoK staff and representatives of NGOs are supposed to agree on the specifics of all aspects of a development program.

There are those who argue that this committee system is not democratic and participatory. This argument does not take into account historical facts.

Before DF there was no system for identifying development needs of local communities other than politicians (usually MPs) lobbying at the national level. Centrally based planners, their NGOs counterparts and center based controllers of political patronage, determined what development went to communities. This system was deemed unsatisfactory by many in society within five years of attaining independence. As a result by 1968, serious debate was raging within academic and policy levels of this society on whether there was merit in imposing center-dominated development to the local communities.

Out of these debates two strands of policy on development emerged. The first and most critical was the take over of some basic services (health, education and roads) from local authorities in 1970 who did not have fiscal ability. Although this may appear to contradict our thesis, one should note that this was done in the name of getting equal access to resources of the center by all local communities. This was to be



a major backdrop to the DF policy as the protagonists argued that the center based development system had been hijacked to only produce services unequally. This policy argument was based on data developed in the decade of the seventies showing some serious regional inequity particularly in access to services.

The second strand was experimentation with some development projects. The most significant was Special Rural Development Project, a central government project which went to the community level to plan development alternatives for specific communities in time and space. This experience is significant in the sense that it led to the creation of District Development Officers thereby transferring some planning capacity to the district level. At the same time it pointed to the possibilities of getting community involvement in the planning process for initially SRDP projects were very localised and communities did take part in project identification and prioritisation. Since then the districts have got other officials to assist in the collection of planning data. Other GoK programs in the same vein are Rural Development Fund, District Focus Training, and lately the plan to coordinate the development activities of NGOS.

By the time DF came about, one should also point out it was intended to get the local politicians to become accountable to their constituents. Since independence, struggle over development had led to the practice where politicians got all sorts of projects to local communities as part and parcel of their political factional infighting. This conclusion is drawn out of studies of Harambee where it was seen as both rooted in local factionalism and as preemptive planning. Each time a politician lost power the projects identified with him stopped. The stories of dispensaries, village polytechnics, goat breeding projects etc which never took off are testimony to development which was not derived from community needs. It is partly to stop this wastage of community resources that the development committee system, which gives base communities a framework to get community consensus for the projects in areas was started. It was also started to get the population and other non-political leaders a chance to contribute to the society for the local level political leaders do not have a monopoly on either knowledge or interest in development. In short DF recognises that for development to take in any community there must be much more than a politician bringing cargo to the community. There must be dialogue within the community on what is desirable and how it is to be institutionalised.

This section would be incomplete if we did not address ourselves to the problem of how NGOs are utilising the DF framework. To begin with other than the development offices of the main churches, many NGOs have offices in Nairobi. Similarly most of their staff are based in Nairobi where most of the programming takes place. They thus travel out to projects. Decision-making is highly centralised. Decisions on programs do not depend on community identified needs. Rather they depend on donor funding criteria. Thus NGOs go out after deciding the sectors and areas in which they are to do development work. They go to the districts to sell projects. Very few have formally set up the structures to take part in the identification of field projects in the district under DF. As a result most NGOs think that to operate in the DF context is only



to be introduced to the PC, DC, DO and then to get the project ratified by the DDC Executives. Whereas this is improvement from past practice when all they did was to link with a politician from an area to sell him a development idea or to spread some patronage, it is not in the spirit of DF.

Of course NGOs are not fully to blame for supervising levels, particularly the District Development Executive Committees, do not exercise their oversight powers coherently. We only know of one district where the DDC has set up a committee to facilitate NGOs to meet and discuss their agenda in the district and to liaise with the the rest of the DDC. We know of another where the NGOs meet as a subcommittee of the DDC Executive. When the fact that no formal committee or subcommittee systems have been set in the districts and below is pointed out to GOK staff in the districts, they claim that there would not be a point in setting up these structures since most NGOs do not have district staff to participate anyhow. NGOs on their part claim they never are informed about the DDC meetings. The arguments on both sides ignore the basic point, ie, base communities are still not involved at the project identification level which is basic.

So by default on both sides, a pattern of interaction is evolving where NGOs only go to meet and ask GOK field personnel, to act for them in the DDC Executives and the full DDCs. Some NGOs are finding out this is an unsatisfactory relationship which is easily derailed in the main DDC meetings by any person who asks to see the initiators of specific projects and whether they were discussed at the appropriate community levels. Usually such ambushes are targeted at spreading projects more evenly around the district. This is seen as a priority in many DDCs. Many NGO projects are stymied this way. Many NGOs see this as sabotage of their plans.

#### PARTICIPATION AS NGO MISSIOLOGY

A central tenet in many international NGOs is the believe that their participation in development is participatory since they are flexible and they respond to needs in expeditious ways which governments do not as they are bureaucratic and do not work in communities. Lately this argument has been made in Kenya, not only by NGOs, but increasingly by bilateral and multilateral donor agencies. They argue quite forcefully that their development resources will go to NGOs mainly since they have doubts not only about the probity and speed of the state organs but also the relevance of state driven development.

The logical implications of this position are rather explosive. First there is the implied challenge to the Independence notion: " Seek ye first the political kingdom and all other things shall be added unto you." This statement by Nkrumah embraces the notion of the state as a tool. It is a tool to be used used for development. Such thinking is part of the psyche of most African nations for the shame of being ordered around by an alien colonial state, is still within their living memory. Thus for the majority in all types of leadership positions, within and outside the state, to make the argument that non-state institutions are more efficacious in society than the state institutions

and processes. is to violate their belief in this underlying assumption. It also is to invite strong hostile reaction from the state and other societal institutions for they are still manned by individuals who remember the shame of being ruled by others because they were not competent to rule themselves. In short they were not cosmopolitan but primitive as we have just been reminded.

Local experience with NGOs is rooted in the missionary tradition. It also inherits the antipathy to the missionary for in all varied Kenyan traditions there is the saying that there is no difference between a missionary and the colonial ruler.

And yet the NGOs keep calling for social and political recognition as unique selfless, serving entities which are above societal fray. So were missionaries but when the chips were down eg World War II or on the issue of racial discrimination or the development of counter-insurgency specialists during Mau Mau, they operated with the rulers. This is clearly remembered and forms the basis of thinking about NGOs on the whole. An old woman in Isiolo put it this way-loosely translated- When we are just beginning to enjoy independence then these sons and daughters of the old DC come to order us to eat their funny food. (The context was the food for work programs run by church NGOs.)

One final point needs to be made on this section. The missiology of the selfless NGO worker living in a community is unbelievable these days for many of them, in the eyes of wananchi, live no less worse than the diplomats. The cars, houses, motorcycles and the style are kizungu. This fact will become a more contentious issue as NGOs employ more locals. The attack will be two sided. On one hand the locals, who get employed and do not get the same treatment as the expatriates will become fractious. On the other hand those who deal with NGOs in base community groups and rural society in general do resent the locals enjoying the lifestyle which is way above the society's level. The same attitudes are already shared by significant portion of the rural based bureaucracy.

#### PARTICIPATION AS LOCALISATION.

There is pressure in this society for localising those jobs for which there are Kenyans qualified. This pressure is clearly resisted by many NGOs in some unobvious ways. For example the creation of regional offices which serve other countries is a subterfuge which gets many around the dictates of work permits. At the same time such a subterfuge gets the key decisions away from the locals who have supposedly been put into the managerial positions of these NGOs for they are not allowed to run the organisations. The situation is ridiculous when individuals move up to the regional level and still continue the same functions as before. This is usually finance, personnel and programming. When these are controlled there is clear window dressing. The local is a shadow.

Kenyans understand these games well for they went through the localisation of the civil service and to a less extent the localisation of business concerns and know very well how these were stymied by window dressing. They also understand the tricks for negating the localisation



those under pressure to go would become the permanent trainers. Other tricks are the lobbying and alliance with political factions.

At the same time there is the concern at the state level when some of the locals work for international NGOs for it can lead to much greater penetration of the society than when outsiders run them. Of course where some of the locals get involved in the full range of society's activities as agents of the outside NGOs, they raise concern at the state and societal levels. In some sense this can be resolved by professionalism on the part of the locals, but when they start playing political, ethnic and other games they invite retribution.

Finally one can see localisation as a very creative process where one gets very experienced locals to run operations with the full range of local knowledge. This can lead to some creativity on the part of the organisations. There are many in the NGO sector who only pay attention to this aspect without agonising about the other not so positive ideas presented above.

#### CONCLUSION: PARTICIPATION POLICY ISSUES.

Several key policy issues seem to me to be fundamental in terms of future development of the NGO sector if it is to generate greater participation to the base communities.

##### 1. Group Exploitation.

It seems to me that to date nobody has paid serious attention to how groups are exploited by those who use their organisations to implement projects. If an agency comes to a group and asks it to take on an activity, then the costing of the group contribution and the agency contribution should be properly done. I want to emphasize that here I am not just talking about labour contribution but much more. It costs something to keep the group going. By doing one project a group is forfeiting other activities. Who pays these costs? Of course issues are not paid attention to since the economists keep us all believing that base communities have surplus labour which is almost free! Similarly misguided missiology keeps our eyes firmly closed and not seeing the way community groups are exploited by all and sundry.

##### 2. Who to Train

It seems to me that there ought to be thought given to demanding that base community groups decide who is going to be trained to become extensionists. If the current pattern of training young people, who get lost to the individual communities or groups because they are mobile, is continued, we will soon get to a position where groups will begin to throw out some development proposals for them, in their own calculus. know the benefits given to the mobile young do not stay with them. The second reason is cultural. Whatever ones feelings, there are activities in this country which need to be undertaken by fairly old people who have a stake in society as our people say. Thus an extension system based on married community people has a better chance of surviving and rooting than one based on highly literate young people. It should not be the business of NGOs to become employment agencies for youth.

##### 3. New Provincial Levels.

Why are NGOs creating new bureaucracies at what can be called provincial levels when the logic of DF is that districts will deal with Nairobi

directly? The objection to this is simply that the best people are being taken to the provincial/regional level and districts are being staffed with less competent and inexperienced people. One predicts that many new programs in training will be mounted by the experienced center and regional program personnel to train at the district level. This is counter-productive. If we are serious about development we have to keep the best trained and experienced people as close to the base communities as possible. This is as true for NGOs as it is for GoK.

#### 4. NGOs in DDCS

It seems to me that it is time the GoK decided how NGOs are to participate in DDC systematically. Each district seems to be handling them in its own way. No details of coordination processes at the district level seems to have been agreed between the various parties. Some proposals exist for creating a committee at each of the districts. I only add that if this committee is not part of the DDC structure it will never take off for DDCs now dominate district processes.

#### 1 UTOONI DEVELOPMENT PROJECT: DIRECT CONSTRUCTION.

ITEM	NUMBER
500 Gallon Water Jars(Unicef Model)	171
750 Gallon Water Jar (Utooni Model)	9
1700Gallon Water Tank(Utooni Model)	216
3000Gallon Water Tank(Utooni Model)	11
5000Gallon Water Tank(Utooni Model)	1
16000Gallon Water Tank(Utooni Model)	1
60000Gallon Water Tank(Utooni Model)	1
Large Subsurface Dams(Utooni Model)	13
Barrages (Utooni Model)	7
Gravity Piped Water Scheme	1
Boreholes	4
Shop	1
Grain Mill	1
Technology Buildings	5
8 4 4 Workshops	3
Church	1
Subchief Offices	2
VIP Toilets (Utooni Model)	56
These figures are for period up to December 1986.	

#### APPENDIX 2. UTOONI PROJECT MEMBER GROUPS

GROUP	MEMBERS
Utooni	130
Kivani Ushirika	60
Manzaa	178
Woni wa Mukuyuni	50
Kamuwani	45
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Total	463
These figures are for active members as at December 1986.	



## APPENDIX 3. DONOR AND UTOONI CONTRIBUTIONS. (KSH.)

ITEM	DONOR		UTOONI	
	Cash	Other	Cash	Labour
Subsurface Dam	75,000	-	-	85,000
VIP Toilet	1,400	-	-	700
S. Water Jar	800	-	-	400
B. Water Jar	1,000	-	-	500
1700G. Tank	1,600	-	-	1,600
3000G. Tank	2,000	-	-	2,000
5000G. Tank	2,500	-	-	2,500
Barrages	1,500	-	-	1,500
Gravity Water	56,000	-	-	56,000
Shop	-	-	156,000	175,000
Mill	-	-	120,000	30,000
Technology Center	-	-	310,000	400,000
844 Workshop	-	-	15,000	60,000
Church	-	-	2,400	31,000
Subchief Office	-	-	2,400	-
2Large Water Tanks	-	-	34,000	34,000

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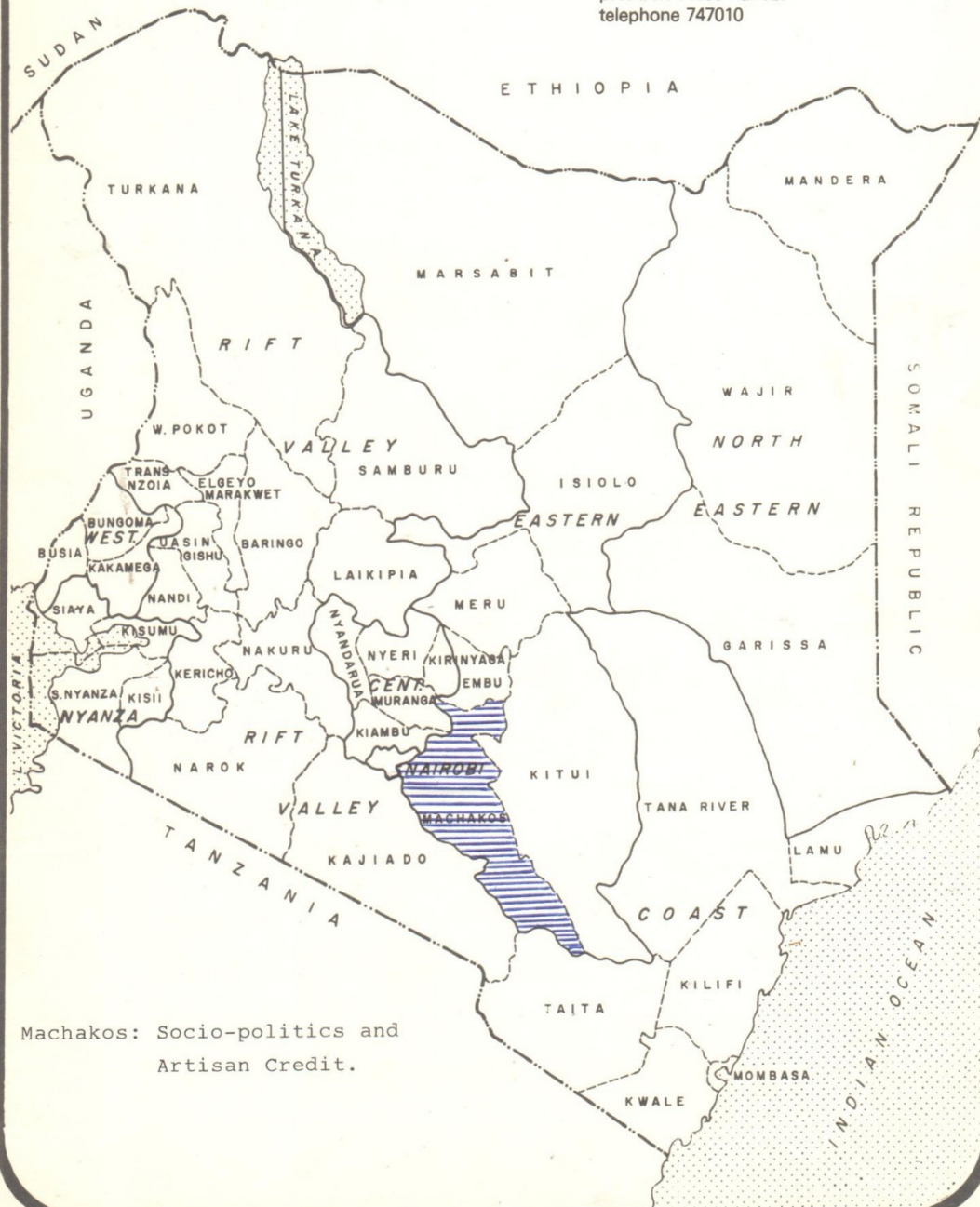
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fes/muticon/1/86



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Machakos: Socio-politics and  
Artisan Credit.

#### Terms of Reference.

Mr. Willi Haan verbally briefed Prof. G-C.M. Mutiso on the terms of reference at the FES Office on 23rd January 1986. In summary form two tasks were supposed to be done by the consultant. These are :-

1. To write on the socio-political background of Machakos as it might affect the planned project and to suggest entry communities.
2. To identify an individual who might be used by FES for more detailed probing into the social structure of the artisan community.

#### Method of Implementation.

It was made clear that the consultant was not to do extensive field work but rather to write a report identifying what FES ought to look out for in planning the project. However the consultant felt that it was important to visit four areas where artisans are concentrated. These are Machakos Town, Matuu, Tala/Kangundo and Wamunyu.

The visits were important for checking possible links of the project to ongoing development work and also in identifying individuals who could play the second project role by discussing with informants who live in these communities and who are known by the consultant.



## Machakos District Socio-political Framework and Credit.

Of concern to FES is whether there are socio-political practices in Machakos District which militate against an artisan credit system.

On the outset there does not seem to be any for, to the best of my knowledge, no formal political leaders or institutions have been arguing this in the district. If anything the opposite is true. The major political leaders Hon. Mulu Mutisya and J.P. Ngei are on record in DDC meetings and private political discussions urging those who take public sector credit to repay so as to facilitate more credit to other people in the district.

Provincial administration and other government bodies have made the same point.

According to bankers the repayment rate of credit in the District is higher than elsewhere.

There is extensive tradition of local credit in the communities. This usually is in form of mwethya groups who raise funds and donate to each member in the same way they raise labour power and donate it to an individual.

Socially credit is accepted for the extensive cooperatives have in recent times been used to give food credit, school fees credit, not to talk of farm production credit.

In summary then there aren't peculiar traditions or political groups which militate against credit systems. However having said this one must candidly state that the factionalisation of district politics could have a bearing on a credit system, if the project was to be seen as strictly contributing to a factional advantage. Thus any credit system must straddle the factions by serving all members. It is therefore important to contain the factional socio-political organisers in design and implementation.



#### Machakos Town Background.

This town, established during the last century, would have become the capital of Kenya had it not been bypassed by the railroad at the turn of the century. It remained a sleepy commercial town with very little 'industrial' activity until recently.. Bad roads into it from the district hinterland diverted district trade to Thika and Nairobi.

Recently the boundaries of the Township have been extended to cover a vast area stretching all the way to Mombasa road, reaching the tops of Iveti and Mua Hills and embracing Kiima Kimwe. As a result, the 1979 POPULATION CENSUS. VOL.11 ANALYTICAL REPORT shows Machakos Town as the fifth largest urban centre with a population of 84,320. This is a dramatic jump from only 6,312 in the 1969 census.

Although the boundaries have been expanded to include areas which could be considered rural, the outlying locations have very high densities which rival most urban areas. The average town density is 260 persons per square kilometre which incidentally is below the densities found in parts of Kangundo and Mbooni.

No study exists on rates of immigration to the township area but the extensive construction within the township shows that a great deal of current population are new arrivals.

No physical plan exists for the township. Construction of residential, commercial and industrial buildings has taken place at random. Particularly problematic are the areas of 'Eastleigh' - behind the Provincial Hospital - where residential buildings were put up before the area got absorbed into the town and where no services plots for roads and sewers are left.

At the old Majengo - a buspark was constructed in the middle of this old slum residential area. It is yet to be used. Sand-wiched between Majengo, the old market and the shopping area is Grogan - the major Jua Kali arena. It grew in the last twenty years on this steep land next to a streamlet on what is Council land.

According to the old Township rough physical plan, all artisan activities were supposed to be miles away to the west of Kilungu Road where Kenya Industrial Estate, Cooperative Union Godowns and a few other industries are located. A few artisans are found there. The rest are scattered around the town.

The Jua Kali artisans argue that they will not move from Grogan for several reasons. They are within a bloc of the major furniture selling street. They are also within two blocs of the functioning bus park and thus are conveniently located for the travelling buyer. One artisan with a sense of humour points out that they are within two blocs of the hospital ! Grogan has only recently grown. Its growth like that of the rest of the district is dependent on several recent activities in the district and the township in particular.

### Township Politics in 1980s.

The town was administered by the County Council until late seventies when it first started running its affairs.

Politics in Machakos has essentially been an issue of those who support the Ngei Faction and those who do not.

The first Mayor of Machakos Town Mr. Muia (Tumba) was in the anti-Ngei faction. His activities in dishing out plots, the major patronage activity of the town council, is credited with creating a boom in Machakos from the mid-seventies to eighties. All plots available, whether belonging to Commissioner of Lands or County Council land were put on the patronage bloc. They were allocated and people built without much attention to building codes or plans. Since his influence extended to the County Council a lot of land was opened up for building.

The growth of artisan community is related to this patronage system. Infact the first Mayor, Muia, has a garage in Grogan under his son. His allies eg current Deputy Mayor Malatu (Kambu) has a mechanic school outside Grogan. Munyao Kiilu has interests in various rented properties being used by artisans. Stone Kathuli has one of the major timber supply houses.

On the Ngei faction individuals who have been key supporters in the Council and in other political operations in the district and town have businesses which rely on artisans or are indirect investors in the sector (through kiosks, shops plots and businesses which supply the sector, Examples are Itumo (Titi) in furniture, Nthenge (Wasyo) in supplies, Muia Many'unza in plots and supplies, Gideon Mbole and his brother in plots, supplies etc.

However it is not just the openly political types who control resources which link with the sector. Even residually Asian businesses like Akamba Timber - possibly the largest timber and hardware business in the district - have from time to time had some politicians and influential Kambas on their boards. As suppliers to the sector they are important sources of credit which can be influenced by politics.

#### Jua Kali as Source of Political Muscle.

The manipulation of Jua Kali sector takes place most nakedly when there are political struggles or elections. Above I have indicated names of individuals who because of their political locale have access to resources needed by the sector. This is not the major source of control though. The sector has access to a lot of people who come to buy. By the same token when large businesses get orders, they sometimes farm the work to the sector. Thirdly some, eg furniture makers and mattress fundis, need formal sector outlets (ie shops) sometimes controlled by the politicals. To maintain their 'businesses' they are obliged to come out when there is political organising.

Any political meeting or demonstration in the town usually has a lot more people from this sector than any other (with a possible exception of Majengo). The reason is simply that this niche's income is generally low and economic pressure can be brought to bear on their participation. They are either paid off in patronage, credit or cash. This must be one of the first point to deal with in credit project design.

Of course within Jua Kali sectors' social structure are the few who have been in it for a longtime and have thus become leaders by their own right eg Zakariah Ngongo - a tinsmith, or Komu - a mechanic.



There are others who have entered from employment sector to an activity of great demand and are therefore accumulating and getting respect among their peers eg Tailor Maweu - the only one in jute mattress-making. Yet there are the great number of day casuals (spanner boys etc) who are the cannon fodder for the politicals. They can earn Shs.20 by working or demonstrating. In a way these are the poorest of the Jua Kali sector and the ones not likely to be caught by any development projects. They incidentally are the majority. They are likely to 'work' on jikos or engines or even turn itinerant sugarcane sellers on any given day.

#### Economic Base of Jua Kali Sector.

A walk through Grogan led to the following activities being identified :-

1. Tyre shoe making.
2. Ordinary charcoal jikos being made (One fundi was identified by the others as the only one who knows and makes claylined jikos on order. He claimed that relatively near sources of pot clay crack and he has to bring it from Mbooni. Incidentally he sells improved jikos for Shs.60).
3. Assorted motor mechanics.
4. Tin Smiths - making lamps, sufuria, Jembe etc.
5. Carpenters - making low cost furniture .
6. Assorted Black Smiths - forging and shaping metal for others.
7. Gas welders.



Conspicuously missing were :-

1. Equipment repairers - watches, pumps etc - who are intermingled with other commercial activities in other areas.
2. Steel window makers - who are in commercial areas with electricity.
3. Wood carvers - who are concentrated in Wamunyu.
4. Tyre repairers - who are in centre of town.

It is clear then that the Township Jua Kali concentrates on low income high demand articles (tire shoes - paraffin tin-wick lamps, ordinary jikos) and general repairs - mechanical vehicle (and not cart) and gas welding.

These items are in major demand by the low income travellers. Commercial buyers from other parts of the district buy and transport to retail in the outlying village shops.

Assets by Jua Kali.

These are kiosks licenced by the Town Council for a few of the Jua Kali artisans. Those who have been there longest like Komu, Ngongo and those tied to politicals have built permanent structures on plots allocated to them personally. The kiosk owners do not enjoy this permanent tenure.

The majority of the kiosks are built with wooden offcuts and have recycled iron sheet roofs.

Compared to Gikomba in Nairobi there are very few tools visible in the sheds. This issue will need to be investigated further if the plan is to use tools and implements as loan collateral.

Problem of Masons, Painters, Roof Fundis.

There is not a single place that I or my informants know where masons, painters and roof fundis congregate as is the case in Nairobi and other towns. One is told that most of them are tied to the main supply houses and politicals especially Muia (Tumba). It is said that he controls most construction. This will need investigation for with all the construction going on there must be a place where they meet if for no other reason to exchange information. It is possible some of the new migrants look for fundis from their homes.

These three categories are usually in great demand.

My own experience with this category of artisans is that many of them from the town environs have migrated to rural areas of the district. Some of them who I know, argue that whatever work is found in Machakos is either for large contractors or is controlled by the politicals. A few others claim that as fundis they can earn more money and be employed more regularly outside the town where members of the rural elite - especially teachers - are always building their dwelling houses and where there always is work in extension of shops in rural centres.

### Possibilities of Artisan Credit.

Behind the request of this consultancy was a concern that elsewhere there are artisans who feel that all loans are not to be paid.

Let me first state that there is throughout the country a cadre of people who because of linkages to the politicals have had this view. However since 1978 the national political leadership has been pushing the idea that all forms of loans are to be paid. Since then, and particularly in the last two years, major politicals who have not honored their debts have been auctioned or bankrupted. Surely there must be salutary impact of this to the wider society.

In Machakos township for the past four years, loan repayment enforcement, particularly by the District Cooperative Union and AFC has been stringent. People openly state that all loans must be repaid in casual conversations.

These facts lead me to suppose that an artisan credit system should not be too problematic particularly if the pitfall of working with the major politicals in the township is avoided.

FES indicated that they would like to get a person from the area to work on the social structure of the artisan community. This is a sensible idea. I only would like to suggest that since my exploratory visit did reveal some oldtimers who are the community wazee, FES should try and get somebody from the informal sector to be the one interacting with his peers as far as discussing credit possibilities.

Such a person is Josphat Maingi who runs two newspaper kiosks within the town and who is informed about the community.

Two other individuals are important given their structural location and rapport with the sector. They are G. Muia Kalla (Box 499, Machakos) and J.R. Muinde Nganga (Box 87 Machakos. Phone 21212)

Kalla has been a private accountant in Machakos town for a longtime. He has risen to be a 'consultant' to the whole informal sector over the years. Infact his office handles more informal sector problems than the primary occupation. He has not been involved in the factional politics although he is active in cooperatives.

Nganga on the other hand has the same stature from his own work with Domestic and Hotel Keepers Union. Similarly he has avoided the factional infighting. In spite of experience with labour union organisers elsewhere, I would recommend him as a major resource.

I believe that an agency can be better served by community based leaders than even consultants from that community for they know the interior power plays not visible to the outsider. FES should tap these two who are extremely knowledgeable about the town and whose habitue is next to Grogan.

FES could also consider tying the credit project to the Catholic Diocese Development Office which has extensive community activities. They do not give credit to this sector to the best of my knowledge but their previous record in community organising is extremely good and it could come in handy.

I already mentioned to FES that inspite of the hostility against cooperatives that Machakos Cooperative Union linkup maybe worth exploring for it is soundly run now.

Other Sites in Machakos District.

1) Matuu.

Matuu Jua Kali Artisans are on the whole doing similar activities to those at Machakos town. They are however advantaged in the sense that their immediate environ, which is dominated by the irrigation canal, is cash awash all year round. They thus market their wares immediately. Their trade networks, also extend to Kitui, Muranga, Thika and Embu.

Beyond the activities found in Machakos, they extensively repair modern agriculture equipment, particularly spray pumps.

Where Machakos town has almost entirely Kamba artisans, at Matuu there is a polyphony of tribes. This clearly will make organising much more complicated for there are tensions between the various groups at Matuu.

I thus agree with the already expressed FES view that they are considering entering the District through Machakos Town. Matuu would be a worthy second entry.

Some sector contacts would be :-

Peter Mutiso, - carpenter, Paul Muindu Nyangi - carpenter, Hamisi - mechanic, John Wambua - mason, Paul Kyondo - welder. A good organiser would be Mulli Ndolo who is a mason and is accepted by others as a leader. Mzee Greg Kathilu(of Box 223, Matuu)would be an important community resource.



## 2. Tala/Kangundo.

There are not as many Jua Kali artisans as either at Matuu. The range is limited to steel window makers, wood workers, tyre shoe makers, few tinsmiths - etc. The hinterland is coffee zone and most repairs relate to that. It is not a major source of commercial supplies of artisan products for Machakos, Thika and Nairobi dominate that role. Since it is not on major trade route, it possibly will never build an artisan base catering to other rural areas like Machakos.

Some sector contacts would be :-

Bernard Muisyo Makau - mechanic , Kitolo Mulei - mechanic, Kilonzo Maitha - carpenter, Musyoki Nyangi - welder, Hussein Mwanthi - mechanic, Zakayo Musembi - welder. A good organiser would be Mwanzia Kiasya (Box 1295) Kangundo.

A community leader who would be helpful as a resource is mzee J. M. Kithome of Box 1295, Kangundo.

## 3. Wamunyu Wood-Carvers.

Carving is a major industry at Wamunyu. Infact people from there dominate the carving industry nationally and their trade networks stretch around the globe.

However the carvers are increasingly being held hostage by large operators as carving wood prices skyrocket. The creation of a carving cooperative has not solved the artisan problem for its marketing is systematically undercut by large operators.

As many as 500 artisans are involved in the location. If FES was interested in pioneering intervention in a system where working resources (wood) and marketing are critical for the existence of an artisan, perhaps no more challenging situation exists than the Wamunyu carvers.

Here the political factions would not be a factor for the major issue is really who controls the wood source. Since artisans cannot afford to buy carving wood they are huddled into minifactories which supply it, and more often than not these same minifactory owners buy either the unpolished product (for polishing under different factory setups) or the finished product. Independent artisans are increasingly being marginalised inspite of the fact that this activity is a high income earner.

If a Wamunyu project were generated other artisans, who are into beds, blacksmith, tyre shoe makers, masons, etc could be serviced by the project.

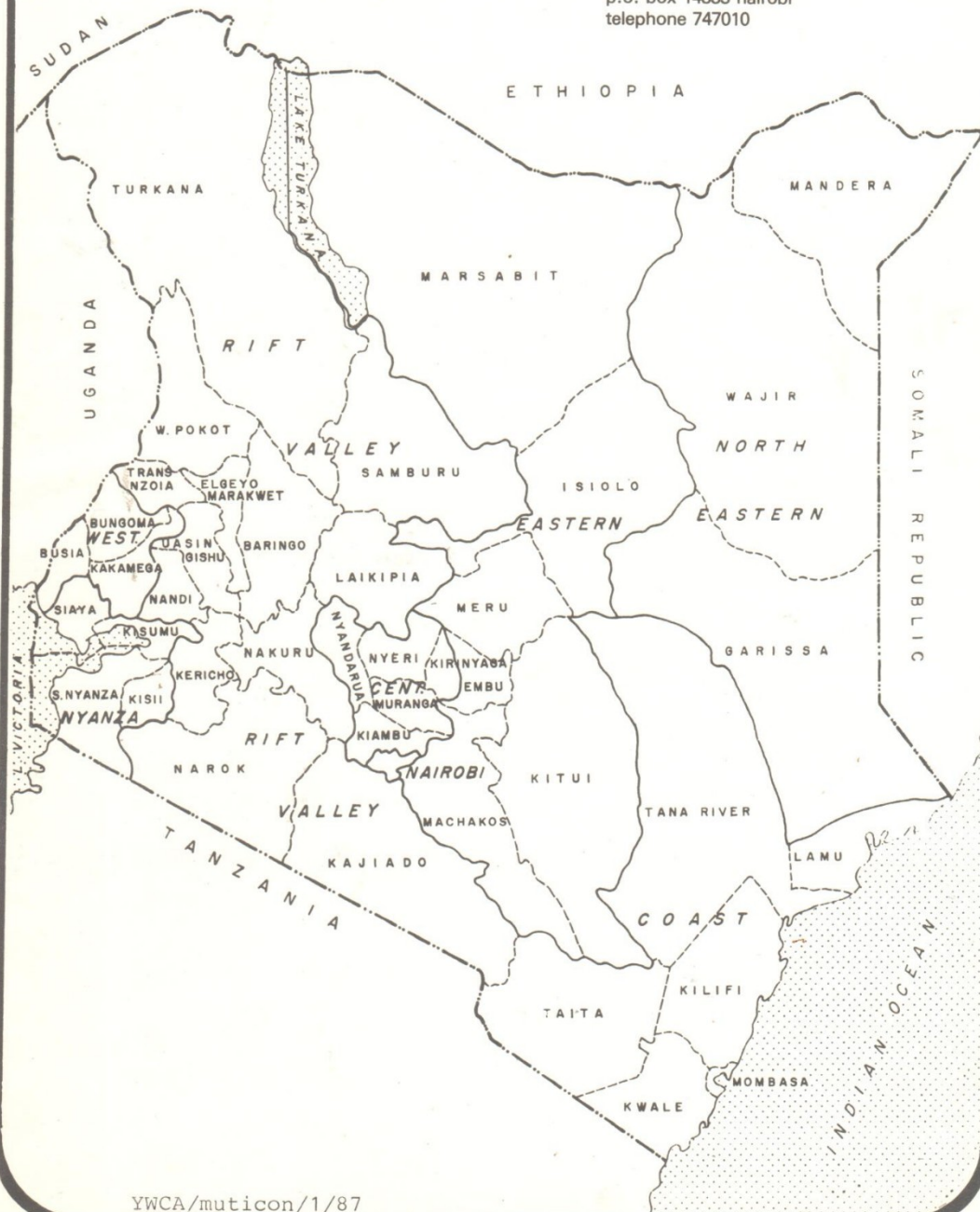
Possible artisan contacts are :-

Mulli Mumo - who sells traditional beds, door frames and poles in the market and who could act as organiser,  
Kilonzo Musanga - mason, Mutweia Kiseko - blacksmith and  
Ndaka Ndile - wood carver.

MARKETING OF FRESH MANGOES  
BY TANA RIVER WOMEN



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## EXECUTIVE SUMMARY

Data on supply of mangoes in Tana River, within the pilot groups villages and their families is presented. The data suggests that mango trading and pulping activities, as well as extension of improved mangoes are possible during phase one of a three phase program leading to a mango products factory and extensive trading in fresh mangoes and their products.

Costs of training and better handling and production as well as trading mangoes are also established.

The report also establishes that there is firm demand of mangoes in the tourism market.

A project proposal is generated out of the data collected in the field during the consultancy as well as data from related earlier consultants reports.

Six sub-projects which, together form phase one of the Tana Mango Projects are recommended. These and their costs (under normal depreciation) are:

<u>SUB-PROJECT</u>	<u>COST</u>
a. Training on Picking and Packing	K.Sh. 153,802
b. Improved Mango Extension	K.Sh. 489,110
c. Mango Export Trading Through HCDA	K.Sh. 375,491
d. Mango Export Trading through Traders	K.Sh. 253,523
e. Mango Trading in Tourism Market	K.Sh. 563,217
f. Mango Pulping	K.Sh. 224,923

(ii)

If these projects are implemented, net income to YWCA women per project are estimated as follows:

<u>SUB-PROJECT</u>	<u>INCOME TO WOMEN</u>
a. Training in Picking and Packing	K.Sh. 0
b. Improved Mango Extension	K.Sh. 1,710,890
c. Mango Export Trading Through HCDA	K.Sh. 1,620,349
d. Mango Export Trading Through Traders	K.Sh. 23,677
e. Mango Trading in Tourism Market	K.Sh. (135,537)
f. Mango Pulping	K.Sh. <u>120,077</u>
TOTAL	K.Sh. 3,339,456

To realise this net income to YWCA women, investment in staff and vehicles and hiring of transport and management services as well as trading capital will be necessary. The costs of these have been spread in all the projects as necessary.

Trading capital requirements are K.Sh. 2,357,340 and the proposal is that K.Sh. 2,297,340 be sought from donors and that YWCA members raise Sh. 60,000. Staff, Training, Equipment and Operating capital needed is for K.Sh. 3,124,626. Thus total financing needed is K.Sh. 5,481,966.

It is recommended that the financing of the interrelated sub-projects be sought simultaneously for the mix forms the best income package.

A. TERMS OF REFERENCE I: SUPPLY OF TANA RIVER MANGOES

1. National Mango Production Statistics

No data exists for the nation as a whole on mango production for it is not a scheduled crop thereby forcing Ministry of Agriculture to keep statistics. Data on estimates of production is worked backwards from the firm HCDA export statistics by assuming that the national production is twice the export figures. It is also assumed that 80% of the production comes from Tana River. The statistics found in the RIDT Report, Mango Feasibility Study in Tana River District, Kenya, are based on this method. Table I, National Mango Production and Exports is based on these assumptions.

2. Tana Mango Supply

Ideally to establish mango supply, the number of trees in Tana should have been counted, which was not possible in the time allocated. I have had to rely on interview data, Ministry of Agriculture and HCDA statistics. Using the assumptions specified above, we have worked out probable supply from Tana as shown in Table II, Tana Mango Production and Markets.

For the year 1986, using the HCDA assumptions, Tana River produced 2,442,836 kgs (2,442 tonnes).

For the same year, Ministry of Agriculture Field Officers at Hola and Mombasa argue that there were 4,000,000 kgs (4,000 tonnes) produced. Their production data is based on 600 hectares of mature mangoes as estimated by field staff.

The two sources (and methods) show that there is a difference of 1,557,164 kgs (1,557 tonnes).

TABLE I: NATIONAL MANGO PRODUCTION AND EXPORT (KGS)

	TOTAL PRODUCTION	TANA RIVER PRODUCTION	TOTAL EXPORT	EXPORT THROUGH JOMO KENYATTA	EXPORT THROUGH MOI
1978	1,755,468		877,734	877,734	-
1979	N/A		268,821	268,821	-
1980	N/A		1,308,651	1,308,651	-
1981	N/A		1,758,250	1,758,250	-
1982	N/A		1,735,333	1,735,333	-
1983	N/A		1,445,606	1,445,606	-
1984	N/A		2,472,311	2,472,311	-
1985	3,052,550		1,526,275	1,526,275	-
1986	5,882,464		2,941,232	2,505,042	435,190
1987*	5,600,000		2,800,000	-	-
1988	6,000,000		3,000,000	-	-
1989	6,400,000		3,200,000		

\* 1987-1989 based on RIDT Projections

TABLE II: TANA MANGO PRODUCTION AND MARKETS (KGS)\*

	TOTAL (KGS)	EXPORT**	DOMESTIC
1978	1,404,374	1,263,936	140,437
1979	430,113	387,101	43,011
1980	2,093,841	1,884,457	209,384
1981	2,813,200	2,531,880	281,320
1982	2,776,533	2,498,879	277,653
1983	2,312,969	2,081,672	231,297
1985	3,955,697	3,560,127	395,570
1986	4,000,000 ***		1,802,164
	2,442,040	2,197,836	244,204
1987	4,480,000	4,032,000	448,000
1988	4,800,000	4,320,000	480,000
1989	5,120,000	4,608,000	512,000

\* 80% of National Production

\*\* 90% of Tana Production according to HCDA Estimates

\*\*\* 100% of Tana Production according to MOA Estimates



As shown in Table II, Tana Mango Production and Markets, the two sources and methods show that between 244,204 kgs and 1,802,164 kgs are available for the domestic market.

When we asked traders how much mangoes they move from Tana, the top 6 companies claim that in 1986 they moved on average 20 tonnes a week during the season. This works out to 3,360 tonnes over the 7 month production period. This data tends to confirm the Ministry of Agriculture estimate that Tana River District Mango Production is within the range of 4,000 tonnes, for other minor traders still move some mangoes, locals consume them and some drop/rot.

### 3. Supply Within Riverine Villages

RIDT in their report counted the trees within villages abutting the river for they were committed to the riverine based buying system. The following are the villages and numbers of trees:

Kilelengwani	2,250
Kao	1,800
Ozi	750
Shirikisho	1,250
Mrafa	600
Anasa	800
Chamwanamuma	2,000
Semikaro	1,250
Ndune	800
Laini	750
Oda	600
Galbanti	1,800
Ngao	1,100
Garsen	1,250
Hewani	500

Wema	750
Kinyandu	1,000
Mnazini	2,100
Kitere	750
Baomo	800
Makere	1,250
Maroni	1,200
Total	<u>25,350</u>

Using their conservative figure of 200 fruit per tree annually, these trees right next to the river would produce 5,070,000 pieces which is 2,281,500 kgs (2,281 tonnes). This is more than half of the Ministry of Agriculture estimate of total Tana River Production. There are villages away from the river bank with significant mango groves as anyone with experience in Tana River will attest. Furthermore, given the very conservative figure of only 200 fruit per tree per year, it seems to me that accepting Ministry of Agriculture 1986 estimate of Tana Mango Production i.e. 4,000,000 kgs (4,000 tonnes) is rational.

#### 4. Mangoes within Women Pilot Group's Villages

The Consultant, 3 YWCA Tana River Field Workers and the Mombasa Branch Secretary evaluated groups for inclusion in the pilot project. The criteria used were:

1. strong group leadership
2. group stability
3. access to river and land based buying system
4. access to mango trees in group catchment area, and
5. access to family trees.

The groups selected to participate in the Mango Pilot Project and trees in their villages are shown hereunder:

YWCA Group	Location	Membership	Trees in Catchment
1. Idsowe	Ngao	45	1,250
2. Kibusu	Ngao	24	
3. Ngao	Ngao	35	1,100
4. Hiari	Ngao	20	
5. Kau	Chara	24	1,800
6. Golbanti	Ngao	25	1,800
7. Oda	Ngao	32	600
8. Chamwanamuma	Chara	42	2,000
9. Ozi	Chara	26	3,000
10. Mpeketoni	Chara	24	
11. Kilelengwani	Chara	24	
		321	11,550

The trees within the villages of the 11 groups produce 2,310,000 pieces or 1,039,500 kgs (1,039 tonnes).

#### 5. Trees Under YWCA Women Groups' Families

In preparing the Tana Mango Processing Industry, Lena Chesaro and G-C.M. Mutiso collected data on family ownership of mango trees from YWCA members. For the pilot groups selected, the following is the data on average mango trees per family in group villages:

YWCA Group	No. of Members	Average No. of Family Trees	Total No. of Trees Per Group
Idsowe	45	8	360
Kibusu	24	5	120
Ngao	35	12	420
Hiari	20	12	240
Kau	24	18	432
Golbanti	25	8	200
Oda	32	12	384
Chamwanamuma	42	18	756
Ozi	26	18	468
Mpeketoni	24	18	432
Kilelengwani	<u>24</u>	18	<u>432</u>
	321		4,244

The total number of trees is 4,244 which is 36.74% of the total number of trees in the riverine villages. The 4,244 trees should produce about 848,800 pieces or 381,960 kgs (381 tonnes) a year.

These figures check with data collected from the YWCA women members in May 1987, about the amounts of mangoes they can pick daily. Those in Chara location estimate that on average during the peak season, they pick from family trees on average 1,500 pieces. Those in Ngao pick on average 150.

Mangoes needed for export and tourism industry as will be shown later are about 1,584,000 pieces. Thus women will be able to get just about half of their fresh trading mangoes outside family owned trees.

## 6. Summary

In summary then the villages of the YWCA members chosen in the pilot project own 11,550 trees producing 1,039,500 kgs (1,039 tonnes) of mangoes in Tana River. Depending on how one arrives at total Tana River production, calculations, this production is between 26% and 43% of all production in the district in 1986.

The families of members own 4,244 trees which produce 381,960 kgs (382 tonnes) which is 37% of the production in their villages.

Given that members families control significant production and that their villages control a major portion of district production, a viable project is possible. One should further note that the trees are within reach of the river based transportation system, essential as an alternative to the extremely bad road system which floods during the heavy marketing seasons.



B. TERMS OF REFERENCE II: MALINDI AND MOMBASA DEMAND

1. Introduction

In discussion of the terms of reference with YWCA, we pointed out that the major market would be in the tourism industry and not other fresh mango markets.

2. Coastal Tourism Mango Consumption

Major Coast Hotels and Daily Mango Consumption, Table III, shows the amounts of mangoes consumed in tourist hotels.

Of the 44 tourist hotels we got actual data from records provided by either beverage managers or chefs for 38. Only in 6 cases was data provided by individuals who are neither chefs nor beverage managers. Since formal records were not presented for scrutiny in the six cases, we treat them as estimates.

For the minor holiday chalets and camps, most of which were closed when we were doing the interviews, we assumed similar consumption to the hotels and working out of number of beds arrived at the figure reflected in the table.

The data is highly reliable therefore. It shows daily consumption of 8,077 pieces which at 0.45/piece works out to 3,634.65 kgs (3.64 tonnes) of mangoes. For a year demand will be for 1,326,775 kgs (1,327 tonnes). This demand is expected to grow at a rate of 10% yearly which is equivalent to the growth of the industry. The four month tourist peak season would require 436,200 kgs (436.2 tonnes).

Table III: Major Coast Hotels and Daily Mango Consumption

Hotel	Location	Daily Consumption (Pieces)
1. Nyali	Northcoast	80
2. Mamba Village	Northcoast	10
3. Silver Beach	Northcoast	100
4. Bahari Beach	Northcoast	170
5. Mombasa Beach	Northcoast	210
6. Reef Hotel	Northcoast	100
7. Oceanview	Northcoast	60
8. White Sands	Northcoast	160
9. Bamburi Beach	Northcoast	100
10. Kenya Beach	Northcoast	130
11. Neptune	Northcoast	200
12. Plaza	Northcoast	110
13. Severin	Northcoast	200
14. Dolphin	Northcoast	100
15. Serena	Northcoast	100 est.
16. Intercontinental	Northcoast	150 est.
17. Oceanic	Town	20
18. Castle	Town	10
19. Robinson	Southcoast	500
20. Two Fishes	Southcoast	1,000
21. Leopard	Southcoast	100
22. Diani Sea Lodge	Southcoast	150
23. Leisure Lodge	Southcoast	160

Hotel	Location	Daily Consumption (Pieces)
24. Golden Beach	Southcoast	160
25. Jadini	Southcoast	80
26. Africana	Southcoast	80
27. Safari	Southcoast	80
28. Diani Reef	Southcoast	100
29. Lagoon Reef	Southcoast	120
30. Trade Winds	Southcoast	60
31. Nomad Beach	Southcoast	30
32. Shelley Beach	Southcoast	100
33. Lawfords	Malindi	125
34. Sindbad	Malindi	30
35. Eden Rock	Malindi	100
36. White Elephant	Malindi	30
37. Coconut Village	Malindi	25 est.
38. Palm Tree	Malindi	40 est.
39. Silve Sand Villas	Malindi	40 est.
40. Sulisuli	Malindi	35 est.
41. Driftwood Beach	Malindi	35
42. African Dream	Malindi	35
43. Seafarers	Malindi	60
44. Turtle Bay	Malindi	<u>100</u>
	Subtotal	5,385
45. Chalets, Holiday camps etc.		<u>2,692</u> est.
	Total	8,077 pieces daily

### 3. Fit Between Mango Seasons and Tourism Seasons

There are two major mango production seasons in Tana River. These are May to July and October to January. Coastal tourism has operated in the past with a clear low season from April to July. Its high season is from August/March. On the surface an argument could be made that the low season would limit selling to the tourism industry. We put this point to those in the industry. They argued that with the promotion of domestic tourism, bed occupancy rates during the 1986 low season, were 80% of the high season. Thus there should not be great variation in coastal tourism consumption. When Tana mangoes are not in season, the sector uses less quality mangoes from the interior or imports from neighbouring countries.

### 4. Possible Tana Mango Supply to Coastal Tourism

Table II, Tana Mango Production and Markets, shows calculations based on two different assumptions. HCDA estimates that 90% of all Tana mangoes are exported and only 10% are available for in country consumption. Those available for domestic market, following the HCDA export based extrapolation, were 244,204 kgs in 1986.

On the other hand, Ministry of Agriculture Field Staff at Hola and Mombasa, estimate that in Tana River there are 600 hectares of mature trees which in 1986 produced 400,000 kgs. Our inclination is to trust their figures, which are collaborated by traders, more than the HCDA figures for the latter do not have field staff. There may well be 1,802,164 kgs of mangoes in Tana River available for the domestic market. This is more than enough mangoes to supply the Coastal tourism market, which demands 1,326,775 kgs annually and 773,952 kgs for the seven months when mangoes are in production in Tana River i.e. May, June, July, October, November, December and January.

#### 5. Structure of Selling Mangoes to Coastal Tourism

In our hotel interviews, we were informed that the main suppliers to the hotels are itinerant sellers. None of the large mango trading outfits supply the hotels for export trade has been more rewarding financially. Small jobbers have moved into the niche, where hotels do not buy at the Mwembe Tayari retail market in Mombasa, which is dominated by four trading concerns.

Out of this, we conclude that the YWCA can move into this market with relative ease if it organises regular and reliable delivery for some of the hotels argued they have to do panic buying when supplies are not forthcoming.

#### 6. Other Markets in Malindi and Mombasa

In interviews in Malindi and Mombasa wholesale markets, we were not able to establish that 80% of the mangoes bought end up in the tourism market as informed earlier by HCDA, Ministry of Agriculture and Association of Tour Operators, basically because mangoes were not in season to enable us to estimate what was going through the market.

Considering Table II, Tana Mango Production and Markets, we have shown in Section A, that the tourism sector demands 773,952 kgs of Tana Mangoes in the seven months they are in production, and assuming that since the tourism industry is a better client and gets filled before other markets, the coastal retail and upcountry market may account for the remainder of Tana Production i.e. 1,028,211 kgs.

We do not recommend YWCA getting into the generalised Malindi/Mombasa and upcountry market now for several reasons. First, we do not know the demand structure. Second, we know that four wholesale traders whose networks stretch to



neighbouring countries monopolise that market and for more than ten years have bankrupted every new entrant. Third, it will be expensive organising such market for many outlets will have to be setup, not to mention problems with transport and its management.

C. TERMS OF REFERENCE III: MAJOR BUYERS IN TANA RIVER,  
MALINDI AND MOMBASA

The major buyers in the last three seasons have been:

1. H & R Ratief
2. East African Growers Ltd.
3. Greenfields Exporters Ltd.
4. Jakal Services Ltd.
5. Kenya Horticultural Exporters (1977) Ltd.
6. Karama and Sons
7. Malindi Farmers Cooperative Society
8. Coastal Growers and Packers Ltd.

Some of the companies listed above are both traders in mangoes within the country, buyers for others to export, and at times exporters.

Historically, the trade in Tana mangoes was dominated by Karama and Sons of Mombasa but lately their position is not as dominant for new companies have moved into the trade and aggressively pushed their operations. Significant among these have been Coastal Growers and Packers Ltd. which dominated the field three years ago; Greenfields Exporters Ltd. which moved into mango trade three years ago and in the second 1986 season, was reputedly the biggest buyer for export. It together with H.R. Retief has insisted on very sophisticated picking and packing at source to assure quality and longer shelf life. This practice is now being copied by all major export traders. Karama and Sons have been buying for Kenya Horticultural Exports (1977) Ltd. They dominate the fresh mango market in Mombasa although Jakal Ltd. are encroaching on it. They do not extend picking

and packing technology. H & R Retief has been buying for East Agrican Growers Ltd.

The companies with infrastructure in Tana River to operate buying networks based on river and land collection are H.R. Retief and Greenfields Exporters Ltd. (Vegair is a new entrant). Their infrastructure consists of large lorries for transportation from Tana River, four wheel drive pickups for collection at points unreachable by trucks, boats for riverine collection and finally established sheds for truck/pickup points. These two companies and HCDA are the innovative ones which in my opinion should participate in the pilot phase of the YWCA mango project. Commercial operating decisions will need to be made even during the pilot on whether other companies, i.e. Jakal Services Ltd., Malindi Farmers Cooperative Society Ltd. and Coastal Growers and Packers Ltd., will establish the sophisticated picking and packing operation in Tana River necessary for selling in the upmarket. If they do, there is no reason why then YWCA should not cooperate with them.

Special relationship should be established by the YWCA with Coastal Growers and Packers Ltd. who are set to start a mango pulp factory in Mombasa. YWCA could supply those mangoes below export quality to them, if Greenfields cannot take all of them at Tana River, subject to a good return being negotiated. Since Greenfields has worked out detailed plans for pulping in Tana River, we recommend initial relationships with them.

D. TERMS OF REFERENCE IV: TRADING SYSTEM AND COSTS

1. Trading Costs

The following three tables show in detail the trading data for mangoes over the last six months (January to June 1987). This (averaged) data collected from 7 major traders shows fluctuating returns to traders first. Second, it shows that most significant costs in the trading chain is air freight. Produce purchase is the second most expensive item. Transport costs from Tana River to Nairobi are comparable to packing material (cartons) costs if one is exporting. The other point is that agent fees are more expensive than either labour or collection costs within the District.

Agent fees are there since the local marketing process is still underdeveloped and many males act as proxies for buyers. They make substantial amounts of money for doing no work. Traders have been held hostage by them in the past.

One of the most successful agents make K.Sh. 87,000 in the 1986 second season fronting for a major exporter.

Elsewhere, we recommend that YWCA groups become agents for they can earn substantive amounts of money without investing money.

Several general points about the overall trading system need to be made clearly. Traders agree on prices to the producer. Up to four years ago, one trader practically dominated the price structure. Since then, aggressive new entrants have pushed the price up but to date they have not managed to break the agents. Since the main market for the new entrants is export, they have also introduced new picking and packaging and collection

technologies. The second general point is that Tana people are insisting that labour for the industry be hired locally and not even from Malindi in the next district, Kilifi. Thirdly, as the system evolves, the position of a trading agent will become more precarious for traders are hiring shambas. There is a nascent idea that the agency fees should go to community groups and finally new marketing strategies (e.g. traders controlling picking) will lessen dependence on agents.

#### Trading Data

(Carton 10 pieces = 5.5kg)

#### 1986 Tana Second Season (Ngowe Mangoes)

a. Buying Sh. 2.50 piece	Carton Sh. 25.00
b. Agent Fees Sh. 0.30 piece	Carton Sh. 3.00
c. Labour (picking/packing/ supervision) Sh. 0.20 piece	Carton Sh. 2.00
d. Collection (vehicles/boats and personnel) Sh. 0.20 piece	Carton Sh. 2.00
e. Carton - Empty	Carton Sh. 8.00
f. Transport Carton - Tana-Nairobi	Carton Sh. 8.00
g. Airfreight Carton - Middle East Sh. 6.60 piece	<u>66.00</u>
Total	144.00
	US\$ 7.125

Carton Price Middle East	US\$ 8.00
Traders' Margin Carton	US\$ 0.88
Traders' Margin Piece	<u>US\$ 0.088</u>
	Sh. 1.40



May 1987 Malindi (Apple Mangoes)

a. Buying Sh. 2.50 piece	Carton Sh. 25.00
b. Agent Fees K.Sh. 0.30 piece	Carton Sh. 3.00
c. Labour (picking/packing, supervision) Sh. 0.20 piece	Carton Sh. 2.00
d. Collection (vehicles, boats) Sh. 0.20 piece	Carton Sh. 2.00
e. Carton Empty - Sh. 8.00 each	Carton Sh. 8.00
f. Transport Malindi/Nairobi/ Carton	Carton Sh. 6.00
g. Airfreight - Middle East Sh. 6.60 piece	Carton Sh. <u>66.00</u>
Total	Sh. 112.00
	US\$ 7.00

Carton Price Middle East	US\$ 12.75
Traders' Margin Carton	US\$ 5.75
Traders' Margin Piece	US\$ <u>0.575</u>
	K.Sh. 9.20

May 1987 Malindi (Ngowe Mangoes)

a. Buying Sh. 2.00 piece	Carton Sh. 20.00
b. Agent Fees Sh. 0.30 piece	Carton Sh. 3.00
c. Labour (picking, packing, supervision) Sh. 0.20 piece	Carton Sh. 2.00
d. Collection (vehicles, boats) Sh. 0.20 piece	Carton Sh. 2.00
e. Carton - Empty Sh. 8.00 each	Carton Sh. 8.00
f. Transport Malindi-Nairobi/ Carton	Carton Sh. 6.00
g. Airfreight - Middle East Sh. 6.60 piece	Carton Sh. <u>66.00</u>
Total	Shs. 107.00
	US\$ 6.18

Carton Price - Middle East	US\$ 8.75
Traders' Margin Carton	US\$ 2.57
Traders' Margin Piece	US\$ <u>0.257</u>
	K.Sh. 4.11

2. Producer Costs

No data is available on producer costs. This limits generating data on producer returns which are now determined by traders. However, as improved trees are planted and husbandry improves, data should be collected by the YWCA to enable it to intervene in the market and negotiate better returns for its members.

If pulping operations by Greenfields and Coastal Growers and Packers get on stream, and export traders continue to expand mango exports, the return to the producer will improve.

This is reflected in trader budgets for the Second Season in 1987 where they show that farm gate prices to producers may rise to Sh. 3.00 a piece, for top quality export mangoes. It is on the basis of this fact that we expect export quality mangoes to be bought at Sh. 2.00 on average.

### 3. Mangoes for Tourism Market

The following is a Table showing Unit costs for tourism market quality mangoes.

Unit Cost - Mangoes for Tourism Market

	Per Piece	Per Carton 10 mangoes = 5.5kg.
Buying Price	Sh. 2.00	Sh. 20.00
Agents Fees	Sh. 0.30	Sh. 3.00
Labour (picking, packing)	Sh. 0.20	Sh. 2.00
Collection	Sh. 0.20	Sh. 2.00
Cartons	Sh. 0.80	Sh. 8.00
Transport - 1. Tana-Malindi	Sh. 0.20	Sh. 2.00
2. Malindi-Hotels	Sh. <u>0.20</u>	Sh. <u>2.00</u>
	3.90	39.00
Less cartons	<u>.80</u>	<u>8.00</u>
	Sh.3.10	Sh. 31.00

Selling Price to Hotels 3.00 to 3.50

Note that packing in cartons is expensive and local material substitute is needed as a saving.

Most of the hotels indicated that they only buy perfect mangoes at K.Sh. 3.50 thereby suggesting a profit of only Sh. 0.40 if mangoes are bought at Sh. 2.00. It is recommended

that mangoes for tourism trading be bought at between Sh. 1.00 and 1.50 and sold at Sh. 3.00 to Sh. 3.50 thereby assuring a profit margin per piece of between Sh. 0.90 to Sh. 1.40 per piece.

Clearly, there will be no market for mangoes in the tourism industry if mangoes are bought at more than Sh. 2.00 per piece.

#### 4. Trading Projects Assumptions

In following pages, the various sub-projects and their financial implications are covered. In this section, we want to point out matters which relate to over all policy.

First, to keep the costs down, no new facilities are envisaged for Malindi or Mijila other than provision of an office at Mijila and storage space from a trader in Malindi. This decision was arrived after reviewing the new (since 1985) practices in the buying chain where traders organise picking, packaging and transport in Tana River. There is thus no need to burden the YWCA with transport and management activities which will take a lot of money.

The second set of assumptions relate to opportunities which did not exist when the 1985 studies were done. HCDA had not offered to market YWCA produce. Other traders were not as interested in getting women as suppliers for export, the tourism market was not seen as important.

It is assumed that of the fresh mangoes traded by women groups during the first year:

- 35% will be exported by HCDA for them
- 35% will be exported by traders
- 30% will be traded in the tourism industry.

This mixture should be reviewed during the year as trading patterns become clear. The YWCA should always focus on increasing exports for the returns are highest there. As more traders invest in transport to Tana, YWCA will be in a position to dictate trading relations. Given the rapidity of change in the trading system over the past year, there may be opportunities even during the first project year for exporting much more than reflected hereunder.

Stemming from the basic assumptions, and data presented above, several other points ought to be made. The first is that women groups ought to collect the agency fees for all mangoes they trade. The second point is that transport from Tana to Malindi for tourism market mangoes can be hired at Sh. 2.00 per carton. Thirdly, distribution in the tourism can be effected at Sh. 1.00 per carton.



E. TERMS OF REFERENCE V AND VI: TRANSPORT CHAIN AND  
TRAINING PILOT GROUPS

1. Transport Chain

Evolution of the trading system in Tana River has put buyers on the farms. As a result, transportation is needed for selling in the tourism market. Its cost is covered in the sub-project 4, writeup.

Transportation needed for collection is costed under a collection vehicle (4 WD Land Cruiser Diesel) whose costs are spread over sub-projects 3-5. Also to transport fresh mangoes for HCDA export and Tourism market from pickup points along the River a hire budget is developed in sub-projects 3(a) and 4. A pickup for distribution to tourist hotels is budgeted in subproject 4. So is another Land Cruiser for use by the Manager in supervision. Mango pulp will be transported by Greenfields and its transport is not part of the project.

Transport costs are still the major item inspite of our reducing it by hiring riverine collection transport (boats) and road transport. Although donors are sensitive to this we recommend that the YWCA make strong presentations on the issue for failure to get adequate transport as presented will lead to lack of collection and supervision with dire consequences for the project.

In Section F, we load all the purchase and hire costs for transportation on the projects in the first year. This leads to unrealistic financial returns. If transportation costs are spread over four years as is the normal case, the project's financial viability is assured.

2. Training Pilot Groups

The costings of this are shown in the sub-project 1 and 2 writeups in Section F.

F. TERMS OF REFERENCE VII: PROJECT PROPOSAL

1. Introduction

The following diagram, Tana Mango Project: Long-term Activity Plan illustrates what is possible in the long-term.

After reviewing the previous studies and completing the activities required by the terms of reference, this is our distillation. It is based on our judgement on how YWCA members can intervene now in marketing and production operations so as to set them up as the major actors in mango production and trade in the long term.

It should be further pointed out that the sub-projects identified seek to:

- a. increase employment opportunities
- b. increase incomes from trading
- c. make women central actors in the mango chain.

We have deliberately not gone out of our way to initially maximise trading income only for that would have led us to the management pitfall. This will come when the YWCA builds up its management capacity.

The roles for different actors, activities and assets of an inter-related project, made up of five distinct sub-projects are shown in the diagram Project Activity/Assets.

Overhead Expenses necessary for all sub-projects are shown in Appendix I.

# TANA MANGO PROJECT LONG TERM ACTIVITY PLAN

Phase I (Pilot) I Year	Phase II Year 2-4	Phase 3 Year 5
1. Training in picking and packing	1. Planting improved mangoes	1. Marketing fresh mangoes directly
2. Setting up nurseries for Improved Mango Production	2. Drying ripe mangoes	2. Establishing mango factory for all mango products
3. (a) Exporting fresh mangoes through HCDA (b) Marketing fresh mangoes to traders for export	3. Marketing of waste green mangoes Overseas for Chutney acharia etc.	3. Marketing of all factory products directly
4. Marketing fresh mangoes to Tourism Industry		
5. Mango pulping for Export by Trader(s)		

# PROJECT ACTIVITY/ASSETS

1	2	3	4	5	6	7
Actors	YWCA Branch Women Groups	Mango Project Staff (Manager, 3 Extension, 2 Drivers)	H.R. Retief	HCDA	Greenfields	Coastal Growers and Packers
Activity	1. Make policy	1. Coordinate Project	1. Train picking & packing train-ers	1. Train picking & packing train-ers	1. Buy for export	1. Buy for export
	2. Super- vise Project	2. Manage mango ex- tension	2. Manage collection & marketing vehicles	2. Find markets	2. Export	2. Export
	3. Sell	3. Supervise collection and mar- keting of mangoes in Tourism Industry	3. Buy for export	3. Export	3. Buy ripe mangoes for pulping	3. Buy for pulping
	4. Run nurse- ries	4. Supervise pulping	4. Transport Tana/Malindi for tourism market	4. Buy pulp		
			5. Store for tourism market			
			6. Train mango extension staff and manager			

Actors YWCA Branch Women Groups Mango Project H.R. Retief HCDA Greenfields Coastal Growers and Packers  
Staff  
(Manager, 3 extension, 2 drivers)

Equipment None 1. Scateurs 1. Office furnishings None 1. Supply own pulping equipment None

2. Packing cartons free 2. Type-writer, calculator 1

3. Wheelbarrows, spades, jembes, pangas, watering cans, polytubes grafting equipment 2 2 1

3. Visual aids

Vehicles None 1. Managers Land Cruiser diesel 1. Own truck for Hireby Project None 1. Supply own transport None

2. Collection land-cruiser diesel

3. Marketing Toyota Diesel

3. 3 motor-cycles, 125 cc, Yamaha offroad ds



2. Sub-Project 1 - Training on Picking and Packing

a. Selection and Number of Trainees

Each of the YWCA groups in the pilot project will choose a member to be trained in modern mango picking and packing techniques. Thus, there will be 11 trainers initially trained. The book-keeper, manager and other YWCA staff ought to participate in this training.

b. Organisation of Trainers Training

HCDA has agreed to send specialists for the training at no cost to the Project as part and parcel of its work. They envisage that over and above their specialists, they would use some of the traders (e.g. H.R. Ratief and Greenfields) and their staff from the community.

The formal training sessions will be scheduled at the YWCA centre at Mijila. Field training will take place in Tana River where trees are traditionally managed. There are better farming systems in Malindi where there are modern mango farms. These will be visited. The detailed activity plans will be made by the Project Manager.

c. Once 11 trainers have been trained by HCDA and traders, they are expected to train all their group members.

d. Cost for the training project has been calculated as K.Sh. 153,802.

e. Note that since training will be initiated before project vehicles are procured, we have budgeted 'hiring' needed transport from the YWCA and others.

PROJECT I

TRAINING ON PICKING AND PACKING (14) DAYS

	<u>K.SHS.</u>	<u>K.SHS.</u>
1. DIRECT/VARIABLE COSTS		
a. <u>ACCOMMODATION AND MEALS</u>		
24 people at K.Sh. 160/= /day x 14 days		53,760
b. <u>STAFF, TRAINEES AND CONSULTANTS ALLOWANCES</u>		
3 YWCA Tana staff at K.Sh. 100/= per day	4,200	
3 YWCA Extensionists at K.Shs. 80/= per day	3,360	
1 Book-keeper at K.Shs. 100/= per day	1,400	
1 Project Manager at K.Sh. 150/= per day	2,100	
1 Branch Secretary at K.Sh. 150/= per day	2,100	
2 Drivers at 100/= per day	2,800	
2 Trade Supervisors at K.Sh. 200/= per day	5,600	
1 Trade Consultant at K.Sh. 1,000/= per day (Relief)	14,000	
11 Trainees allowances at K.Sh. 100/= each	<u>1,100</u>	36,660
c. <u>VEHICLE RUNNING COSTS</u>		
1 4WD Consultant and Supervisor. 500 km at K.Sh. 12/= per km.	6,000	
1 4WD YWCA vehicle 500 km at K.Sh. 12/= per km.	6,000	
1 Microbus YWCA vehicle 500 km at K.Sh. 12/= per km.	<u>6,000</u>	18,000
d. TRAINEES MATERIALS		5,000
e. PICKING AND PACKING TRAINEE ALLOWANCE (YEAR)		26,400
f. OVERHEAD EXPENSES YWCA:		
10% of (a) to (d) above		<u>13,982</u>
TOTAL COST		<u><u>153,802</u></u>

3. Sub-Project 2 - Improved Mango Extension

a. Selection and Number

The three extension staff will be picked from the best of the original 11 group representatives who will be initially trained for picking and packing. The idea is simply to reward learning and leadership. But, in selecting the three extension staff, they must be distributed in such a way that they will be handling groups near their home group. Each extensionist will be expected to handle about three group nurseries or a total of 100 members.

b. Training

The critical training will be in nursery operations, grafting and horticultural supervision. Since extensionists will be responsible for production of improved mango seedlings, they should be attached to Government nurseries at Mtwapa and attached to a modern mango farm - H.R. Ratief at Malindi for a time.

c. Work Schedules

Each extensionist will be expected to visit each group at least once a week to ensure that nurseries are operated properly. Once planting out starts, they should organise farm visits.

d. The project Manager will coordinate the field work by ensuring that detailed work plans are made and followed.

e. Cost of Training, Staffing and Operations for Mango extension has been calculated at K.Sh. 780,472.

SUB-PROJECT 2

IMPROVED MANGO EXTENSION

	<u>K.SHS.</u>	<u>K.SHS.</u>
1. a. <u>ACCOMMODATION AND MEALS</u>		
14 people at K.Sh. 160/= per day x 14 days		33,360
b. <u>STAFF CONSULTANTS/TRAINING ALLOWANCES</u>		
3 Mango Extensionists	3,360	
3 YWCA Tana Staff	4,200	
1 Project Manager	2,100	
1 Branch Secretary	2,100	
1 Book-keeper	1,400	
2 Drivers	2,800	
2 Mango Trade Supervisors	5,600	
1 Mango Trade Consultant (Retief)	7,000	
Government Agricultural Staff	-	28,560
c. <u>VEHICLE RUNNING COSTS</u>		
1 Microbus (YWCA vehicle) 1,000 km at K.Sh. 12/= per km.		12,000
d. <u>TRAINING MATERIALS</u>		5,000
e. <u>OVERHEAD EXPENSES: (FIRST YEAR)</u>		
3 Mango Extensionists	54,000	
$\frac{1}{5}$ of Project Manager	16,800	
$\frac{1}{5}$ Managers Land Cruiser	160,000	
$\frac{1}{5}$ of Book-keeper	10,800	
$\frac{1}{5}$ of Office Furnishing and Equipment	7,000	

4. Sub-Project 3(a) - Mango Export Trading through HCDA

a. Identification of Markets and Selling for Women Groups

This will be the responsibility of HCDA as discussed with them. Given that deferement of payment is a problem, based on previous experience in Tana River, it is crucial that HCDA marketing must include cash payment. Since HCDA does not have buyers in the field and uses some traders, this should not present problems for the traders can handle HCDA cash and pay members directly at going rates. After international disposal, HCDA will remit to the YWCA Project office proceeds which will be passed to members who had sold to HCDA. This means that proper accounts on mangoes sold to HCDA must be kept by H.R. Ratief and the Project Management office showing shipment by particular members.

b. Total Costs for this sub-project is calculated as K.Sh. 547,228.

PROJECT 3(a) MANGO TRADING EXPORT THROUGH HCDA

	K.SH.	K.SH.
a. <u>SALES PER CARTON - MIDDLE EAST</u>		140
b. <u>DIRECT/VARIABLE COSTS</u>		
One Carton of Mango	20	
Agency fees per Carton	3	
Labour Costs	2	
Collection Costs per Carton	2	
Empty Carton	8	
Transport Tana-Nairobi	8	
Airfreight Nairobi to Middle East	66	
		<u>109</u>
Contribution per Carton		<u>31</u>



c. FIXED COSTS

	K.SH.	K.SH.
$\frac{1}{5}$ Project Manager	16,800	
$\frac{1}{5}$ Managers Land Cruiser	160,000	
$\frac{1}{5}$ Book-keeper	10,800	
$\frac{1}{5}$ Vehicle Collection Costs	160,000	
$\frac{1}{5}$ Drivers Costs	4,800	
$\frac{1}{5}$ Ratief Management Costs (26 days)	26,000	
$\frac{1}{5}$ Truck hire	110,880	
$\frac{1}{5}$ Office Furnishings and Equipment	7,000	
$\frac{1}{5}$ Office Rent	<u>1,200</u>	
		497,480

d. YWCA OVERHEAD COSTS

10% of (c) above	<u>49,748</u>
Total Fixed Costs	<u><u>547,228</u></u>

2. Break - Even Point =  $\frac{\text{Fixed Costs}}{\text{Contribution per Carton}}$

=  $\frac{547,228}{31}$

= 17,653 Cartons

= 176,530 pieces of Mangoes

3. INCOME TO WOMEN

55,440 Cartons @ K.Sh. 31/= per Carton	1,718,640	
Employment & Agency Income (55,440 x 5)	<u>277,200</u>	
		1,995,840
Fixed Costs (c) and (d) above		<u>547,228</u>
Net Income to Women		<u><u>1,448,612</u></u>

Please note that Employment and Agency Income is what the Women will get as Agency Fees and their Labour for collecting mangoes.

5. Sub-Project 3(b) - Mango Trading for Export by Traders

- a. Traders will be buying for their own international disposal. They should buy cash also as is practice. During the pilot, we do not recommend that traders sell YWCA mangoes overseas under YWCA label. Above, we have recommended international marketing under HCDA. International marketing under YWCA label may be considered under phase II of the Project. Therefore, all that traders will be doing is assuring YWCA members of outlet for their produce and purchases at the top farm gate prices.
- b. Detailed plans for where various traders will buy need to be worked on by the project manager. In other words, some discussion on what groups will sell to what trader and when is part of the detailed business planning.
- c. The costs for this sub-project are calculated as K.Sh. 425,260.

PROJECT 3(b) - MANGO TRADING FOR EXPORT BY TRADERS

	K.SH.	K.SH.
1. (a) SALES OF ONE CARTON AT MIDDLE EAST		140
(b) <u>DIRECT/VARIABLE COSTS</u>		
One Carton of mangoes	20	
Agency Fees per Carton	3	
Labour Costs per Carton	2	
Collection Costs per Carton	2	
Empty Carton	8	
Transport Tana-Nairobi	8	
Airfreight Nairobi to Middle East	66	
		<u>109</u>
Contribution per Carton		<u>31</u>

	K.SH.	K.SH.
(c) <u>FIXED COSTS</u>		
$\frac{1}{5}$ Project Manager	16,800	
$\frac{1}{5}$ Manager's Land Cruiser	160,000	
$\frac{1}{5}$ Book-keeper	10,800	
$\frac{1}{5}$ Driver	4,800	
$\frac{1}{5}$ Collection Vehicle Costs (Purchase and running Costs)	160,000	
$\frac{1}{5}$ Ratief Management Costs (26 days)	26,000	
$\frac{1}{5}$ Office Rent	1,200	
$\frac{1}{5}$ Office Furnishing and Equipment	<u>7,000</u>	
		386,600
(d) <u>YWCA OVERHEAD COSTS</u>		
10% of (c) above		<u>38,660</u>
Total Costs		<u><u>425,260</u></u>

$$\begin{aligned}
 2. \text{ BREAK-EVEN POINT} &= \frac{\text{Fixed Costs}}{\text{Contribution per Carton}} \\
 &= \frac{425,260}{31} \\
 &= 13,718 \text{ Cartons} \\
 &= 137,180 \text{ pieces of mangoes}
 \end{aligned}$$

3. <u>INCOME TO WOMEN</u>	
55,440 Cartons @ K.Sh. 5/= per Carton	277,200
Fixed Costs (c) and (d) above	<u>425,260</u>
Net Loss to Women	<u><u>(148,060)</u></u>

Note that under this project income to women is only Agency fee and Labour (i.e. Sh. 3 + Sh. 2).

6. Sub-Project 4 - Mango Trading - Tourism Market

a. Marketing Hotels

The initial activity will be to get firm orders from the hotels in Malindi, Northcoast and Southcoast. In this activity, the Project Manager should be assisted by the Mombasa Branch Committee members who have standing in the community and the sector.

- b. Since the pickup for delivery will be based at H.R. Ratief at Malindi, there should be a system of records set to show deliveries from Tana River to H.R. Ratief and deliveries from H.R. Ratief to hotels.
- c. It will be the responsibility of the Project Manager to supervise delivery and finances. If internal control systems are properly set, and packaging is as per destination, no extra personnel will be needed and the pickup driver can be responsible for deliveries and collecting orders.
- d. Detailed work plans, including initial marketing by the Project Manager and Branch Committee members, should be worked out in conjunction with the Branch Secretary.
- e. Cost of this sub-project has been calculated as K.Sh. 941,204.

PROJECT 4 - MANGO TRADING - TOURISM MARKET

	K.S.H.	K.S.H.
1. (a) SALES PER CARTON - TOURISM MARKET		35
(b) <u>DIRECT/VARIABLE COSTS</u>		
One Carton of Mangoes	20	
Agency Fees	3	
Picking and Packing	2	
Collection Costs	2	
Transport: Tana to Malindi	2	
Malindi to Hotels	<u>2</u>	
		<u>31</u>
Contribution per Carton		<u>4</u>
(c) <u>FIXED COSTS</u>		
$\frac{1}{5}$ Project Manager	16,800	
$\frac{1}{5}$ Manager's Land Cruiser	160,000	
$\frac{1}{5}$ Book-keeper	10,800	
Pickup Costs (purchase and running costs)	350,000	
Drivers Costs (distribution pickup)	24,000	
$\frac{1}{5}$ Collection vehicle Costs (purchase and running)	160,000	
$\frac{1}{5}$ Drivers Cost	4,800	
Ratief Management Costs	26,000	
$\frac{1}{2}$ of Truck hire costs (Tana-Malindi transport)	95,040	
$\frac{1}{5}$ Office Furnishing and Equipment	7,000	
$\frac{1}{5}$ Office Rent	<u>1,200</u>	
		855,640
(d) <u>YWCA OVERHEAD COSTS</u>		
10% of (c) above		<u>85,564</u>
Total Cost		<u>941,204</u>



PROJECT 4 (CONT'D)

$$\begin{aligned} 1. \text{ BREAK-EVEN POINT} &= \frac{\text{Fixed Costs}}{\text{Contribution per Carton}} \\ &= \frac{941,204}{4} \\ &= 235,301 \text{ Carton} \\ &= 2,353,010 \text{ pieces of mangoes} \end{aligned}$$

3. <u>TRADING INCOME TO WOMEN</u>	K.SH.	K.SH.
47,520 Cartons @ K.Sh. 4/= per Carton	190,080	
Employment/Agency Income	<u>237,600</u>	427,680
Fixed Costs (c) and (d) above		<u>941,204</u>
Net Loss to Women		<u>(513,524)</u>

Annual tourism market demand is for 240,687 carton per year. This is higher than the break-even point.

The projected sale is only 47,520 Cartons of mangoes, which is what we, using trader judgement, estimate possible in the first year.

7. Sub-Project 5 - Mango Pulping

a. Introduction

Two companies are set to go into mango pulping. After 2½ years study, Greenfields Exporters Ltd., are going to locate a major refrigeration plant in Malindi. They will have a cooling plant in Kipini. This site was selected to be near the Kipini-Kau-Ozi complex, which is by far the major production area. Refrigeration trucks will be sent out to pick pulped mango all over the district.

Greenfields costing show that they will buy ripe mangoes at Sh. 0.20 a piece. They intend to supply all the pulping equipment, and they will train personnel in pulping. They expect to pay the personnel at Sh. 25.00 to 30.00 per day.

The pulping operation cannot compete with selling mangoes for export. It will come at the tail end of the season when most of the mangoes go to waste.

Coastal Growers and Packers have plans to establish a centralised pulping operation at Mtwapa. They want mangoes transported from producer areas to their centralised factory. I do not see how YWCA women can get involved in this for transport is not only costly but demands extra management capacity. If the company wants to buy ripe mangoes in Tana River, the women should consider selling to it.

Greenfields will need 20,000 pieces daily for pulping for a total of 1.5m pieces in June and July and a possibility of some pulping in December. A project for YWCA Pilot Project will be either to sell to Greenfields or to buy mangoes, pulp them and sell the mango pulp to Greenfields.

I recommend the later.

b. Training in pulping and Employment.

Greenfields has indicated that they are willing to train as many YWCA groups as desired for pulping at their cost. This will give them product stability.

c. Equipment

Greenfields have agreed to supply all equipment necessary.

d. Supervision/Marketing and Storage

Greenfields have agreed to supervise market and store at their cost.

e. Mango Buying

YWCA women groups should buy the mangoes. Since the projected price is Sh. 0.20 perhaps they can buy at Sh. 0.15 so as to get a profit margin of Sh. 0.05.

f. Benefits

Benefits to the group will be the profit margin of Sh. 0.05 per piece plus employment for significant number for periods of about 10 weeks every year at Sh. 25 to Sh. 30 daily. Pulping operations will be concentrated in June/July when most mangoes go to waste.

g. Project Costs

The whole project will cost the YWCA K.Sh. 396,660. We recommend that whatever the financing from donors, women groups should utilise their contribution of Sh. 60,000 in this project for the returns will be immediate and not subject to being handled away from the villages.

PROJECT 5  
MANGO PULPING

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales of 1.5m mangoes @ Kshs. 0.20 each		300,000
Purchase of 1.5m mangoes @ Kshs. 0.15 each		<u>225,000</u>
Gross Income		<u>75,000</u>
(b) Fixed Costs:-		
$\frac{1}{5}$ Project Manager	16,800	
$\frac{1}{5}$ Manager Land Cruiser	160,000	
$\frac{1}{5}$ Book-keeper	10,800	
$\frac{1}{5}$ Office furnishing and equipment	7,000	
$\frac{1}{5}$ Collection Vehicle costs (purchasing and running)	160,000	
$\frac{1}{5}$ Drivers Costs	4,800	
$\frac{1}{5}$ Office Rent	<u>1,200</u>	360,600
(c) YWCA Overhead Costs		
10% of (b) above		<u>36,060</u>
Total fixed costs		<u>396,660</u>
2. <u>INCOME TO WOMEN</u>		
Gross Trading Income	75,000	
Employment Income (salaries 300 women @ K.Sh. 30 daily for 30 days)	<u>270,000</u>	345,000
Fixed Costs (b) and (c) above		<u>396,660</u>
Net loss to women		<u>(51,660)</u>

Although the Project shows a net loss of K.Sh. 51,660/= to women, there are other costs such as pulping equipment, equipment maintenance, etc., which will be supplied by traders and are therefore not part of project costing.

8. Mango Buying Support Fund

- a. This is a fund envisaged for supporting women in their efforts to buy mangoes from their villages for:  
(1) export through HCDA, (2) selling to traders for export, (3) selling to the tourism market and (4) mango pulping.
- b. It can be operated on the basis of a revolving fund where groups will be lend money to purchase and trade mangoes.
- c. No funds will be lend to the group if they do not pay back to the fund money advanced before.
- d. It is envisaged that each women member will contribute Shs. 200 each which will be used in the mango pulping sub-project. From this source about Shs. 60,000 will be realised.
- e. Total funds from the donor for trading are calculated as 1/6 of the trading funds for in the opinion of traders that is about the trading capital level necessary. Funds for this operation to back sub-projects 3a, 3b, 4 and 5 are calculated as Shs. 2,279,340.



9. TOTAL PROJECTS COSTS AND FINANCING

The following table summarises project costs.

DETAILS	DIRECT COSTS	FIXED COSTS	TOTAL	FINANCING
	(KSHS)	(KSHS)	(KSHS)	(KSHS)
a. Project No. 1	113,420	40,385	153,802	153,802
b. Project No. 2	78,920	701,552	780,472	780,472
c. Project No. 3a	6,042,960	547,228	6,590,188	1,554,388
Project No. 3b	6,042,960	425,260	6,468,220	1,432,420
d. Project No. 4	1,473,120	941,204	2,414,324	1,186,724
e. Project No. 5	225,000	396,660	621,660	374,160
TOTAL	13,751,380	3,052,289	17,028,666	5,481,966

Please note the following:

- Projects 1 and 2 will need financing for both direct and fixed costs.
- Project 3a - the whole of fixed costs will need financing while only  $\frac{1}{6}$  of the direct costs will need financing.
- Project 3b -  $\frac{6}{6}$  the whole of direct costs will be financed by the traders while the whole of fixed costs will need financing.
- Project 4 -  $\frac{1}{6}$  of the direct and the whole of fixed costs will need financing.
- Project 5 -  $\frac{1}{6}$  of the direct and the whole of the fixed costs will need financing but women will generate Shs. 60,000.

It may be useful to further note the assumed sources of money for different investments.

Trading Capital requirements are K.Sh. 2,297,340 from donor(s) and K.Sh. 60,000 from YWCA pilot group members. Training, Equipment, Staff and Operating Capital of K.Shs. 3,052,289 is required and should be sought from donors.

#### 10. Normal Fixed Costs Depreciation

So far all fixed costs have been borne in the first year for in interpretation of terms of reference, the Consultant was informed that preliminary discussions with the donor were for only a commitment of a year.

Below we present costing data whereby we depreciate vehicles and equipment in normal accounting fashion to underscore the financial viability of the project. Out of this exercise, we recommend that YWCA and the donors to consider the project in the normal accounting time frame. We would like to further point out that the heavy cost items in fixed costs like vehicles would be used in the suggested extension of this project into other activities suggested in diagram Tana Mango Project Long-term Activity Plan (p. 26).

Since Sub-project 1, Training and Picking and Packing has no income component, it is not affected by depreciation. In all other sub-projects, there is significant impact on income to women groups. In Sub-project 2, Improved Mango Extension, if fixed costs are depreciated normally, net income jumps from K.Sh. 1,419,528 to K.Sh. 1,710,890. In Sub-project 3a, Mango Trading through HCDA, net income to women improves from K.Sh. 1,448,612 to K.Sh. 1,620,349.

Sub-project 3b, Mango Trading for Export by Traders which has a loss of Sh. 148,060 if all fixed costs are loaded to one year generates a small income of Sh. 23,677 under normal depreciation.

We pointed out in Section F (p. 40) that tourism demand for fresh mangoes is Sh. 240,687 Cartons annually and 140,718 cartons during the seven months Tana River can supply as their mangoes would be in season. Only about a fifth (47,520 Cartons) will be provided by Sub-project 4, Mango Trading Tourism Market, during the first year. This was based on trader judgement on what is possible in terms of business build up. These assumptions showed a loss to women of Sh. 513,524 if fixed costs were loaded in year one. The loss is cut to Sh. 135,537 if fixed costs are depreciated normally. We would further like to point out that if business build up is normal, it is not unrealistic to expect YWCA to provide all mangoes required by the sector when they are in season i.e. 140,720 cartons which is just under the breakeven point of 140,804 within three years. Given that extra income will still be going to women in agency fees and labour, the project is still unable. If women sell 140,720 cartons, trading profit will be K.Sh. 562,880. Their Agency and Labour Income will be K.Sh. 703,600, fixed costs will be K.sh. 872,801 leaving a net income to women of K.Sh. 393,675.

Sub-project 5, Mango Pulping generates income if fixed assets are depreciated normally by moving from a K.sh. 51,660 loss to a net income of K.sh. 120,077.

THE BASIC RECOMMENDATION to the YWCA therefore is that funding for ALL SUB-PROJECTS MUST BE SOUGHT TOGETHER. The reason is simply that the returns are better if all sub-projects are initiated simultaneously. If not overall costs are much higher and income to women unfavourable.

SUB-PROJECT 2 - MANGO EXTENSION

1. <u>DIRECT COSTS</u>	<u>K.SHS.</u>	<u>K.SHS.</u>
a. Accommodation of meals		33,360
b. Staff, Consultants, Trainee, Allowances		28,560
c. Vehicle running costs		12,000
d. Training materials		5,000
e. Overhead Expenses - First Year:		
Mango Extensionists	54,000	
Project Manager	16,800	
Book-keeper	10,800	
Office Rent	1,200	
Drivers Costs	4,800	
Ratief Management	21,000	
Vehicle Running Expenses (Landcruisers)	120,000	
Motor cycle Running Expenses	<u>50,000</u>	278,600
f. Depreciation:		
- Motor vehicles 25%	50,000	
- Motor cycles 25%	26,250	
- Nursery Equipment 25%	10,000	
- Office Furnishing and Equipment 12½%	<u>875</u>	<u>87,125</u>
		444,645
g. YWCA Overhead Expenses:		
10% of (a) to (f) above		<u>44,465</u>
TOTAL COSTS		<u>489,110</u>
2. <u>INCOME TO WOMEN</u>		
Sale of 110,000 Mango Seeding at K.Shs. 20/= per tree		2,200,000
Total Costs (a) to (g) above		<u>489,110</u>
NET INCOME TO WOMEN		<u>1,710,890</u>

PROJECT I

TRAINING ON PICKING AND PACKING (14) DAYS

1. DIRECT/VARIABLE COSTS	K.SHS.	K.SHS.
a. <u>ACCOMMODATION AND MEALS</u>		
24 people at K.Shs. 60/= per day		53,760
b. <u>STAFF, TRAINEES AND CONSULTANTS ALLOWANCES</u>		
3 YWCA Tana Staff at K.Sh. 100/= per day	4,200	
3 YWCA Extensionist at K.Sh. 80/= per day	3,360	
1 Book-keeper at K.Sh. 100/= per day	1,400	
1 Project Manager at K.Sh. 150/= per day	2,100	
1 Branch Secretary at K.Sh. 150/= per day	2,100	
2 Drivers at 100/= per day	2,800	
2 Trade Supervisors at K.Sh. 200/= per day	5,600	
1 Trade Consultant at K.Sh. 1,000/= per day (Relief)	14,000	
11 Trainees allowances at K.Sh. 100/= each	<u>1,100</u>	36,660
c. <u>VEHICLE RUNNING COSTS</u>		
1 4WD Consultant and Supervisor. 500 km at K.Sh. 12/= per km.	6,000	
1 4WD YWCA vehicle 500 km at K.Sh. 12/= per km.	6,000	
1 Microbus YWCA vehicle 500 km at K.Sh. 12/= per km.	<u>6,000</u>	18,000
d. Trainees materials		5,000
e. Picking and packing Trainee Allowance (Year)		26,400
f. Overhead expenses YWCA:		
10% of (a) to (d) above		<u>13,982</u>
TOTAL COST		<u><u>153,802</u></u>



PROJECT 3(a) MANGO TRADING  
EXPORT THROUGH H.C.D.A.

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales per carton - Middle East		140
Direct variable costs		109
Contribution per carton		<u>31</u>
(b) Fixed Costs:-		
Project Manager	16,800	
Book-keeper	10,800	
Driver	4,800	
Ratief Management	26,000	
Truck Hire	110,880	
Office rent	1,200	
Vehicle running expenses	<u>120,000</u>	290,480
(c) Depreciation:-		
Motor vehicle 25%	50,000	
Office Furnishing and Equipment 12½%	<u>875</u>	<u>50,875</u>
		341,355
(d) YWCA Overhead Expenses:-		
10% of (b) and (c) above		<u>34,136</u>
Total Fixed Costs		<u>375,491</u>
Break-Even Point	$= \frac{\text{Fixed costs}}{\text{Contribution per carton}}$ $= \frac{375,491}{31}$ $= 12,113 \text{ cartons}$ $= \underline{121,130 \text{ pieces of mangoes}}$	
2. <u>INCOME TO WOMEN</u>		
55440 cartons at Kshs 31/- per carton		1,718,640
Employment and Agency Income (55440 x 5)		<u>277,200</u>
		1,995,840
Fixed costs (b) to (d) above		<u>375,491</u>
Net Income to Women		<u>1,620,349</u>

PROJECT 3 (b)  
MANGO TRADING FOR EXPORT BY TRADERS

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales per carton- Middle East		140
Direct/variable costs		109
Contribution per carton		<u>31</u>
(b) Fixed Costs:-		
Project manager	16,800	
Book-keeper	10,800	
Driver	4,800	
Ratief Management	26,000	
Office rent	1,200	
Vehicle running expenses	<u>120,000</u>	<u>179,600</u>
(c) Depreciation:-		
Motor vehicles 25%	50,000	
Office furnishing and equipment 12½%	<u>875</u>	<u>50,875</u>
		230,475
(d) YWCA overhead expenses:-		
10% of (b) and (c) above		<u>23,048</u>
Total fixed costs		<u>253,523</u>
Break-Even Point	$= \frac{\text{Fixed costs}}{\text{Contribution per carton}}$ $= \frac{253,523}{31}$ $= 8,178 \text{ cartons}$ $= \underline{81,780 \text{ pieces of mangoes}}$	

INCOME TO WOMEN

55,440 cartons (Employment and Agency Income)	
at Kshs. 5/-	277,200
Fixed Costs	<u>253,523</u>
Net Income to Women	<u><u>23,677</u></u>

PROJECT 4  
MANGO TRADING-TOURISM MARKET

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales per carton - Tourism market		35
Purchase price per carton		<u>31</u>
Contribution per carton		<u>4</u>
(b) Fixed Costs:-		
Project manager	16,800	
Book-keeper	10,800	
Driver (Distribution Pick-up)	24,000	
Drivers costs	4,800	
Ratief Management	26,000	
Truck Hire (Tana-Malindi)	95,040	
Office rent	1,200	
Vehicle running costs	<u>220,000</u>	<u>398 640</u>
(c) Depreciation:-		
Motor vehicles 25%	50,000	
Pick-up 25%	62,500	
Office furnishings and Equipment 12½%	<u>875</u>	<u>113,375</u>
		512,015
(d) YWCA overhed costs:-		
10% of (b) and (c) above		<u>51,202</u>
Total fixed costs:-		<u>563,217</u>
Break-Even Point	= $\frac{\text{Fixed costs}}{\text{Contribution per carton}}$ = $\frac{563,217}{4}$ = 140,804 cartons = <u>1,408,040 pieces of mangoes</u>	

INCOME TO WOMEN

47,520 cartons at Kshs. 4/- per carton	190,080
Employment/Agency Income	<u>237,600</u>
	427,680
Fixed Costs	<u>563,217</u>
Net Loss to Women (First Year)	<u>(135,537)</u>

PROJECT 5  
MANGO PULPING

	<u>KSHS.</u>	<u>KSHS.</u>
1. (a) Sales of 1.5m mangoes at Kshs. 0. 20 each		300,000
Purchase of 1.5m mangoes at Kshs 0.15 each		<u>225,000</u>
Gross Income		<u>75,000</u>
(b) Fixed Costs:-		
Project Manager	16,800	
Book-keeper	10,800	
Office rent	1,200	
Driver	4,800	
Vehicle running costs	<u>120,000</u>	<u>153,600</u>
(c) Depreciation:-		
Motor vehicle 25%	50,000	
office furnishing and equipment	<u>875</u>	<u>50,875</u>
(d) YWCA overhead expenses		<u>204,475</u>
10% of (b) and (c) above		<u>20,448</u>
Total fixed costs		<u>224,923</u>
2. <u>INCOME TO WOMEN</u>		
Gross Trading Income	75,000	
Employment Income		
300 women at Kshs 30/- per day for 30 days	<u>270,000</u>	<u>345,000</u>
Fixed costs		<u>224,923</u>
Net Income to women		<u>120,077</u>

APPENDIX I

BASE COSTINGS

A. <u>PERSONNEL COSTING</u> <u>CATEGORY</u>	NO.	MONTHLY SALARY	YEARLY SALARY	TOTAL
		(KSHS)	(KSHS)	(KSHS)
(i) Driver	2	2,000	48,000	
(ii) Extensionists	3	1,500	54,000	
(iii) Manager	1	7,000	84,000	
(iv) Book-keeper	1	4,500	54,000	
(v) Picking/Packing Trainees	11	200	<u>26,400</u>	226,400
 B. <u>TRAINING COSTS</u>				
Mango Extension Training			57,320	
Training of Picking and Packing			<u>79,820</u>	137,140
 C. <u>OTHER OPERATIONAL COSTS</u>				
H.R. Ratief Management fee 99 days @ Kshs. 1,000/- per day	)			99,000
(a) 52 days on Mango for export	)			
(b) 21 days on Nurseries	)			
(c) 26 days on Tourism	)			
 D. <u>CAPITAL EXPENDITURE</u>				
		UNIT COST MAY 1987	TOTAL COST	
(i) Land Cruisers p/ups diesel	(2)	500,000	1,000,000	
(ii) Pick-up - Toyota Hilux Diesel - 2 wheel	(1)	250,000	250,000	
(iii) Motor Cycles (Yamaha Off Road 125 c.c.)	(3)	35,000	105,000	
(iv) Office Furnishing	-	-	20,000	
(v) Nursery Equipment	-	-	40,000	
(vi) Calculator/Typewriter	-	-	<u>15,000</u>	1,430,000



E. <u>EQUIPMENT RUNNING COSTS</u>		UNIT COST <u>MAY 1987</u>	TOTAL <u>COST</u>
(i)	Motor Vehicles	3 700,000	
(ii)	Motor Cycles	3 <u>50,000</u>	750,000
F. <u>VEHICLES HIRE</u>			
(i)	Truck Hire - H.R. Ratief	205.920	
(ii)	Office Rent Kshs. 500/- monthly	<u>6,000</u>	<u>211,920</u>
			2,894,460
	USA dollars converted at Kshs, 16/- per dollar		180,904

APPENDIX II

PERSONS INTERVIEWED

1. YWCA National Secretary
2. YWCA Branch Secretary
3. 3 Tana River YWCA Field Workers
4. Managing Director, Greenfields Ltd.
5. Managing Director, Horticultural Crops Development Authority
6. Marketing Manager, Horticultural Crops Development Authority
7. Managing Director, H.R. Retief Ltd.
8. Managing Director, Vegair Ltd.
9. Managing Director, Coastal Growers and Packers
10. Managing Director, E.A. Growers Ltd.
11. Managing Director, Jakal Services Ltd.
12. Managing Director, Kenya Horticultural Exporters Ltd.
13. Managing Director, Karama and Sons
14. General Manager, Malindi Farmers Cooperative Society
15. District Agricultural Officer, Tana River
16. District Agricultural Officer, Kilifi
17. District Agricultural Officer, Kwale
18. Provincial Agricultural Officer, Mombasa
19. District Horticultural Officer, Tana River
20. District Officer, Garsen
21. Divisional Agricultural Officer, Garsen
22. Head, Horticultural Crops, Ministry of Agriculture
23. Project Officer, Ford Foundation
24. Chef, Nyali Hotel
25. Chef, Mamba Village Hotel
26. Chef, Silver Beach Hotel

27. Chef, Bahari Beach Hotel
28. Chef, Mombasa Beach Hotel
29. Chef, Reef Hotel
30. Chef, Oceanview Hotel
31. Chef, White Sands Hotel
32. Chef, Bamburi Beach Hotel
33. Chef, Kenya Beach Hotel
34. Chef, Neptune Hotel
35. Chef, Plaza Hotel
36. Chef, Severin Hotel
37. Chef, Dolphin Hotel
38. Chef, Serena Hotel
39. Chef, Intercontinental Hotel
40. Chef, Oceanic Hotel
41. Chef, Castle Hotel
42. Chef, Robinson Hotel
43. Chef, Two Fishes Hotel
44. Chef, Leopard Hotel
45. Chef, Diani Sea Lodge
46. Chef, Leisure Lodge
47. Chef, Golden Beach Hotel
48. Chef, Jadini Hotel
49. Chef, Africana Hotel
50. Chef, Safari Hotel
51. Chef, Diani Reef Hotel
52. Chef, Lagoon Reef Hotel
53. Chef, Trade Winds Hotel
54. Chef, Nomad Beach Hotel

55. Chef, Shelley Beach Hotel
56. Chef, Shelley Beach Hotel
57. Chef, Lawfords Hotel
58. Chef, Sindbad Hotel
59. Chef, Eden Rock Hotel
60. Chef, White Elephant Hotel
61. Chef, Coconut Village Hotel
62. Chef, Palm Tree Hotel
63. Chef, Silve Sand Villas
64. Chef, Sulisuli Hotel
65. Chef, Driftwood Beach Hotel
66. Chef, African Dream Hotel
67. Chef, Seafarers Hotel
68. Chef, Turtle Bay Hotel
69. 20 Retailers, Malindi and Mombasa

APPENDIX III

TERMS OF REFERENCE FOR YWCA TANA MANGO PILOT PROJECT  
CONSULTANCY

The following are the terms of reference for the YWCA Tana Mango Pilot Project:

The Consultant shall:

1. Establish supply of mangoes in Tana River and more specifically those within reach of the women pilot groups to be identified by consultants.
2. Establish aggregate demand for fresh mangoes in Malindi and Mombasa.
3. Establish and evaluate the major buyers in Tana River, Malindi and Mombasa.
4. Study the mango trading system to establish return to the producers and the traders.
5. Establish costs for picking, packing and transport of mangoes at Minjila or Malindi, any of which can act as a bulking and selling point.
6. Establish costs of training pilot group women in the picking, packing and transport chain.
7. Write a proposal for project funding for transmission to the donors.