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INTEGRATING JCGP ACTIVITIES IN KWALE

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PART ONE

SOCIO-ECONOMIC PROFILE

1. Agricultural Potential

Kwale District has land area of 832,200 hectares. Of this, 776,700 hectares or 93 percent can be used for agricultural activities. Table I below shows various agro-ecological zones in terms of agricultural potential.

Table I: Agro-Ecological Zones by Division and Potential

	District	Kubo	Matuga	Msambweni	Kinango
Area (000 Ha)	832	67	32	274	460
% of Total	100	7.8	3.8	33.0	55.0
Agricultural Area (000 Ha)	777	43	25	250	458
% of Total	93.0	5.7	3.2	32	58
Potential (000 Ha):					
High	-	-	-	-	-
Medium	120	33	12	74	-
Marginal	147	10	13	96	29
Range And Desert	530	-	7	93	430

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

2. Population

This District is mainly inhabited by the Mijikenda group of which Wadigo and Waduruma are numerically the most important. Based on 1979 census the population of the District was 288,363. The Central Bureau of Statistics (CBS) estimates the 1990 population for the District to be in the order of 449,573. It is further projected that by 1993, the population will be 500,562.

Population density and distribution is influenced to a large extent by the topographic and agro-ecological variables. Kwale's population density varies from a minimum of 8 persons per sq.km to 315 persons per sq.km. Table 2 shows population distribution by Division.

Table 2: Population Distribution by Division

Division	Area (Sq.Km)	1979 Census	1990 Estimate	1993 Projection
Kubo	434	42,216	45,406	50,556
Matuga	340	67,295	72,381	80,590
Kinango	3,837	137,098	147,459	164,184
Msambweni	3,331	171,373	184,324	205,230
Total	8,257	417,983	449;573	500,562

Source: **CBS Kenya Population Census, Vol. 1, 1979.**

Analysis of demographic characteristics of the district indicates that the population structure is basically youthful. The 1979 Census showed that 46 percent of the total population was constituted by those under the age of 15 years. Those over 60 years of age accounted for only 4 percent of the 1979 population.

Table 3: Population Characteristics by Sex and Selected Age Groups (000)

Age Group	1979		1990		1993	
	M	F	M	F	M	F
0-14	67	66	109	105	119	116
6-13	32	31	51	49	56	53
14-17	12	11	19	18	21	20
15-59	67	76	106	115	119	130
60+	1	6	8	7	9	8
14-49 (Female)	-	72	-	107	-	121
Total Pop.	180	184	223	228	247	254

Source: **Kwale District Development Plan, 1989-1993.**

3. Vital Statistics

The district is average in terms of vital rates and has an infant morbidity of less .... per 1000 live birth and a childhood mortality rate of 124.8 per 1000 (1988). The crude birth rate is close to the national figure and is ... per 1000. The crude death rate in the District is 15.1 per 1000 giving rise to rate of increase of about 3.9 percent per annum.

4. Health Facilities

Health Information System (HIS) Annual Report for the District indicates that there were 36 health facilities by the end of 1988. It is estimated that 24 percent of the population live within 2 kilometres of a health facility. A further 58 percent live within

5 kilometres and 83 percent within 10 kilometres of a health facility. The ratio of institution to population is 1:12,000 which is relatively too high by national average.

Table 3: Institution and Institution-Population Ratio

Health Facility	GOK	NGO	TOTAL	Inst/Pop.Ratio
Hospital	3	1	4	1:35,000
Health Centres	5	0	5	1:81,000
Dispensaries	25	2	27	1:16,000
Total	33	3	36	1:12,000

Source: **HIS Annual Reports, 1987 and 1988**

5. Health Status

The causes of morbidity and mortality are mainly those that are preventable. They vary with the ecological zones of the district. The following diseases are the most prevalent for both out-patients and in-patients:

- Malaria
- Respiratory Diseases
- Intestinal Worms
- Diarrhoeal Diseases
- Bilharzia
- Anaemia
- Urinary Tract Infections
- Eye Infections
- Joint Disorders
- Gonorrhoea
- Accidents

6. Nutritional Status

From the national assessment the district is considered at nutritional risk. The prevalence of nutritional stunting in Kwale was found to have increased from 38.5 percent in 1982 to 43.4 percent in 1987. This District maintains the highest level of stunting in the Coast Province. Table V shows nutritional stunting and wasting in Kwale.

Table 5: Stunting and Wasting in Kwale District

Indicator		1982(%)	1987(%)
Height for Age			
< 90%			
	District	38.5	43.4
	National	24.0	19.7
Weight for Height			
< 80%			
	District	4.9	2.9
	National	3.0	2.5

Source: **Socio-Economic Profiles, GOK/UNICEF 1990.**

Factors that affect nutritional status of in the District include morbidity, infection, economic status of the household inadequate accessibility to adequate and good quality water and malarial infections.

7. Environmental Health

The major problem area is latrine construction and their use. Only 37 percent of the households some form of latrine. Of these 96 percent are ordinary type latrines. Most members of the households, up to 62 percent, use bush.

Table 6: Types of Latrines Used

Type of Latrine	No. of HH	%	Cumulative
VIP-latrine	1	0.4	0.4
Ordinary Latrine	98	35.5	35.9
Septic Tanks	3	1.1	37.0
Bush	171	62.0	99.0
Others	3	0.1	100.0
District Total	276	100.0	

Source: **CBS, Rural Nutrition Survey,1987.**

8. Water Resources

Good quality water is a problem in the District. A number of water supply locations have been identified by the Ministry of Water Development and Kwale Water and Sanitation Programme. These include springs, dams, roof and rock catchments. In 1987, there were 30 water supply schemes in the District, 20 under operation and/or

under construction, 3 under design and 7 out of function. Since then the only major activity has been the water and sanitation programme reviewed under water in Part 2.

Majority of the households obtain water from piped water schemes, rivers/streams, dams, springs, unprotected wells and protected wells. Three-quarter of the households obtain water from piped water sources, rivers/streams and dams during dry and wet seasons. Only 49 percent obtain water from clean sources during the dry seasons. About 38 percent obtain water from clean sources during wet seasons. More than half of the households use water from unclean sources. The intensity of such uses is highest during the wet season when there is increased reliance on unprotected wells and dams. Table VII shows water sources and intensity of use.

Table 7: Water Sources and Intensity of Use

Water Sources	Dry Season No. of HH	%	Cummu-lative	Wet Season No. of HH	%	Cummu-lative
Pipe Water	78	28.3	28.3	62	22.5	22,5
Boreholes	46	16.7	45.0	33	12.0	33.5
Protected Wells	10	3.6	48.6	9	3.3	37.8
Unprotected Wells	17	6.2	54.6	28	10.1	47.9
Rivers/Streams	56	2.3	75.1	52	18.8	66.7
Springs	21	7.6	82.7	21	7.6	74.3
Dams	46	16.7	99.3	63	22.8	97.1
Others	2	0.7	100.0	8	2.9	100.0
Total	276	100.0		276	100.0	

Source: **CBS, Rural Nutrition Survey, 1987.**

9. Housing

Housing conditions in Kwale District is depressingly poor. Most houses have neither water nor sanitation facilities. The large majority of structures have thatched roofs and mud walls and do not have piped water or water closets. Table VII shows by dwelling type.

Table 8: Housing by Dwelling Type

	Number of Structures ('000)
ROOFING MATERIAL	
Thatched Roof	85.9
Corrugated Iron	5.0
Tiles	0.2
Asbestos	0.9
Tin	0.3
Others	1.2
WALL CONSTRUCTION	
Mud	80.5
Wood	8.2
Stone	1.3
Bricks	1.8
Mud-Cement	1.9
Others	2.6
With Piped Water	3.8
Without Piped Water	89.6
With Water Closets	2.6
Without Water Closets	90.8
% Permanent	8.7
% Semi-Permanent	31.0
% Traditional	60.3
Mean No. of Rooms:	
Permanent	4.1
Semi-Permanent	2.5
Traditional	1.9
All	2.6

Source: CBS, Rural Household Budget Survey, 1981/82.

10. Employment Opportunities

A large percent of employment opportunities is found in agriculture and agro-oriented activities in the coastal area where agro-ecological potential is higher than in the interior area. About 130,000 workers would be available for such opportunities. The remainder is made up of non-agricultural wage labour, the business and commercial/self-employed and out migrant labour. A large percentage of labour force in the District is engaged in gainful employment. In total, the estimated labour force is 172,486. A detailed breakdown is given in Table 9 below.

It should however be noted that there is a need to refine these categories and specify what kind of economic activity is involved in the analysis. This should be done when the CBS/UNICEF data gathering exercise is undertaken.

Table 9: Labour Force and Employment Estimates

	1988	%	Target Annual Growth Rate(%)	1993
NON-AGRICULTURAL WAGE LABOUR				
1.Public Sector	10,250	6.0	2.0	11,315
2.Firms: L. M. @ S.	11,000	6.4	3.5	13,060
BUSINESS/COMMERCIAL SELF-EMPLOYED LABOUR				
1.Small Scal Bus.	1,626	0.94	3.0	1,885
2.Informal Sector	11,000	6.4	5.0	15,139
AGRICULTURE/LIVESTOCK EMPLOYMENT				
1.ADC Farms	-	-	-	-
2.Large Farm/ Ranches	6,000	3.48	3.0	6,955
3.Coop. Farms	5,200	3.0	3.5	6,110
4. Landless/Famine Relief Schemes	6,100	3.54	-	9,100
5. Smallholder	104,520	60.6	3.0	121,166
6. Pastoralists	15,300	8.87	1.0	16,079
OTHERS				
1. Out migrant Labour	1,480	0.85	-	6,030
Total	**172,486**	**100.0**	-	**207,845**

Source:Adapted from KWALE District Development Plan, 1989-1993.

11. Income and Expenditure Patterns

Rural Household Budget Survey (RHBS) 1981/82 showed that average monthly income per household in Kwale was Kshs.937. It was also observed that in 1982 households in Kwale derived nearly half their monthly income from employment, mainly in the tourists and hotel locations around the Coast.

Table 10: Average Net Monthly Income by Source (Kshs.)

	1982	1989 (Estimates)
Salary and Wages	422	760
Farm Enterprises	312	562
Non-Farm Enterprises	145	261
Other Sources	59	106
Total	937	1689

Source: **CBS, 1981/82 Household Budget Survey,** unpublished.

A detailed analysis of income sources confirm employment is a more important source of income in Kwale. Self-employment is the next most important source of household income in the District. Table 11 shows mean Monthly Cash Receipts by Source as percentage of household.

A look at the pattern of expenditure in the district shows that regular cash expenditure tend to be on food, clothing, household goods and health services. The other important items of expenditure in the District relate to maintenance of business in self-employment and purchases of household furniture.

Table 11: Monthly Cash Receipts by Source as % of Household

Source	Percentage Household
Employee Wages	46.9
Self-Employed Earnings	25.9
Transfers In	13.4
Livestock Sales (Cash)	5.5
Crop Sales (Cash)	3.4
Other Loans	2.1
Milk Sales (ash)	1.3
Employer Income	0.8
Interest, Dividends, Rent	0.3
Cash from Cooperatives	0.3
Inventory Sales	-
Agricultural Loans	-
Egg Sales	-
Total	100.0

Source: **CBS, Kwale-Kilifi District Development Project, 1989 - A Baseline Survey.**

12. Education and Literacy

A recent CBS survey on education shows that education levels in the District is lower than the national average. While 33 percent of the population reported reaching education levels of between 1 and 8, the national average for this level is 52.2 percent.

Regarding literacy rate, while the national literacy rate has increased considerably from 47.2 percent in 1981/82 to 54.3 percent in 1988, the District exhibits literacy rate of 35 percent which is well below the national average.

Table 12: Percentage Distribution of Population by Ability to Read and Write in any Language

	Kwale	National
Able to Read	34.88	55.14
Able to Write	34.67	53.51
Total 1988 Literacy Survey	34.78	54.33
Total 1981/82 Literacy Survey	37.20	47.20
Difference	3.05	7.13

Source: **CBS 1981/82 and 1988 Literacy Surveys.**

13. Community Participation

The community participation is mainly in terms of membership of cooperative societies or self-help groups. The District has a total of 46 cooperative societies of which 36 are active. Table 13 shows the state of cooperative societies in the District.The aims of these cooperative are to enable all farmers to participate in the country's economic development; to provide credits to smallholders through the Cooperative Bank; to market the farmers' produce; to emphasize quality production to ensure high prices; and to provide marketing information.

Table 13: Cooperative Societies by Activities in 1988

Activity	Active	Dormant	Under Liquidation	Total
Savings & Credit	18	-	-	18
Cereals and Grains	3	2	1	6
Fisheries	5	-	-	5
Dairy	-	5	-	5
Multi produce	3	-	-	3
Other Crop Marketing	2	-	-	2
Ranching & Livestock	1	1	-	2
Farm Produce	1	1	-	2
Sugar	1	-	-	1
Unions	1	-	-	1
District Unions	1	-	-	1
Total	36	9	1	46

Source: Ministry of Cooperative Development, **Directory of Cooperative Listing by Province,** 1988

The objective of self-help groups is to build capacity of the people in the District to help themselves through involvement in gainful activities. The most prevalent self-help activities in the District in 1989 are shown in Table 14 below.

Table 14: MCSS Registered Self Help Groups by Activity 1989 &1990

Type of Project	Cont. 1988	Started	Abandoned	Total 1989	1990
Pri.School	228	8	-	236	236
Nursery Centres	70	-	-	70	70
Sec. Schools	20	-	-	20	20
Culti/Weeding	45	-	-	45	45
Dispensaries	38	-	-	38	38
Mosque/Churches	30	-	-	30	30
Dams/Water Catch	26	-	-	26	26
Women C/Halls	25	-	-	25	25
Piped Water Supply	20	-	-	20	20
Other Projects	11	-	-	11	11
Youth Centres	9	-	-	9	9
Other Buildings	9	-	-	9	9
Latrines	9	-	-	9	9
Teacher's Houses	6	-	-	6	6
Comm.Halls	6	-	-	6	6
Bush Clearing	5	-	-	5	5
Tree Planting	4	-	-	4	4
Bridges	4	-	-	4	4
Wells	2	-	-	2	2
Terracing	2	-	-	2	2
Cattle Dips Crushes	1	-	-	1	1
Sports Ground	1	-	-	1	1
Total	571	8	-	579	579
Women Groups				375	375
Other				204	204

Source: MCSS Files

A third of all activities relate to construction of primary schools. Significantly the next most important activity is construction of nursery centres. The third and fourth activities are cultivation and weeding and construction of dispensaries. Schools related activities account for 58% of all group activities.

In an earlier report it was shown that the major self -help activities were women group driven as shown in Table 15. below. The women groups were engaged mainly in income generating activities among which were food/cash crop farming, poultry keeping, bee keeping, dairy farming, goat/sheep rearing, handicraft, shopkeeping and money lending.

Table 15: Membership to Women Groups

Year	No. of Groups	Total Membership
1985	286	13,140
1986	371	14,728
1987	371	14,725
1988*	471	15,000

Source: **Kwale District Development Plan, 1989-93.**

* Estimated.

It should be further noted that in 1990, the registration of women groups still follows the coastal approach like every other development activity in the district. The registration by Division are shown in Table 16 below.

Table 16: Registration of Women Groups by Division 1990.

Division	No. Registered Women Groups
Msambweni	180
Matuga	50
Kinango	78
Kubo	67
Total	375

Source: MCSS Files

Two points with major consequence to JCGP programming ought to be made forcefully. First, the donor driven need to segregate and support women groups mainly does not address the participation needs of the communities for it ignores some of the urgent development needs of the community. Second, it leads to subterfuges and other manoeuvres by self help groups to ensure support, thereby killing the very spirit of community participation. Self Help Groups have adjusted to donor demands and transform themselves to Women Groups to get resources. However, communities are interested in building schools and other school related facilities. This does not square with the misplaced concreteness that is income generating whether implemented by field officers, NGOs or even if the strategy is Grameen Bankish.

14. Tourism (to come)

15. Industry(to come)

PART TWO

STRUCTURE OF LONG TERM DEVELOPMENT

THE PRIMACY OF INFRASTRUCTURE AND HUMAN RESOURCES DEVELOPMENT

Economic activity in Kwale District is dominated by beach based tourism, agriculture and livestock, informal sector and construction based activities in descending order. Other than construction related material production there is no major manufacturing.

The major limitation in expanding economic activity is the underdeveloped infrastructure, particularly roads, although water availability has become a constraint to the expansion of tourism, town based economic activity and the peoples health not to speak of the limitation on livestock production. Little by way of exploiting water resources for higher agricultural production exists.

Long term development of the district has thus to address the bottleneck of infrastructure first so as to a. increase interdistrict transactions and thus incomes b. to create potential for expansion c. to retain the returns on economic activity in the district and d. increase return on existing human and physical resources.

Simultaneously with the improvement of infrastructure for expanding economic activities and integration of the same, there is need to invest in the health and education of the population. It is from this perspective that significant activities in the education sector and the health sector are envisaged. This is not welfare but enabling the population to improve its productivity.

In the subsequent parts of this report we discuss the sectors, particularly those which the JCGP group has projects in detail. In this section we call attention to the long term logic of what we stress later. In other words, this section is the overall framework for long term development. It is predicated on integrating the various regions of the district to an economic whole. Since the JCGP group does not normally invest in Tourism, the only discussion is how other development sectors can take advantage of the tourism activity by supplying it.

A word on the data is apropos. Methodologically, long term development strategy is not based only on quantitative survey data which we have summarised in Part One. It also borrows on non-quantitative methodologies including imaging and contextual disaggregated quantitative data. These sources of data and field interviews have been used to arrive at the priorities in long term development by sectors. The following sectors are thus in descending order of priority.

ROADS INFRASTRUCTURE DEVELOPMENT

For the long term development of the district the most critical intervention is in the road infrastructure sector for it limits all development activities. Map 7 shows the existing roads in Kwale District. One should note that no reclassification has been done since the sixties.

The communication district has been shaped by the tarmacking of A 14 from Mombasa to Lunga Lunga. The availability of this communication artery, coupled with the poor maintenance of other routes has denied service to as the highly productive areas of rub division and the interface (high potential area and Asal areas) served by C 107 and C 106 (Mariakani Kinango- Lunga Lunga. For example KBS (which used to be the postal bus) used to go to Lunga Lunga via Kinango but the service has been stopped on costs of maintenance related to very poor road conditions.

The domination of A14, and the lack of other high standard access roads into the district means that significant tourism transportation and consumption benefits are siphoned by Mombasa. That is not all. The lack of good quality circulation roads in the district means that supply to beach based tourism cannot be met from within the district despite inherent potential for producing horticultural produce. Such produce rots on farm.

Further, Tsavo Park which abuts the districts is closed completely from linking with either beach based tourism or Shimba Hills Park. Finally, labour is immobile because of lack of adequate transportation.

The priority in building up road infrastructure then is to:

a. Increase intradistrict economic transactions by:

   1. Creating new marketing and trading patterns of produce from within the district.

   2. Creating new regional marketing and trading patterns of produce important for regional food supplies.

   3. Creating more interaction by the tourism sector with the rest of the district especially Shimba Hills Park.

   4. Opening up and creating service based economic activities in ASAL areas of Kwale by linking with Taita and Kajiado districts.

   5. Creating efficient circulation of labour within the district.

b. Create alternative links with the national transport

system to:

1. Bypass the Mombasa ferry bottleneck which is limiting the growth of South Coast beach tourism.

2. Open new tourist routes to Tsavo West and Amboseli.

3. To service proposed large scale industrial operations in Kwale.

Given the above, it is possible to classify the road development strategies Intradistrict Economic Intensification and National/Regional and Interdistrict Economic Links. Map 2 shows the proposed roads for opening up the hinterland and linking Kwale to the nation/region bypassing the ferry bottleneck.

a. Intradistrict Economic Intensification Roads

Kwale's high potential agricultural areas are essentially around Kubo division and Kikoneni location. The major limitation to market gardening of Tomatoes, Cabbages, Kales, Carrots, Capsicums, Indian Vegetables, Fruits, Grains, and Pulses (simsim & cow peas) is lack of reliable transport to markets. To date, supplies of these commodity rot in the farms for transporters refuse to risk their vehicles on the very bad roads. It is clear that production of the above commodities, chickens and pigs are limited not by production knowledge, extension or markets but by transport bottlenecks.

The key step for development is to upgrade roads through three strategies, ie tarmac roads, all weather murram roads and minor access roads.

Tarmac Roads.

Given the importance of the Kubo Division and Kikoneni Location for market gardening, tarmacking of D 548- E 960, C 108 (ie Kwale-Mkongani-Lukore-Mrima, and Lukore- Shimba Hills-Mwambungo) is a clear priority for which development funds will be necessary. Only by bringing these roads to tarmac level will the agricultural productive capacity be fully utilised.

All Weather Murram Roads

On top of establishing these major tarmac roads, there is need to finance systematic murraming to all weather standard of: D 546, D 547- D 548, E 960, E 962, E 944, E 963 (ie Shimba Hills to A 14, Mwangulu (C 106) to A 14; Gandini- Kwale; D 548 to C 108; C 106 - C 108: C 106 - D 548; D 546- E 960. These are roads for enabling local transport to major collection points.

Minor Farm to All Weather Roads

Within the high potential agricultural area, it is estimated that 400 km of Rural Access roads would be needed to assure transport from farm gate to all weather road. The District has already made proposals to the Ministry of Public Works and donors involved in Minor Roads Programme (DANIDA) on key roads in Kubo, Msabweni and Matuga divisions for purposes marketing produce. The proposals were not availed to the consultant the fact that discussions were going on at the same time.

Murram Roads to Open-Hinterland (Kinango and Samburu Divisions)

Key murram roads, which should be constructed to open the interior of Kwale and their estimated distances are:

Mackinon Road-Kilibasi	28 Km
Taru-Kilibasi	34 Km
Vigurugani-Kilibasi	24 Km
E 941-Gonzini-Kilibasi	24 Km
Kuranzi-Mwambega Ranch- Kilibasi	47 Km
Kwale/Taita Taveta Border- Mbita	24 Km
Mbita-Mwandimu	14 Km
4B-Mwandimu/Mbita	22 Km
Lunga Lunga Ranch HQ-Godo	17 Km
Mbita-Godo	25 Km
Godo - Kasemeni	10 Km
Kasemeni - Makwanyeni	15 Km
Kasemeni - Kilimangodo	12 Km.
Total	296 Km.

Although the proposed roads amount to just under 300 km. it is estimated that another 200 km. of roads will be needed to connect villages to the centres. Thus it is estimated that about 500 Km of new murram roads needed to open up more than a third of the district and to serve areas where populations have settled. The estimate of Kilometres is crude for no direct tracks exist to check alignment and distances. Map 8 shows the proposed interior roads.

b. Links With National/Regional and Interdistrict Roads

Tarmac Roads

The most important regional and interdistrict communication road is to build a link between Kwale and Taita-Taveta assuring:-

a. Direct link of Kwale Beach based Tourism with Shimba Hills, Tsavo and Amboseli Parks animal and bird watching tourist circuits which are fast expanding.
b. Circulation of food especially horticulture and fruits supplies.
c. Linking to proposed major national Southern Tour Circuit link.

Nationally it is proposed in IFAD Report No. 716-KE and other earlier reports, that for the long term development of the ASAL areas in Narok, Kajiado Taita-Taveta and Kwale, that Kwale district be linked by a major road which will serve to link coastal tourism to Shimba Hills, Park, Tsavo Park, Amboseli Park and ultimately Mara Park. Such a road would also act as a national/regional commodities channel. Discussions on this have been held with the Coastal ASAL Appraisal Mission in a meeting involving donor and GOK chaired by the PS MRDASW.

The link on this road which would assure Kwale of keeping a higher level of tourist revenues is a link from Taita-Taveta District ie D 541 from Mwatate-Rukanga to Kwale District ie at Mbita-Namenwa-, Mwandimu-Mafundini- Mkangombe-Gulanze- Ndavaya- Mkongoni, Lukore-Tiribe-Shimba Hills- Mwambungo on A14.

This tarmac road would link up A14 with Shimba Hills and Tsavo Park thereby linking beach based tourism with animal based tourism-avoiding the ferry bottleneck. It should be joined to Kwale-Kinango from Ndavaya. The Kwale-Kinango link is already being worked on since it was announced by the President last year.

The other justification of this major road network is the planned expansion of beach tourism in the district. At the same time, one should note that a major cement factory it planned at Shimoni. It will need an outlet to the interior of the country which bypasses the ferry bottleneck in Mombasa. The planned export promotion zone on the Kwale side of Port Rietz, would benefit out of the proposed tarmac system for it would create an alternative to the congested ferry.

This tarmac road proposal does not contradict the proposal that to service the EPZ a tarmac a road should be made either from Mariakani or Mazeras to Kinango and then to the EPZ on the Kwale side of Mombasa. Such a road will not serve the wider interests discussed above but will be complementary.

This road is important for assuring the security of the while region west of Mwandimu which has been receiving a lot of population from Kwale, Taita-Taveta, Kajiado and from without the region. The resources to exploit in Kwale by building this road are tourism, agriculture, livestock and mining.

Development Strategy

The Consultant is of the view that improving roads, both tarmac and murram is the single most important long term development issue for the district for it would open up economic activity.

The most efficacious way of financing the all weather murram and minor roads, is to relate them to the existing DANIDA Minor Roads Programme being considered in the district for crop intensification

in the high potential areas.

Farm gate to all weather road roads can be financed by food for work as has happened in other districts in the country under the Rural Access roads programme which got absorbed by the Minor Roads Programme. Discussions with many donors who have funded the programme could elicit support.

The tarmac roads will call for specific financing and can be related to plans for expansion of Tourism and Export Promotion Zone Services being considered by the World Bank.

WATER INFRASTRUCTURE DEVELOPMENT

Development of water resources is one of the more controversial development issues in Kwale. Controversy is based on the neglect Kinango Division. It is drier than the other divisions and got some structures developed under livestock development activities in the late sixties and early seventies. Kinango has not received significant attention under the Kwale Water and Sanitation Programme whose outputs to date are shown in Table 17. Significantly, Kinango divisional headquarters only got water under the Rural Trading and Production Centre programme of the MNPD funded by USAID. It is not likely other centres in Kwale will benefit from this programme in the next phase.

Table 17: KWASP Interventions by Location

LOCATION	*1	2	3	4	5	6	7
DIANI/KINONDO	108	4	-	-	-	21	72
MSAMBWENI	97	25	-	-	-	13	13
KIKONENI	57	-	-	-	-	17	31
TIWI	37	-	-	-	2	18	9
PONGWE/KIDIMU	14	-	-	-	-	10	-
VANGA/LL	14	-	3	-	-	20	12
LUKORE	7	10	1	-	-	6	15
PUMA	3	-	8	-	-	6	16
MWERENI	3	-	2	-	-	1	2
MKONGANI	1	-	-	-	-	4	1
MAJIMBONI	1	4	1	-	-	3	-
NDAVAYA	1	-	7	-	-	3	-
WAA	1	-	-	-	-	11	-
MWAVUMBO	-	-	-	-	-	6	-
KILIBOLE	-	-	-	-	-	9	-
KINANGO	-	-	3	-	-	11	6
NGOMBENI	-	-	1	-	-	3	6
MWALUPHAMBA	-	-	-	-	-	2	6
SAMBURU NORTH	-	-	-	-	-	5	-
SAMBURU SOUTH	-	-	7	1	-	6	1
TSIMBA	-	4	2	-	-	26	34

*(1. Boreholes 2. Spring Protection 3. Roof Catchments 4. Dams 5. Self Help Water Supply 6. Demonstration VIP Latrine 7. Self Help Latrine.
Source: KWASP

As shown in the bibliography many studies of hinterland water resources and possible strategies are available. These studies have also detailed some of the geology of the area which has impact on water resources. A simplified version of the geology is shown in Figure 1. Schematic Setting of Kwale Hinterland.

Key studies documenting surface water resources are Norconsult 1987 and GWS 1990. Both did not cover all of the hinterland division

more specifically their studies do not get to the extreme west of the district where there is now (1991) significant settlement, farming and grazing. Map 1, culled out of Norconsult, shows the extent of their definition of the Hinterland. This peculiar conception of the hinterland influenced the location of the rain gauges and the subsequent work by GWS. Hence data for water related planning is supposed to forget the far extremities of the district. Observe that Map 2 showing the major hinterland catchments also ignores the same area. This area has been receiving a lot of population in the past and deserves service.

Norconsult (1987) points out that more than 100 dams and waterholes are in disuse. The same report also documents the following significant rivers for hinterland surface water resources as shown in Map 2. The key ones are:

River	Catchment Size Sq. Km.
Upper Ramisi	1576
Mweria	257
Mbuji (Mwereni)	152
Puma (Chasemba/Pemba Tri.)	360
Dzuhoramawe	80
Ngeyeni	844
Vigurungeni (Mlunguni)	404

These main catchments (and their more interior portions) are the main sources of surface varied quality water for the hinterland. However, although the geology leads to high total dissolved solids and thus salinity or sodicity, still from the water resources development point of view they will have to be used. In the past, dams were built and used in these catchments.

During the next phase, KWASP will drill 15 boreholes, construct 10 Rock Catchments and Roof Catchments. Coast ASAL (IFAD) proposes 30 wells and 20 pans for hinterland. These proposals, even with a few RDF Constructions in NOT ANYWHERE NEAR WHAT IS NEEDED IN THE INTERIOR. Not many other resources will come into the hinterland either from livestock or agriculture.

Development Strategy

Many of these studies have not been detailed enough to a. rule out groundwater potential totally (b) exhaust all possible water exploitation strategies (c) to make a case against dams for livestock supply. Both Norconsult 1986 and GWS 1990 mapped zones where groundwater exploitation was possible. Rather than take the hostile attitude to dams, because of maintenance problems, it is the considered view in the district that more community organising on dam use is called for. Further, the exploitation of water resources by use of subsurface/sand dams has not been explored. There is merit in trying this technique which has good advantages for groundwater recharge and therefore environmental enhancement as

well as being cheaper than pans/dams. It is of very low on maintenance.

Ground water resources are problematic since no systematic (seismic and resistivity) mapping of the resource, location of boreholes etc has been done. The thirty two boreholes drilled by KWASP were located almost randomly for the shatter zones had not been located prior to the limited sighting studies. It was proposed that further ground water resources work be done for KWASP but other than their internal capacity it is not provided for in the next period.

It is therefore proposed that:
a. JCGP Commission development of a detailed operations plan for provision of water in the hinterland. This should include detailed geophysical survey, pan/dam survey, subsurface/sand dam survey, rock-catchment survey to be coordinated with the KWASP activities. A possible approach is Appendix GWS: Proposed Strategy for Hinterland Water provision.

b. As a matter of urgency JCGP should embark on a training programme of fundis to construct water structures and fund extensively construction of the same. Unicef experience in Kitui should be useful in this. Labour could be paid for by food for work methods. The strategy for water provision should be to train and supervise fundis so that at end of project they can continue local construction privately. Their business training and financing can be done under the Small Scale Business financing by UNDP.

c. Hinterland fundis should be trained in surface construction, ground watertank, rock catchment construction and subsurface/sand dam construction.

d. When a detailed operations plan is being worked out, the trained fundis could start with construction of water tanks in all public buildings in hinterland as part and parcel of the upgrading of the schools. Again UNICEF has experience in this is Kitui among others.

EDUCATION FOR DEVELOPMENT

Kwale has lagged in educational development for historical reasons. To begin with the Islamic influence in the coastal divisions tended to encourage religious education at the expense of formal education. Second, the poor migrants into the high potential areas and the Duruma of the interior have not had the economic power to build all the necessary schools. For the interior population building costs are high given the cost of transportation of materials and environmentally unsound techniques. Public pressure for formal education high in Kinango and Kubo divisions.

Enrolment

Table 18 shows the enrolment and teachers per location. Table 19, shows the same data for each specific school as reviewing and targeting development will need disaggregated data.

Table 18: Primary School Enrolment and Teachers 1991.

Location	Pop. 1991	No. Sch.	Total Enrol.	Teach.	Enrol/ Teach.
Vanga LL	22370	16	4380	141	31
Pogwe K	7990	11	2003	73	27
Kikoneni	31723	14	4570	155	29
Msambweni	26730	18	6172	204	30
Kinondo	13039	12	2907	95	31
Diani	29737	11	4793	137	35
Waa	12079	6	2528	81	31
Tiwi	14259	8	3043	92	33
Ngombeni	17273	9	4889	134	36
Lukore	4899	5	1276	50	26
Mkongani	15365	12	3085	103	30
Mwaluphamba	14188	9	2631	85	31
Majimboni	5079	7	1427	62	23
Tsimba	16911	14	4724	153	31
Kinango	22920	14	3793	110	34
Puma	18121	13	2580	97	27
Ndavaya	9303	8	1252	60	21
Mwereni	23124	12	2674	82	33
Kasemeni	14001	9	3222	100	32
Chengoni	8152	5	1244	43	29
Taru	10129	8	1825	58	31
Mtaa	7140	7	1297	42	31
Samburu	17323	12	3073	102	30
Mwavumbo	20003	10	4589	120	38
Total	381758	230	73977	2379	
Population/P.Sch.	1660	1			
Enrolment per Teacher		31	1		
Enrolment per School		1	322		
Teachers per School		1		10	

Source: DEO

Table 19 : Enrolment and Number of Teachers per School

TSIMBA	School	Enrol.	No. of Teachers
	Bilashaka	326	11
	Chirimani	400	12
	Dima	107	6
	Golini	666	17
	Jorori	304	9
	Kwale	602	14
	Kwale Deaf	85	12
	Kwale Mentally	42	7
	Lunguma	94	8
	Msulwa	169	8
	Mwangunga	621	16
	Vuga	573	16
	Vyongwani	305	7
	Ziwani	430	10
		4724	153
TIWI	Chai	265	7
	Kinidi	430	14
	Mwachema	559	16
	Mwaligulu	385	13
	Mwadinda	558	15
	Mwamivi	200	7
	Tiwi	388	12
	Vinuni	258	8
		3043	92
WAA	Bowa	154	6
	Kombani	639	16
	Matuga	549	17
	Mbweka	311	11
	Voroni	174	8
	Waa	701	23
		2528	81
NGOMBENI	Denyenye	858	19
	Kiteje	528	14
	Mbuguni	358	12
	Mkumbi	518	16
	Mteza Central	110	7
	Ngombeni	691	19
	Pungu	485	11
	Yeje	606	17
	Zibani	735	19
		4889	134

MKONGANI	Kibuyuni	250	8
	Magwasheni	353	11
	Mangawani	266	9
	Miamba	111	4
	Manyalatsoni	95	5
	Mbegani	118	6
	Mhongani	532	14
	Mkundi	217	8
	Mtsamviani	252	7
	Mzinji	216	9
	Simanya	171	8
	Tiribe	484	14
		3085	103
MWALUPHAMBA	Bahakanda	286	9
	Burani	510	12
	Kizibe	370	11
	Mapanda	98	7
	Miatsani	199	8
	Miritini	147	8
	Mlafyeni	344	10
	Mtsangatamu	205	7
	Terezani	472	13
		2631	85
MAJIMBONI	Boyani	178	8
	Majimboni	415	13
	Makobe	135	8
	Mwapala	289	9
	Kidongo	162	8
	Shimba Hills	150	8
	Kipambani	98	8
		1427	62
LUKORE			
	Kichakasimba	311	11
	Mkanda	102	9
	Lukore	445	12
	Mwagodzo	221	10
	Mwaluvanga	197	8
		1278	50

MSAMBWENI	Bodo	240	9
	Eshu	311	11
	Fahamuni	160	8
	Funzi	103	9
	J/Kenyatta	630	19
	Kilulu	187	9
	Kingwede	524	15
	Mafisini	230	9
	Magodi	209	8
	Mophombe	243	9
	Msambweni	713	20
	Mivumoni	311	9
	Milalani	458	14
	Mwachande	197	8
	D/Ndegwa	600	15
	Ramisi	627	15
	Kingujini	558	16
	Munje	50	16
		6172	204
DIANI	Bongwe	154	9
	Mshokani	216	8
	Mbuwani	131	9
	Mkwakwani	620	14
	Mvindeni	510	15
	Mwakigwena	1193	28
	Mwamanga	296	7
	Mwaroni	960	21
	Shamu	512	16
	Magutu	113	3
	Vukani	88	7
		4793	137
PONGWE/KIDIMU	Ganda	74	8
	Kidimu	261	9
	Majoreni	313	8
	Mwangweni	225	9
	Mkwiro	154	6
	Shimoni	239	8
	Tswaka	301	10
	Wasini	110	6
	Mzizima	150	4
	Kichakamkwaju	74	2
	Mgome	102	3
		2003	73

KINONDO	Galu	619	18
	Gazi	116	8
	Kinondo	207	8
	Magaoni	309	9
	Makongeni	194	9
	Maumba	230	9
	Mkwambani	320	7
	Muhaka	390	14
	Muhaka IC	131	3
	Zigira	163	5
	Madogo	160	3
	Mwanjamba	63	2
		2907	95
KIKONENI	Gugu	411	11
	Kikoneni	554	14
	Kikonde	134	8
	Kimku	109	8
	Kitungure	345	11
	Mabatweni	158	7
	Mamba	752	20
	Masimbani	212	8
	Mrima	252	14
	Mhembalazi	160	7
	Mwananyamala	580	18
	Mwandeo	223	8
	Mwanguda	387	11
	Vivivwini	293	10
		4570	155
VANGA/L.L.	Godo	195	8
	Kasemeni	128	4
	Kidomaya	223	10
	Kiwegu	250	8
	Lunga Lunga	700	19
	Makwenyeni	143	8
	Mgombezi	393	12
	Mwalewa	138	6
	Ngathini	202	8
	St Marks	195	8
	Perani	690	18
	Tsuini	353	10
	Vanga	558	16
	Mzuri	42	3
	Tego	101	2
	Mahuruni	69	1
		4380	141

MWERENI	Bidinimole	238	7
	Kilimangodo	232	9
	Magombani	129	5
	Maledi	363	11
	Menzamwenye	372	12
	Mtumwa	365	6
	Mwangulu	304	9
	Mwena	313	9
	Mwereni	181	8
	Kalalani	85	3
	Mwamtsefu	89	2
	Manda	34	1
		2674	82
KINANGO	Amani	179	4
	Dunbule	240	7
	Dzivani	266	8
	Gandini Central	266	9
	Gwadu	101	4
	Kibandaongo	220	7
	Kinango	865	21
	Lutsangani	179	8
	Moyeni	320	8
	Ngonzini	246	8
	Nzovuni	328	9
	Tsunza	370	9
	Yapha	182	7
	Chizini	31	1
		3793	110
MTAA			
	Bofu	360	11
	Mabesheni	197	8
	Mkanyeni	192	7
	Mtaa	297	10
	Guro	76	2
	Gona	108	2
	Nunguni	67	2
		1297	42
PUMA	Kifyonzo	250	9
	Mwalukombe	440	11
	Mwanguni	226	8
	Ndauni	125	7
	Vigurungani	211	8
	Mbilini	131	7
	Tata	218	7
	Kasageni	164	5
	Videri	57	3
	Vyogoto	165	8
	Bang'o	297	8
	Mazola	344	9

	Nyango	42	7
		2580	97
CHENGONI	Cheanzou	195	5
	Chengoni	309	9
	Maji ya Chumvi	466	14
	Mwarovesa	76	6
	Silaloni	198	6
		1244	43
NDAVAYA	Gandini South	144	7
	Gulanze	340	10
	Mbita	81	3
	Mbwaleni	131	7
	Mkangombe	141	7
	Mwachanda	266	8
	Mwakijembe	101	5
	Ndavaya	498	13
		1252	60
SAMBURU SOUTH	Chigutu	227	8
	Kinangoni	722	17
	Kwakadogo	143	4
	Mdomo	137	7
	Mulunguni	162	8
	Mwangea	228	8
	Ndohivyo	275	10
	Vinyundeni	152	8
	Samburu	568	15
	Bumburi	90	5
	Kituu	101	5
	Makamini	268	7
		3073	102
KASEMENI	Bonje	106	7
	Fulugani	199	8
	Mezear	891	21
	Miguneni	237	10
	Miyani	238	8
	Mpirani	165	6
	Mwamdudu	366	14
	Mwache	388	11
	Mnyenzani	632	15
		3222	100
MWAVUMBO	Gwasheni	422	14
	Matumbi	257	10
	Mariakani	774	20
	Maurivirini	821	21
	Mgandini	848	20
	Mwabila	504	12
	Mwanda	552	13

	Pemba	236	7
	Vitsakaviiri	120	2
	Maweu	55	1
		4589	120
TARU	Egu	143	7
	Jaffery	417	10
	Mgalani	112	3
	Nyari	Closed Down	
	Taru	763	20
	Bahakwenu	112	4
	Kilibasi	167	7
	Busho	111	7
		1825	58

Several points come out of this data and interviews with officials and parents in Kwale. First, the enrolment is uneven in the district. The locations of the interior do not get as many children per school and thus per class as the coastal locations. It is assumed that this is related to food availability and distances between homes and schools. Most of the schools are nowhere near the MOE class guideline of 50 students per class. Second, because of poor facilities the interior schools proportionately get less teachers.

Beyond the formal data it is estimated that only about 60% of the children who should be in school actually attend.

Ironically in spite of these limitations, the DEO makes the point that the passes in the interior are much better on the average than the coastal area.

However it is clear that establishing schools, staffing them and getting low enrolments is counter productive in the long term. To maximise the use of the educational resources enrolment in the interior must be increased. It is explained that enrolment is low because of food shortages and vast distances. Clearly the proposed WFP Primary School feeding programme ought to have positive contribution towards increasing enrolments for primary schools. Enrolment for Secondary schools is shown in Table 20 below.

Table 20: High School Enrolment by Location and School 1990

Loc.	H.S. Name	Enrolment	
Tsimba	Kwale High	638	
	St.Marys	205	
Total			845
Waa	Matuga	497	
	Waa	443	
Total			940
Kinango	Kinango	321	
Total			321
Majimboni	Shimba Hills	430	
Total			430
Taru	Taru	371	
Total			371
Msambweni	Msambweni	320	
	Mivumoni	120	
	Ramisi	185	
Total			625
Kasemeni	Mazeras	443	
	Mbobolulo	139	
Total			582
Lukore	Lukore	241	
	Kichakasimba	36	
Total			277
Ngombeni	Ngombeni	118	
Total			118
Vanga	LungaLunga	120	
Total			120
Diani	Diani	216	
Total			216
Ndavaya	Ndavaya	147	
Total			147
Tiwi	KayaTiwi	113	
Total			113
Mwavumbo	Mwavumbo	40	
Total			40
Kikoneni	Kikoneni	18	
Total			18
Mkongani	Mkongani	26	
Total			26
District Total			5187

Source:DEO

The high school enrolment data shows that the interior schools do not have the normal registration. Out of the five thousand high school students, close to four thousand are in the coastal divisions. Most classes are way below the MOE guideline of 40 students per class.

Teacher Qualifications

52% of Kwale primary school teachers are untrained. Of the 48% trained the majority are in the coastal divisions according to the District Education Office. Even where some trained teachers are posted to the interior, they struggle to get to the coastal divisions or exit from the district for school facilities, teacher houses on school compound or commercial buildings for hire are lacking in the interior.

Early Childhood Education

UNICEF has supported early child education through the DICECE Programme for a while. This programme has not only contributed to the tracking of children for school education but has been significant in building up early childhood education teaching capacity in the district.

The programme has trained 88 teachers between 1985/86 and 1989/90. For 1990/91 it expects to train an extra 58 teachers, thirty of whom will be targeted to the madrassa system. A few madrassa oriented teachers have been trained in the past.

One of the major innovations is the integration of normal education with madrassa. This is significant in the dominantly Muslim areas for the past practice has been to press children to continue with religious education in the Madrassa at the expense of normal education. Table 21 below shows the Madrassa in Kwale dealing with Pre-school children although there might be some more madrasa which are dealing with the pre-school age children that have not yet been visited by DICECE and thus are not listed. It is expected that the programme will expand to service these schools over and above the support to Muhaka Resource Centre which pioneered the integration approach.

Table 21: Madrasa With Pre-School Age Children 1991.

Madrasa	Location	Division
Islamiya	Vanga/LL	Msambweni
Bushra	Vanga/LL	Msambweni
Tahadhib	Pongwe/Kidimu	Msambweni
Ahlul Bait	Pongwe/Kidimu	Msambweni
Mkwiro	Pongwe/Kidimu	Msambweni
Ridhaa	Diani	Msambweni
Irshad	Diani	Msambweni
Murkoz	Diani	Msambweni
Hudaa	Diani	Msambweni
Muhaka Islamic	Kinondo	Msambweni
Aqswa	Kinondo	Msambweni
Noor-al-Huda	Diani	Msambweni
Answar	Kinondo	Msambweni
Marwat	Kinondo	Msambweni
Hidaya	Kinondo	Msambweni
Islamiya	Kinondo	Msambweni
Shamsigya	Kinondo	Msambweni
Fauzi	Kinondo	Msambweni
Tagwa	Kinondo	Msambweni
Nur	Msambweni	Msambweni
Anwaari	Msambweni	Msambweni
Mnaje	Msambweni	Msambweni
Moyeni	Kinango	Kinango
Kinango	Kinango	Kinango
Gora	Samburu	Kinango
Samburu	Samburu	Kinango
Taru	Taru	Kinango
Jaffery	Taru	Kinango
Burani	Mwaluphamba	Kubo
Tawakal	Tiwi	Matuga
Safina	Tiwi	Matuga
Rahman	Tiwi	Matuga
Hudaa	Tiwi	Matuga

The early childhood programme should not be expected to incorporate other programme activities of interest to UNICEF and JCGP in general as is suggested in some of the documents. It should remain strictly educational and get services on other health and nutrition related issues from other programme activities and personnel.

Development Strategy

Education is not just a social right but an important contributor to the long term development of a district. This is recognised by the population of Kwale which has organised 58% of all Self Help Groups to service the sector. Therefore dealing with the identified bottlenecks to educational expansion and quality is a worthy undertaking by JCGP.

A good start has been made by the DICECE programme. It should be continued with only an education focus. Further projects to deal with facilities and teacher education should be developed.

Discussions in with MOE officials point out that the major development bottleneck for education in Kwale in general is the great proportion of untrained teachers. Since most of the trained teachers are from without the district, there is high exit from the district and the MOE is worried that the proportion of untrained teachers will increase over time. It was on the basis of this that the MOE proposed a special training programme for Kwale Primary school teachers.

In 1991, in Shanzu Teachers College in Mombasa, there are 60 Kwale teachers undergoing training. Since there are 1178 untrained teachers, such a programme does not make much impact. In the opinion of District educators they think getting about 120 teachers into the special programme will be useful. Note that it will still be 20 years before all untrained teachers are covered! However, given normal entry and improved conditions for local people, it is expected that the proportion of untrained teachers will decline if the special programme is expanded to produce 120 teachers a year. This should be supported by JCGP.

Facilities in the schools which are most short are buildings, equipment and books. On equipment and books, the consultant recommends a JCGP budgetary support through the district for the poor interior schools. This is straightforward for the standard requirements are know by MOE.

On buildings, the consultant suggests a mixed strategy involving UNICEF and WFP primarily for both already have school programmes. The problem is the environmentally unsound construction of school buildings with a lot of wood and mud. This wood is cut in an area short of wood resources. The mud constructed classes also do not last for white ants attacks are especially vicious.

Buildings can be upgraded easily with uneven stone construction to save the community the environmental cost as well as to assure sanitary classrooms. Construction of classrooms can be undertaken by food for work. Since roofing materials and cement, for floors mainly, will be needed, monetization of food could be tried. If WFP cannot handle monetisation easily, perhaps the other JCGP agencies can produce the cash for roofing materials and cement.

The WFP school feeding programme will need sure sources of water for the schools feeding programme. This can be provided perhaps by expanding the UNICEF programme providing water tanks to schools to be constructed by the local fundis proposed under the section on Water development.

AGRICULTURAL DEVELOPMENT FOR SELF SUFFICIENCY

Crop Production

The following table shows the pattern of major crop production as culled from assorted annual reports of the MOA. This type of data is always statistically problematic for it is dependent on self reporting. It is included to show indicative trends.

Table 22: Agricultural Production 1984-1989.

	Year	Ha.	Tons
MAIZE	1984	28198	24558
	1985	20600	37080
	1986	19263	35332
	1987	19305	11167
	1988	20600	37880
	1989	22254	42283
RICE	1984	198	128
	1985	245	221
	1986	1448	869
	1987	709	12064
	1988	958	1437
	1989	1758	2778
CASSAVA	1984	20317	304754
	1985	15000	150 000
	1986	4254	42540
	1987	4606	46060
	1988	7814	78140
	1989	10000	115500
MILLET	1984	85	26
	1985	146	64
	1986	72	31
	1987	-	-
	1988	-	-
	1989	-	-
SORGHUM	1984	-	-
	1985	-	-
	1986	179	160
	1987	187	52
	1988	97	49
	1989	360	242
COWPEAS	1984	2137	2309
	1985	1912	1368
	1986	1370	685
	1987	958	480
	1988	1676	1006
	1989	1909	1043

PIGEONPEA	1984	72	32
	1985	371	200
	1986	142	71
	1987	90	46
	1988	185	93
	1989	-	-
BEANS	1984	902	487
	1985	1553	1225
	1986	776	388
	1987	407	205
	1988	414	248
	1989	1060	592
CASHEW NUTS	1984	18536	12975
	1985	18232	12762
	1986	17679	12375
	1987	17681	12377
	1988	17712	12398
	1989	18565	12996
COCONUTS	1984	15410	92460
	1985	15800	94800
	1986	16300	94800
	1987	16445	28601
	1988	16956	25434
	1989	18667	28000
SIMSIM	1984	3953	2372
	1985	1490	800
	1986	963	482
	1987	718	359
	1988	511	257
	1989	1591	868
BIXA	1984	2805	2500
	1985	2820	2513
	1986	2810	1974
	1987	2810	1967
	1988	2941	1472
	1989	3172	1586
MANGOES	1984	3891	19455
	1985	4278	21390
	1986	4295	19328
	1987	2357	19328
	1988	2435	13525
	1989	2500	13750

SWEET POTATOES			
	1984	290	870
	1985	1218	3659
	1986	696	278
	1987	305	1220
	1988	305	1220
	1989	350	1400
BANANAS	1984	3593	35930
	1985	3930	39300
	1986	4469	44690
	1987	4510	38500
	1988	4852	38816
	1989	5200	41600

Given the brevity of time to settle some of the quantitative production data, the balance of this section is dependent on data gleaned from interviews with farmers, district officials and consultants working in Kwale.

It is not agreed that Kwale is a food deficit district. What is agreed is that there is a lot of production in the district which rots in farms without getting to district populations who need the food or markets outside the district. Thus there appears to be food shortage in some areas because of distribution problems.

This is especially so for vegetables and horticultural products surpluses of which are concentrated in Kubo division. Farmers told the consultant that they were selling oranges at 20-40 cents at the farm gate when they cost Ksh. 2 at Ukunda and Ksh. 4 at Kinango during field work. The problem is essentially farm to market roads. The situation is so bad that even coastal hotels which can get products near them refuse to give long term orders because of the unreliability of supply. More insidious is the shortage of grains in some parts of the district, especially the interior, while other parts have surpluses rotting. A case in point is the surpluses in Kubo and Kikoneni this year while Samburu is getting food relief.

The historically derived farming system understands agroforestry as shown by the integration of coconuts, cashew nuts, bixa and citrus in the appropriate zones. Farmyard manure availability is limited by the tse tse menace which kills livestock. Few families in the higher potential areas integrate livestock in the farming system.

For the long term the issue of soil fertility in Kwale agriculture is still problematic. It is yet not addressed in any of the project documents. It is serious enough that some farmers are moving out of the high rainfall hills (Lukore) to go to the drier areas (eg Godini) since soils are getting exhausted after only twenty to thirty years of continuous cultivation. Techniques for incorporating the natural mulch into the soils must be extended. They do not feature anywhere in project documents.

Given the flush growth after the rains, Kwale farmers have serious technique and labour problems in working the land. The strategy of introducing ox ploughing is partly targeted at this production bottleneck but given the tsetse menace one wonders whether it is realistic until the tsetse are controlled. Again given that the proposed tsetse trap will take 2 years to develop and there will be limited extension in the third year, one has serious doubts about the utility of the strategy now.

Compared to 1972, when extensive work was done in the district whilst planning Kwale Special Rural Development Project, there are now soil and water conservation structures seen on the ground especially in Kubo division and parts of Kinango division. Yet still extensive farming without conservation structures is done. Erosion is particularly noticeable in Kasemeni and other areas of Kinango Division as well as the steeper sides of the central hills in Matuga and Kubo divisions.

The IFAD project will begin to address erosion problems but it is clear that the planned activities are not sufficient. Perhaps there is need to get into mass mobilisation for soil and water conservation structures rather than paying for a few officials to go out to meet farmers.

Sugar cane farmers in the District have serious problems since the major sugar company has collapsed. Currently, there are two international and two local companies who are discussing with the GOK possible take over of the Ramisi Sugar Estate in Msambweni Division. If these discussions are not finalised soon, the strategy suggested by the Provincial Agricultural Board by its licensing of 4 jaggeries in its November 22 , 1988 meeting should be actively pursued. Allowing jaggeries will at least get some cash to the sugar cane farmers as they convert to other crops.

The IFAD project report for 1990, shows that the target population in Kwale is 16,000 for the pilot project. It is not clear which proportion of the 25,000 to 30,000 beneficiaries identified for IFAD Coast ASAL will be from Kwale although the report makes it clear it will be focused on former Kinango division, now split into Kinango and Samburu. This ignores the high potential areas of Kubo which by all accounts are the producers of surpluses especially horticulture.

Crop seed/seedling bulking and multiplication was seen as central in IFAD programmes. It is also proposed by ICIPE for their project. Given that the unit cost of the public operations are usually high and that the bulked materials find their way into the national agricultural system although they are planned for a particular district, a real question remains on whether some of the bulking activities, eg nurseries, cannot be delivered more efficiently by the farmer entrepreneurs already doing it. The strategy question is whether JCGP should not be giving such farmers seed money to

increase their operations.

The IFAD programmes stress the importance of improved seedlings. These are to be produced in public nurseries/plots. The ICIPE proposal and interviews suggests the use of their plot at Muhaka for seed bulking although it also alludes to using food for work to get farmers to produce seeds.

There appears to be practices which challenge these assumptions. Significant innovations in private nursery bulking of seedlings have started. For example farmer's private nurseries around Lukore are able to sell their seedlings at prices lower than the MOA as shown as below.

	IFAD 1989		MOA 1991	Lukore Farmer
	Actual	Proposed	Actual	Actual
Coconut	1.50	4.00	6.00	3.00
Citrus	8.00	9.00	15.-25.00	6.00
Mango	12.00	12.00	15.00	6.00
Banana	5.00	15.00	12.00	5.00

Obviously the MOA has problems moving its seedlings and is resorting to administrative measures to limit the operations of the private nurseries. It is clear to this consultant that the bulking of seedlings by the ministry is not the central issue in the long term strategy for developing agriculture in the district.

High Technology Agriculture.

Historically, the bulk of Kwale agriculture was driven by historically settled peasants or migrant peasants who were settled by government in the 1950s or later. During the colonial period limited plantation agriculture in sugarcane production, coco nuts and cashew nuts was started but it was not big enough to impact on the agricultural development of the district. Commercial ranches were not extensive either. The bottleneck was infrastructure.

In the past 10 years high tech agriculture has begun to move into the district. It is based on sophisticated irrigation of vegetables and fruits. This activity is dominated by managers of the tourist hotels who can sell to the yet closed market. It also has extensive production of chickens and pigs. This is driven by access to the beach hotel food waste as supplementary feed.

An interesting strand of high technology is the investment of very experienced, third generation Kenyans of European extraction, who are buying up masses of land for growing castor seed and simsim. It is conceivable that their large investments will begin to build up some local processing capacity as well as providing knowledge to the smallholder agriculture.

Another significant strand of high tech agriculture is the building of a fruit processing plant in Kwale town. This is a joint venture company of Kenyans and some Italians. It is expected to encourage expansion of fruit growing in the district. One wonders though whether in the first years it will get enough product to process, even regionally, since another plant in Kilifi district, which in some ways has more developed fruit production, is still short of products.

We point out these strands of high tech agriculture for it is likely to have extensive spread effect on the rest of Kwale agriculture. Significantly, it has not yet got into beef and milk production for the tsetse menace is too expensive to deal with.

Development Strategy

Kwale's maximum cultivation potential has not been reached. Productivity per hectare is still very low. The bottlenecks are labour, equipment and income levels which can only rise with better marketing, which in turn is dependent on improving roads and farming technologies of manuring, water and soil conservation, nitrogen fixation and marketing technologies among which are cooperatives and input supplies through cooperatives and individual traders. Development resources should be spent on these farming technologies.

GOK research institutions in the coast are very busy developing seed for the major crops found in the coast. The usual bottlenecks in adapting new seed/seedlings is availability in the market. It seems to this consultant then that the strategy for assuring the use of better seed is in improving supply. This calls for distribution networks through both cooperatives and individual traders. A major innovation should be to try private contractors for growing the seed and seedlings required.

The Small Scale Business Development strategy of UNDP should be useful in financing equipment repairers, seed suppliers and commercial nurseries urgently needed in Kwale agriculture. A possible strategy is to create a fund for financing this at the district level. Another modality is to create a special fund in the banks operating in Kwale and to lend the money for these activities commercially or with some interest relief.

Government extension should put resources into soil and water conservation, development and introduction of soil improvement techniques like mulching (ploughing under or cultivating under the excess growth) rather than burning for soil improvement, introduction and testing of farm tools and equipment able to handle some of the fragile soils and finally to work out strategies of introducing appropriate nitrogen fixing shrubs and trees into the farming systems.

Given the availability of some surplus food in the district, WFP may wish to consider buying its grain requirements for food for work in the district from those areas with surpluses and moving it to the areas of shortage. This will not only stimulate intra district marketing but will also give local transporters some income.

LIVESTOCK DEVELOPMENT AWAY FROM RANGE

One of the more serious problems in the long term development of Kwale is the assumption that the Kinango Division is inhabited by pastoralists and thus the development strategy should be dependent on the creation of ranches. This position is not backed by the land use and farming systems currently found in the division.

First, the population of Kinango has been sedentary for a long time. That they keep cattle is not questioned. However the system is not pastoral. It is a mixed cultivation and livestock keeping system.

Second, significant numbers of the population have lost cattle in the recent past. The main causes of the cattle losses where the droughts of the seventies and the eighties and tsetse driven East Coast Fever, whose prophylaxis and treatment are too expensive for the farmers. Those who loose cattle become cultivators for investments are lower in cultivation than in livestock production. As has been extensively studied and reported in this country (See Republic of Kenya, ASAL Policy Development Draft 3 : 7 September 1990 for latest evaluation) the conventional range management strategy dependent on large scale ranches is not tenable for 1. density of population reasons, 2. the pressure for individual title to land 3. the inappropriateness of large scale derived techniques and 4. cannot address vegetation improvement and especially soil improvements based on water conservation and nitrogen fixation.

Further, classical range management does not address the issue of the increasing drop outs from livestock keeping forced by natural calamities and/or conscious decisions to invest elsewhere.

Map 3 shows the proposals of the MOLD to increase the numbers of ranches although most of the existing ranches are not systematically operated as ranches and there are significant numbers of cultivators within what is are considered ranches. Other ministries in Kwale, especially Provincial administration, do not support the expansion of ranches for they are aware that many families do not utilise them since they are cultivators. This is not only backed by field observation but is also suggested by the agro ecological classification of the District as shown in Map 4. Those who utilise the so called range areas, more often than not are the more well off.

Further, the departments argue that if land is not adjudicated to individual tittle, significant numbers of Kwale population will be denied access to the national credit system which is based on individual title. This is a national issue which has led to some areas in so called range districts like Narok, Kajiado and Samburu leaving ranches and moving towards individual title land registration. There is no logical reason why Kwale should be left out of the national pattern for its so called range areas have more

potential than even districts like Kajiado and Laikipia.

Given these facts and further that there is extensive cultivation in areas which formalistically are supposed to be ranches, the consultant does not support the expansion of group or cooperative ranches.

The major livestock production bottleneck, as strongly argued by the MOLD is East Coast Fever, transmitted by Tsetse fly. The adaptive research project of IFAD through KARI and ICIPE is supposed to address this problem by first developing a fly trap more efficient in trapping the tsetse species found in the coast. The one developed in Narok does not seem top be as effective on the coastal tsetse species. The importance of the trap is in reducing the fly population at about a cost of US$ 8.00 (about Ksh. 200) per sq. Km as opposed to US$ 500 for spraying.

Three programming issues though remain to be addressed by JCGP. First, the first two years of the project period will be spent on modifying the trap. It is only in year three that there will be wide distribution. For JCGP group the programming issue is whether the adaptive research can be speeded up and field application started.

Second, the operations site of the adaptive research activity is supposed to be about 100 sq. km around the Muhaka Centre. Two traps per square km. will be put out. This is in the Diani Ukunda environs, again coastal although by all public knowledge there are few animals there. ICIPE argues that they cannot go out of the area since it was chosen by the MOLD. There may be scientific reasons for this location but application reasons would suggest that the site be related to the areas producing livestock. These are found either in the extreme south West part of Msambweni division or more significantly in the Kinango and Samburu Divisions. Adaptive research dictates that the adaptation must be as near as possible to application and utilisation.

Third, assuming that the adaptive research density of 2 traps per sq. km. would have to be maintained in application, the district will need close to 17,000 traps to cover its area of 8,257 sq.km. The logistics of maintaining such a system in the public arena are daunting. A mixed strategy for maintaining some by public institutions and mainly by livestock keepers is possible. However, this will call for detailed planning now so that if and when the system is available, it can be manned effectively. Who is doing the implementation planning for this?
It is important that the research and extension activities get out of the coastal areas to the Kinango and Samburu districts where the bulk of the district cattle population is found. If the activities do not emphasize the interior, they will be bent to serve the few coastal cattle farmers who are generally more wealthy than the interior smallholders.

Development Strategy

The demand for livestock products exists. The major bottleneck is the tsetse fly. Dealing with it is the fist priority for large investment is lost yearly from East Coast Fever. The planned activities to control it should be speeded up so that the adaptive research stage can get into implementation.

Beyond the control of tsetse, the overall district strategy should emphasize the smallholder livestock producer, for the range strategy is not in tune with the demographic and farming systems changes apparent on the ground. Thus small holder grazing improvement, especially soil and water conservation and nitrogen fixation activities should become central. Smallholder breed improvements are in order. They should be strengthened.

Some small stock, especially chickens and pigs, have a ready market in the tourist sector. They should be specifically targeted for development. Honey is extensively consumed in the tourist sector. Its processing by small scale methods should be a major source of income especially in the dry hinterland. Its marketing to the sector should be easy.

For Kinango and Samburu divisions, the provision of water for livestock is crucial. It should be provided by appropriate technologies which do not a priori deny one method (See discussion under water.).

A controversial point is the subdivision of ranches. The only support in the district is confined to the MOLD. The consultant's view is that such a breakup will be advantageous from a land use, credit access and development point of view. Support by JCGP should be for the Ministry of Lands to build up land adjudication in the hinterland where lack of individual tittle denies most small holders credit for investing both in agriculture and livestock production.

HEALTH FOR SUSTAINED DEVELOPMENT

UNICEF has extensive experience in Kwale. Its projects over the years have addressed many issues ranging from nutrition, institutional capacity building in health and other departments and recently community based health care.

On reviewing this experience one is struck by how widely spread out the programme given its meagre funding. The impression is created that UNICEF is a donor for all development activities in the district. The consultants view is that there is nothing wrong with this, if adequate resources are availed for the activities and adequate management of the programme is in place to support DF.

Given the limited resources UNICEF commits to the scattered activities raises some fundamental issue of what the programmes are supposed to achieve in long term framework.

Table 23 shows the facility coverage of the district. The outstanding fact is that the coverage of the facilities is biased first towards the coastal area. Second, it is clear that the district hospital is in a peripheral part of the district. People in Kinango, Samburu and even Kubo division rarely travel to Msambweni District Hospital. Further, even with moving the operations of most district health staff to Kwale is not likely to assure the district population adequate coverage for communication to Kwale District Headquarters is problematic especially from Kinango, Samburu and the south west parts of Msambweni divisions.

The solution to these siting problems is to build up Kinango Hospital to be able to cater to the people who cannot conveniently get to Msambweni for the Mombasa alternative is not ideal given the crowding in Mombasa facilities.

On facilities, there is still room for expanding the support in CSD for the upcoming dispensaries. These offer real service to the immediate communities- a point usually lost in contradistinction to thrust for community based systems. As shown above, each location now has at least one facility. The coverage by facilities is not bad. What still is problematic is he availability of staff, drugs and health services.

Table 23: Public and Private Health Facilities 1991

	Location	Facility
Hospitals		
	1. Msambweni	Msambweni
	2. Kinango	Kinango
	3. Kwale	Kwale
	4. Tiwi	Tiwi
Other Facilities		
	1. Majimboni	1. Shimba Hills
		2. Makwangani
	2. Kikoneni	1. Kikoneni
		2. Mrima
	3. Vanga LL	1. Vanga
		2. Vitsangaraweni
		3. Lunga Lunga
	4. Samburu	1. Samburu
	5. Taru	1. Taru
		2. Nyari
	6. Ngombeni	1. Ngombeni
	7. Waa	1. Waa
	8. Diani	1. Diani
		2. Mbwani
		3. Mwamivi
	9. Kinondo	1. Muhaka
		2. Mwambugo
		3. Mwamua
	10. Msambweni	1. Majoreni
		2. Mivumoni
	11. Mwavumbo	1. Mazeras
		2. Mwanda
	12. Mwereni	1. Kilimangodo
	13. Ndavaya	1. Ndavaya
	14. Samburu	1. Kibandaongo
		2. Makamini
	15. Mtaa	1. Bofu
		2. Mnyenzeni
		3. Mtaa
	16. Kinango	1. Lutsangani
	17. Chengoni	1. Mackinon Road
	18. Tsimba	1. Matuga
		2. Mazimalume
		3. Vyongwani
	19. Pogwe Kidimu	1. Shimoni
	20. Mwaluphamba	1. Mwaluphamba
	21. Majimboni	1. Makwangani
	22. Mkongani	1. Mkongani
		2. Kibuyuni
		3. Kizibe
	23. Lukore	1. Lukore
		2. Kichakasimba
	24. Puma	1. Virungani

Development Strategy

It seems to this consultant that UNICEF should concentrate on delivering health programme other than being involved in many sectors (line Ministries) as suggested by the immediate past work plans given its current funding levels. The reason is simply the issue of impact in the health sector. Towards that end resuscitating and continuing the Health Information is priority. So is equipping the many new facilities and upgrading Kinango hospital. This is an area worthy of joint funding by all the JCGP group if UNICEF would like to emphasise the Bamako Initiative.

On the disease pattern, it is clear that Kwale's major health issues are Immunisation, malaria, worms, schistosomiasis and STD/AIDS.

There is a clear need to focus on mass campaigns on immunisation, deworming and to deal with schistosomiasis. Given the limited facilities and the bad communication in the district, it may be a useful idea to deliver these through the school system and to include the siblings and parents of the pupils. Such techniques have been used effectively in this country in the past. There is extra merit in them especially in Kwale for other than just relying on static facilities or groups, they lend themselves to better organisation of delivery and very large coverage.

The UNICEF programme activity on building school water tanks, the proposed WFP activity on school feeding and the UNFPA activities on population can be bunched up and delivered through the school system to facilitate more rational resource uses and also to increase the long term impacts on the activities for they would be targeted to the future population.

STD/AIDS is a particularly intractable problem particularly in the coastal divisions of Msambweni and Matuga. No systematic mass programme activity dealing with this problem is evident on the ground. It is the consultant's view that developing such a programme is priority for the problem has got so out of hand that even Provincial administration and police in Kwale are involved. Their objective is to control those identified from interacting with the tourist sector but nothing seems to be done to treat/control those in the coastal communities not directly tied to the tourist sector.

Finally, there UNFPA has proposed some IEC activities for Kwale. These are proposed again as is fashion in the coastal area initially. They are to be delivered through MCSS, Adult Education. Given the urgency of STD/AIDS a more mass effort may need to be designed to go along with this national programme. It is also clear that the coverage should be district wide. Towards achieving this, JCGP may wish to work out how information and other resources can

be shared particularly for the under school population and young adults.

ADMINISTRATIVE REORGANISATION FOR DEVELOPMENT.

Currently 1990 Kwale District is divided into five divisions which are Matuga, Kinango, Samburu, Kubo and Msambweni. The location of the District in Kenya is shown in Map 5.

When the current District Development Plan was prepared in 1988, the district was divided into four administrative divisions. These were Matuga, Kinango, Kubo and Msambweni. These were further subdivided into 24 locations and sixty nine sublocations. The divisions and locations in 1988 are shown in Map 6 and Table 24.

Table 24: Kwale District Administrative Units 1988

Divisions	Matuga	Kinango	Kubo	Msambweni
Locations	Ngomeni	Kinango	Lukore	Msambweni
	Waa	Mtaa	Majimboni	Pogwe/Kidimu
	Tiwi	Puma	Mwaluphamba	Kikoneni
	Tsimba	Taru	Mkongani	Diani
		Chengoni		Kinondo
		Kasemeni		Mwereni
		Ndavaya		Lunga Lunga
		Mwavumbo		
		Samburu South.		

Source: DDP

It has always been clear to the administration that the location of development facilities and administrative centres clearly were determined by access and they in turn shaped the development of the environs. The oldest administrative centres of Shimoni, Msambweni, Kwale and Kinango, historically established for easy communication, are currently not suitable for the geo-physical demands of the rest of the district. Yet their existence and the existence of buildings in Matuga and Shimba Hills, led to the creation of divisional administrative centres there.

Msambweni is one of the first administrative centres. The colonial DC used to be based there and as a result, the district hospital still there is now on the periphery of the district.

The growth of tourism along the district's coast has led to a concentration of population and economic service activities along the districts northern coast which has marginalised both Msambweni and Kwale (the district capital) from being the premier service and economic centres. The Diani/Ukunda complex is now the premier economic/service node. This has been recognised by the security system which has located a police station at Ukunda. There is no administrative division located in this complex.

Since the preparation of the current development plan, it became

clear that Kinango division could not effectively administer forty seven percent of the district as shown in Table 25.

Table 25: Divisional Area and Population

Division	Area Sq. Km	Pop. 1979
Matuga	340	46327
Kinango	3837	94713
Msambweni	3331	118073
Kubo	434	29250
Total	8257	288363

Source: DDP

Consequently Kinango Division was divided into Kinango and Samburu divisions. However due to lack of resources to build the DO facilities in Samburu, he still operates from Kinango. Clearly then one of the development needs for closer district administration is to build up administrative facilities for the new division of Samburu so as to relocate not only the DO but other development staff. Other infrastructure like water are needed for this new division.

Discussions in Kwale and analysis of administrations and development needs of Kwale, suggest that further reorganisation of divisions is useful so as to first:

a. Focus development on a divisions comparative advantage,
b. Solve specific division's development constraints and
c. Create a development and administrative structure which takes advantage of the emerging communications infrastructure to cheaply serve the greatest number of people.

Towards that end, in the near term it is necessary to create a new division at Ukunda to replace Matuga which is in a cul de sac. Thus there will be five divisions in the district with distinct economic development and administrative needs. These divisions, their locations and the 1990 population estimates are shown in Table 26 Proposed Divisions below.

Table 26: Proposed Kwale Divisions and Locations 1991

Division	Location	Population
MSAMBWENI		
	Vanga LL	22370
	Pogwe Kidimu	7990
	Kikoneni	31723
	Msambweni	26730
	Kinondo	13039
	Total	101852

UKUNDA			
	Diani	29737	
	Waa	12079	
	Tiwi	14259	
	Ngombeni	17273	
	Total		73348
KUBO			
	Lukore	4899	
	Mkongani	15365	
	Mwaluphamba	14188	
	Majimboni	5079	
	Tsimba	16911	
	Total		56442
KINANGO			
	Kinango	22920	
	Puma	18121	
	Ndavaya	9303	
	Mwereni	23124	
	Kasemeni	14001	
	Total		87469
SAMBURU			
	Chengoni	8152	
	Taru	10129	
	Mtaa	7140	
	Samburu	17323	
	Mwavumbo	20003	
	Total		62747

Divisional Centres would be Msambweni, Ukunda Shimba Hills, Kinango and Samburu. There will be need to therefore develop divisional infrastructure for Ukunda.

The logic of Msambweni Division will be to administer the southern most coastal locations whose economic activities are mainly agricultural, limited deep sea fishing and limited industrial development of a proposed cement factory in Pogwe Kidimu.

Ukunda division development focus would be to develop services related to the dominant tourism industry activities. This will mainly involve semi-processing of the limited agricultural output for immediate consumption in the tourism industry. Significant Jua Kali activities including repair and fabrication, making clothes, laundry etc can be targeted here. There is limited opportunity (by land size, rainfall and quality of soils) for production of food surplus.

Kubo division constitutes the most suitable land for agricultural development in the district. Soils and rainfall are adequate the intermixing of populations from many cultural backgrounds gives the

society good agricultural knowledge base and organisational potential. It is here that concentration on expanding grain, pulses and horticulture and fruits should be intensified. The area is compact and field costs should be low. Market gardening both for the tourist divisions and the ASAL areas will be increased if roads are maintained as proposed elsewhere.

Kinango and Samburu Divisions are essentially ASAL with not only moisture limitations but also soil quality limitations. Pockets of the divisions can produce grains. This should be exploited and production increased by improved water management for food, fodder and smallholder livestock production.

The priority development needs for these two divisions is roads and water. More specifically the Western parts of both divisions need linkages to adjoining regions within and without the district which are important sources of food fodder and trade. Proposals along these lines are made under the infrastructure section.

Development of water infrastructure is a priority, previous educational health, water and roads programmes have ignored these ASAL area.

Land adjudication should be intensified in these divisions to enable better land use and capitalization of development.

PART THREE

JCGP COORDINATION

General Issues

The issue of coordination between the JCGP group was seen in discussion with the consultancy supervisors as one of the critical issues for this consultancy. At one level, it is a simple matter requiring that the individual members put time and resources to it. Agencies cannot do that however until they at least accept the logic of an area based programme and bend their internal planning and supervision procedures to accept spending management resources in Kwale.

Second, agencies must break out of the mould of programming only those areas in proximity to tarmac roads and beach hotels. This is not just a problem for programmes they develop in house but also any projects put to them for funding.

Third, too many of the JCGP programme people the consultant talked to are using District Focus in an extremely deviant manner, ie refusing to take responsibility about programming claiming that it is up to the district officials to make decisions and they are only taking instructions from them. This is damaging nonsense of the highest order. JCGP staff have professional obligation to work out the programmes together with District Officials. They cannot pass the professional buck to districts.

Coordination

The key issues in coordination are:

1. Project/Programme Planning.
2. Project/Programme Management:-
   a. Implementation Supervision
   b. Monitoring and Evaluation.

Project/Programme Planning.

To date JCGP agencies have planned their projects independently. This ultimately means that details of projects and programmes are different in terms of internal logic, affiliation with ministries/national agencies, project cycles and most importantly satisfaction of Kwale development needs.

Since agencies will remain independent, perhaps the only way to rationalise the project programme planning is to insist that all of them CONFORM TO THE GOK PLANNING CYCLE first.

Second, and equally important, is the need to minimise the number of implementation departments, NGOs, etc involved in the

implementation of a particular JCGP member in Kwale. It denies project/programme logic when the activities lead many to define the elephant in the classical manner.

Third, and still significant, is the need to have specific project officers within the JCGP agencies involved in the planning of area based projects and programmes. In as far as possible, these officers should ultimately write the final project together with the officers to be involved in Kwale.

One of the clear issues in Kwale by district heads is the irrelevance of what is contained in many appraisal documents. Usually GOK field officers are involved during project identification. That often is the last time they are involved until they are required to work out annual implementation plans on projects which have already been cast in concrete. Naturally, one should not be surprised if they ignore the project specifics and seek to maximise their normal operations.

The procedure should then be to meet the field officers of all the ministries to be involved in a project and to hammer out the appraisal and implementation details with them. It is not to present them with a fait accompli.

Some comments on the content of projects/programmes are also apropos. First, projects should not seek to be everything to everybody. There is a sense in which CSD and IFAD projects in Kwale have too many elements and thus too many ministries. The current CSD work plan for January to June 1990 (still in draft!) has 34 separate subprojects. It is the consultant's view that these programmes should be simplified and some of the elements which are minor dropped for thy are being done by the population. Furthermore some can be done by other mass techniques outside the public bureaucracy. Finally, by concentrating resources, one increases the chance of addressing Kwale priorities rather than making development activities an income generating project of a few bureaucrats and their selected groups unrelated to systemic development.

The general rule ought to be that activities which are palliative - a KTB here, a goat there, a trapezoidal bund elsewhere- should be discouraged in future programmes. Where funds are meagre, it probably makes sense to do one thing effectively.

The other point is that JCGP agencies seem to ride each other coat-tails in terms of implementation strategy. For example, if women groups are important for implementation of health activities, does it follow that they are equally important in implementation of tree nurseries or improved livestock keeping? The new find is predicated on that public bureaucracy is inefficient and NGOs are saints.

The danger with the coat-tailing is that all programme activities

are privatised by limited numbers of groups and NGOs in very limited areas. This problem is more acute in the Coast Province where organisational pluralism is less developed than many parts of the country. Consequently, NGOs and groups, in alliance with specific development bureaucracies be they local or international, tend to act as gatekeepers to communities against systemic development. JCGP should take this problem seriously in its programming. For example , for more than 20 years six women have shaped all the programmes which have been targeted to Women in the province. The shaping involves funding, hiring and targeting of resources.

If JCGP group plans a unified programme in Kwale, it should designate specific programme officers to assure coordinated supervision. Currently UNICEF has an Kwale area officer. In the long term, as other agencies increase the level of funding and activities in Kwale, the JCGP group may want to consider designating one officer, within the working group of programme officers,to handle Kwale programme on full time basis. This officer's time will have to be mainly in Kwale. The officer must be senior, experienced, have significant field programme supervision skills and be a tough manager.

There is a sense in which designating area officers and stationing them in Nairobi does not make sense. Nairobi time should be for facilitation only.

Project/Programme Management

DF gives the coordinative role in district programmes to DDCs in general and DEC and DC in particular. Under the DC, the key official is the DDO with his DPU. The DPU according to the DF Circular 1989 should be composed of DDO, ADDO, DSO, Programme Officers. This is the official coordinative machinery at District level. Figure 2, taken from IFAD Programme Appraisal refers.

In Kwale there is no ADDO. The one who was a conditionality for IFAD programme and who was trained by IFAD on programme management was transferred and not replaced. For the future of their programme, JCGP group should discuss the possibility of retaining such staff with the relevant authority, in this case MPND.

The coordinative role of the DPU can be seen as primarily Implementation Supervision assuming that the project/programme planning has been done as suggested above in collaboration with the DPU officials and the relevant DEC members is relevant district head of departments.

a. Project/Programme Supervision.

1. Managing Finances

To date there are two modalities of moving JCGP funds into Kwale. UNICEF organises the AIE and they are issued to DDO. This is the RDF model. On the other hand IFAD organises issuing of AIEs to the specific ministries. Funds are therefore controlled in Nairobi by the various accounting officers (various PSs). This ultimately means that the IFAD Programme Officer, appointed by MRDASW, on one hand, is not bound to coordinate or report to the DDO (under OP). By the same token the IFAD Programme Officer cannot demand financial explanations from other ministries for, as the consultant was told in Kwale "there is no PS who is above the others".

During IFAD Kwale Kilifi identification, it was proposed that the RDF model, by creating a District Development Fund, to be used in districts like Kwale to:

a. facilitate systematic district programme planning.
b. to speed up implementation.

Subsequent missions and appraisals objected to this on the basis of financial accounting by District Accountants and financial management by the various PSs as ministerial accounting officers.

UNICEF uses the RDF model and is basically unhappy about it for first financial accounting reasons and second for programme content reasons.

The consultant believes that on balance finding a formula to take AIEs to districts is a better approach to district programming. What is lacking is programme audit ie relating expenditure to programme activity.

This problem can be tackled by the JCGP agencies following the UNICEF model and ensuring that financial resources are channelled to planned activities. This should be done under the DDO. If need be, particularly if Kwale activities are increased, the JCGP officer identified to be responsible for Kwale should be put in the field to a ensure that programme activities are undertaken before AIEs are cashed by the District Accountant and actively audit the cash flow and programme activities on monthly basis.

The DPU will be equipped with a computerised system to track project activities under the CSD programme. It should be on the basis of this that the designated JCGP Kwale Programme Manager can intervene based on monthly programme activity audits. Shrinkage in cash flow or programme activity should result in immediate termination of funding of the activity.

If JCGP does not want one of its officers playing this role, it can contract it out to locally based development consultants with experience to undertake the role.

Since UNDP and perhaps some of the other JCGP members do not have policy limitations on direct funding, funds can be targeted to specific activities and disbursed by an officer appointed to handle such funds. If a programme manager under the DDO is working in Kwale, funds can be channelled through his office.

2. Managing Programme Activities/Programme Audit.

Some JCGP members are unhappy about the rate and quality of implementation. The basic truth is simply that there has not been adequate activity supervision either from the JCGP group or the public service. As far as the consultant could tell, nobody from the agencies checks on what was supposed to be done. The DPU does not have the capacity. The option is to get the Area Coordinators and DPU to do systematic supervision.

Such supervision can be done only if the activity plans are discrete and specific to particular areas. In the consultants view, AIEs should not be released unless implementing agencies develop these together with JCGP programme personnel. Furthermore, activities should be for specific sublocations locations or divisions. It is not good enough that they are generalised on district basis and thus mystified from either supervision, monitoring and evaluation and even financial accounting.

b. Monitoring and Evaluation.

JCGP has its own monitoring and evaluation needs. These should be fulfilled. However there is a sense in which monitoring and evaluation does not serve Kwale district and neither does it rely on peer group pressure for improved implementation.

GOK is trying a M & E system on development which was initially formulated through IFAD assistance. A good M & E system can be used for programme management over and above the other needs of the funding agency. To ensure that Kwale gets an effective system:

1. Routine M & E meeting should be held quarterly by the JCGP programme officers, the DPU and the DEC (involved ministries).

b. The minutes of such should be tabled officially to the DDC through the DEC.

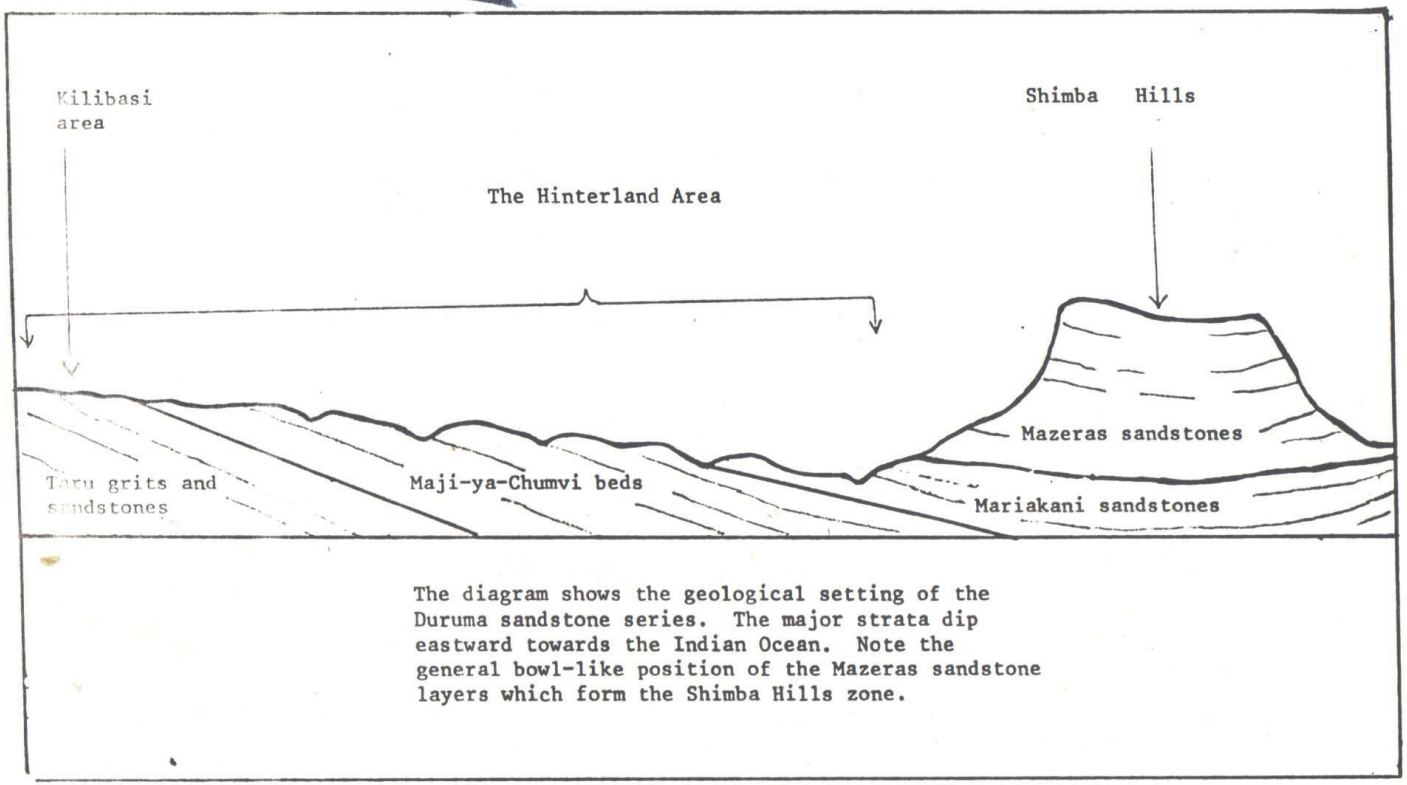
c. The PMEC should show greater commitment to Kwale activities than has been the case to date.

d. Matters reported in such meetings should form part and parcel of the normal M & E for midterm and terminal evaluation

e. M & E should include assessment capacities of particular implementation agencies at District level.

FIGURE 1:

SCHEMATIC SETTING OF THE KWALE HINTERLAND

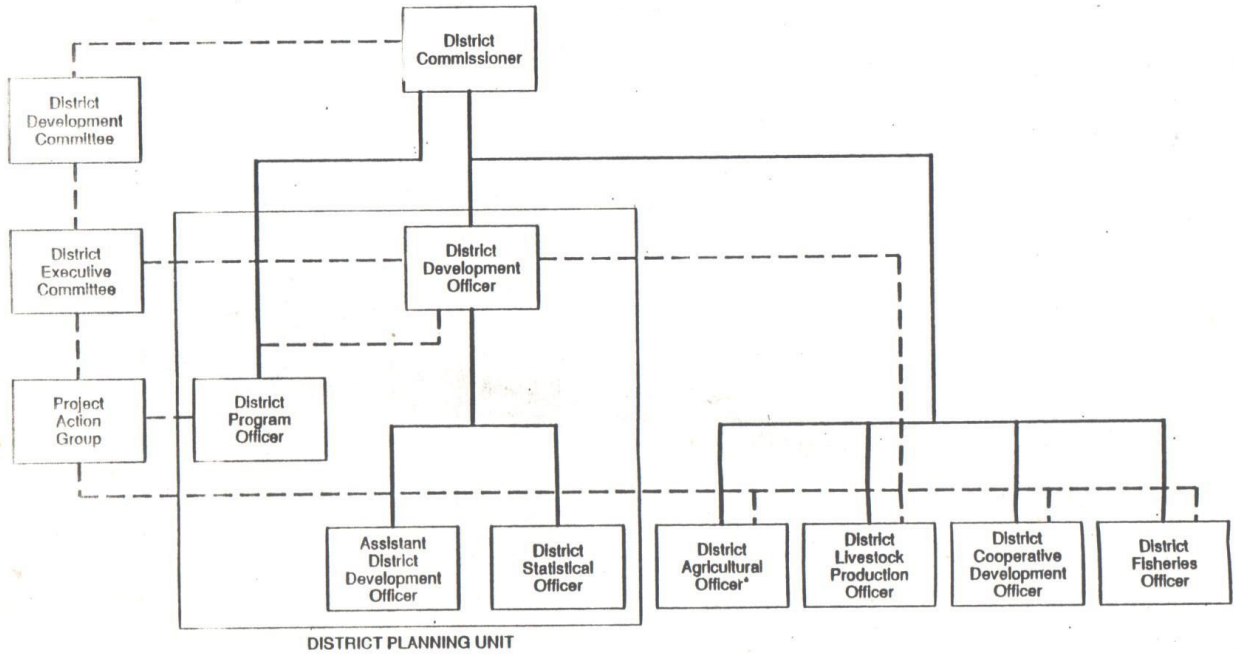


The diagram shows the geological setting of the Duruma sandstone series. The major strata dip eastward towards the Indian Ocean. Note the general bowl-like position of the Mazeras sandstone layers which form the Shimba Hills zone.

Norconsult (1986) Hinterland Ground Water.

FIGURE 2.

KENYA
KWALE AND KILIFI DISTRICT DEVELOPMENT PROJECT
Organizational Structure

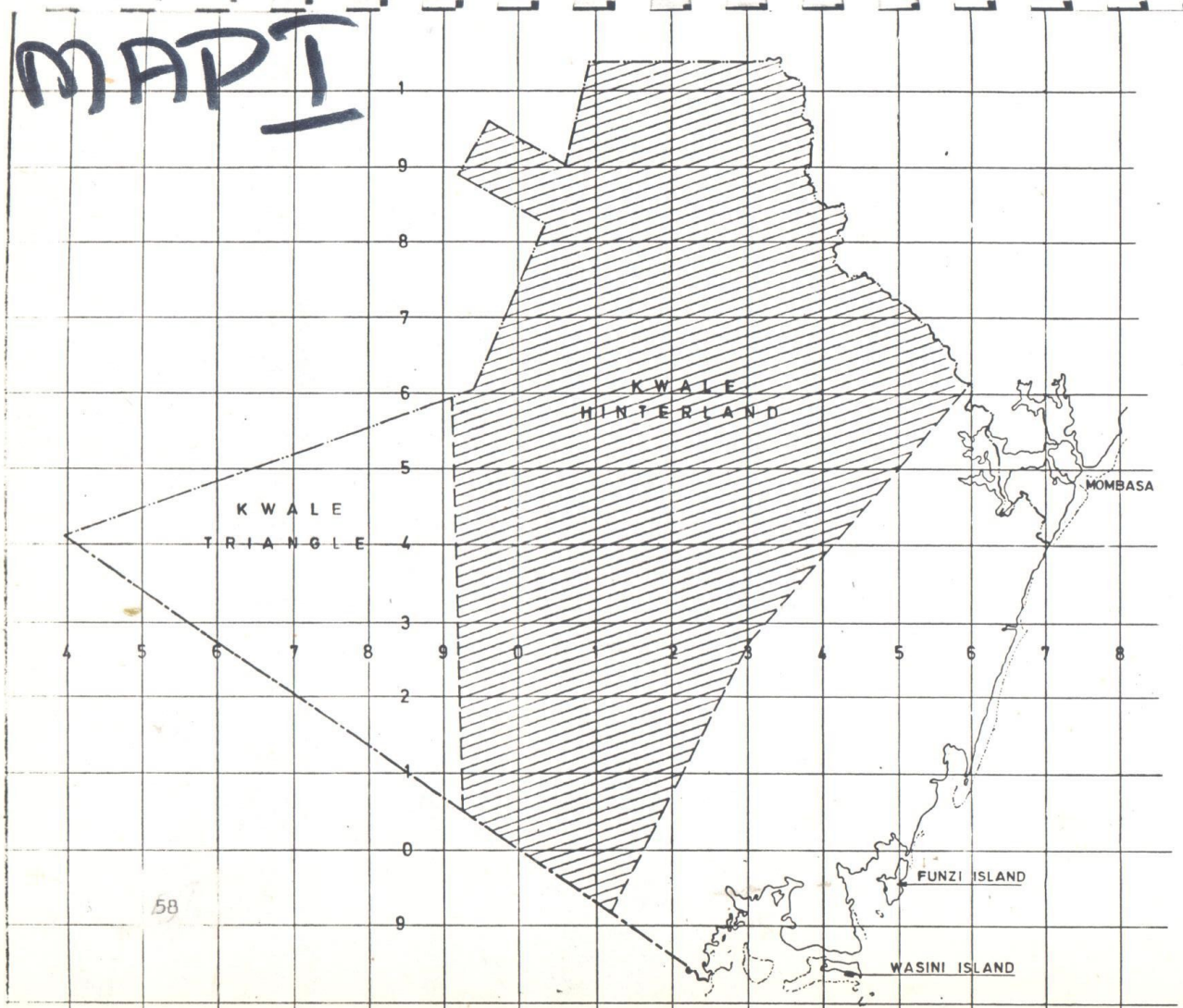


——— Denotes hierarchical relationship
– – – Denotes linkage and coordination

*For nutrition component with District Health Officer and District Social Officer.

cak\w42392

MAP I



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REVISIONS

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SCALE

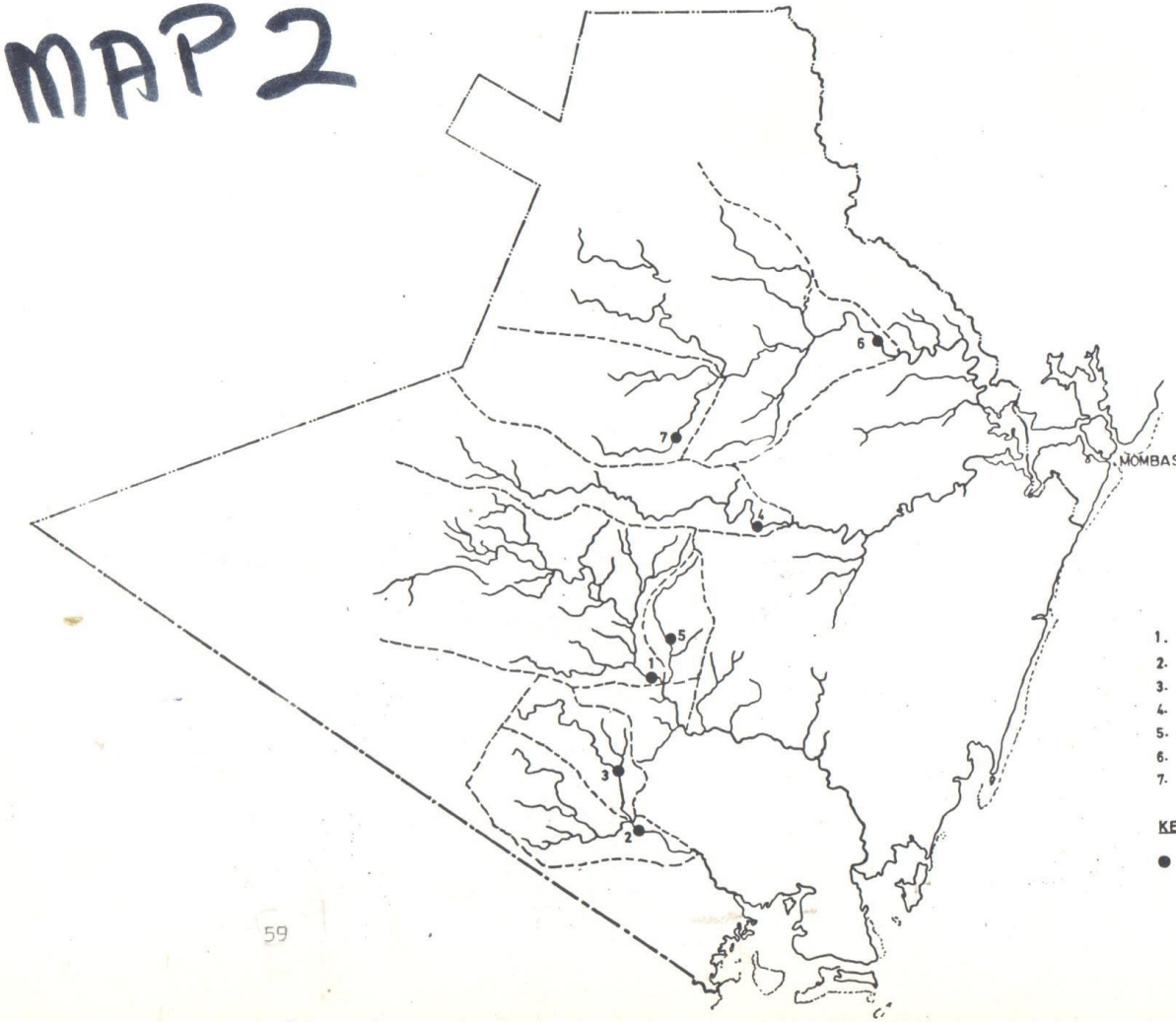
KWALE DISTRICT WATER SUPPLY PROJECT AND SANITATION

LOCATION OF KWALE HINTERLAND

3335 / 300

FIGURE 1

MAP 2



		AREA (KM²)	
1.	UPPER RAMISI	1576.0	KM²
2.	MWENA	257.0	KM²
3.	MWERENI	152.0	KM²
4.	PUMA	360.0	KM²
5.	DZUHORAMAWE	80.0	KM²
6.	NGEYENI	844.0	KM²
7.	VIGURUNGANI	404.0	KM²

KEY

● GAUGING STATION

59

REVISIONS		
LTR	DESCRIPTION	DATE

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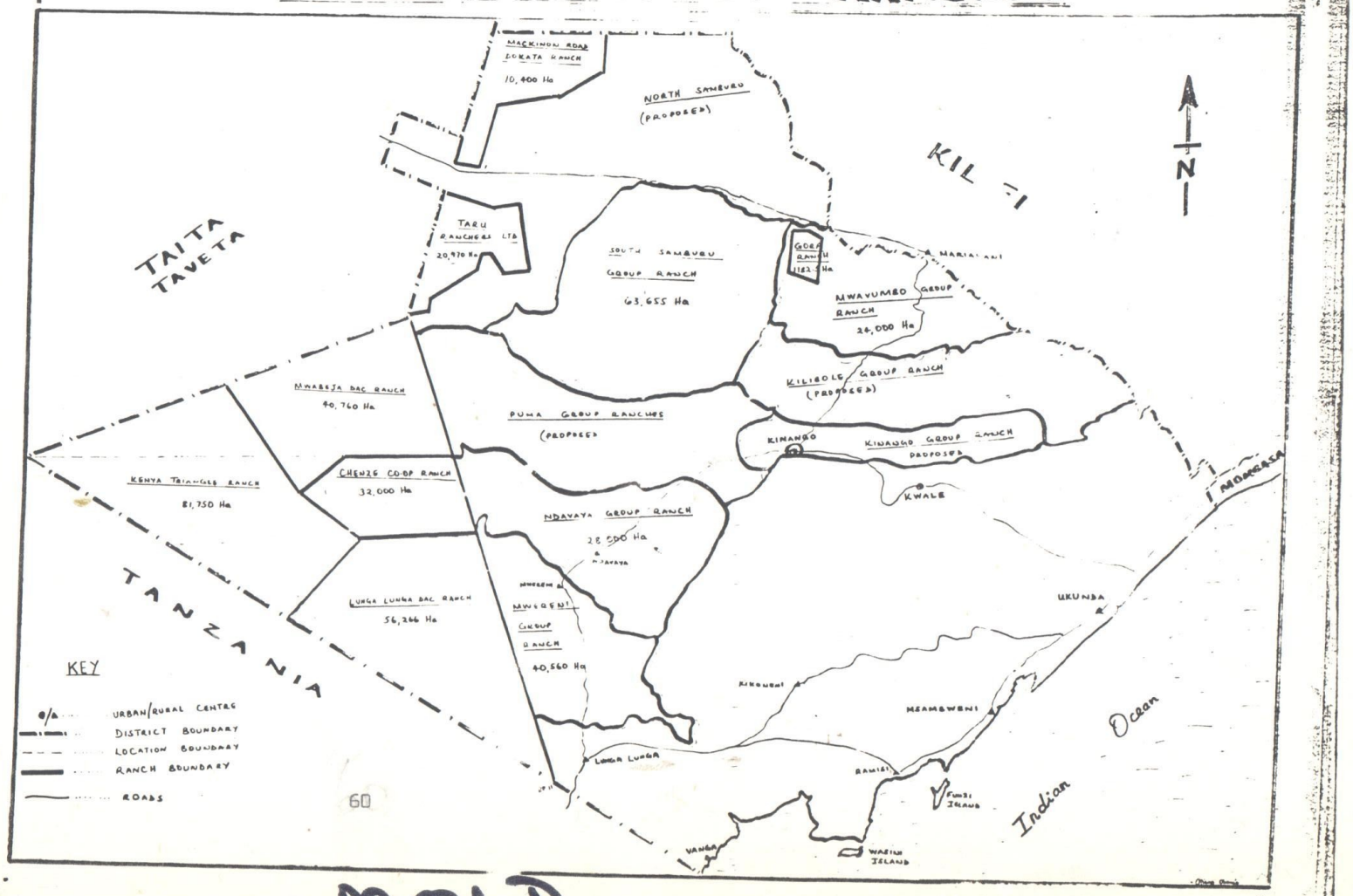
KWALE DISTRICT WATER SUPPLY AND SANITATION PROJECT
HINTERLAND CATCHMENT AREAS AND RIVER GAUGING STATIONS

3335/300
FIG. 10

MAP 3:

KWALE DISTRICT RANCHES

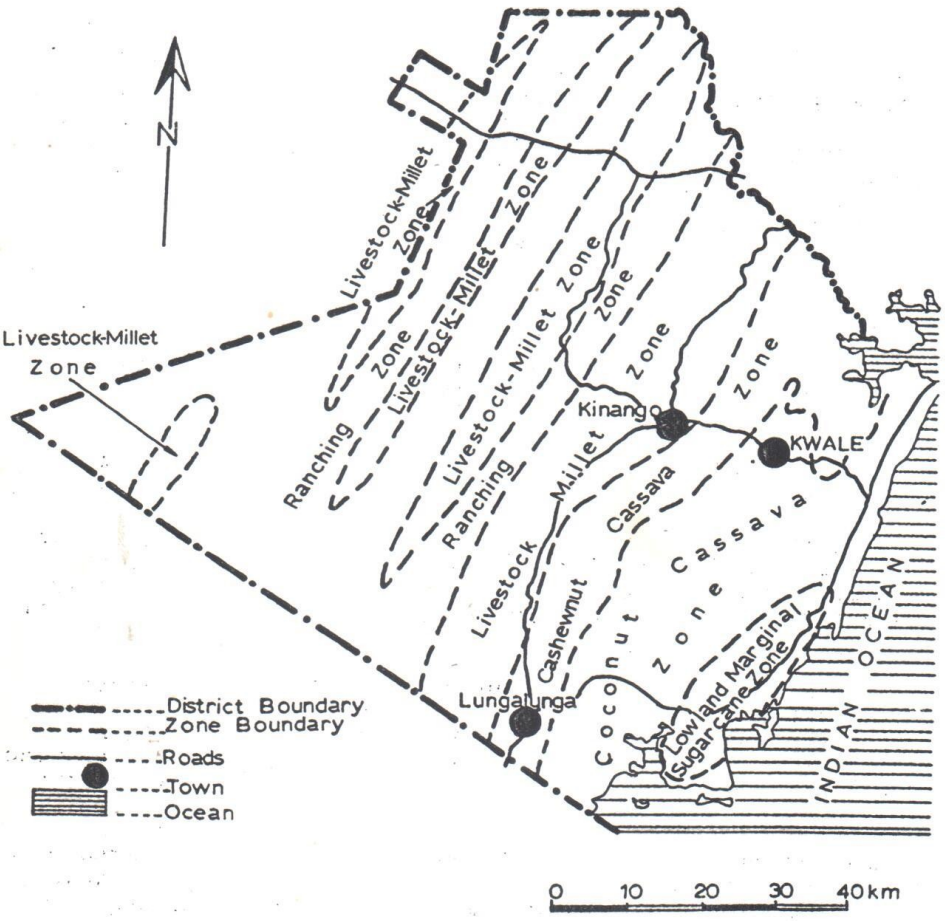


MOLD

MAP. 4.

Kwale District

Simplified Agro-Ecological Zones

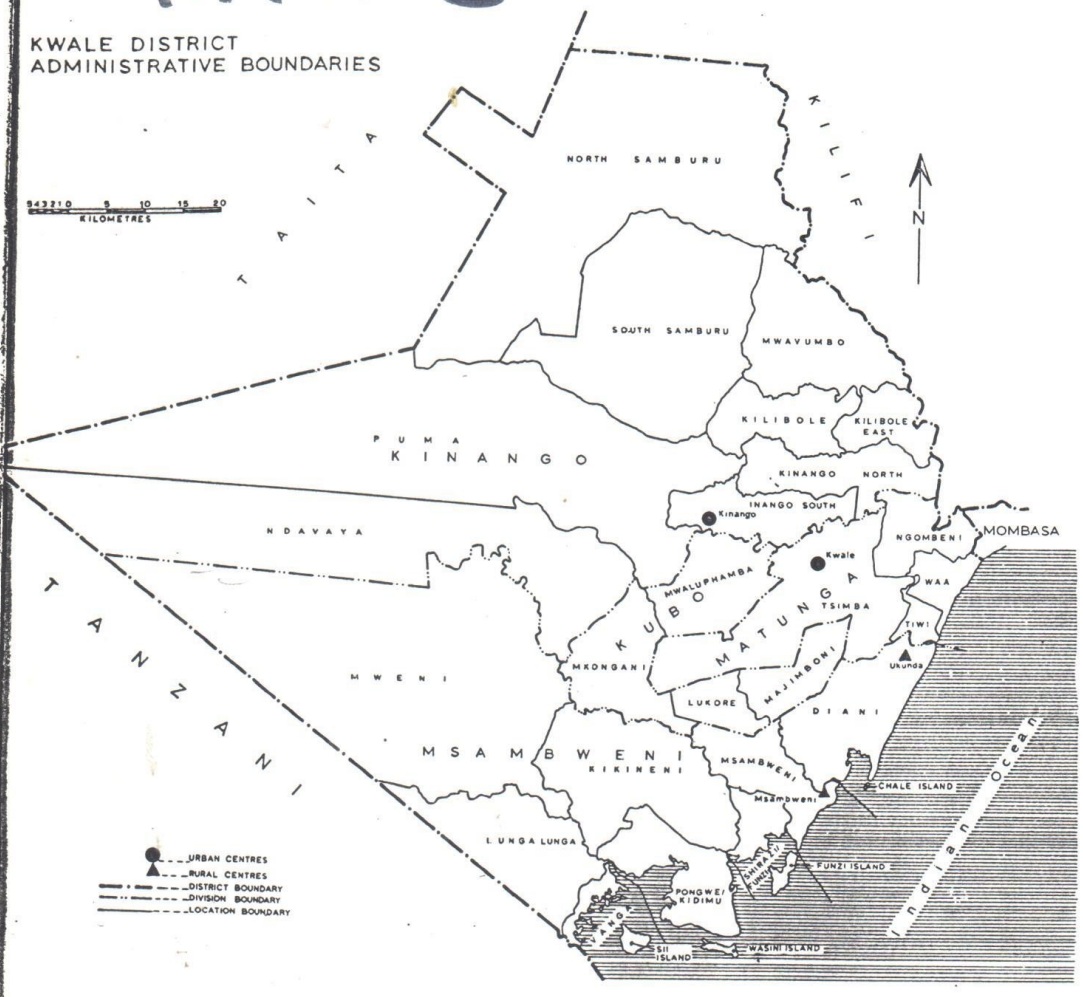


From Farm Management Handbook Of Kenya 1982

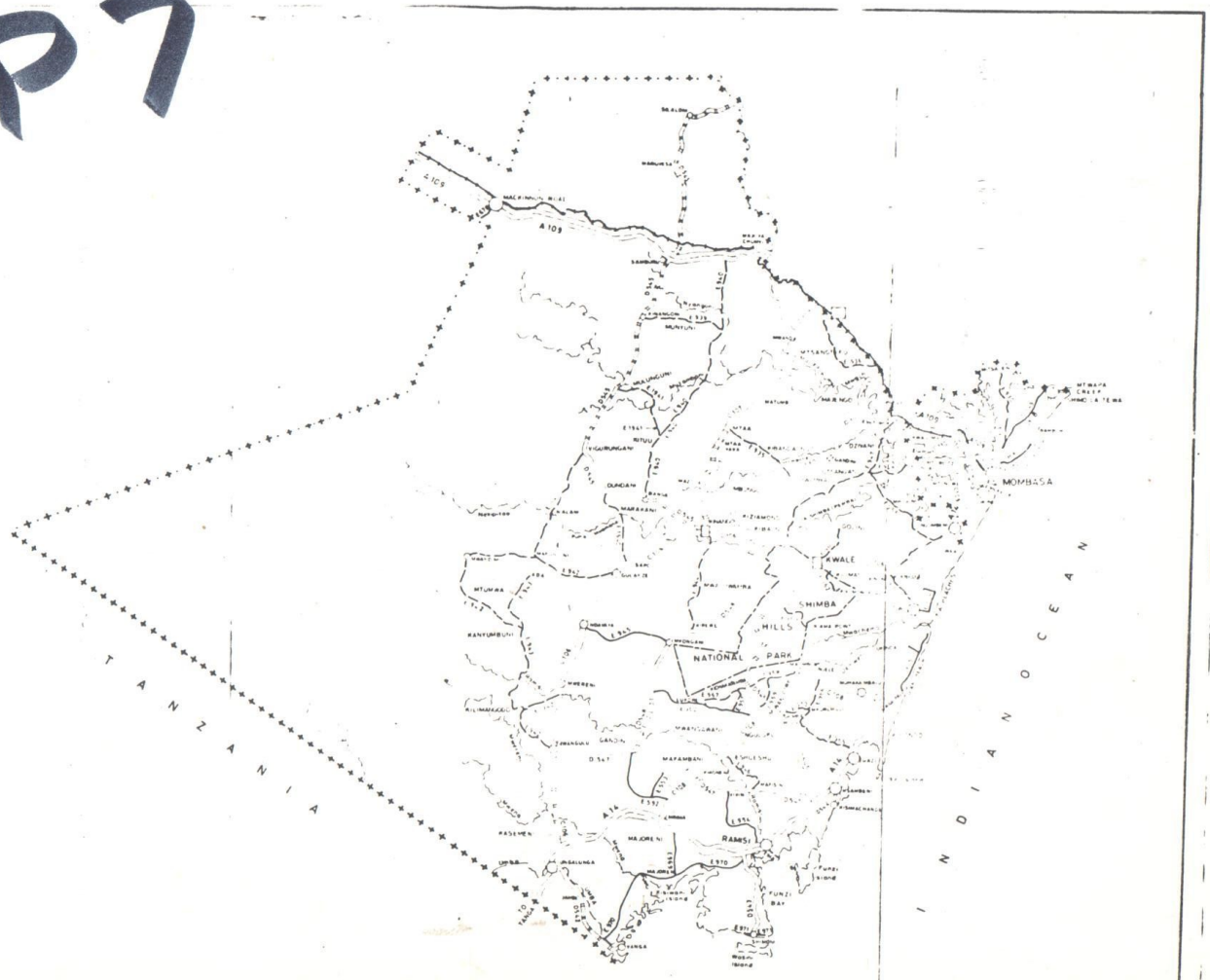
MAPS

Location Of District

MAP 6

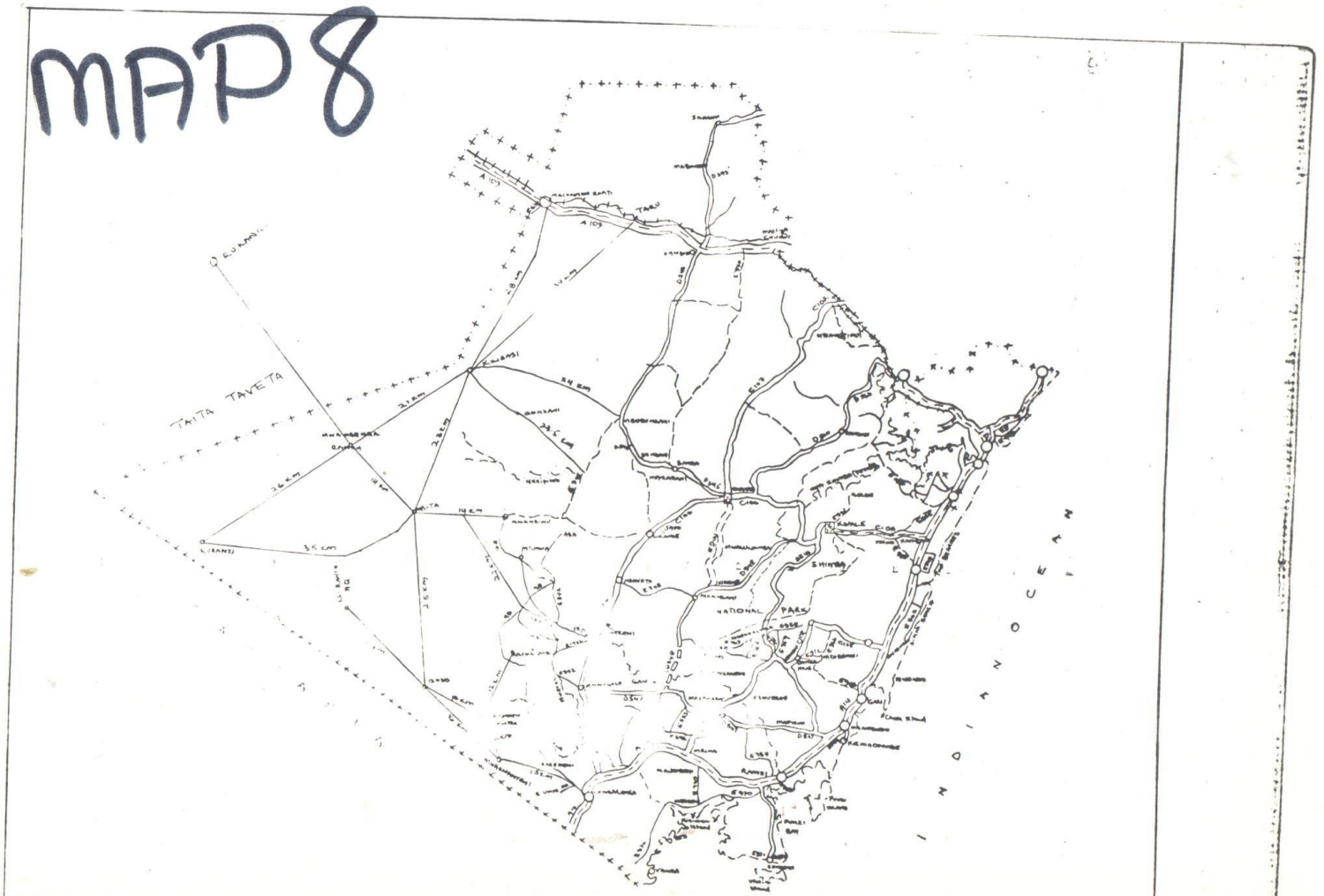

KWALE DISTRICT
ADMINISTRATIVE BOUNDARIES
543210 5 10 15 20
KILOMETRES
N
TAITA
KILIFI
NORTH SAMBURU
SOUTH SAMBURU
MWAVUMBO
KILIBOLE
KILIBOLE EAST
PUMA
KINANGO
KINANGO NORTH
INANGO SOUTH
Kinango
NDAVAYA
MOMBASA
NGOMBENI
Kwale
MWALUPHAMBA
KUBO
MATUNGA
TSIMBA
WAA
TIWI
Ukunda
TANZANIA
MWENI
MKONGANI
MAJIMBONI
LUKORE
DIANI
MSAMBWENI
KIKINENI
MSAMBWENI
Msambweni
CHALE ISLAND
LUNGA LUNGA
FUNZI ISLAND
PONGWE/KIDIMU
SII ISLAND
WASINI ISLAND
Indian Ocean
URBAN CENTRES
RURAL CENTRES
DISTRICT BOUNDARY
DIVISION BOUNDARY
LOCATION BOUNDARY

MAP 7



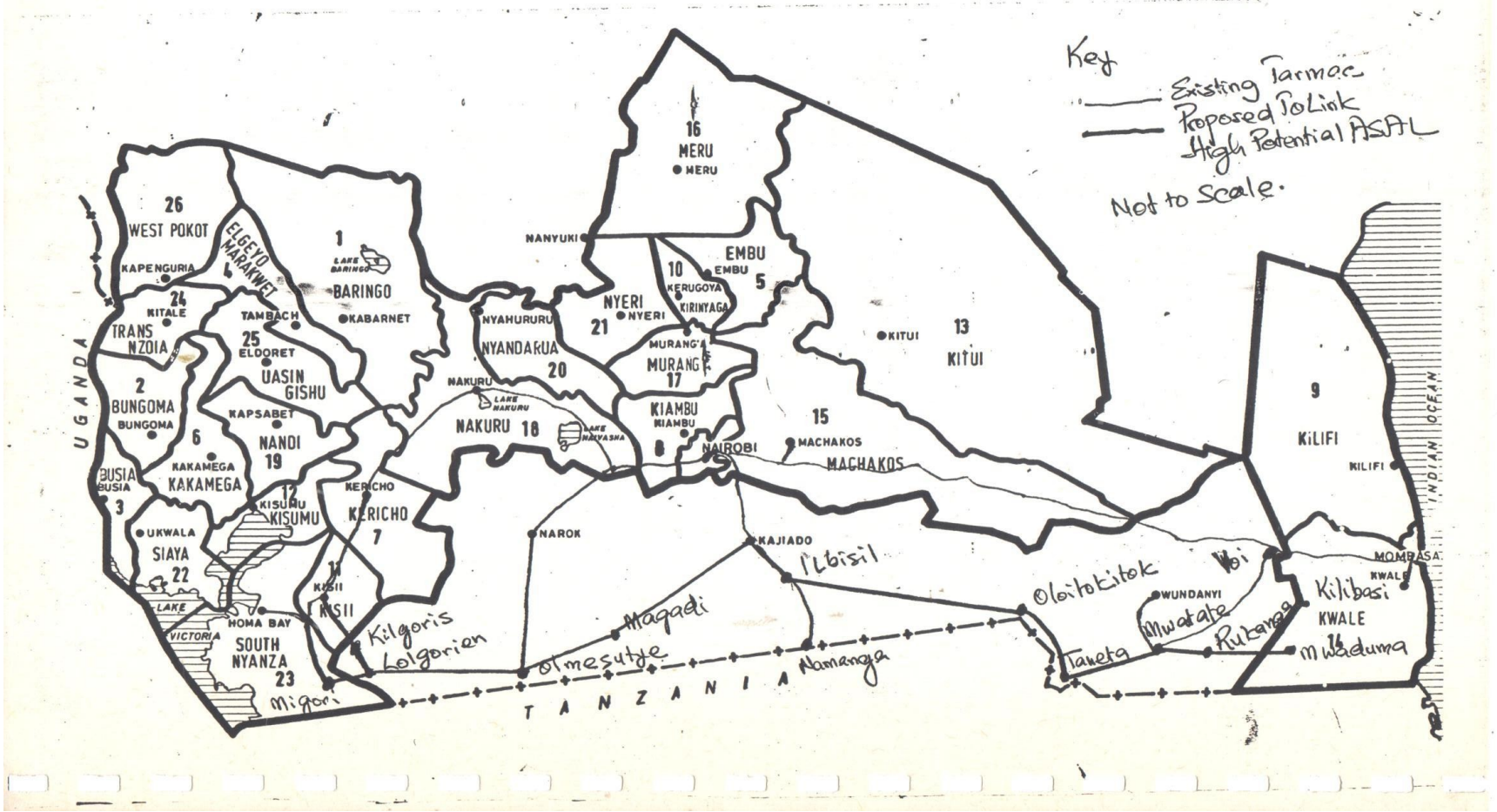
KWALE AND MOMBASA DISTRICTS
ROAD CLASSIFICATION
SCALE 1 250 000

MAP 8



KWALE DISTRICT
SCGP ROAD PROPOSAL
SCALE 1:250000

MAP 9: Proposed National Link of High Potential Areas of ASALs.



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1. Kenya 2502/II: Assistance for Feeding Primary and Pre-Primary School Children: US 24,543,280.

2. KEN/88/P02: Integrating Family Life Education in Programmes for Men Women and Youth.: US 1,120,777.

3. Kwale District Integrated CSD Programme. Plan of Action July 1989-1990 and Plan After Review January 1990 to December 1990.

4. UNFPA Report on Trip to Kilifi, Tana River and Lamu, 3 through 9 September 1990.

5. KEN/89/009/A/01/99: Kwale and Kilifi Adaptive Research Project: US 1,142,300.

6. Food Assistance to Increase Agricultural Production Through Integrated Pest Management:

7. IFAD: Kwale Kilifi Development Programme: Kwale District Annual Works Programme for 1990/91.

8. IFAD Funded Projects Report as at #1st December 1990.

9. MRDASW: Coast ASAL Development Project Assistance to Pre-Implementation Studies.

10. IFAD Coast ASAL Development Project Appraisal Report October 1990 Volumes 1 and 2: US$ 19,200,000.

11. Kwale Kilifi Development Project Staff Appraisal Report No. 7616-KE June 8, 1989.

12. GOK/UNICEF: Plan of Operations for Improving Child Survival and Development and the Situation of Women in Kenya. 1989-1993.

13. UNICEF: New Country Programme Presentation by Representative M. Baquer Namazi to the Executive Board, 20th April 1989.

14. UNICEF: project: Strengthening Primary Health Care Through Community Based Action: E/ICF/1989/P/L.2. May 1990. Bamako/86/5/90.

15. UNICEF: Project Number: KWL/PPA/ 01 to 34 (Kwale CSD Plan of Operations) January 1991-June 19992.

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17. Ground Water Survey, Kwale Hinterland Water Resources Study-Interim Report. January 1990.

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19. AMREF KWSP-Demographic and Social Cultural Survey, 1985.

20. Norconsult, Report on Hinterland Groundwater Investigation 1986.

21. Norconsult, Report on Hinterland Surface water Investigations 1987.

22. Alfredsson, Eva et.al., Dam Protection on Grazingland in Kwale District Kenya, Swedish University of Agricultural Sciences, 1988.

23. Jaetzold, R & Schmidt H. Farm Management Handbook of Kenya. Vol II C. 1983

24. MPND - Kwale District Development Plan 1989-1993.

25. MOA - Annual Reports 1980-1989

26. MOE - Annual Report (various)

27. DICECE -Annual Reports (Various)

SCHEDULE AND PERSONS INTERVIEWED

4/2/91	Larry Ngutter	- Programme Officer UNDP
	Karen Muller	- Programme Officer UNDP
5/2/91	Judy Cheng Hopkins	- UNDP Deputy Res.Rep.
	Caroline Blair	Programme Adviser UNFPA
	Thomas Ochieng	Programme Officer WFP
	J.E. Odada	Chief Planning Section UNICEF
	M. Wanga	Programme Officer UNICEF
	L. Wasonga	Associate Programme Officer UNDP
6/2/91	Travel to Mombasa	
	I. M. Aden	Deputy PC - Coast Province
	Dr. Oburu Odinga	Provincial Planning Officer
7/2/91	Ali B. Korane	DC Kwale
	H. Ajwang	DDO Kwale
	G. Wayamba	KWASP
8/2/91	H. Ajwang	DDO Kwale
	Salim Bakari Mwarangi- Muhaka Islamic Centre.	
	Samuel Kiboba Masoka - District Roads Officer	
	N. Makoti- District Education Staffing Officer	
	E.J.Odongo- District Public Health Officer	
	W.W. Nyiwuory-District Personnel Officer MOH.	
11/2/91	S.A. Nyamanga-MRDASW Programme Officer	
	L.K. Biwot- KWASP	
	A.B. Korane- DC Kwale	
	K.A. Mwambui-DICECE, Deputy Programme Officer	
12/2/9	Travel, Mazeras, Gandini, Kinango, Gulanze, Ndavaya Mwereni, Petulani, Magombani, Bidinimole, Mbita, Cheza Range, Mwereni, Ndavaya Mkongani, Tiribe, Lukore, Kilulu, Kindiani, Mivumoni, Mwachande, Mlalani, Ukunda, Tiwi, Ngombeni	
	Interviews:	
	M. Mjita- Asst. Chief Mkangombe, Ndavaya Loc.	
	G.O. Otieno - D.O.Kinango	
	Kwaka Makiri-Chief, Ndavaya Location	
	Kibundwo Mumba-Village Elder Mbita Ndavaya Loc.	
13/2/91	H. Ajwang - DDO Kwale	
	J.K.M. Kiobi-District Works Officer.	
	D.Mutie- Farmer Nursery-Shimba Hills.	
	S. Sera- Farmer-Godo	
	R.N. Kiilu-Farmer-Godo	
	M.T.Mdoe-Head Herdsman-Lunga Lunga Ranch	
	J.Mwaniki-Farmer Trader-Lunga Lunga	

Visited
Kwale, Vunga, Tingeti, Jurore, Msulwa, Majimboni, Shimba Hills, Nguluku, Mafisini, Milalani, Mwachade, Kivulini, Kikoneni, Mabandani, Mwadeo, Maji ya Moto, Mabandani, Makambani, Mamba, Mwamkofu, Lunga Lunga, Kichukwa (Sega), Makwenyeni, Godo, Mzuri, Kasemeni Mzuri, Lunga Lunga, Perani, Msabweni, Ukunda.

14/2/91 S.C. Ondieki-District Agricultural Officer
M.Gatonye- District Extension Officer
M.B.M/Mwova- District Livestock Production Officers
O.Obongo- District Range Officer
R.M. Mbwana-Kanu Chairman Tsimba Loc.
O.Mwanyota-Elder Tsimba
J.H.Madzitsa-Farmer Tsimba
A.C. Mwamambo-Farmer Diani
Omari Ali-Farmer Lukore
Bakari Mwingi-Asst.Chief Lukore, Lukore Loc.
Susan M.Nzuki-Farmer Kibuyuni

Visited
Kwale, Tsimba, Tiwi, Diani, Mwabungo, Mwapala, Majimboni, Lukore, Mkongani, Kwale.

15/2/91 D.M. Mriwe Programme Officer Dicece.
J.K. Wanyama Education Officer
C.Chibamba-Public Health Officer
H.C.H.Gichohi-District Rural Acc. Rds Insp.
K.A.Mwambui-Deputy Programme Officer Dicece

18/1/91 G.M. Ndirangu-DSDO Kwale
M.M. Mwakinyezi- DCDA Kwale
O. Odinga-PPO Mombasa
A.L.Ambwere-MCSS Nairobi
S.W. Wanjohi- MCSS Nairobi
J.Ahmad-MCSS/FAO Nairobi
S.Muthoka- Development Consultant
G. Kioko- Gidson Properties

19/2/90 O. Mwakumanya- Statistical Clerk DEO
R.R. Ondeng-District Education Officer
M.Wanga-UNICEF
O.Odinga-PPO
A.M.Gikanga- Provincial Water Officer
N.N.Gekonge- Provincial Works Officer
K.O.Ayuko-Provincial Project Monitoring & Evaluation Officer.
Travel to Nairobi

20/2/91 Writeup field notes

21/2/91	J.C. Hopkins- UNDP E. Visuri-UNFPA E. M. M. Larsen -WFP L. Wasonga-UNDP
22/2/91	Write up
25/2/91	R.A. Odingo-ICIPE W. Otieno-ICIPE L. Otieno-ICIPE J. Maneno- UNICEF N. Memon-UNICEF M.B. Namazi-UNICEF Representative, Kenya. M. Wanga-UNICEF J.E. Odada- UNICEF
26/2/91	L. Ngutter-UNDP L. Wasonga- UNDP M. Gachago- Deputy Chief Economist, Rural Planning Department, MPND
27/2/91	J.C. Hopkins L. Ngutter ?. Omambia
28/2/91	Report Writing
1/3/91	Report Writing
2/3/91	Report Writing
4/3/91	Report Proof Reading
4/3/91	Report Production

TERMS OF REFERENCE FOR JOINT CONSULTATIVE GROUP ON POLICY (JCGP) CONSULTANT

BACKGROUND:

All the five JCGP agencies (IFAD, UNDP, UNFPA, UNICEF, WFP) have or plan activities in Kwale District. Hence, it has been considered appropriate to start JCGP coordination in this district. The JCGP agencies have agreed to get a consultant to comprehensively review baseline information on development needs of Kwale district versus planned JCGP activities and to recommend the most appropriate methodology/modality for JCGP cooperation in Kwale.

Purpose

The purpose of this consultancy is:

- to improve the coordination of development activities in Kwale District between the individual JCGP agencies and between the JCGP agencies and between the JCGP agencies, other donor agencies and Government of Kenya.
- to identify conditions hampering development in the district and
- to come up with suggestions and project proposals which can enhance development.

The consultant will work in close consultation with the five JCGP agencies, with GoK and with other relevant donor agencies.

The tasks to be performed will be as follows:

1. review existing JCGP project activities, project proposals and project ideas for the district by reading various documents of these agencies and interviewing key personnel to supplement this information.
2. review existing literature and come up with socio-economic baseline data on Kwale District.
3. review other donor and GoK activities in the district.
4. identify gaps and overlaps between the different projects and programmes.

After consultations with the Ministry of Reclamation and Development of Arid and Semi Arid Areas and Wastelands and with District Officers.

5. propose actions to be taken by the JCGP agencies to redirect their projects and project plans.

6. come up with project proposals to fill in gaps between the different existing and planned development activities in the district.

7. Come up with a proposal on how the JCGP agencies in the future could coordinate their activities (planning, implementation, monitoring) in Kwale District.

8. present the findings and conclusions reached at a meeting between the JCGP agencies and arrange for a discussion of it.

9. taking into account recommendations from GoK, from District Representatives and from the JCGP agencies, present a final report on proposed actions to be taken and a project proposal.

Qualifications

The consultant must have a multi-disciplinary approach and experience. He must have at least 5 years experience with development activities in Kenya and have a wide knowledge of Kenya and of the District Focus for Rural Development Strategy. The consultant must be familiar with the procedures and fields of activities of the individual JCGP agencies.
