

PRA SURVEY SITES

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J.1.1 ISLAND FARM SURVEY SITE

J.1.1 ISLAND FARM SURVEY SITE

Table J.1.1-1 Government Agencies Offering Services to the Community

| Agencies | Services Provided |
|---|--|
| Ministry of Agriculture and Livestock Development | Offers advisory and extension services to farmers |
| Provincial Administration | In charge of security A link between community and other government departments. |
| Forestry Department | Availing of forest products Provision of temporary cultivation rights in forest areas |
| Ministry of Culture and Social Services | Facilitating group formation and registration |
| Ministry of Water Development | Provision of technical services to water users |
| Ministry of Public Works | Occasional maintenance of rural roads |
| Kenya Wildlife Services | Protecting game animals from the community and the community from game animals |
| Ministry of Education | Administration of schools |

Table J.1.1-2 Services Provided by External and Local Organizations

| Organization | Services Provided |
|--------------------------------------|---|
| SISDO | Provision of agricultural inputs on credit (seeds, pesticides etc.) |
| Kenya Co-operative Creameries (KCC) | Provision of marketing services for dairy milk. |
| Kenya Institute of Organic Farming | Educating farmers on organic farming |
| Island Farmers Co-operative Society | Selling farmers milk to KCC |
| Island Farmers Water Self-help Group | Manages water for horticultural farming |

Table J.1.1-3 Annual Household Income and Expenditure in an Average Household

| Income Item | Sh | Expenditure Item | Sh |
|---------------|---------------|---------------------------------|---------------|
| Cabbage | 8,000 | Buy farm input | 5,000 |
| Potatoes | 7,000 | Paying hired labor | 2,000 |
| Carrots | 9,000 | School fees (books) | 15,000 |
| Snow peas | 18,000 | Hospital fees | 2,000 |
| Milk | 12,000 | Transport | 1,000 |
| | | House hold items | 5,000 |
| | | Buying clothes | 2,000 |
| | | Entertainment (radio N/paper) | 1,000 |
| | | Harambee | 1,000 |
| | | Extended family | 2,000 |
| | | Hiring forest farms | |
| | | Hiring grazing land | 4,000 |
| | | Buying wood collecting licenses | |
| | | Homes construction and repair | 1,000 |
| | | | 2,000 |
| Totals | 54,000 | | 43,000 |

Table J.1.1-4 Social Infrastructure Services

| Social Infrastructure | Service Level | Quality of Service | Accessibility | Management body |
|------------------------------------|---|--|---|--|
| Domestic & irrigation water supply | Water furrow | Untreated water used by both man and livestock. Water for irrigation is not sufficient | All project members | Management committee |
| Road Network | Occasional maintenance | Poor | Poor accessibility during rainy seasons | MOPWH Community |
| Electrification | No electricity | None | Nearest supply 2 Km away | Local community already organized and raised Shs. 300,000 towards getting electric power |
| Health | Island Farm dispensary | Not enough drugs Patient receives prescriptions only | All community members | Island Farm dispensary committee MoH |
| Education | Primary school Polytechnic Nursery school | Adequate | Accessible to all community members | More PTA Teachers |

Table J.1.1-5 Daily Activities Profile for Different Members of the Household

| Father | Mother | Children |
|--|--|--|
| Wake up 4.00 am Milk cows Connecting irrigation water Weeding in the cabbage plot Fetching animal feeds Milking in the evening Sleeps at 9.00 pm | Wake up 4.00 am Warming milking water Cooking breakfast Preparing lunch Cleaning utensils Cleaning the house Tidying bedrooms Washing clothes Feeding calves and goats, chicken Weeding in the farm Cooking dinner Sleeps at 11.00 pm | Wake up 5.30 am Preparation to go to school Farm work for boys and girls Feeding rabbits Carrying cabbage from farm to the buying point Connecting water for irrigation Feeding animals Girls assisting mothers to cook Taking milk to the dairy |

Table J.1.1-6 Household Resources and Ownership Pattern

| Property | Ownership | Right to Use | Right to Dispose |
|----------------|-------------|--------------------|------------------|
| Cow | Man + Woman | Man woman children | Man |
| Goat/Sheep | Man + Woman | Man woman children | Man |
| Chicken | Boy + Woman | Man woman children | Boy + Woman |
| Dog | Boy | Man woman children | Man |
| Hen | Boy | Boy | Boys |
| Land | Woman + Man | Man woman | Consensus |
| Cabbage/Carrot | Woman + Man | | Woman + Man |
| Utensils | Woman | | Woman |
| Wheel barrow | Woman | | Man |
| Money | Man + Woman | | Woman + Man |

Table J.1.1-7 Seasonal Calendar

| Parameters | J | F | M | A | M | J | J | A | S | O | N | D | |
|---------------------------|--|---|-----------------|--|---|--|-------------|---|---|----------------------------|---|-------------|--|
| Rainfall | Long Rains (Wathima) | | | | | | | Short Rains (Njakoira) | | | | | |
| Land | | | | | Rainfed Farms | | | | Rainfed Farms | | | | |
| Preparation Irrigated | Irrigated Farms | | Irrigated Farms | | | | | | | | | | |
| Planting | | | | Rainfed Planting of potatoes, bean, peas | | | | Rainfed planting of Maize, Beans, Peas and Potatoes | | | | | |
| | Irrigated Planting of Cabbages, Carrots, Maize, Snowpeas, French beans and Maize | | | | | | | | | | | | |
| Weeding | | | | | | | | | | | | | |
| Harvesting | Potatoes, Beans and Peas | | | | | | | | | Maize, Potatoes and Peas | | | |
| Human Diseases | Malaria, Cold, Pneumonia and Rheumatism | | | | | | Common Cold | | Malaria, Pneumonia, Rheumatism, Common Cold | | | | |
| Crop Diseases and Pest | Pest, Aphids and Stock borer | | | Bacteria blight-spot | | | Aphids | | Bacterial-wilt, Brightspot | | | | |
| Livestock Diseases | Anaplasmosis, ECF, Ndigana | | | | | Foot-Rot, Pneumonia Ndigana, ECF Digana ECF. | | | | Anaplasmosis and Bloodroot | | | |
| Wildlife Crop Menace | Buffaloes | | | | Elephant, Wildpigs, Vervet-Monkey and Buffaloes | | | | | Buffaloes | | | |
| Wildlife livestock Menace | | | | | | Hyena Leopards and Lions | | | Hyena Leopard and Lions | | | | |
| Labour Demand | | | | | | | High Demand | | | | | High Demand | |
| Labour Availability | High | | | | | | High | | | | | | |
| Food Availability | High | | | Low | | High | | | Low | | | | |

Table J.1.1-8 Employment Opportunities

| | Men/Youth | Women |
|---|--|---|
| Agriculture Related | Farming of horticulture Farming in the forest Middlemen in horticulture | Farming of horticulture Farming in the forest |
| Employment outside the community | Formal employment teachers, drivers and touts Traders in local and outside markets Selling forest products (timber) Selling farm inputs (shopkeepers) | Formal employment teachers etc. Traders I local markets Selling farm inputs |
| Non-agricultural related within the community | Irrigation systems repairs Small restaurants Tailors hoteliers, shopkeepers etc. | Tailors hoteliers shopkeepers |

Table J.1.1-9 Major Household Concerns

| Community Concerns | Remark |
|---|---|
| Wildlife invasion | due to destruction of farms and KWS insensitivity |
| Inadequate irrigation water | the water levels |
| Bad roads | Impassable roads make produce rooting the farms |
| Lack of facilities (health) | The location has a dispensary |
| Poor markets for produce | Agriculture is the mainstay of household life |
| Uncontrolled dishonest traders and bookers | They usually determine process produce |
| Unavailability of agriculture and veterinary services | The government is not active |
| Lack of electricity | This hinders any tangible development |
| Expensive seeds | The middlemen and shop owners exploit the farmers |
| Soil erosion | The farms down streams are swept away by floods |
| Shortage of land | |

Table J.1.1-10 Community Owned Resources

| Communal Resources | Ownership | Right to use | Right to disposal | Management body | Functions |
|---------------------------------|-----------------------------------|-------------------------------|-------------------------------|-------------------------------|---|
| Thego river and Kimahuri stream | Ministry of Water Development | Ministry of Water Development | Ministry of water development | Ministry of Water Development | Issue water permits Inspect water use |
| Kabaru Forest | GoK Ministry of Natural Resources | GoK/MNR/KWS | GoK, MNR | MENR/KWS | Issue wood collection permits Protect forests Permits temporary cultivation |
| Island from dispensary | Ministry of Health/Community | Community | GoK, Ministry of Health | GoK, MOH, Community | Giving prescriptions to patients Supply medicine |
| Roads | MOW, County Council | Community | GoK, MOW County Council | GoK, MOW/Community | Maintenance of roads |
| Primary schools | MOE, PTA | Community | GoK, MOE | MOE, sponsor PTA | Provide teaching staff |
| Cattle dip | GoK, MOALD | MOALD, Community | MOALD, Community | MOALD, dip committee | Replenish tick control chemicals |

Table J.1.1-11 Social Stratification and Local Poverty

| Wealthy Households (5%) | Household of Modest Wealth (25%) | Poor Households (70%) |
|--|---|--|
| <p>Attributes</p> <p>7-10 acres land Permanent house 20 grade cattle Educated children overseas Owns business Owns commercial plots Owns residential plots Owns a car (private) Plenty of food Planned family</p> <p>Reason for Position in Stratum</p> <p>Working hard Invests properly Not a drunkard High management capacity</p> | <p>Attributes</p> <p>1-7 acres of land Semi permanent house 2-3 grade cows Educated children Rents people farm for cultivation Own small business Has sufficient food</p> <p>Reason for Position in Stratum</p> <p>Better social relationship Well educated Modest planing capacity</p> | <p>Attributes</p> <p>Unhealthy Live in rental housing Rents cultivation land Children not educated Laborer providers Large families Not employed No livestock</p> <p>Reason for Position in Stratum</p> <p>Alcoholism Unplanned families</p> |

Table J.1.1-12 Conflict and Conflict Management

| Level | Type of conflict | Management Mechanism |
|--------------|---|---|
| Household | Disagreement on use of family income Misunderstandings between husband and wife Family water use conflict among household members with their own families Conflict on family resources e.g pasture in a small land | Husband and wife discuss and try to agree Other family members are invited to solve the issue Village elders are asked to solve the issue |
| Community | Boundary disputes Theft of farm produce seeding etc Fighting in public Livestock grazing trespasses Unacceptable behaviors | Taken to village elders Taken to the Assistant Chief Taken to survey department Taken to court Police case Village elders |

Table J.1.1-13 Ranking of Problems by Different Members of the Household

| Men | Women | Youth |
|------------------------------|-------------------------------------|------------------------------------|
| 1. Inadequate water supply | 1. Lack of maternity | 1. Inadequate water for irrigation |
| 2. Lack of general knowledge | 2. Poor roads | 2. Impassable roads |
| 3. Poor marketing | 3. Inadequate water supply | 3. Poor market |
| 4. Poor roads | 4. Poor produce proses | 4. Poor medical services |
| 5. Lack of hospitals | 5. Heavy household management roles | 5. Unemployment |

J.1.2 KIBIRIGWI SURVEY SITE

J.1.2 KIBIRIGWI SURVEY SITE

Table J.1.2-1 Government Agencies Providing Services to the Community

| Agency | Services Provided |
|---|--|
| Ministry of Health | Out patient treatment Family planning Referral letters to other bigger hospitals |
| Ministry of Agriculture and Livestock Development | Agriculture extension services Animal care treatment Checking meat prior to sale in butcheries |
| Ministry of Education | Provision of teaching staff in primary schools |

Table J.1.2-2 Other Organizations

| Institution | Activities |
|---|---|
| 1. SISDO: Smallholder Irrigation Scheme Development Organisation. | Formed groups of women and gave them inputs loans SISDO has assisted farmers to get market for their farm produce. They introduced farmers to IBG (International Business Group). |
| 2. Kirinyaga District Co-operative Union (KDCU) | Loaned farmers Ksh. 600,000 to buy seeds. |
| 3. Kibirigwi Farms Co-operative Society: | Guaranteed farmers for the KDCU loan. |
| 4. Action Aid: | Constructing water tanks for the upper side of the area |
| 5. Rural Development Fund: | Gave donation of for the polytechnic. |
| 6. Green Belt Movement: | Gave advice on planting provided plastic paper for tree seedlings. Provided training on how to grow trees |
| 7. National Fund for Disabled: | Donation given to disabled center |

Table J.1.2-3 Daily Activities Profile for Different Members of the Household

| Time | Men and Male Youth | Women and Female Youth |
|-------------|--|--|
| 5.00 a.m | Wake up and pray | |
| 6.00 a.m | Inspect the Shamba Milking | Light fire Boil water for milking Cook porridge or tea prepare children for school |
| 7.00 a.m | Go to fetch cattle food Youth takes milk to the dairy | Take the milk to the dairy The girls assist the mother |
| 8.00 a.m | Breakfast Go to Shamba | Sweep the house Wash clothes Wash utensil Look for cows food |
| 1.00 p.m | Come back to lunch, Feed the cattle with food and water | Go back home to eat lunch feed the cows Give drinking water to the cows |
| 2.00 p.m | Go back to the shamba or go to the shopping center for refreshment Visit friends participate in meetings if any Go to the market | Look for food for chicken, pigs, goats etc and fetch water for both human and animals Cultivate land Look for cows food |
| 4.00 p.m | Go back home from either shamba, market or refreshment Make sure the harvested coffee is delivered to the factory Milking | Fetch firewood Fetch water |
| 5.00 p.m | Deliver milk to the customers (Those with no cows or those who are not milking) Youth go out for their welfare activities or wash clothes | Cook food for the family Milk the cows |
| 5.30 p.m | Transplant seedlings from seedbeds and plant them in the shamba | Wash utensils assisted by the girls after school |
| 7.00 p.m | Set the sprinklers to irrigate Eat supper and retire to bed. | |
| 8.00 pm | Family gathers together in the sitting room to watch TV, Mzee reads the newspaper, shower, family discussion and planning for tomorrow activities. | Go to bed |

Table J.1.2-4 Ownership and Management of Household Resources as Perceived by Women

| Men | Women |
|------------|---|
| Cows | Beans |
| Goat | Maize |
| Coffee | Potatoes |
| Pigs | Vegetables |
| House | Fruits |
| Furniture | |
| Bedding | The man can ask for income from the listed resources at any time. |
| Radio | |
| Television | In the case of a divorce, a woman can only walk away with her clothes |

Table J.1.2-5 Ownership and Management of Household Resources as Perceived by Men

| Men | Women |
|-------------------|---------------------------------------|
| Family house | Traditional crops (maize, beans etc) |
| Cattle | Nuts |
| Goats | Fruits trees |
| Chicken | Car |
| Dogs | Wheelbarrows |
| Cat | Bicycles |
| Furniture | Wagons / carts |
| TV | Sewing machines |
| Coffee plantation | Irrigation equipment |
| Bananas | Bananas |
| Trees | Farm tools e.g. Jembes, pangas |
| Vegetables | |

Table J.1.2-6 Leadership Distribution in the Community

| | Elders | Chief |
|-----------------------------|--|---|
| Roles | Link the community with the government | Obtain security in the location Manage development activities |
| Function | Invite meetings Settle minor disputes of boundaries, Insults, etc | Link the community with the government Call for barazas Monitoring community development |
| Authority | Report criminals Take people to sub-chief (arresting) Settle disputes | He has the authority to arrest within the location Invitation of community meetings Refer cases to the Law Courts |
| Rules of Appointment | They have to be elected by the community or the sub-chief | He has to be Kenyan 35 years & above Have attained required level of academic Married Loyal to his country |
| Social Recognition | They are recognized through decision making in the community Granted all respect by the community | Respected Obeyed by the community He is informed He commands through chiefs act |
| Men | A group of elders | |

Table J.1.2-7 Social Stratification and Local Poverty

| Wealthy Households (10%) | Household of Modest Wealth (60%) | Poor Households (30%) |
|---|--|---|
| <p>Attributes</p> <p>Large businesses such as wholesale, butchery or a shop Own 30 acre of land and employ workers Have a coffee factory Own rental houses Can afford children's school fees Own permanent houses and car</p> <p>Has good health and proper clothing Better health and clothing</p> <p>Children attend private boarding schools Children attend universities abroad They own a telephone Solar system Owns a tractors Possess grade cattle and milking goats Keeps poultry Has piped water for domestic and irrigation</p> | <p>Attributes</p> <p>Own grade cattle (zero grazing) Employs at least 3 people in the farm Owns shop or a small butchery Has pick up vehicle Work as casual laborers</p> <p>Has permanent or semi-permanent house Live in temporary housing</p> | <p>Attributes</p> <p>No livestock</p> <p>Mostly landless</p> <p>own a few chicken Wear second hand clothes Brew and drink local beer</p> <p>Likely to get sick</p> <p>Insufficient food</p> <p>Relatively large number of children</p> |

Table J.1.2-8 Problem Priorities by Different Members of the Household

| Men | Women | Youth |
|---|--|-----------------------------|
| 1. Poor payment of farm produce | 1. Single mother parents are on the increase | 1. No land for youth |
| 2. Poor marketing strategies and sales | 2. Insufficient income | 2. Impassable roads |
| 3. No public land for expansion of development facilities | 3. Unemployment among the youth | 3. No water in high areas |
| 4. Pipes are not available | 4. Poor state of roads | 4. Expensive farming inputs |
| 5. Low income | 5. Expensive medical costs | 5. No electricity |

J.1.3 RUPINGAZI SURVEY SITE

J.1.3 RUPINGAZI SURVEY SITE

Table J.1.3-1 Institutions Providing Services to the Local Community

| Institution | Services Rendered |
|--------------------------------------|--|
| Catholic church | Evangelism Women groups promotion |
| CPK church | Evangelism Women groups promotion |
| Full Gospel Church | Evangelism |
| Kenya Tea Development Authority | Buying farmers tea Maintaining tea feeder roads |
| Co-operative Coffee factories (4 no) | Coffee processing and buying |

Table J.1.3-2 Estimate of Annual Family Income and Expenditure

| Income Item | Sh | Expenditure Item | Sh |
|-------------|--------|---------------------|--------|
| Coffee | 8,000 | School fees | 10,000 |
| Vegetables | 3,000 | Transport | 2,000 |
| Beans | 2,000 | Household utilities | 2,000 |
| Milk | 3,000 | Health bills | 3,000 |
| Maize | 2,000 | Clothes | 1,000 |
| Potatoes | 1,000 | Drugs | 2,000 |
| Arrow roots | 1,000 | Farm inputs | 5,000 |
| Beans | 1,000 | Hired Labour | 2,000 |
| Tea | 10,000 | | |
| Mangoes | 1,000 | | |
| Avocadoes | 1,000 | | |
| Totals | 33,000 | | 27,000 |

Table J.1.3-3 Daily Activities Profile for Men, Women and Youth

| Men | Women | Youth |
|---|---|---|
| 6.30 am Wake up, wash face | 5.30 am Wake up, light fire | 7.00 am Wake up |
| 7.00 am Go to the cow shed to observe the animals | 5.45 am Milking, cooking tea | 8.00 am Help in washing utensils |
| 7.30 am Taking breakfast | 6.15 am Taking milk to the dairy | 9.00 am Picking tea or feeding animals or farm work |
| 8.00 am Working in the coffee plot | 8.00 am Washing utensils | 12.00 pm Lunch - taking tea to buying centres |
| 12.00 pm lunch time | 9.00 am Preparing Githeri, mixture of maize and beans food | 3.00 pm Cleaning the house/clothes |
| 2.00 pm Working in the farm | 10.00 am Working in the farm | 4.00 pm Watering seedlings |
| 4.00 pm Resting/washing | 12.00 pm Serving lunch, washing utensils and clothes, feeding the cows, watering the cows | 7.00 pm Washing and relaxing |
| 9.00 pm Eating dinner | 3.00 pm Milking | 9.00 pm Sleeping |
| 9.00 pm Go to sleep | 3.30 pm Taking milk to the dairy, washing dairy gallons, cooking supper | |
| | 9.00 pm Serving food | |
| | 10.00 pm Washing utensils | |
| | 10.30 pm Sleeping | |

Table J.1.3-4 Property Use and Disposal Rights

| Property Item | Right of Use | Right of Disposal |
|---------------|----------------------|-------------------|
| Coffee | men, women, children | man |
| Farm | men, women, children | family |
| Vehicle | men, women, children | family |
| Cattle | men, women, children | family |
| Poultry | women, boys | boys and women |
| Goat | family | man |
| Television | family | man |
| Radio | family | man |
| Tea | family | man |
| Macadamia | family | man |
| Solar energy | family | man |
| Plots | family | man |
| Utensils | family | women |
| Dog | family | boys |
| Bananas | family | women |

Table J.1.3-5 Main Division of Labor within the Household

| Men | Women | Youth |
|--------------------|-----------------------------------|---|
| Planting coffee | Feeding poultry | Planting horticulture crops |
| Planting macadamia | Planting bananas | Helping in maintaining coffee and macadamia trees |
| Planting grass | Planting potatoes for family food | |
| Building a home | Maintaining kitchen garden | |
| | Planting arrow roots | |

Table J.1.3-6 Seasonal Labor Calendar

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | |
|------------------|-----|-----------------|-----|-----|-----|----------|-----|------------------|----------------|-------------|-----|--|
| Dry season | | Long Rains | | | | | | Dry | | Short Rains | | |
| Coffee spraying | | Planting | | | | Coffee | | Harvest | Planting | | | |
| Land preparation | | thinning | | | | Planting | | Land preparation | Harvesting | | | |
| Coffee pruning | | Weeding | | | | | | | Coffee picking | | | |
| Tea picking | | horticulture | | | | | | | Tea picking | | | |
| | | Coffee spraying | | | | | | | | | | |

Table J.1.3-7 Profile of Cash Needs and Cash Availability

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|-------------------|-------------|-------------|-----|-------------------------------|----------------------|------------------|-----|-----|-------------|-----------------------|-----|-----|
| Need for cash | School fees | | | School fees | Household activities | | | | School fees | Christmas preparation | | |
| Cash availability | | Bonus Money | | Coffee income Macadamia money | | Vegetables money | | | | Tea bonus | | |

Table J.1.3-8 Labor Availability and Labor Requirements Calendar

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|--------------------|------------------|------------|------------|------------|------------|------------|------------|-------------------|------------|---|------------|------|
| Labor availability | Mode -rate | Mode -rate | Mode -rate | Mode -rate | Mode -rate | Mode -rate | Mode -rate | High availability | | Mode -rate | Mode -rate | High |
| Labor requirement | Land preparation | | Planting | Weeding | Weeding | Weeding | General | General | Harvesting | Tea, Coffee picking, harvesting, planting | | |

Table J.1.3-9 Employment Opportunities

| Type of Employment | Men | Women | Youth |
|---------------------------------------|------------------------------|------------------------------|---|
| Farm related | Tea, Coffee picking | Tea, coffee picking | Tea, coffee picking fetch timber in the forest |
| Outside the community | Business in Embu | Business in Embu | Formal employment |
| Non-farm related within the community | Small business in the market | Small business in the market | Small business in the market Selling second-hand clothes |

Table J.1.3-10 Community Owned Resources

| Type of Resource | Ownership | Right of use | Right of disposal |
|------------------|----------------|--------------|-------------------|
| Schools | Community | Community | School/committee |
| Rivers | Community | Community | Government |
| Hospitals | Govt/Community | Community | Government |
| Public land | Community | Community | County council |
| Forests | Community | Community | Government |

Table J.1.3-11 Social Stratification on the Basis of Wealth

| Wealthy Households (3%) | Middle Income Households (50%) | Poor Households (47%) |
|-------------------------|--------------------------------|--|
| Attributes | Attributes | Attributes |
| Has coffee factory | Has 1.5 acres | Is landless or owns only small plot of land |
| Coffee plantation | 3-4 children | Has 9-10 children |
| Stone houses | Timber/mud/iron sheet houses | Is a laborer |
| Plots for rental | Is educated | Lives in rented house |
| Shambas | Has a cow, goat, poultry | No education for children |
| Vehicles | Has a bicycle | Weak and unhealthy |
| Grade cattle | Has coffee, tea, & macadamia | Tattered clothes |
| Own irrigation | Has horticultural farming | Uses wages to buy flour "Karamandi" small packet of unga |
| Stone fence | Has solar energy | |
| 4 children | Has TV | |
| Poultry farming | Has radio | |
| Piggery farming | Plot | |
| Goat farming | | |
| Electricity | | |
| TV | | |
| Telephone | | |
| Health | | |
| Good clothes | | |
| Good education | | |

Table J.1.3-12 Conflicts and Conflict Management

| Type of Conflict | Resolving Mechanism |
|---|---|
| Within the household e.g spouse to spouse | Parents, community and church elders |
| Boundaries | Village elders, assistant chief, chief, court |
| Stealing | Police case upto court of law |
| Fighting | Police case upto court of law |

Table J.1.3-13 Prioritization of Problems by Different Members of the Community

| Men's Priority Areas | Women's Priority Areas | Youth Priority Areas |
|--------------------------------------|-------------------------------|--|
| 1. Inadequate irrigation water | 1. Lack of freedom at home | 1. Low income |
| 2. Expensive farm inputs | 2. Poor community leadership | 2. Inadequate water for irrigation |
| 3. Low payment of farm produce | 3. Expensive farm inputs | 3. Poor market for horticultural goods |
| 4. Impassable roads during the rains | 4. Lack of jobs for the youth | 4. Lack of skills and technology |
| 5. Expensive drugs | 5. Low incomes | 5. Poor roads |

J.1.4 MASHAMBA SURVEY SITE

J.1.4 MASHAMBA SURVEY SITE

Table J.1.4-1 Government Agencies Providing Services to the Community

| Agency | Services Provided |
|---|--|
| Ministry of Agriculture & Livestock Development | Agriculture extension services Animal care treatment Checking meat prior to sale in butcheries |
| Ministry of Education | Provision of teaching staff in primary schools Administration of schools |
| Ministry of Health | Out patient treatment Family planning Referral letters to other bigger hospitals |

Table J.1.4-2 Other Organizations

| Organization | Services Provided |
|--------------------|---|
| KWS | Fencing between people and wild animals Assisting the community to build primary schools |
| PLAN International | Assistance to orphan children Assisting community to murrum roads, extend primary schools and construct dispensary Construction of 8 boreholes, 3 dams and training of water attendants Provision of stoves, farm inputs and training of farmers Training of traditional birth attendants Provision of credit for business |

Table J.1.4-3 Household Income and Expenditure

| Source of Income | Expenditure Item |
|----------------------------|---|
| I. Agriculture | Paying school fees and school uniform |
| Green grams | Transport |
| Coriander seeds | Buying food that is not produced within the household |
| Cotton | Buying clothes, shoes and other regular requirements for the family |
| Yellow grams | Purchasing house construction materials |
| Okra | Investing in the farm by constructing terraces, buying farm tools and farm inputs |
| Black grams | Buying consumer durables such as bicycles, radio, house utensils and furniture |
| Chillies | Buying oxen |
| Sunflower | Meeting health care expenses for the family |
| | Paying casual labor |
| II. Non-agriculture | Starting business |
| Charcoal burning | Pay dowry |
| Bee keeping | |
| Outside employment | |

Table J.1.4-4 Conditions and Accessibility of Social Infrastructure

| Type of Infrastructure | Service Level | Quality of Service | Accessibility | Managing Body |
|------------------------|--|---|--|---|
| Domestic water supply | 8 boreholes equipped with hand pumps | Fairly adequate | The furthest person walks 3 kms and the nearest walks 100 metres | Management committee of 13 people. |
| Livestock water supply | Earth dam | Fair | 200 metres the furthest person to walk there ½ km nearest | Management committee of 13 members |
| Roads | Murramed road | Poorly maintained, high incidence of potholes | Accessible to all members of the community | Ministry. of Public Works |
| Electricity | None | None | None | Not Applicable |
| Health | Dispensary | Treats minor diseases e.g. malaria coughing etc.but medicines not readily available | The distance is 100m to 9km. Cost sharing arrangement which includes sh.10 registration. | Ministry of Health & Management committee of 13 members |
| Education | 10 primary schools with attached nurseries | Fair | The distance is 200m to 3km Cost sharing management | School committee of 13 members and headmaster |

Table J.1.4-5 Daily Activities Profile for Men and Male Youth

| Time | Men | Male Youth |
|----------|--|-----------------------------|
| 5.00am | Prayers | |
| 6.00 am | Wake up Check animals Take breakfast | Wake up |
| 7.00 am | Go to the farm | Take breakfast |
| 8.00 am | | Go to the farm |
| 9.00 am | | Look after animals |
| 12.00 pm | Come back home for lunch | Take animals to drink water |
| 2.00 pm | Make beehives Cut trees for construction Go back to farm to spray cotton | Ploughing |
| 7.00 pm | Bathing | Back home |
| 8.00 pm | Take supper | |
| 9.00 pm | | |

Table J.1.4-6 Daily Activities Profile for Women and Female Youth

| Time | Women | Female Youth |
|-------------|--|-------------------------------------|
| 5.00am | wake up wash face milk cows | Wake up Wash face |
| 6.00 am | make fire prepare breakfast wake up children wash children | Sweep kitchen Prepare for school |
| 7.00 am | cloth children take breakfast send out children to school prepare porridge for small children | Take breakfast Leave for school |
| 8.00 am | wake husband up give husband water serve husband with breakfast | |
| 9.00 am | Prepare food for herdsmen | |
| 11.00 am | Go to the farm Go home to prepare lunch | |
| 12.00 pm | serve and eat lunch | |
| 1.00 pm | | |
| 7.00 pm | Milking cows | Assist in cooking |
| 8.00 pm | Eat supper | |
| 9.00 pm | Prepare tea | Eat dinner |
| 10.00 pm | Wash and go to bed | Go to bed |

Table J.1.4-7 Household Resources and Management Patterns

| Resource Item | Ownership | Right of use | Right of Disposal |
|---------------------|-----------|----------------|-------------------|
| 1. Houses | men | both men/women | men |
| 2. Chicken | women | men | men/women |
| 3. Goats | men | men | men |
| 4. Maize | men | women/men | women/men |
| 5. Beans | women | men | women |
| 6. Dog | men | children | children |
| 7. Water | men | women | women |
| 8. Trees | men | men | women/men |
| 9. Land | men | women | women/men |
| 10. Bicycles | men | men | men |
| 11. Radio | men | men/women | men |
| 12. Ox plough | men | women/men | men |
| 13. Car | men | men | men |
| 14. Cows | men | women/men | men |
| 15. Hoes | men | women | men |
| 16. Books | children | children | women/men |
| 17. Panga | men | women/men | men |
| 18. Bore & arrow | men | men | men |
| 19. Water tanks | men | women | men |
| 20. Ox-cart | men | men/women | men |
| 21. Basket | women | women | women |
| 22. Tables | men | men | men |
| 23. Chairs | men | men | men |
| 24. Mattresses | men | women/men | men |
| 25. Utensils | men | women/men | men |
| 26. Firewood | men | women/men | men |
| 27. Water jerricans | women | women | women |

Table J.1.4-8 Seasonal Cropping Calendar

| | JAN | FEB | MARCH | APRIL | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC |
|---------------|---|-----------------------------------|--|---------------------------|-------------------|------------|-------------------------------|-----------------------------|---|--------------------|----------|------------------------------------|
| Seasons | Dry Season | | Rainy Season | | | Dry Season | | Rainy Season | | | | |
| Activities | Harvesting -maize -beans -millet -cowpeas | -Making terraces -Prepare land | Planting -maize -beans -cowpeas | | Weeding | | Harvesting | | Prepare land -construction of houses | | Planting | Weeding |
| Mens task | -Dig terraces -Build houses | Prepare land | Planting | | Weeding | | Harvesting cotton | | Planting | | | Birds scaring |
| Women task | Preparing land | | Planting | | Weeding | | Harvesting Weaving baskets | | Planting | | | Birds scaring |
| Youth task | Schooling | | | Weeding | Schooling | | | Harvesting | Schooling | | | Birds scaring |
| Problems | School fees | | Seeds for planting | Scarcity of land | Weeding for money | | | | | Seeds for planting | | School fees |
| Opportunities | Selling basket & ropes | Sell of farm produce | | Digging terraces for cash | Weeding for money | | Mashing bricks to sale | House construction for cash | House construction for | Planting for cash | | Harvesting in Mwea scheme for cash |

Table J.1.4-9 Community Owned Resources

| Resource Item | Ownership | Right to use | Right of disposal | Management body | Functions |
|---------------|--------------------|---|--|----------------------------------|--|
| 8 boreholes | Community | All the members | Management committee | Committee | Maintaining boreholes Ensure water is adequate |
| Earth-dams | Registered members | Livestock of community members | Plan international and management committee | There is a committee of 9 people | Maintenance Regulate mode of use |
| Dispensary | Community | Any sick person from the community locational level | Ministry of health | Moh and management committee | Ensure medicine is supplied by the government |
| Schools | Community | Children of community members | Ministry of education | School committee and headmaster | Maintenance of building structures Ensure good learning environment |
| Cattle dip | Community | Those that poses livestock (cow) | Management committee of 7 people | Management committee of 7 | Refilling the dip with water Procurement of dip chemicals |
| Rivers | Community | Community | Government | Government | None |
| Roads | Community | Community | Rural access roads under the ministry of works | Ministry of works and housing | Road repair and up-grading |
| Churches | Community | Church members | Bishop and church committee | Church committee | Religious services Church maintenance |

Table J.1.4-10 Social Stratification and Local Poverty

| Wealthy Households (5%) | Household of Modest Wealth (25%) | Poor Households (70%) |
|--|--|--|
| Attributes Owns Ox-Cart And Plough Owns Commercial Plots Stable Income Owns 50-100 Cattle Children Education to University Enough Food Owns 20 Goats Land 10 Acres Own Domestic Animals Better Clothing Employs Home Labourers | Attributes Land 10 Acres 2 Ox For Ploughing 4 Goats 1 Donkey 1 Ox Cart 5 Chicken Educate Children To Std 8 Own Domestic Animals Low Income Poor Harvest | Attributes Land 10 acres Utilizes 3 acres only harvest 1 acre Provide of casual labour Lives from hand to mouth Children not in school Owns domestic animals Very energetic Receive relief food Distance domestic water Poor dressing |

Table J.1.4-11 Conflicts and Conflict Management

| Type of Conflict | Management mechanisms |
|--|---|
| Boundaries Dispute | Village elders deliberate on the matter together with four representatives of the parties in dispute If not resolved, matter is referred to chiefs court If still not resolved, matter referred to court of law in Siakago |
| Divorce | Parents of husband and wife mediate If matter not settled, village elders and four representatives of parties in dispute together with two independent witnesses try to resolve the matter. The chief's court is the final stage where the matter is settled granting divorce and return of dowry |
| Unauthorized grazing of other peoples land | Case goes to the village elders and then to the court |
| Fights | Partners reconcile by slaughtering a goat to appease the offended party Alternatively the matter becomes a Police case and is taken to court |
| Adultery | The man committing adultery and the woman are taken to village elders in order to resolve the matter Usually , the offended husband is compensated by the man guilt of adultery with cows or goats as determined by the elders |

Table J.1.4-12 Priority Ranking of Problems

| Men | | Women | | Youth | |
|-----|---------------------------------|-------|------------------------------|-------|---------------------------------|
| 1. | Low agriculture production | 1. | Low agricultural production | 1. | Unemployment |
| 2. | Poor roads and communication | 2. | Poor education facilities | 2. | Inadequate education facilities |
| 3. | Inadequate education facilities | 3. | Inadequate health facilities | 3. | Low agricultural production |
| 4. | Poor health facilities | 4. | Unemployment | 4. | Poor roads |
| 5. | Unemploymente | 5. | Poor roads | 5. | Inadequate health facilities |

J.1.5 RUUNGU SURVEY SITE

J.1.5 RUUNGU SURVEY SITE

Table J.1.5-1 Household Income and Expenditure

| Source of Income | Expenditure Items |
|---|----------------------------|
| Sale of poultry | School fees |
| Sale of indigenous cows | Hospital fees |
| Sale of indigenous goats | Transportation to Mitunguu |
| Sale of cotton | Household utilities |
| Sale of subsistence crops (millet, sorghum, katumani maize, beans, green peas, soya beans, pigeon peas) | Buying clothes |
| | Fund raising |
| | Farm labor |
| | Seedlings |
| | Extended family |
| | Home construction/repair |

Table J.1.5-2 Household Asset Ownership by Gender

| Men | Women |
|-------------------|-------------------|
| Livestock | Millet-Sorghum |
| Bicycle | Food(small-scale) |
| Land | Chicken eggs |
| Cows | Traditional bag |
| Beehives | Milk |
| Ploughs | House utensils |
| Radio | |
| House | |
| Children | |
| Food(large scale) | |

Table J.1.5-3 Household Asset Control by Gender

| Men | Women |
|-----------|--------------------|
| Money | Chicken |
| Livestock | Child care |
| Land | Kiondo |
| Axe | House Utensils |
| Panga | Grinding stone |
| Beehive | Food Store(Mururu) |
| Bows | Cooked food |
| Arrows | |
| Ploughs | |
| Honey | |

Table J.1.5-4 Employment Opportunities

| Source of Employment | Men | Women | Youth |
|---|---|---|--|
| Farm Related | Cultivation of Cotton, Maize, Green grams, millet | Cultivation of Cotton, Maize, Green grams, Millet | Cultivation of cotton, maize, green grams, millet |
| Outside the Community | Small Business in Mitunguu, Nkubu and Meru | Small business in Mitunguu, Nkubu and Meru | Formal employment in government offices; casual employment |
| Non farm related but within the community | Small business at the market, charcoal burning, bee keeping | Small Business in market | |

Table J.1.5-5 Community Resources

| Community Resources | Ownership | Management |
|---------------------|----------------|-------------------|
| Primary school | Community | GOK/Sponsor |
| Dispensary | Community | Community/Sponsor |
| Cattle crashes | Community | Community |
| Road | Community | Community |
| Churches | Community | Community |
| Bore holes | Community | Community |
| Karochi market | Community | County council |
| Ruungu Market | County Council | County Market |
| Posho mill | Community | Women Group |
| Water (project) | Women group | Community/SISDO |
| Bridge (Beams) | Community | Community |
| Public land | Community | Community |

Table J.1.5-6 Social Stratification and Local Poverty

| Wealthy Households (4%) | Household of Modest Wealth (30%) | Poor Households (30%) |
|---|--|--|
| Attributes Has a vehicle Has a shop A bar/businessman Has livestock (20) Has a shamba 10 hectares Is employed Has corrugated sheet roofs 2 bicycles Plots Healthy family members Few children Children with courses/boarding | Attributes Kiosk 1 Bicycle Children go to local school Shamba 5 hectare Food from shamba Children 6 to 7 Health family members Dresses as usual | Attributes One livestock Grass thatched huts Children don't go to school 1 hectare of shamba Poor heath family members Famine stricken family Many children (9) Poor dressing |

Table J.1.5-7 Prioritization of Problems by Different Members of the Household

| Women | Men | Youth |
|--|---|---|
| 1. Distance to school 2. Carrying heavy loads 3. Low production 4. Low income 5. Inadequate labour | 1. Lack of capital / finances 2. No water to irrigate 3. Unreliable rainfall 4. Lack of pasture 5. No cattle dips | 1. Poverty throughout the community. 2. Prevalence of illiteracy 3. Improper health facilities 4. Poor transport facilities 5. Lack of technical skills |

J.1.6 NKUI SURVEY SITE

J.1.6 NKUI SURVEY SITE

Table J.1.6-1 Government Agencies Offering Services to the Community

| Agency | Services Provided |
|---|---|
| Ministry of Agriculture and Livestock Development | Advisory and extension services to farmers on crop and livestock production |
| Provincial Administration | Security, settling disputes and providing a link between the community and other Government departments |
| Forestry Department | Advice on tree planting |
| Ministry of Culture and Social Services | Facilitating group formation and registration |
| Ministry of Water Development | Provision of technical services to water users (surveying designs) Issuing of permits to water users |
| Ministry of Public Works | Providing culverts for the main roads |
| Ministry of Education | Administration of schools including provision of teachers |

Table J.1.6-2 Other Organizations

| Institution | Services Provided |
|----------------------------|--|
| 1. BAT | Advisory services in tobacco cultivation Provision of input credit (Fertilizers, Seeds, Pesticides) Buying of tobacco from farmers |
| 2. Horticultural Exporters | Provision of input credit (Fertilizers, Seeds, Pesticides) |
| 4. Cotton Board | Provision of cotton seed |
| 5. Cotton Ginery | Buying cotton from farmers |
| 6. SISDO | Provision of farm input credit to farmers Community organization for infrastructural credit |

Table J.1.6-3 Social Organization and Leadership within the Community

| | Roles | Rules of Appointment |
|---------------|---|---|
| Elders | Settle minor disputes Acts as mediator between the village community and the government A team of five elders deals with minor cases of discipline eg boundary disputes or a fight | Elders are selected by the assistant chief on the basis of their leadership qualities and exemplary behavior |
| Chief | In charge of the location and chairman of community development activities He is the mediator between community and the government Settles minor disputes referred by the sub-chief or elders He authorizes the community to participate in communal work or barazas Orders administration police in his location to arrest criminals reported in his office. | Must come from the same location and should have Form IV education Be at least 35 years old, be in good health and be of good behavior |

Table J.1.6-4 Household Assets and Their Ownership by Gender

| Assets Owned by Women | Assets Owned by Men |
|-----------------------|------------------------------|
| 1. Chicken | 1. Land |
| 2. Eggs | 2. Cows |
| 3. Cereals | 3. Goats |
| 4. Fruits | 4. House |
| 5. Bananas | 5. Pigs |
| 6. Kitchen garden | 6. Yams |
| 7. Furniture | 7. Farm tools and implements |
| 8. Utensils | 8. Cash crops eg cotton |
| | 9. Bicycles |
| | 10. Vehicles |

Table J.1.6-5 Household Income and Expenditure

| Source of Income | Main Expenditure |
|---------------------------------------|---|
| I Agriculture | |
| Bananas | Paying school fees and buying school uniform |
| Karella | Transport |
| French Beans | Buying food that is not produced within the household |
| Okra | Buying clothes, shoes and other regular requirements for the family |
| Chillies | Purchasing house construction materials |
| Tobacco | Investing in the farm by constructing terraces, buying farm tools and farm inputs |
| Maize | Buying consumer durable such as bicycles, radio, house utensils and furniture |
| Beans | Buying oxen |
| II Non -Agriculture Activities | Meeting health care expenses for the family |
| Baking | Paying casual labor |
| Kiosks | Starting business |
| Employment | |
| Shop keeping | |

Table J.1.6-6 Daily Profile for Men and Male Youth

| Time | Men | Boys |
|-------------|---|--|
| 5:00 am | Waking up | Waking up |
| 6:00 am | Inspecting the homestead | Inspecting if horticultural crops were stolen |
| 7:00 am | Breakfast | Breakfast |
| 8:00 am | Inspecting the shamba, while looking for pastures | Harvesting horticultural crops |
| 9:00 am | Harvesting horticultural crops | Harvesting horticultural crops |
| 10:00 am | Marketing farm produce | Marketing farm produce |
| 11:00 am | Irrigating farm | Marketing farm produce |
| 12:00 pm | Irrigating farm | Marketing farm produce |
| 1:00 pm | Lunch | Lunch |
| 2:00 pm | Weeding, ploughing , harvesting cotton | Ploughing, weeding , planting and wiring Karrela |
| 3:00 pm | Weeding, ploughing , harvesting cotton | Ploughing, weeding , planting and wiring Karrela |
| 4:00 pm | Weeding, ploughing , harvesting cotton | Ploughing, weeding , planting and wiring Karrela |
| 5:00 pm | Weeding, ploughing , harvesting cotton | Washing and cleaning |
| 6:00 pm | Cleaning and washing | Going to receive order at mitunguu market |
| 7:00 pm | Visiting other men | Going to receive order at mitunguu market |
| 8:00 pm | Visiting other men | Going to receive order at mitunguu market |
| 9:00 pm | Supper time | Going to receive order at mitunguu market |
| 9:30 pm | Home affairs | Going to receive order at mitunguu market |
| 10:00 pm | Inspecting animals | Supper time |
| 11:00 pm | Sleep | Sleep |

Table J.1.6-7 Daily Activities Profile for Women and Female Youth

| Time | Women |
|----------|--|
| 6.00 am | Wake up Milking Cooking breakfast |
| 6.30 am | Preparing children to go to school Wash utensils General house cleaning and compound |
| 8.30 am | Start preparing for lunch Feeding livestock |
| 10.00 am | Go to the Shamba Weeding, planting |
| 12.30 pm | Go back home for lunch preparation |
| 1.00 pm | Eating lunch (the whole family) Feeding cows and watering Washing utensils |
| 2.00 pm | Start preparing supper |
| 2.30 pm | Washing clothes (school clothes) |
| 3.00 pm | Looking for firewood |
| 3.30 pm | Go back to the shamba |
| 5.30 pm | Go back home Washing children Milking (selling) Continue preparing supper |
| 8.00 pm | Eating dinner |
| 8.30 pm | Washing |
| 9.00 pm | Children go to sleep Relaxing |
| 10.00 pm | Sleep |

Table J.1.6-8 Seasonal Calendar

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------------------|---|-----|---------------------------------|-----|-----|---------------|-----|---|-----|-------------|---------------------|-----|
| Season | HARVEST | | RAIN | | | COLD | | DRY | | RAIN | | |
| Men seasonal Activities | Digging Harvesting Constructing houses and shades | | Planting Weeding Spraying | | | Spraying | | Digging Clearing bushes Harvesting | | | Planting | |
| Women Seasonal Activities | Harvesting Processing Clearing land | | Planting Weeding | | | Scaring Birds | | Harvesting Processing Cleaning land | | | Planting Weeding | |
| Youth Seasonal Activities | Attending to cattle Assisting harvesting | | Planting Weeding | | | Scaring Birds | | Harvesting Processing Cleaning land | | | Planting Weeding | |

Table J.1.6-9 Problem Priorities by Different Members of the Household

| Youth | Women | Men |
|---|--|---|
| 1. Lack of water for irrigation 2. Lack of co-operation 3. Lack of service technology 4. Lack of public utility 5. Lack of exposure | 1. Shortage of water for irrigation 2. No maternity hospital 3. Poor roads 4. Lack of farming inputs 5. Lack of market 6. No school on Nkui | 1. Shortage of water for irrigation 2. Low income 3. Poor roads 4. Hospital is far 5. No administration in Nkui |

J.1.7 KIORIMBA SURVEY SITE

J.1.7 KIORIMBA SURVEY SITE

Table J.1.7-1 Government Agencies Offering Services to the Community

| Agencies | Services Provided |
|---|--|
| Ministry of Education | Schools administration including provision of teachers |
| Ministry of Agriculture and Livestock Development | Extension services in crop and livestock production |
| Provincial Administration | Maintenance of security and settling disputes |
| Ministry of health | Dispensary services, public health training and general health inspection |
| Ministry of Water Development | Provision of technical services to water users Issuing of permits |
| Ministry of Culture and Social Service | Groups registration Advisory services to groups Provision of social welfare services to disadvantaged groups e.g orphans, the old and the sick |

Table J.1.7-2 Other Organizations

| Institutions | Activities |
|---------------------------|--|
| 1. Kiorimba Water Project | Management of water for irrigation, domestic and livestock use |
| 2. BAT | Advisory services in growing of tobacco and buying of the same Providing credit for tobacco growing |
| 3. Mastermind | Same as above |
| 4. Cotton Ginnery | Buying farmers cotton |
| 5. Women groups | Making cooking stoves |
| 6. SISDO | Providing credit for irrigation infrastructure |

Table J.1.7-3 Conditions and Accessibility of Social Infrastructure

| Social Infrastructure | Service Level | Quality of Service | Accessibility | Management Body |
|--------------------------------------|---|---|--|--|
| Domestic and irrigation water supply | Temporary river intake and earthen furrow | Not reliable | Accessible only to households at the top end of the furrow | Kiorimba water project committee |
| Roads | Partly murramed road | Poorly maintained Impassable during rain seasons | All members of the community | Ministry of Public Works and Road Committee |
| Health | No dispensary or health center | Poor | People have to go to Meru 40kms | MOH (Ministry of Health) |
| Schools | One primary school | No secondary school | Accessible to all children who can afford building charges | Ministry of Education and a School Committee |

Table J.1.7-4 Seasonal Calendar by Gender

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|------------------|--|-----|---|--|-----|-----|-----|-----|--|-----|-----|-----|
| Season | Dry season | | Short rains | Dry season | | | | | Long rains | | | |
| Men Activities | Harve-sting | | Planting tobacco nurseries Spraying pesticides | Putting manure on shambas Help in harvesting Work in the intake Work in swamps as casuals Work as load carriers Assist in shamba preparations | | | | | Spraying pesticides in tobacco Weeding | | | |
| Women Activities | Harvesting all other crops like maize, beans etc | | Harvesting tobacco and planting tobacco nursery Weeding, Harvesting and preparing shamba | Plant tobacco nurseries, plant maize and beans, transplanting tobacco and weeding all crops | | | | | Harvesting all other crops (maize , beans etc) | | | |

Table J.1.7-5 Social Stratification and Local Poverty

| Wealthy Households (5%) | Household of Modest Wealth (70%) | Poor Households (25%) |
|--|--|---|
| <p>Attributes More than 10 acres of land Educated children upto university Permanent house More than 10 heads of cattle More than one source of income</p> <p>Own domestic water system Dress well Prepares land well for cultivation</p> <p>Buys and sells food stuff</p> | <p>Attributes Has 1-2 casual laborers Not more than 5 acres Partial utilization of land Not more than three livestock Brick or timber houses</p> <p>Educated children upto standard 8 Land preparation by oxen ploughs House walls finished with cow dung Two goats, five chicken Keeps a kiosk Uses bicycle or wheelbarrow for communication</p> | <p>Attributes Land not more than one acre Children not in school No of livestock on farm Unhealthy children No participation in community activities</p> <p>Tattered clothes</p> <p>House made of sticks and grass</p> <p>Reason for Position in Stratum Shortage of land Lack of water for irrigation (people in the two subunits where there is no furrow water were all identified as poor) Low or lack of income Poor roads and hence the area is not accessible</p> |

Table J.1.7-6 Priorities by Gender

| Men | Youth | Women |
|------------------------------------|--|------------------------------------|
| 1. Inadequate water for irrigation | 1. Inadequate water for irrigation | 1. Poor health facilities |
| 2. Poor roads and inaccessible | 2. Lack of agricultural inputs (expenditure) | 2. Inadequate water for irrigation |
| 3. Poor health facilities | 3. Poor roads | 3. Poor roads |
| 4. Lack of good market | 4. Poor health facilities | 4. Lack of a ready market |
| 5. Lack of agricultural inputs | 5. Lack of a ready market | 5. Lack of agricultural inputs |

ANNEX J.2 TRAINING MODULES FOR INSTITUTIONAL DEVELOPMENT

Table J.2.2-1 Our Community, Our Living Environment (Social Preparation Sessions)

Target: Project Community (including project members and non-members)

| Topic | Facilities & Sub-Topics | Session Duration (day) |
|-----------------|---|------------------------|
| Preliminaries | <p>a) Facilities: Large hall as venue; manila paper, marker pens, cards; writing paper and pens; farmers to provide food</p> <p>b) Sub-topics: - Facilitator explains session procedures particularly use of cards as the medium of communication - Community appoints one of their members as secretary to the sessions</p> | |
| Our History | <p>a) Sub-topics: - Community's settlement history (when ,how and where they came) - List of key community events since settlement (eg famine, floods, wars, locusts, projects, new crops etc) - Notable trends in important resources since time of settlement (vegetation, river flows, soil fertility, crop yields population - Importance of appreciating a community's history and collective experience (sense of identity, feeling of togetherness? what else)</p> | 0.5 |
| Our Resources | <p>a) Sub-topics: - Listing of community resources (land, rivers, institutions, skills etc); if necessary take transect of community area - Attempt at qualifying and quantifying community's listed resources</p> | 1 |
| Our Problems | <p>a) Sub-topics: - List of main community problems (agricultural, health, social, economic etc) - Attempt at qualifying and quantifying community's problems</p> | 0.5 |
| Our Needs | <p>a) Sub-topics: - List of main community needs (in relation to problems) - Use of pair-wise scoring matrix to prioritize main needs</p> | 1 |
| Our Action Plan | <p>a) Sub-topics: - Whose responsibility is it for meeting the community's needs? Is it governments? Donors? Community? - Attempt at relating the needs to community's resources - Preparation of outline action plans aimed at satisfying community needs (irrigation only one of the plans), using medium term horizon say 5-10 years - Assignment of responsibility to different community members for different plan components</p> | 1 |

Note: A facilitator from a consultant firm or NGOs and Three IDB/MOA/MOCSS staff will be in attendance for the 4 days PRA workshops.

Table J.2.2-2 Our Irrigation Development Plan

Target: Prospective Project Members Only

| Topic | Facilities & Sub-Topics | Session Duration (day) |
|--|---|------------------------|
| Preliminaries | <p>a) Facilities: Large hall as venue; previous PDM; manila paper, marker pens, cards; writing paper and pens; farmers to provide food</p> <p>b) Sub-topics: - Facilitator explains session procedures - Community appoints one its members as secretary to the sessions</p> | |
| Over view of PDM | <p>a) Sub-topics: - Validating project problems and objectives - Validating project purpose, results and activities - To whom does the Irrigation plan belong?</p> | 1 |
| Water Users Association | <p>a) Sub-topics: - What is WUA? - Justification for a WUA; individual effort versus collective action - Qualification for WUA membership(household heads, wives, children, tenants?); membership fees (joining and annual) - Water allocation criteria(equal amounts or by existing plot size) - What should be the rules for distributing water along the canal (from tail-end upstream or from up-stream downwards? What are members' experience here or in any irrigation scheme on problems related to distribution sharing of irrigation water - Members rights, obligations, discipline, existing by-laws, required amendments</p> | 1.5 |
| Management Committee and Group-leaders | <p>a) Sub-topics: - How should representatives to the management committee be elected? - Suitability for being elected as group-leader/member of management committee - Duties and expectations for management committee members(as a group and individually); To whom are they answerable</p> | 1 |
| Supporting Agencies | <p>a) Sub-topics: - Supporting agencies (government, NGOs and private sector) - Mutual expectations of farmers and supporting agencies in irrigation development</p> | 0.5 |

Note: A facilitator from private firm or NGOs and three IDB/MOA staff will be in attendance for the 4 days irrigation planning workshop.

Table J.2.2-3 Designing Our Irrigation System

Target: Prospective Project Members Only

| Topic | Facilities & Sub-Topics | Session Duration (days) |
|---|---|-------------------------|
| Preliminaries | <p>a) Facilities: Large hall as venue; previous PDM, preliminary engineering design, card-board model of intake structure, manila paper, marker pens, cards; writing paper and pens; farmers to provide food</p> <p>b) Sub-topics: - Introduction and prayers - Facilitator explains session procedures - Community appoints secretary to the sessions</p> | |
| Intake Structure | <p>a) Sub-topics: - Visit to alternative intake sites - On-site discussion on intake design criteria in relation to area to be irrigated - Elements of comprising the intake and how they will be expected to function (refer to cardboard intake model prepared by IDB) - Comments on the intake siting as well as any suggestions as to how intake elements may be modified to suit expected usage</p> | 0.5 |
| Conveyance, Secondary and Tertiary canals/pipes and Drainage System | <p>a) Sub-topics: - Walk along main canal/pipe route guided by preliminary design lay-out - Women members to take lead in assessing appropriateness of canal and associated structures - Field structures(offtakes, boxes, drops, lining ets) and discussion of their design, siting and mode of operation (continuous flow or rotated flow?)</p> | 1 |
| Design Review and Proposed Changes | <p>a) Sub-topics: - Design lay-out placed on the wall and examined by members - Summary of suggestions on siting, sizing and configuration of intake structure, - Summary of suggestions on sizing alignment of main canal/piping, secondary and tertiary canals/piping in relation to expected water allocation and management practices (among groups and individuals) - Summary of comments on structures, important fixtures etc - Feed-back from IDB which comments can be accommodate in the - Community 's mandate to IDB to finalize design subject to incorporation of practicable suggestions by the members</p> | 1 |
| Right of Way | <p>a) Sub-topics: - List of people affected by design alignment of main canal/pipe - Community's pledge to acquire right of way by a specified date using their internal arrangements without reference to IDB/MOA</p> | 0.5 |

Note: A facilitator from private firm or NGOs and three IDB/MOA staff will be in attendance for the 3 days design review workshop.

Table J.2.2-4 Financing Our Irrigation System

Target: Prospective Project Members only

| Topic | Facilities & Sub-topics | Session Duration (days) |
|--|---|-------------------------|
| Preliminaries | a) Facilities: - Large hall as venue; previous PDM ; manila paper, marker pens, cards; writing paper and pens; farmers to provide food b) Sub-topics: - Facilitator explains session procedures particularly the use of cards - Community appoints one of its members as secretary to the sessions | |
| Cost of Implementing the Irrigation System | a) Sub-topics: - Discussion of breakdown of implementation cost into materials and labour components - Possibility of and commitment by farmers to meet some of the costs by providing labour or materials eg aggregates - Listing of alternative methods of meeting the remaining cost | 1 |
| Members Contribution | a) Sub-topics: - Consensus on level of individual contribution - Methods and procedures for collecting and banking member contributions | 0.5 |
| Harambee Contributions | a) Sub-topics: - Sub-committee for Harambee organization - Timing and targeting of Harambee contribution - Collection and banking procedures | 0.5 |
| Obtaining a Loan from Lending Agency | a) Sub-topics: - Listing of alternative loan sources and associated conditions - Agreement on which agencies to write to for loan request by a specified date - Expected loan repayment procedures through main and group bank accounts - Mandating of committee to do the follow-up and report at agreed future date | 1 |

Note: A facilitator from from a consulting firm or NGOs and three IDB/MOA staff will be in attendance for 3 days Financing planning workshops.

Table J.2.2-5 Implementing Our Irrigation System

Target: Prospective Project Members Only

| Topic | Facilities & Sub-topics | Session Duration (day) |
|-----------------------------------|--|------------------------|
| Preliminaries | <p>a) Facilities:</p> <ul style="list-style-type: none"> - Large hall as venue; previous PDM; manila paper, marker pens, cards; writing paper and pens; farmers to provide food <p>b) Sub-topics:</p> <ul style="list-style-type: none"> - Facilitator explains session procedures particularly use of cards - Community appoints one of its members as secretary to the sessions | |
| Implementation Plan | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Appreciation of who and what in the implementation plan - Discussions on duration of implementation including key events - Has the implementation plan considered the rain seasons - What factors can delay the construction plan and what can the community do about them? | 0.5 |
| Choosing the Contractor | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Choice criteria and procedures - Do the contractors have relevant experience? - Are there contractors from the community? Is this good or bad? - Is the contractor likely to engage local labour or will he import them from elsewhere? - Discussion on condition to be included in the contract of selected contractor - Contractor payment procedures ; are there any hidden costs? | 1 |
| Farmers Implementation Activities | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Procedures for mobilizing farmers for labour contribution - Procedures for any materials contribution to be made by the farmers - Right of way acquisition | 1 |
| Progress Supervision | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Responsibility for technical supervision and quality control - Role of WUA committee in supervision and progress chasing - System testing and hand-over procedures | 0.5 |

Note: A facilitator from private firm or NGOs and three IDB/MOA staff will be in attendance for 3 days implementation planning sessions.

Table J.2.2-6 Planning Operation of Our Irrigation System

Target: Prospective Project Members Only

| Topic | Facilities & Sub-topics | Session Duration (day) |
|---|--|------------------------|
| Preliminaries | a) Facilities: - Church hall as venue; previous PDM; manila paper, marker pens, cards; writing paper and pens; farmers to provide food b) Sub-topics: - Facilitator explains session procedures - Community appoints one of its member as secretary to the sessions | |
| Operation of the Intake | a) Sub-topics: - Responsibility for opening and closing of intake - Opening and closing schedule for intake (high and low water requirements) - Emergency closures - Security arrangements | 0.5 |
| Operation of Off-takes in Main and Secondary Canals/pipes | a) Sub-topics: - Responsibility for opening and closing - Opening and closing schedule (allocation criteria, need for rotation?) - Procedures for dealing with unauthorized opening or damage and associated penalties at the community level and in courts of law | 1 |
| Operation of group feeder canal | a) Sub-topics: - Responsibility for opening and closing - Opening and closing schedule (allocation criteria, need for rotation?) - Procedures for dealing with unauthorized opening or damage and associated penalties at the community level and in courts of law | 0.5 |
| Irrigation Operation Budget | a) Sub-topics: - Permanent water guard , duties, salary and allowances - Any other operational expenses - Total operation costs and implied charge to farmers - Procedures for collecting operation water charges - Procedures for dealing with payment defaulters - Responsibility for compiling "Irrigation Operation Manual" for the scheme to be completed by a specified date (any assistance from IDB?); who will get copies of the manual? all members? Who will pay for the cost of producing and distributing the manual? | 1 |

Note: A facilitator from a consulting firm or NGOs and three IDB/MOA staff will be in attendance for 3 days operation planning sessions.

Table J .2.2-7 Planning Maintenance of Our Irrigation System

Target: Prospective Project Members only

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--|--|------------------------|
| Preliminaries | a) Facilities: - Large hall as venue; previous PDM, manila paper, marker pens, cards; writing paper and pens; farmers to provide food b) Sub-topics: - Facilitator explains session procedures - Community appoints one of its member as secretary to the sessions | |
| Intake Maintenance | a) Sub-topics: - Maintenance requirements (what, how and when) - Responsibility for intake maintenance - Need for specialized skills - Cost estimate including provision for future emergencies | 0.5 |
| Maintenance of the Main and Secondary Canals | a) Sub-topics: - Maintenance requirements (weed clearing, desilting, embankment repair , replacement of structures etc) - Responsibility for canal maintenance - Cost estimates (labour, materials, cash?) | 1 |
| Maintenance of Group Feeder Canals | a) Sub-topics: - Maintenance requirements (weed clearing, desilting, embankment repair , replacement of structures etc) - Responsibility for canal maintenance - Cost estimates (labour, materials, cash?) | 1 |
| Maintenance Budget | a) Sub-topics: - Labour estimates - Financial estimates including provision for future emergencies and replacements - Maintenance cost implication at the farmer level in money and labour terms - Procedures for collecting maintenance charges or deploying maintenance labour - Compilation of maintenance manual; how will the cost of compiling and distributing the manual be met? What support is needed from IDB? | 1.5 |

Note: A facilitator from a consulting firm or NGOs and three IDB/MOA staff will be in attendance for 4 days maintenance planning sessions.

Table J.2.2-8 Training in Community Organization

Target: IDB, DAO Extension Staff, NGOs Staff

| Topic | Facilities & Sub-topics | Session Duration (day) |
|---|---|------------------------|
| Preliminaries | a) Facilities - Residential training venue with class-room size rooms; Audio-visual aids (flip chart, video-camera, TV-Video) b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Proposed Agricultural Policy and Extension Strategy | a) Sub-topics: - Extension support services in a liberalized, privatized, and commercialized agricultural environment - Cost sharing in provision of support services - Collaboration with the private sector in providing extension services | 0.5 |
| Organizations | a) Sub-topics: - Elementary theory of organization - Group dynamics - Leadership styles | 0.5 |
| Community Mobilization | a) Sub-topics: - Motivation and change - Individual versus group action - Gender issues (women status, gender division of tasks now and with and proposed developments, differential access to resources) - Communication theory and practical exercises (video camera and video re-play) | 1.5 |
| Field Barazas (meetings) | a) Sub-topics: - Defining objectives - Preparation - Setting out the scene - Do's and don't's in a field baraza - When things go wrong - Practical exercises | 1 |
| Field Trip | a) Sub-topics: - Field visit to a community engaged in irrigated horticultural production and currently facing specific problems - Division of participants into 3-4 groups each to address one specific problem - Groups spend whole morning in the community (with prior arrangement) - Field baraza addressed by group representatives - Presentation of field visit reports including critique of baraza address performance by other participants | 1.5 |

Note: A facilitator from a consulting firm or NGOs and two staff from IDB staff. will be in attendance for 5 days.

Table J.2.2-9 Training in Participatory Approaches

Target: IDB, DAO Extension Staff, NGOs Staff

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--|--|------------------------|
| Preliminaries | a) Facilities: - Residential training venue with class-room size rooms; Audio-visual aids (Flip charts, video-camera, TV-Video. b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Introduction to Participatory Approaches | a) Sub-topics: - Overview of past experience with development planning and implementation (Kenya and Philippine case studies) - Justification of community participation in all stages of project cycle - Participation and gender equity | 0.5 |
| Rapid Rural Appraisal (RRA) | a) Sub-topics - Historical background and applications - RRA procedures and current status | 0.5 |
| Participatory Rural Appraisal (PRA) | a) Sub-topics: - Historical back ground and applications - PRA procedures and Current status | 2 |
| ZOPP/GOPP and PDM | a) Sub-topics: - Historical back ground and applications of ZOPP - ZOPP procedures and current status - Historical background and application of PDM - PDM procedures and current status | 2 |

Note: A facilitator from a private firm or NGOs and two staff from IDB staff will be in attendance for 5 days.

Table J.2.2-10 Training in Financial Management

Target: WUA Management Committee

| Topic | Facilities & Sub-topics | Session Duration (day) |
|---------------------------------------|---|------------------------|
| Preliminaries | a) Facilities: - Church hall, Flip charts, Manila Paper , cards b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Financial and other Records | a) Sub-topics: - Individual farmer accounts - Invoicing and receipting procedures - construction , operation and maintenance expenses (in kind and in cash) - Books of account and annual report | 1 |
| Budget Preparation and Budget Control | a) Sub-topics: - Forward planning of operation and maintenance expenses - Preparation of one , and three year budgets - Income and expenditure budget including provision for maintenance fund - Cash flow monitoring and budgetary control | 1.5 |
| Banking | a) Sub-topics: - Types of bank accounts - Cash deposit and withdrawal procedures - Bank reconciliation | 0.5 |

Note: A facilitator from a consulting firm or NGOs and two staff from IDB/MOA will be in attendance for the 3 days of the training workshop.

Table J.2.2-11 Training in General Management

Target: WUA Management Committee

| Topic | Facilities & Sub-topics | Session Duration (day) |
|-------------------------------|---|------------------------|
| Preliminaries | a) Facilities: - Residential training venue; flip charts, Manila Paper , cards b) Sub-topics: - Introductions - Overview of training content and procedures by facilitator | |
| Organization Principles | a) Sub-topics: - Types of organizations and Organization objectives - Organization structures and management styles - Communication principles in relation to organization structure - Verbal and written communications - Organization records | 1 |
| Roles of Management Committee | a) Sub-topics: - Farmers mobilization for meetings, labour or financial contributions - Collection and security of construction, operation and maintenance charges - Moral crisis currently facing farmers organizations - Supervision of construction, operation and maintenance of irrigation system - Conflict resolution and irrigation water discipline - Management of external relations | 1.5 |
| Meetings | a) Sub-topics: - Conduct of annual general meeting and committee meetings - Writing Minutes | 0.5 |
| Field Visit | a) Sub-topic: - Visit to one irrigation scheme with good performance - Visit to one irrigation scheme with poor performance | 1 |

Note: A facilitator from a consulting firm or NGO and two IDB/MOA staff will be in attendance for the 4days training session.

Table J.2.2-12 Training in Financial Management

Target: Women Groups

| Topic | Facilities & Sub-topics | Session Duration (day) |
|-------------------------|---|------------------------|
| Preliminaries | a) Facilities: - Large hall, Flip charts, Manila Paper , cards b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Group Financial Records | a) Sub-topics: - Members contributions and disbursements - Group expenses and revenue - Integrity in handling members finance | 0.5 |
| Banking | a) Sub-topics: - Types of bank accounts - Cash deposit and withdrawal procedures - Bank reconciliation | 0.5 |
| Budget Preparation | a) Sub-topics: - Procedures for identifying future expenditure items - Identifying income generating activities and associated expense and revenues streams - Identifying agencies that can provide loans to women groups - Procedures for applying and negotiating for loans | 1 |
| Annual Reports | a) Sub-topics: - Balancing expenditure and revenue during the year - Annual report of group activities including statement on expenditure and revenue as well as benefits to individual members | 1 |

Note: A facilitator from a consulting firm or NGOs and two staff from MOA/MOCSS. will be in attendance for the 3 days training workshop.

Table J.2.2-13 Training in General Management

Target: Women Groups

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--------------------------------------|---|------------------------|
| Preliminaries | a) Facilities: - Large hall, Flip charts, Manila Paper , cards b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Elementary concepts of organizations | a) Facilities:-same as above b) Sub-topics: - Types of organizations - Organization objectives - Leadership in organizations | 1 |
| Group Self assessment | a) Sub-topics: - Strengths, weaknesses, opportunities and threats of the women group - Review of current activities and exploration of other opportunities when irrigation becomes available e.g production/marketing of horticultural produce - Areas where internal management of group requires strengthening | 0.5 |
| Planning of Group Activities | a) Sub-topics: - Forward-planning procedures - Time budgeting against competing activities - Monitoring performance | 1 |
| External Relations | a) Sub-topics: - Identifying support agencies in government, NGOs and private sector - Negotiation/bargaining techniques with external agencies | 0.5 |

Note: A facilitator from consulting firm or NGOs and two staff from IDB/MOA staff will be in attendance for the 3 days of training workshop..

Table J.2.2-14 Training in Financial Management

Target: Production/Marketing Group

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--|---|------------------------|
| Preliminaries | a) Facilities: - Large hall; flip charts, cards, black-board, pens, writing paper b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Members Transaction Records | a) Sub-topics: - Opening of member ledgers - Procedures for recording farmer produce deliveries to the group grading shed (Farmer delivery note) - Procedures for recording group supplies to contract buying companies (Contractor delivery note) - Membership and handling charges - Fortnightly member statements | 1 |
| Operating Group Bank Accounts | a) Sub-topics: - Types of bank accounts - Considerations that influence what type of bank account to choose - Procedures in opening, depositing and withdrawing money by cash and cheque - Arrangement for payment by buyers through cash or cheque on produce delivery or fortnightly | 1 |
| Annual Activities and Budget Preparation | a) Sub-topics: - Committee members trips in search of support services (market information, production technology, contract preparation) - Installation of grading shed/office, weighing machines, office equipment and stationery - Employment of grading supervisor, accounts clerk, cleaner and watchman etc - Total expenditure & revenue collection estimates; procedures for budget approval by group general meeting | 1 |
| Accounts Records | a) Sub-topics: - Sources and application of group finances - Summary of individual member transactions during the year - Compilation of group annual accounts for discussion at Annual General Meeting (AGM) | 1 |

Note: A facilitator from a consulting firm or NGOs and two staff from MOA will be in attendance for 4 days.

Table J.2.2-15 Training in General Management

Target: Production/Marketing Group

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--|---|------------------------|
| Preliminaries | a) Facilities: - Large hall; flip charts, manila paper, marker pens, writing paper, pens; samples of registration forms and contract agreements b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Analysis of Existing Marketing Situation | a) Sub-topics: - Overview of marketing experience of the last three years here or elsewhere in the district - Brokers and other middlemen; good and bad things about them - Situation of farmers profit margin in relation to the price of inputs and horticultural produce - Factors that determine farmer-level price of inputs and horticultural produce | 1 |
| The case for a Production Marketing Group | a) Sub-topics: - Advantages in in-put procurement - Advantages in price negotiation - Advantages in accessing production technology - Advantages in getting market information | 0.5 |
| Group Formation, Organization & Management | a) Sub-topics: - Group objectives and main activities - Who should be in the group and what should be the number limit - Group's by-laws, organization structure, and registration procedure with MOCSS as well as FPEAK) - Composition and functions of Group Management Committee | 1 |
| Production & Marketing Activities | a) Sub-topics: - Group activities plan - Procedures for accessing market information - Negotiating production/marketing contracts with buyers for export and domestic markets (price, quantity, timing & payment procedures) - Dealing with brokers and other middlemen - Demanding and accessing extension support from MOA/HCDA - Group procurement of in-puts from local stockists at discount - Exploring local sources of credit including from group itself - Group production scheduling in relation to market requirements - One day visit to an operational marketing group | 2.5 |

Note: A facilitator from a consulting firm or NGOs and two staff from MOA/HCDA will be in attendance for 5 days.

Table J.2.2-16 Training in General Loan Administration

Target: Local Level NGOs Staff

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--|--|------------------------|
| Preliminaries | <p>a) Facilities:</p> <ul style="list-style-type: none"> - Residential training venue with class-room size rooms; Audio-visual aids, Flip charts, video-camera, TV-Video. <p>b) Sub-topics</p> <ul style="list-style-type: none"> - Introductions - Overview of course content and procedures by facilitator | |
| Overview of NGOs Operational Framework | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Framework for NGOs operations (legal and spatial coverage) - Range of activities, support services, existing Linkages with other NGOs and government agencies | 0.5 |
| Nature of Organizations | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Elementary theory of organization - Group dynamics - Leadership styles | 0.5 |
| Organization for Efficient Loan Administration | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Organization structure of a loan administration Department (credit preparation unit; credit processing and disbursement unit; Loan monitoring and recovery unit) - Caliber of loan department employee, job descriptions, performance specification and accountability procedures - Type and frequency of loan performance reports (no. of farmers, loan volume, recovery volume, qualifying comments etc) | 1 |
| NGOs as Community Change Agents | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Motivation and change - Individual versus group action - Gender issues (women status, gender division of tasks now and with and proposed developments, differential access to resources) - Communication theory and practical exercises (video camera and video re-play) - Social marketing skills; service packing and demand stimulation | 1 |
| Group Formation for Irrigation loans | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Understanding the beneficiary community - Identifying key informants and enlisting support of local grassroots leaders (formal and informal) - Meetings with WUA members to agree on need for credit and credit group formation - Group Preparatory meetings and agreement on terms and conditions of credit (for irrigation infrastructure and farm inputs) | 1 |
| Loan Administration Procedures | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Training of credit groups on security fund contributions and banking procedures - Steps in loan processing, disbursement, repayment, monitoring and dealing with delinquencies | 1 |

Note: A facilitator from a consulting firm or NGOs and two staff from IDB/MOA will be in attendance for 5 days.

Table J.2.2-17 Training in Internal Financial Management

Target: Local Level NGOs' Staff

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--|---|------------------------|
| Preliminaries | a) Facilities: - Large hall; flip charts, cards, black-board, pens, writing paper b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Annual and triennial Operation Budgets | a) Sub-topics: - Projected estimates of loan demands for the next three years - Estimates of projected loan administration expenses (up-front expenses of group organization, cost of loan processing and loan recovery - Overhead cost estimation (back-up support, bank charges and cost of acquiring loan funds) | 1 |
| Loan Account Operation | a) Sub-topics: - Justification for opening and operating separate bank loan account - Opening of individual loan account ledgers - Timely availability of loan account status; need for computerization ; frequency of record up-date | 1 |
| Budgetary Control and Management Reports | a) Sub-topics: - Breakdown of budget into quarterly parts displaying disbursements, recovery and associated expenses - Quarterly performance reports showing variance between targets and actual achievements (figures, graphs and charts) - Cost management systems - Annual report including standard accounts statements (source and application of funds, balance sheet, separate loan accounts) | 1 |
| Experience Consolidation and Forward Planning Strategies | a) Sub-topics: - Lessons from loan operations so far (do's and don'ts) - Demand survey for irrigation credit requirements in the locality and neighboring areas - Exploration of alternative funding sources for irrigation lending with specific attention to the local banking system | 1 |

Note: A facilitator from a consulting firm or NGOs and two staff from MOA will be in attendance for 4 days.

Table J.2.2-18 Training in General Loan Management

Target: SISDO Loan Personnel

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--|---|------------------------|
| Preliminaries | <p>a) Facilities:</p> <ul style="list-style-type: none"> - Residential training venue with class-room size rooms; Audio-visual aids, Flip charts, video-camera, TV-Video. <p>b) Sub-topics</p> <ul style="list-style-type: none"> - Introductions - Overview of course content and procedures by facilitator | |
| Overview of SISDO'S Operational Framework | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Framework for SISDO'S operations (legal and spatial coverage) - Range of activities, support services, existing Linkages with other NGOs, government and multilateral agencies | 0.5 |
| Nature of Organizations | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Elementary theory of organization - Group dynamics - Leadership styles | 0.5 |
| Organization for Efficient Loan Administration | <p>a) Sub-topics</p> <ul style="list-style-type: none"> - Organization structure of a loan administration Department (credit preparation unit; credit processing and disbursement unit; Loan monitoring and recovery unit) - Caliber of loan department employee, job descriptions, performance specification and accountability procedures - Type and frequency of loan performance reports (no. of farmers, loan volume, recovery volume, qualifying comments etc) | 1 |
| SISDO as Community Change Agent | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Motivation and change - Individual versus group action - Gender issues (women status, gender division of tasks now and with and proposed developments, differential access to resources) - Communication theory and practical exercises (video camera and video re-play) - Social marketing skills; service packing and demand stimulation | 1 |
| Group Formation for Irrigation loans | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Understanding the beneficiary community - Identifying key informants and enlisting support of local grassroots leaders (formal and informal) - Meetings with WUA members to agree on need for credit and credit group formation - Group Preparatory meetings and agreement on terms and conditions of credit (for irrigation infrastructure and farm inputs) | 1 |
| Loan Administration Procedures | <p>a) Sub-topics:</p> <ul style="list-style-type: none"> - Training of credit groups on security fund contributions and banking procedures - Steps in loan processing, disbursement, repayment, monitoring and dealing with delinquencies | 1 |

Note: A facilitator from a consulting firm or NGO and two staff from IDB/MOA will be in attendance for 5 days.

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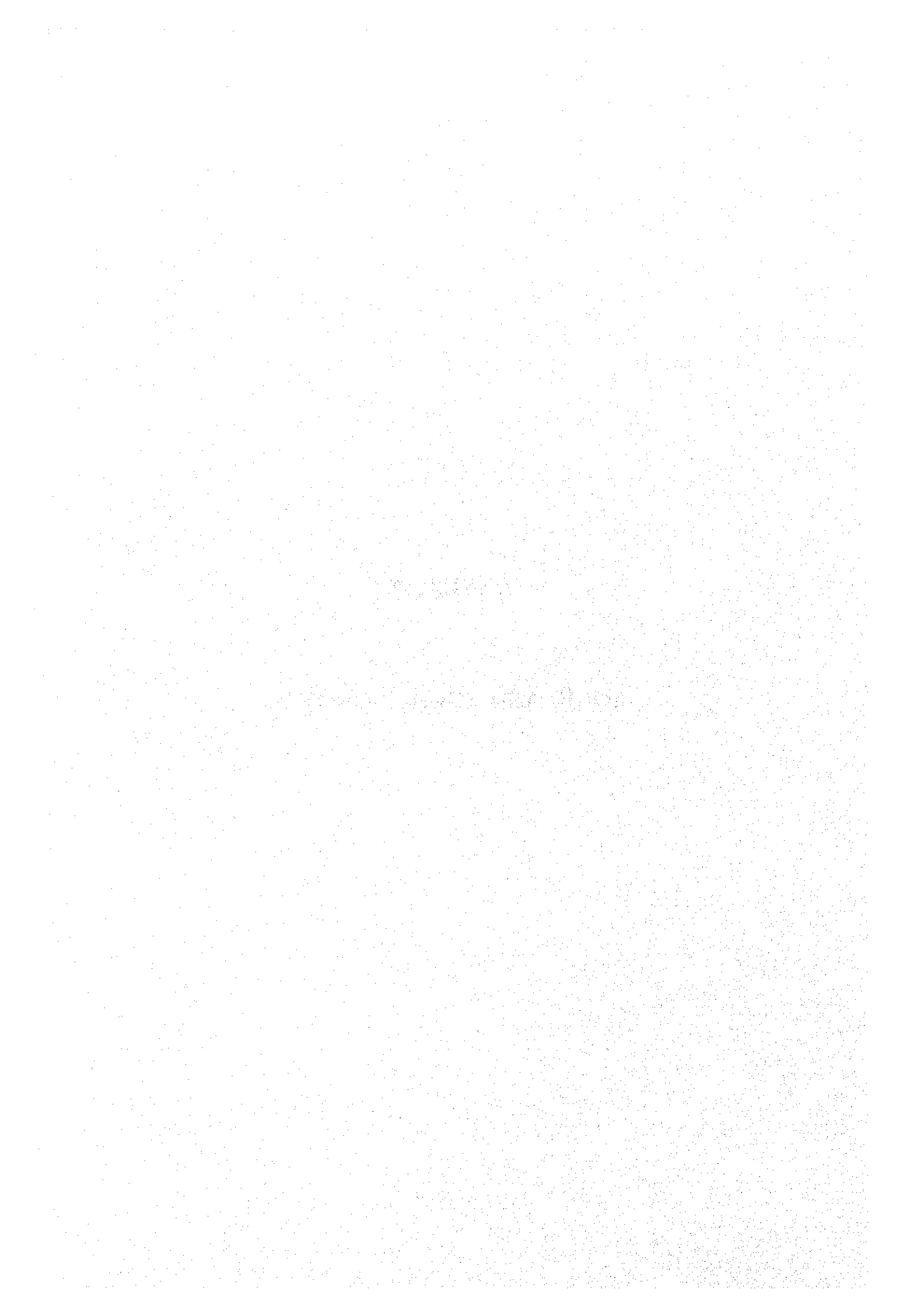
Target: SISDO Loan Personnel

| Topic | Facilities & Sub-topics | Session Duration (day) |
|--|---|------------------------|
| Preliminaries | a) Facilities: - Large hall; flip charts, cards, black-board, pens, writing paper b) Sub-topics: - Introductions - Overview of course content and procedures by facilitator | |
| Annual and triennial Operation Budgets | a) Sub-topics: - Projected estimates of loan demands for the next three years - Estimates of projected loan administration expenses (up-front expenses of group organization, cost of loan processing and loan recovery - Overhead cost estimation (back-up support, bank charges and cost of acquiring loan funds) | 1 |
| Loan Account Operation | a) Sub-topics: - Justification for opening and operating separate bank loan account - Opening of individual loan account ledgers - Timely availability of loan account status; need for computerization ; frequency of record up-date | 1 |
| Budgetary Control and Management Reports | a) Sub-topics: - Breakdown of budget into quarterly parts displaying disbursements, recovery and associated expenses - quarterly performance reports showing variance between targets and actual achievements (figures, graphs and charts) - Cost management systems - Annual report including standard accounts statements (source and application of funds, balance sheet, separate loan accounts) | 1 |
| Experience Consolidation and Forward Planning Strategies | a) Sub-topics: - Lessons from loan operations so far (do's and don'ts) - Demand survey for irrigation credit requirements in the locality and neighboring areas - Exploration of alternative funding sources for irrigation lending with specific attention to the local banking system | 1 |

Note: A facilitator from a consulting firm or NGOs and two staff from MOA will be in attendance for 4 days.

ANNEX K

SOCIO AND AGRO-ECONOMY



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K.1.1 MACRO ECONOMY

| | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|--|--------|--------|--------|--------|
| 1. GDP at Current Prices (million K£) | 13,224 | 16,681 | 20,036 | 22,785 | 25,896 |
| 2. GDP at Constant Prices (million K£) | 4,332 | 4,343 | 4,474 | 4,692 | 4,907 |
| 3. Annual Growth of GDP (%) | 0.5 | 0.2 | 3.0 | 4.8 | 4.6 |
| 4. GDP per Capita (K£) | 452 | 546 | 632 | 698 | 773 |
| 5. Contribution of Agricultural Sector to GDP (%) | 26.2 | 25.1 | 25.0 | 25.0 | 25.0 |
| 5.1 Growth Rate of Agricultural Sector (%) | -3.7 | -4.1 | 2.8 | 4.8 | -0.1 |
| 6. Gross National Product at Current Prices (million K£) | 10,434 | 12,182 | 14,798 | 18,589 | 22,216 |
| 7. Trade Balance (million K£) | | | | | |
| 7.1 Exports | 1,742 | 3,678 | 4,282 | 4,866 | 5,910 |
| 7.2 Imports | 2,955 | 5,056 | 5,754 | 7,758 | 8,424 |
| 7.3 Balance | -1,213 | -1,378 | -1,472 | -2,892 | -2,514 |
| 8. Exports of Fresh Horticultural Products | | | | | |
| 8.1 Volume (1,000 ton) | 62.3 | 62.4 | 65.2 | 71.1 | 84.8 |
| 8.2 Value (million K£) | 125.8 | 233.6 | 246.8 | 320.0 | 385.0 |
| 8.3 Major Exporting Destination Countries of the Horticultural crops | UK, France, Germany, Netherlands, Belgium, Italy, Others | | | | |
| 9. Major Exporting Commodities | Tea, Coffee, Horticultural crops, Petroleum Products | | | | |
| 10. Major Importing Commodities | Machinery and Transport Equipment, Minerals & Fuels, Chemicals, Food and Animals | | | | |
| 11. Exchange Rate of US\$ | 32.2 | 58.0 | 56.1 | 51.4 | 58.0 |
| 12. Balance of Payment (million K£) | -157 | 288 | 291 | -1,031 | -211 |

Source: Economic Survey 1996

Statistical Abstract 1995

Table K.1.1.1-2 Social Indicators

| | | Kenya | | |
|---|------------------------|----------------------|-----------------|--|
| 1. Total Land Area(sq.km) | | 582,646 | | |
| 2. Cultivable Area(ha) | | 3,828,000 | | |
| 3. Ratio of Cultivable Area(%) | | 6.57 | | |
| 4. Irrigated Area(1998)(ha) | | 82,000 | | |
| 5. Ratio of Irrigated Area to Cultivable Areas (%) | | 2.14 | | |
| 6. No. of Provinces | | 8(including Nairobi) | | |
| 7. No. of Districts | | 60 | | |
| 8. Forest Areas(sq.km) | | 19,200 | | |
| 9. Afforestation Accumulated(ha) | | 155,500 | | |
| 10. Per Capita GDP(1996) | | 309US\$ | | |
| 11. Contribution to GDP by Agricultural Sector(1996) | | 25.0% | | |
| 12. Contribution to Exports by Horticultural Crops in Value(1996) | | 12.0% | | |
| 13. Population | | Rural | Urban | |
| 13.1 Population in 1994 | 26,423,580 | 22,292,892(84.4) | 4,130,688(15.6) | |
| 13.2 Male population | 13,023,979 | 10,927,689(83.9) | 2,096,289(16.1) | |
| 13.3 Female Population | 13,399,581 | 11,365,203(84.8) | 2,034,378(15.2) | |
| 14. Population Density(person/sq.km) | 37 | - | - | |
| 15. Annual Increase of Population(%) | 3.42 | - | - | |
| 16. Population Working in Agricultural Sector(1994)(%) | 70.7 | 85.0 | - | |
| 17. No. of Households(1,000)-1994 | 5,049 | 4,012 | 1,036 | |
| 18. Average Family Size(1994) | 5.20 | 5.60 | 4.00 | |
| 19. Sex of Household Head(1994) | | | | |
| 19.1 Male Head(%) | 75.5 | 73.8 | 81.8 | |
| 19.2 Female Head(%) | 24.5 | 26.2 | 18.2 | |
| 20. Ratio of Landless Households(1994)(%) | 25.8 | - | - | |
| 21. No. of Farm Households | 2,756,438 | - | - | |
| of which, Smallholders | 2,700,000 | - | - | |
| Large Holders | 56,438 | - | - | |
| 22. Average Farm Size(ha/farm household) | 2.5 | - | - | |
| 23. Definition of the Smallholders | holding less than 20ha | - | - | |
| Medium Holders | holding 20 to 50ha | - | - | |
| Large Holders | holding above 50ha | - | - | |
| 24. Highest Education Level of Household Head(1994) | | | | |
| 24.1 Pre-school/Primary(%) | 40.1 | 41.6 | 34.0 | |
| 24.2 Secondary(%) | 22.8 | 17.6 | 43.0 | |
| 24.3 Secondary+(%) | 4.2 | 2.4 | 11.1 | |
| 24.4 None(%) | 31.1 | 36.7 | 9.2 | |
| 24.5 Not Stated(%) | 1.8 | 1.6 | 2.7 | |
| 25. Occupation of Household Head(1994) | | | | |
| 25.1 Unpaid Family Worker(%) | 5.9 | 6.7 | 3.7 | |
| 25.2 Agriculture(%) | 46.5 | 57.9 | 2.4 | |
| 25.3 Skilled Worker(%) | 20.4 | 14.4 | 43.9 | |
| 25.4 Unskilled Worker(%) | 16.1 | 13.3 | 26.7 | |
| 25.5 Business Person(%) | 10.7 | 7.7 | 22.4 | |
| 26. Monthly Household Income and Expenditure(1994) | | | | |
| 26.1 Monthly Household Income(Ksh) | 9,696 | 8,508 | 14,295 | |
| 26.2 Monthly Household Expenditure(Ksh) | 7,393 | 6,365 | 11,373 | |
| 26.3 Food Share in Total expenditure(%) | 71.0 | 73.7 | 60.3 | |
| 27. Poverty Line(1994) | | | | |
| 27.1 Ksh/month/capita | - | 703 | 875 | |
| 27.2 Ksh/year/capita | - | 8,440 | 10,500 | |
| 28. Poverty Incidence(%) | - | 46.8 | 29.2 | |
| 29. Literacy Rate(1994) | | | | |
| 29.1 Male(%) | 76.8 | 71.6 | 94.2 | |
| 29.2 Female(%) | 44.7 | 39.0 | 76.4 | |
| 30. Access to Safe Water(%)—1994 | 44.9 | 32.5 | 93.3 | |
| 31. Access to Sanitation(%)—1994 | 80.4 | 75.9 | 97.6 | |
| 32. Education | | | | |
| 32.1 Primary School Enrolment(1,000)(1996) | 5,598 | - | - | |
| 32.2 Secondary Enrolment(1,000) | 658 | - | - | |
| 32.3 Post Secondary Enrolment(1,000) | 86 | - | - | |
| 33. Life expectancy | | | | |
| 33.1 Male | 57.0 | - | - | |
| 33.2 Female | 60 | - | - | |
| 33.3 Total | 58 | - | - | |
| 34. Per Capita Consumption of Maize per Year(kg/capita) | - | 125.6 | 97.1 | |
| 35. Per Capita Consumption of Vegetables per Year(kg/capita) | - | 20.4 | 36.9 | |

Sources: Statistical Abstract 1995

District Development Plans 1997-2001

Welfare Monitoring Survey II 1996

Population Dynamics of Kenya 1996

District Annual Reports 1996

Economic Survey 1997

Table K.1.1.1-3 Gross National Product

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Factor Incomes | 421.68 | 458.45 | 491.89 | 522.45 | 560.86 | 602.14 | 649.70 |
| A. Non-Monetary Economy | | | | | | | |
| B. 1. Remuneration of Employees | 2,123.67 | 2,391.34 | 2,800.90 | 3,390.91 | 4,607.63 | 5,635.99 | 6,283.89 |
| Enterprises | 113.56 | 132.40 | 154.57 | 180.58 | 211.13 | 247.21 | 284.17 |
| Private Households | 1,286.44 | 1,481.51 | 1,717.33 | 2,045.12 | 2,469.44 | 2,863.50 | 2,950.48 |
| Producers of Government Services | 3,523.67 | 4,005.25 | 4,672.80 | 5,616.61 | 7,288.20 | 8,746.70 | 9,518.54 |
| Total | 480.52 | 545.97 | 658.42 | 716.69 | 764.86 | 814.00 | 936.10 |
| 2. Rental Surppus(including depreciation) | 3,951.48 | 4,530.66 | 5,579.42 | 7,329.66 | 8,289.32 | 9,177.66 | 10,761.21 |
| 3. Other Operating Surplus(including depreciation) | 7,955.67 | 9,081.88 | 10,910.64 | 13,662.96 | 16,342.38 | 18,738.36 | 21,215.85 |
| Total Monetary Economy | 8,377.35 | 9,540.33 | 11,402.53 | 14,185.41 | 16,903.24 | 19,205.79 | 21,865.55 |
| Total Factors Incomes=GDP(at factor cost) | 1,399.14 | 1,522.22 | 1,821.17 | 2,465.30 | 3,131.78 | 3,577.90 | 4,030.90 |
| Add:Indirect Taxes | 0.10 | 0.06 | 0.05 | 0.07 | 1.06 | 1.02 | 0.00 |
| Deduct:Subsidies | 9,776.36 | 11,062.49 | 13,223.65 | 16,680.64 | 20,033.96 | 22,782.67 | 25,896.45 |
| GDP at Market Prices | 5.54 | 8.18 | 2.75 | 9.70 | 58.60 | 65.95 | 61.24 |
| Add:Factor Income from Abroad | 514.50 | 636.80 | 627.42 | 1,218.99 | 1,153.72 | 991.58 | 791.84 |
| Deduct:Factor Income Paid Abroad | 10,296.40 | 10,433.87 | 12,598.98 | 14,571.35 | 18,938.30 | 21,857.04 | 25,165.85 |
| Gross National Product(GNP) | | | | | | | |

Source: Economic Survey 1997(1992-1996)

Statistical Abstract 1995(1990-1991)

Table K.1.1.1-4 Gross Domestic Product (1992-1996)

(K million)

| | Current Prices | | | | | | | | | | 1982 Constant Prices | | | | | | | |
|---|----------------|---------|---------|----------|----------|----------|----------|----------|----------|---------|----------------------|---------|---------|---------|---------|---------|---------|---------|
| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994* | 1995* | 1996** | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994* | 1995* | 1996** |
| A. NON-MONETARY ECONOMY | | | | | | | | | | | | | | | | | | |
| Forestry | 52.6 | 59.3 | 62.8 | 68.0 | 72.0 | 77.1 | 81.9 | 81.4 | 84.3 | 29.5 | 30.5 | 31.4 | 32.2 | 33.0 | 33.9 | 34.5 | 35.6 | 36.1 |
| Fishing | 2.1 | 2.9 | 3.0 | 3.3 | 3.4 | 4.2 | 4.8 | 5.1 | 5.6 | 1.5 | 1.5 | 1.5 | 1.4 | 1.3 | 1.2 | 1.3 | 1.3 | 1.4 |
| Buildings and Construction | 91.0 | 88.9 | 90.8 | 92.7 | 101.4 | 103.2 | 104.9 | 117.8 | 121.6 | 69.2 | 71.5 | 72.9 | 74.4 | 75.5 | 76.4 | 77.9 | 78.9 | 79.9 |
| Water Collection | 40.7 | 44.5 | 48.1 | 48.0 | 53.1 | 56.4 | 60.0 | 63.7 | 67.7 | 22.6 | 23.4 | 24.1 | 24.9 | 25.3 | 25.5 | 26.6 | 27.7 | 28.1 |
| Ownership of Dwellings | 162.3 | 199.0 | 218.9 | 245.4 | 282.0 | 281.6 | 306.2 | 334.1 | 370.5 | 92.8 | 96.4 | 99.7 | 101.7 | 102.3 | 110.4 | 114.2 | 119.6 | 124.6 |
| Total of Non-Monetary Economy | 348.7 | 394.5 | 421.7 | 458.5 | 491.9 | 522.5 | 569.9 | 602.1 | 649.7 | 214.8 | 223.4 | 229.6 | 234.5 | 237.4 | 247.4 | 254.4 | 263.1 | 270.2 |
| B. MONETARY ECONOMY | | | | | | | | | | | | | | | | | | |
| 1. Enterprises and Non-Profit Institutions | | | | | | | | | | | | | | | | | | |
| Agriculture | 1,902.7 | 2,088.4 | 2,235.5 | 2,337.7 | 3,016.0 | 4,168.5 | 5,292.1 | 5,778.1 | 6,293.0 | 1,109.3 | 1,152.5 | 1,192.0 | 1,178.9 | 1,134.8 | 1,088.5 | 1,119.3 | 1,173.3 | 1,225.4 |
| Forestry | 61.6 | 63.4 | 107.4 | 131.1 | 140.4 | 168.1 | 190.5 | 203.5 | 223.9 | 36.5 | 40.6 | 42.7 | 46.2 | 48.2 | 53.1 | 57.8 | 60.8 | 65.0 |
| Fishing | 20.1 | 27.4 | 32.6 | 37.5 | 45.2 | 53.9 | 63.0 | 61.9 | 68.4 | 12.3 | 12.8 | 13.4 | 13.1 | 12.2 | 12.6 | 13.1 | 13.7 | 14.2 |
| Mining and Quarrying | 15.7 | 18.6 | 23.0 | 28.0 | 30.3 | 35.2 | 35.7 | 36.2 | 37.1 | 10.2 | 10.6 | 11.3 | 12.0 | 11.0 | 11.2 | 11.4 | 11.7 | 12.0 |
| Manufacturing | 753.0 | 855.4 | 987.4 | 1,167.4 | 1,230.7 | 1,419.7 | 1,807.8 | 1,945.6 | 2,282.2 | 502.8 | 532.5 | 580.3 | 581.6 | 588.6 | 599.2 | 610.8 | 634.4 | 657.7 |
| Building and Construction | 281.4 | 323.4 | 378.8 | 477.1 | 579.8 | 655.2 | 742.8 | 799.2 | 879.0 | 121.7 | 131.4 | 134.3 | 129.3 | 122.2 | 111.8 | 113.1 | 117.4 | 121.5 |
| Electricity and Water | 57.6 | 64.0 | 78.4 | 92.1 | 100.3 | 128.9 | 194.1 | 191.1 | 208.0 | 39.5 | 39.5 | 43.7 | 46.0 | 45.1 | 45.5 | 46.5 | 47.3 | 48.7 |
| Trade, Restaurants, Hotels | 712.0 | 829.1 | 947.8 | 1,133.4 | 1,517.1 | 1,920.7 | 2,400.8 | 3,238.0 | 4,144.8 | 438.3 | 455.5 | 466.0 | 472.1 | 478.9 | 479.6 | 508.8 | 552.5 | 596.7 |
| Transport, Storage & Communications | 433.7 | 518.0 | 598.2 | 681.9 | 908.7 | 991.9 | 1,263.0 | 1,515.9 | 1,713.8 | 234.0 | 241.1 | 249.7 | 249.7 | 263.6 | 265.7 | 273.7 | 285.2 | 296.8 |
| Finance, Insurance | 501.8 | 584.8 | 666.7 | 865.4 | 1,081.3 | 1,398.2 | 2,015.7 | 2,295.5 | 2,646.2 | 291.3 | 313.1 | 333.2 | 353.5 | 377.9 | 405.2 | 429.9 | 459.5 | 492.2 |
| Real Estate and Business Services | 355.6 | 383.9 | 480.5 | 546.0 | 656.4 | 716.7 | 794.9 | 814.0 | 936.1 | 212.2 | 220.6 | 229.4 | 235.3 | 239.0 | 239.5 | 243.1 | 255.7 | 270.3 |
| Ownership of Dwellings | 197.9 | 228.0 | 251.5 | 282.2 | 368.7 | 477.9 | 578.1 | 663.7 | 816.6 | 119.7 | 127.9 | 135.9 | 141.1 | 144.5 | 145.7 | 149.4 | 158.8 | 168.4 |
| Other services | 248.0 | 281.6 | 282.5 | 328.1 | 643.0 | 725.4 | 1,410.1 | 1,944.9 | 2,245.0 | -121.8 | -128.1 | -134.0 | -136.8 | -142.0 | -156.3 | -169.2 | -180.2 | -191.3 |
| Less: Imputed Bank Service Charges | 5,048.0 | 5,752.7 | 6,544.0 | 7,461.7 | 9,033.7 | 11,407.3 | 13,908.2 | 15,827.7 | 17,946.0 | 3,000.8 | 3,149.0 | 3,277.8 | 3,329.9 | 3,324.1 | 3,301.0 | 3,407.5 | 3,590.0 | 3,777.2 |
| Sub-Total | 83.9 | 97.5 | 113.6 | 132.4 | 154.8 | 180.8 | 211.1 | 247.2 | 294.2 | 55.3 | 62.4 | 70.5 | 78.3 | 85.3 | 94.6 | 102.5 | 113.9 | 124.8 |
| 2. PRIVATE HOUSEHOLDS (DOMESTIC SERVICES) | | | | | | | | | | | | | | | | | | |
| Producers of Government Services | 211.4 | 270.2 | 317.1 | 380.0 | 443.3 | 568.8 | 651.8 | 676.6 | 711.1 | - | - | - | - | - | - | - | - | - |
| Public Administration | 27.5 | 32.5 | 42.0 | 39.8 | 38.2 | 41.7 | 43.3 | 50.8 | 65.5 | - | - | - | - | - | - | - | - | - |
| Defense | 479.6 | 528.2 | 590.3 | 717.8 | 849.2 | 945.6 | 1,024.1 | 1,441.3 | 1,601.9 | - | - | - | - | - | - | - | - | - |
| Education | 96.9 | 114.4 | 134.8 | 148.1 | 171.9 | 215.6 | 210.5 | 245.8 | 271.0 | - | - | - | - | - | - | - | - | - |
| Health | 53.6 | 54.5 | 59.3 | 53.9 | 55.8 | 72.2 | 81.8 | 87.5 | 101.8 | - | - | - | - | - | - | - | - | - |
| Agricultural services | 129.0 | 143.5 | 155.0 | 148.4 | 164.0 | 230.2 | 211.6 | 228.9 | 234.7 | - | - | - | - | - | - | - | - | - |
| Other Services | 998.0 | 1,143.2 | 1,298.5 | 1,487.8 | 1,722.3 | 2,075.0 | 2,223.1 | 2,728.8 | 2,965.7 | 568.2 | 618.4 | 645.7 | 669.1 | 685.4 | 699.8 | 710.3 | 723.1 | 734.7 |
| Sub-Total | 6,131.9 | 6,993.4 | 7,956.1 | 9,081.9 | 10,910.6 | 13,663.0 | 16,342.4 | 18,603.7 | 21,215.9 | 3,842.2 | 3,828.8 | 3,894.0 | 4,077.0 | 4,094.8 | 4,095.4 | 4,220.2 | 4,427.1 | 4,636.7 |
| Total of Monetary Economy | 6,480.6 | 7,387.9 | 8,377.8 | 9,540.4 | 11,402.5 | 14,185.4 | 16,903.2 | 19,205.8 | 21,865.6 | 3,857.0 | 4,053.1 | 4,223.6 | 4,311.5 | 4,332.2 | 4,342.8 | 4,474.6 | 4,690.1 | 4,906.9 |
| Grand Total (Monetary + Non-Monetary economy) | 6,829.3 | 7,782.4 | 8,800.5 | 10,000.8 | 12,414.4 | 15,352.9 | 18,208.4 | 20,913.6 | 23,131.5 | 7,714.2 | 8,082.5 | 8,523.2 | 8,693.4 | 8,727.0 | 8,737.2 | 8,949.1 | 9,380.2 | 9,813.7 |
| Estimated Population (million) | 289.5 | 344.6 | 378.1 | 416.7 | 451.76 | 549.59 | 631.66 | 697.88 | 773.45 | 172.27 | 189.04 | 190.63 | 188.91 | 171.64 | 167.03 | 167.21 | 170.43 | 173.57 |
| GDP per Capita (K€) | | | | | | | | | | | | | | | | | | |

Source: Statistical Abstract 1995 (1988-1989)
Economic Survey 1997 (1992-1996)

Table K.1.1.1-5 Growth of Gross Domestic Product (1992-1996)

| | Current Prices | | | | | | | | | | Constant (1992) Prices | | | | | | | | | |
|---|----------------|---------|---------|----------|----------|-----------|---------|---------|---------|----------|------------------------|-----------|---------|---------|---------|----------|----------|-----------|--------------|--|
| | 1990-91 | 1991-92 | 1992-93 | 1993-94* | 1994-95* | 1995-96** | 1990-91 | 1991-92 | 1992-93 | 1993-94* | 1994-95* | 1995-96** | 1990-91 | 1991-92 | 1992-93 | 1993-94* | 1994-95* | 1995-96** | 1992-1996*** | |
| A. NON-MONETARY ECONOMY | | | | | | | | | | | | | | | | | | | | |
| Forestry | 8.3 | 5.7 | 7.2 | 6.2 | -0.7 | 3.6 | 2.6 | 2.7 | 2.6 | 1.7 | 3.2 | 1.6 | 2.3 | | | | | | | |
| Fishing | 9 | 4.3 | 21.9 | 15.8 | 5.4 | 9.2 | -6.7 | -8.7 | -4.8 | 4.1 | 4.0 | 8.4 | 2.8 | | | | | | | |
| Buildings and Construction | 2.1 | 6.4 | 1.7 | 1.7 | 12.3 | 3.2 | 2 | 1.4 | 1.2 | 2.0 | 1.3 | 1.3 | 1.5 | | | | | | | |
| Water Collection | 6.3 | 11.5 | 6.2 | 6.5 | 6.2 | 6.3 | 3 | 1.8 | 0.7 | 4.1 | 4.2 | 1.6 | 2.6 | | | | | | | |
| Ownership of Dwellings | 12.1 | 3.9 | 7.5 | 9.8 | 8.1 | 10.9 | 2 | 0.6 | 7.8 | 3.5 | 4.7 | 4.2 | 5.1 | | | | | | | |
| Total Non-Monetary Economy | 8.7 | 5.5 | 6.2 | 7.4 | 7.4 | 7.9 | 2.1 | 1.2 | 4.2 | 2.8 | 3.4 | 2.7 | 3.3 | | | | | | | |
| B. MONETARY ECONOMY | | | | | | | | | | | | | | | | | | | | |
| 1. Enterprises and Non-Profit Institutions | | | | | | | | | | | | | | | | | | | | |
| Agriculture | 4.6 | 14.7 | 67.6 | 27.0 | 9.2 | 7.9 | -1.1 | -3.7 | -4.1 | 2.8 | 4.8 | 4.4 | 1.9 | | | | | | | |
| Forestry | 22 | 28.6 | 19.7 | 13.3 | 6.8 | 10.0 | 8.4 | 4.2 | 10.3 | 8.8 | 5.1 | 7.0 | 7.8 | | | | | | | |
| Fishing | 15 | 20.5 | 19.3 | 16.9 | -1.7 | 10.4 | -2.2 | -6.9 | 2.9 | 4.0 | 4.1 | 4.0 | 3.8 | | | | | | | |
| Mining and Quarrying | 22.1 | 8 | 18.3 | 1.3 | 1.5 | 2.4 | 6.4 | -8.0 | 2.0 | 1.6 | 2.7 | 2.5 | 2.2 | | | | | | | |
| Manufacturing | 18.2 | 5.4 | 15.4 | 27.3 | 7.8 | 17.3 | 3.8 | 1.2 | 1.8 | 1.9 | 3.9 | 3.9 | 2.8 | | | | | | | |
| Building and Construction | 26.6 | 13.2 | 13.0 | 13.4 | 7.6 | 10.0 | -3.7 | -5.5 | -8.7 | 1.3 | 3.8 | 3.5 | -0.2 | | | | | | | |
| Electricity and Water | 16 | 8.9 | 26.5 | 29.3 | 18.5 | 8.8 | 5.2 | -1.9 | 0.8 | 2.2 | 1.8 | 3.1 | 1.9 | | | | | | | |
| Trade, Restaurants, Hotels | 19.6 | 33.9 | 29.6 | 25.0 | 34.9 | 28.0 | 1.3 | 1.5 | 0.1 | 6.1 | 8.6 | 8.0 | 5.7 | | | | | | | |
| Transport, Storage and Communications | 14 | 33.3 | 9.2 | 27.3 | 20.0 | 13.1 | 3.7 | 1.7 | 0.8 | 3.0 | 4.2 | 4.0 | 3.1 | | | | | | | |
| Finance, Insurance, Real Estate and Business Services | 26 | 25 | 29.3 | 44.2 | 13.9 | 15.3 | 6.1 | 6.9 | 7.2 | 6.1 | 6.9 | 7.1 | 9.8 | | | | | | | |
| Ownership of Dwellings | 13.6 | 5.5 | 8.9 | 6.7 | 6.4 | 15.0 | 2.6 | 1.6 | 0.2 | 1.5 | 5.2 | 5.7 | 3.1 | | | | | | | |
| Other Services | 16.2 | 26.2 | 29.6 | 21.0 | 20.0 | 18.0 | 3.8 | 2.4 | 0.8 | 2.9 | 6.3 | 6.0 | 3.9 | | | | | | | |
| Less: imputed Bank service charges | | | 12.8 | 94.4 | 37.9 | 15.4 | | | 10.1 | 8.2 | 6.5 | 6.2 | 7.7 | | | | | | | |
| Sub-Total | 14 | 15.3 | 26.3 | 21.9 | 12.4 | 14.8 | 1.6 | -0.2 | -0.7 | 3.2 | 5.4 | 5.2 | 3.3 | | | | | | | |
| 2. Private households (Domestic Services) | 16.6 | 16.7 | 16.8 | 16.9 | 17.1 | 15.0 | 11 | 8.9 | 10.9 | 8.3 | 11.2 | 9.6 | 10.0 | | | | | | | |
| 3. Producers of Government Services | | | | | | | | | | | | | | | | | | | | |
| Public Administration | 19.8 | 16.7 | 25.5 | 14.4 | 3.9 | 5.1 | | | | | | | | | | | | | | |
| Defense | -5.4 | 4.1 | 9.3 | 3.9 | 17.3 | 29.0 | | | | | | | | | | | | | | |
| Education | 21.6 | 18.3 | 11.4 | 8.3 | 40.7 | 11.1 | | | | | | | | | | | | | | |
| Health | 9.9 | 16.1 | 25.4 | -2.4 | 16.8 | 10.3 | | | | | | | | | | | | | | |
| Agricultural services | -8.3 | 3.6 | 29.3 | 13.3 | 6.9 | 16.2 | | | | | | | | | | | | | | |
| Other Services | -4.3 | 10.5 | 40.4 | -8.1 | 7.3 | 3.4 | | | | | | | | | | | | | | |
| Sub-Total | 14.8 | 15.8 | 20.5 | 7.1 | 22.8 | 9.4 | 3.6 | 2.4 | 2.1 | 1.5 | 1.8 | 1.6 | 1.8 | | | | | | | |
| Total Monetary Economy | 14.2 | 15.4 | 25.2 | 18.9 | 13.8 | 14.0 | 2.1 | 0.4 | 0.0 | 3.0 | 4.9 | 4.7 | 3.2 | | | | | | | |
| TOTAL NON-MONETARY ECONOMY AND MONETARY ECONOMY | 13.9 | 15 | 24.4 | 19.2 | 13.8 | 13.9 | 2.1 | 0.5 | 0.2 | 3.0 | 4.8 | 4.6 | 3.2 | | | | | | | |
| GROSS DOMESTIC PRODUCT PER CAPITA | 10.2 | 11.2 | 20.8 | 15.8 | 10.5 | 10.8 | -1.2 | -2.8 | -2.7 | 0.1 | 1.9 | 1.8 | 0.3 | | | | | | | |

* Revised.
 ** Provisional.
 *** Cumulative.
 Source: Statistical Abstract 1995(1990-1992)
 Economic Survey 1997(1992-1996)

Table K.1.1.1-6 Sectoral Share of GDP at 1982 Constant Prices

| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994* | 1995* | 1996** |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| A. NON-MONETARY ECONOMY | | | | | | | | | |
| Forestry | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 |
| Fishing | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Buildings and Construction | 1.8 | 1.8 | 1.7 | 1.7 | 1.7 | 1.8 | 1.7 | 1.7 | 1.6 |
| Water Collection | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| Ownership of Dwellings | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.6 | 2.5 | 2.5 |
| TOTAL NON-MONETARY ECONOMY | 5.6 | 5.5 | 5.4 | 5.4 | 5.5 | 5.7 | 5.7 | 5.6 | 5.5 |
| B. MONETARY ECONOMY | | | | | | | | | |
| 1. Enterprises and Non-Profit Institutions | | | | | | | | | |
| Agriculture | 28.8 | 28.4 | 28.2 | 27.3 | 26.2 | 25.1 | 25.0 | 25.0 | 25.0 |
| Forestry | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.3 | 1.3 | 1.3 |
| Fishing | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Mining and Quarrying | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 |
| Manufacturing | 13 | 13.1 | 13.3 | 13.5 | 13.6 | 13.8 | 13.6 | 13.5 | 13.4 |
| Building and Construction | 3.2 | 3.2 | 3.2 | 3.0 | 2.8 | 2.6 | 2.5 | 2.5 | 2.5 |
| Electricity and Water | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Trade, Restaurants, Hotels | 11.30 | 11.20 | 11.00 | 10.90 | 11.1 | 11.0 | 11.4 | 11.8 | 12.2 |
| Transport, Storage and Communications | 6.1 | 5.9 | 5.9 | 6.0 | 6.1 | 6.1 | 6.1 | 6.1 | 6.0 |
| Finance, Insurance, Real Estate and Business Services | 7.6 | 7.7 | 7.9 | 8.2 | 8.7 | 9.3 | 9.6 | 9.8 | 10.0 |
| Ownership of Dwellings | 5.5 | 5.5 | 5.4 | 5.5 | 5.5 | 5.5 | 5.4 | 5.5 | 5.5 |
| Other Services | 3.1 | 3.2 | 3.2 | 3.3 | 3.3 | 3.4 | 3.3 | 3.4 | 3.4 |
| Less: Imputed Bank Service Charges | -3.2 | -3.2 | -3.2 | -3.2 | -3.3 | -3.6 | -3.8 | -3.8 | -3.9 |
| Sub-Total | 77.8 | 77.6 | 77.5 | 77.3 | 76.7 | 76.0 | 76.1 | 76.5 | 77.0 |
| 2. Private households (Domestic Services) | 1.4 | 1.5 | 1.7 | 1.8 | 2.0 | 2.2 | 2.3 | 2.4 | 2.5 |
| 3. Producers of Government Services | - | - | - | - | - | - | - | - | - |
| Public Administration | - | - | - | - | - | - | - | - | - |
| Defense | - | - | - | - | - | - | - | - | - |
| Education | - | - | - | - | - | - | - | - | - |
| Health | - | - | - | - | - | - | - | - | - |
| Agricultural services | - | - | - | - | - | - | - | - | - |
| Other Services | - | - | - | - | - | - | - | - | - |
| Sub-Total | 15.2 | 15.3 | 15.3 | 15.5 | 15.8 | 16.1 | 15.9 | 15.4 | 15.0 |
| Total Monetary Economy | 94.4 | 94.5 | 94.6 | 94.6 | 94.5 | 94.3 | 94.3 | 94.4 | 94.5 |
| Total Monetary & Non-Monetary Economy | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

* Revised.

** Provisional.

Table K.1.1.1-7 Production Accounts, 1995-1996

(K&Million)

| | 1995 | | | | 1996 | | | | |
|---|---------------------------------------|---------------------------|---|---------------------|---------------------------------------|---------------------------|---|---------------------|-----------|
| | Gross Output at approx. Basic Prices* | Inter-mediate Consumption | Gross Domestic Product (at Factor Cost) | | Gross Output at approx. Basic Prices* | Inter-mediate Consumption | Gross Domestic Product (at Factor Cost) | | |
| | | | Labour Costs | Operating Surplus** | | | Labour Costs | Operating Surplus** | |
| A. NON-MONETARY ECONOMY | 745.25 | 143.11 | 602.14 | 5.25 | 826.97 | 177.27 | 649.70 | 5.48 | 844.22 |
| B. MONETARY ECONOMY | | | | | | | | | |
| 1. Enterprises and Non-Profit Institutions | | | | | | | | | |
| Agriculture | 6,367.00 | 588.88 | 5,778.12 | 444.02 | 5,334.10 | 6,778.60 | 6,233.00 | 579.94 | 5,653.06 |
| Forestry | 229.59 | 26.05 | 203.54 | 121.77 | 81.77 | 254.85 | 223.85 | 139.15 | 84.70 |
| Fishing | 66.25 | 4.32 | 61.93 | 16.12 | 45.81 | 72.34 | 68.37 | 18.09 | 50.28 |
| Mining and Quarrying | 119.05 | 82.84 | 36.21 | 18.80 | 17.41 | 123.55 | 37.06 | 18.36 | 17.70 |
| Manufacturing | 16,431.39 | 14,485.84 | 1,945.55 | 763.78 | 1,181.77 | 21,086.71 | 2,282.23 | 958.10 | 1,324.13 |
| Building and Construction | 1,591.28 | 792.10 | 799.18 | 595.95 | 203.23 | 1,717.91 | 879.02 | 615.31 | 263.71 |
| Electricity and Water | 657.53 | 466.40 | 191.13 | 161.40 | 29.73 | 715.73 | 208.01 | 154.28 | 53.73 |
| Trade, Restaurants, Hotels | 7,391.00 | 4,153.00 | 3,238.00 | 1,775.09 | 1,462.91 | 8,499.65 | 4,144.76 | 1,826.76 | 2,318.00 |
| Transport, Storage and Communications | 3,035.78 | 1,520.14 | 1,515.64 | 456.10 | 1,059.54 | 3,425.54 | 1,713.84 | 504.16 | 1,209.69 |
| Finance, Insurance, Real Estate and Business Services | 2,992.00 | 696.48 | 2,295.52 | 831.85 | 1,463.67 | 3,446.34 | 95.00 | 902.33 | 1,743.83 |
| Ownership of Dwellings | 901.14 | 87.14 | 814.00 | 0.00 | 814.00 | 1,031.10 | 936.10 | 0.00 | 936.10 |
| Other Services | 1,944.91 | 1,251.18 | 693.73 | 451.11 | 242.62 | 1,771.47 | 818.60 | 566.41 | 252.19 |
| Less: Imputed Bank Service Charges | -1,944.90 | 0.00 | -1,944.90 | 0.00 | -1,944.90 | 2,245.03 | -2,245.03 | 0.00 | -2,245.03 |
| TOTAL | 43,671.82 | 28,044.17 | 15,627.65 | 5,635.99 | 9,991.66 | 51,178.82 | 17,945.97 | 6,283.99 | 11,662.08 |
| 2. Private Household (Domestic Services) | 247.11 | 0.00 | 247.21 | 247.21 | 0.00 | | 284.17 | 284.17 | 0.00 |
| 3. Producers of Government Services | 4,015.15 | 1,286.36 | 2,728.79 | 2,863.50 | -134.71 | 4,404.57 | 2,985.71 | 2,950.49 | 35.23 |
| Total Monetary Economy | 47,994.08 | 29,330.43 | 18,603.65 | 8,746.70 | 9,856.95 | 55,867.56 | 21,215.85 | 9,518.54 | 11,697.31 |
| Total Monetary & Non-Monetary Economy | 48,679.33 | 29,473.54 | 19,205.79 | 8,751.95 | 10,453.84 | 59,694.52 | 21,865.55 | 9,524.02 | 12,341.53 |

Source: Economic Survey 1997

Table K.1.1.1-8 Inflation Trends

| Year | Annual Average | Annual Inflation Rate(%) | (1986=100) Coefficient |
|------|----------------|--------------------------|---------------------------|
| 1972 | 18.93 | - | |
| 1973 | 20.66 | 9.14 | |
| 1974 | 24.18 | 17.04 | |
| 1975 | 28.79 | 19.07 | |
| 1976 | 31.88 | 10.73 | |
| 1977 | 36.37 | 14.08 | |
| 1978 | 41.99 | 15.45 | |
| 1979 | 45.25 | 7.76 | |
| 1980 | 51.31 | 13.39 | |
| 1981 | 57.53 | 12.12 | |
| 1982 | 69.92 | 21.54 | |
| 1983 | 78.52 | 12.30 | |
| 1984 | 86.28 | 9.88 | |
| 1985 | 97.16 | 12.61 | |
| 1986 | 101.76 | 4.73 | 3.95 |
| 1987 | 110.62 | 8.71 | 3.63 |
| 1988 | 124.28 | 12.35 | 3.23 |
| 1989 | 141.00 | 13.45 | 2.85 |
| 1990 | 163.11 | 15.68 | 2.46 |
| 1991 | 195.12 | 19.62 | 2.06 |
| 1992 | 248.44 | 27.33 | 1.62 |
| 1993 | 362.72 | 46.00 | 1.11 |
| 1994 | 319.99 | 28.80 | 1.26 |
| 1995 | 325.11 | 1.60 | 1.24 |
| 1996 | 354.37 | 9.00 | 1.13 |
| 1997 | 401.93 | 13.42 | 1.00 |

Source: National Development Plan 1994-1996
Fact Book 1997/98

Table K.1.1.1-9 Average Retail Prices in Nairobi

| | Unit | 1991 | 1992 | 1993 | 1994 | 1995 |
|-----------------|------------|--------|--------|--------|--------|--------|
| Bread, white | 0.5kg loaf | 6.42 | 7.12 | 13.71 | 15.00 | 15.17 |
| Wheat flour | 2kg | 21.97 | 26.99 | 53.67 | 52.71 | 51.08 |
| Maize flour | kg | 5.92 | 11.25 | 13.88 | 20.50 | 15.96 |
| Maize grain | kg | 6.29 | 8.54 | 12.25 | 17.40 | 12.58 |
| Millet flour | kg | 12.38 | 15.41 | 17.67 | 28.42 | 30.86 |
| Rice, grade II | kg | 16.23 | 21.33 | 29.94 | 31.17 | 33.21 |
| Dry beans | kg | 13.25 | 14.90 | 23.54 | 37.38 | 31.88 |
| Green grams | kg | 17.71 | 24.83 | 31.17 | 57.88 | 42.72 |
| Beef with bones | kg | 40.00 | 46.66 | 68.75 | 98.33 | 106.67 |
| Offals-Matumbo | kg | 26.00 | 27.33 | 40.17 | 65.09 | 70.29 |
| Milk | 0.5 lit. | 4.10 | 6.18 | 9.08 | 13.25 | 13.67 |
| Eggs | dozen | 24.00 | 31.83 | 48.10 | 60.35 | 64.23 |
| Cooking oil | 500 g | 14.18 | 18.94 | 44.08 | 46.13 | 51.31 |
| Ghee | 500 g | 14.18 | 18.94 | 44.17 | 46.82 | 52.36 |
| Margarine | 500 g | 18.79 | 27.54 | 50.49 | 52.28 | 65.76 |
| Salt | kg | 4.15 | 5.26 | 12.25 | 14.79 | 14.92 |
| Coffee | 34 g | 3.04 | 3.50 | 3.88 | 5.62 | 7.88 |
| Tea leaves | 100 g | 6.24 | 9.37 | 18.29 | 20.68 | 20.88 |
| Sugar, refined | kg | 13.65 | 21.13 | 32.38 | 42.21 | 40.50 |
| Cabbage | kg | 6.76 | 8.79 | 12.42 | 14.18 | 15.96 |
| Kales | kg | 7.91 | 7.76 | 16.92 | 8.51 | 12.42 |
| Carrots | kg | 16.60 | 14.29 | 15.67 | 23.27 | 16.17 |
| Onions | kg | 8.82 | 15.83 | 16.67 | 37.86 | 22.50 |
| Tomatoes | kg | 16.85 | 12.00 | 22.92 | 26.37 | 27.60 |
| Cooking bananas | dozen | 5.73 | 9.51 | 21.67 | 29.72 | 31.00 |
| Ripe bananas | dozen | 11.80 | 13.75 | 29.75 | 42.98 | 38.48 |
| Beer | 0.5 lit. | 13.10 | 14.42 | 24.60 | 33.25 | 36.17 |
| Cigarettes | pkt. | 17.00 | 19.83 | 31.50 | 40.00 | 40.00 |
| Kerosene | lit. | 7.96 | 9.38 | 15.16 | 17.13 | 17.04 |
| Matches | box | 1.22 | 1.42 | 2.02 | 2.58 | 3.00 |
| Bed linen | pair | 310.42 | 339.75 | 386.91 | 451.29 | 517.50 |
| Bath towel | each | 195.83 | 145.00 | 223.12 | 287.71 | 347.67 |

Source: Statistical Abstract 1995

Table K.1.1.1-10 Foreign Exchange Rate of Kenya Shilling

| Currency | Mean Rate in Kenya Shillings | | | | | |
|-------------------------------------|------------------------------|----------------|----------------|----------------|----------------|----------------|
| | 31st Dec. 1991 | 31st Dec. 1992 | 31st Dec. 1993 | 31st Dec. 1994 | 31st Dec. 1995 | 31st Dec. 1996 |
| 1 US Dollar | 28.0740 | 36.2160 | 68.1630 | 44.8390 | 55.9390 | 55.0211 |
| 1 Pound Sterling | 52.4280 | 54.7050 | 100.9160 | 69.9490 | 86.5590 | 93.0495 |
| 1 Deutsche Mark | 18.4860 | 22.3810 | 39.2980 | 28.8890 | 38.9300 | 35.3431 |
| 1 French Franc | 5.4100 | 6.5680 | 11.5670 | 8.3730 | 11.4070 | 10.5053 |
| 1 Swiss Franc | 20.7110 | 24.7210 | 46.0560 | 34.1350 | 48.5040 | 40.8195 |
| 1 Dutch Guilder | 16.4010 | 19.9240 | 35.1270 | 25.7780 | 34.7650 | 31.5221 |
| 1 Swedish Kroner | 5.0600 | 5.1240 | 8.1930 | 6.0300 | 8.3910 | 7.9967 |
| 1 Norwegian Kroner | 4.6970 | 5.2350 | 9.0710 | 6.6010 | 8.8160 | 8.5385 |
| 1 Zambian Kwacha** | 0.3140 | 0.1020 | 0.1030 | 0.0650 | - | - |
| 1 Austrian Schilling | 2.6270 | 3.1910 | 5.5940 | 4.1150 | 5.5430 | 5.0433 |
| 1 Belgian Franc | 0.8970 | 1.0900 | 1.8990 | 1.4080 | 1.8950 | 1.7239 |
| 1 Danish Kronor | 4.7520 | 5.7930 | 10.0770 | 7.3660 | 10.0710 | 9.1951 |
| 1 Canadian Dollar | 24.2460 | 28.5530 | 51.3080 | 31.9310 | 41.0900 | - |
| 1 Finish Marka | 6.7880 | 6.9230 | 11.7800 | 9.4470 | 12.8130 | 11.8523 |
| 1 Australian Dollar | 21.3310 | 24.9710 | 46.1740 | 34.5420 | - | 43.8243 |
| 100 Japanese Yen | 22.3520 | 29.0660 | 60.9140 | 44.9530 | 54.3800 | 47.3897 |
| 100 Italian Lira | 2.4410 | 2.4550 | 3.9880 | 2.7660 | 3.5480 | 3.6003 |
| 1 Indian Rupee | 1.0850 | 1.3990 | 2.1730 | 1.4340 | 1.6090 | 1.5391 |
| 1 Pakistan Rupee | - | 1.3970 | - | 1.4420 | - | 1.3818 |
| 100 Burundi Francs** | 14.6910 | 15.3710 | 25.8500 | 18.1700 | - | - |
| 100 Rwanda Francs** | 23.4360 | 24.7600 | 46.7400 | 32.3200 | - | 1.2211 |
| Overall Weighted Index* 1982=100 | 282.1000 | 314.6000 | 600.0000 | 419.8300 | 551.5600 | 510.7150 |

* Trade weighted Fisher's ideal index.

** P. T. A. Exchange Rates (Zambia, Rwanda and Burundi).

Source: Economic Survey 1997

Table K.1.1.1-11 Projected Growth Rates for GDP and Sector Share (1997-2001)

| | Projected Growth Rate 1997-2001 (%) | Sector Share 1996 (%) | Projected Sector Share 2001 (%) |
|-------------------|-------------------------------------|-----------------------|---------------------------------|
| Agriculture | 4.40 | 27.90 | 26.00 |
| Industry | 7.86 | 16.50 | 18.00 |
| Services, Private | 6.00 | 38.60 | 38.80 |
| Public Services | 6.20 | 17.00 | 17.20 |
| GDP | 5.90 | 100.00 | 100.00 |

Source: National Development Plan 1997-2001

K. 1.2 STATE BUDGET

Table K.1.1.2-1 Government Accounts

| | (unit:1,000 K. pound) | | | |
|---------------------|-----------------------|-----------|-----------|-----------|
| | 1990/91 | 1991/92 | 1992/93 | 1993/94 |
| Revenue | | | | |
| Recurrent Account | 1,928,189 | 2,878,787 | 5,421,427 | 5,272,101 |
| Development Account | 883,586 | 1,279,798 | 1,841,806 | 3,275,706 |
| Total | 2,811,775 | 4,158,585 | 7,263,233 | 8,547,807 |
| Expenditure | | | | |
| Recurrent Account | 3,062,909 | 3,642,253 | 5,122,352 | 7,831,398 |
| Development Account | 475,176 | 329,546 | 473,833 | 563,312 |
| Total | 3,538,085 | 3,971,799 | 5,596,185 | 8,394,710 |
| Surplus/Deficit | | 186,786 | 1,667,048 | 153,097 |

Source: Statistical Abstract 1995

Table K.1.1.2-2 Central Government Out-Turn of Revenue and Expenditure

| | (unit:K£million) | | | | | Change(%) |
|---------------------------|------------------|-----------|----------|----------|----------|-------------------|
| | 1992/93 | 1993/94 | 1994/95 | 1995/96 | 1996/97 | (1992/93-1996/97) |
| Current revenue | 3,454.71 | 5,039.37 | 6,067.82 | 7,181.84 | 7,441.42 | 115.40 |
| Current expenditure | 3,884.17 | 5,921.64 | 5,888.84 | 6,745.53 | 7,404.05 | 90.62 |
| Current surplus | -429.46 | -873.27 | 208.98 | 436.31 | 37.37 | -108.70 |
| Capital revenue | 21.37 | 12.31 | 38.62 | 29.02 | 5.02 | -76.51 |
| Capital expenditure | 423.71 | 566.67 | 715.17 | 890.36 | 1,052.63 | 148.43 |
| Net lending | 76.28 | 35.90 | 29.52 | -209.71 | 133.36 | 74.83 |
| External grants | 440.40 | 458.15 | 661.45 | 450.05 | 787.15 | 78.74 |
| Overall deficit | -467.68 | -1,005.38 | 164.36 | 234.73 | -356.45 | -23.78 |
| Financing deficit: | | | | | | |
| External loans(net) | 318.00 | -56.75 | -106.50 | 86.30 | 136.60 | -57.04 |
| Total domestic borrowing | 751.70 | 1,212.35 | 401.90 | -113.55 | 88.30 | -88.25 |
| Long-term(net) | 66.05 | -168.80 | -376.70 | -355.10 | -19.75 | -129.90 |
| Short-term(net) | 685.70 | 1,380.95 | 778.60 | 241.55 | 108.05 | -84.24 |
| Changes in cash balances: | | | | | | |
| Increase=(-) | -602.02 | -150.20 | -459.76 | -207.48 | 131.55 | -121.85 |
| Memorandum items: | | | | | | |
| Public debt redemption | 1,672.45 | 2,461.34 | 1,579.62 | 1,463.46 | 1,453.06 | -13.12 |
| (a) External | 269.56 | 1,018.70 | 944.87 | 960.33 | | |
| (b) Internal | 1,402.89 | 1,442.64 | 634.75 | 503.13 | | |

Source: Economic Survey 1997

Table K.1.1.2-3 Balance of Payment

| | 1994 | | | 1995 | | | 1996 | | |
|---|-------------------|-------------------------|-------------|-------------------|-------------------------|-------------|-------------------|-------------------------|-------------|
| | Debits/ Assets | Credits/ Liabilities | Net | Debits/ Assets | Credits/ Liabilities | Net | Debits/ Assets | Credits/ Liabilities | Net |
| A. Current Account | | | | | | | | | |
| 1. Merchandise(FOB) | 4,936.21 | 4,150.89 | Dr 785.32 | 6,787.22 | 4,822.42 | Dr 1,964.80 | 7,335.32 | 5,822.92 | Dr 1,512.40 |
| 2. Shipment | 780.25 | 152.49 | Dr 627.76 | 1,086.59 | 295.73 | Dr 790.86 | 1,174.33 | 262.55 | Dr 911.78 |
| 3. Other transportation | 279.59 | 670.62 | 391.03 | 298.38 | 635.10 | 336.72 | 298.84 | 770.21 | 471.37 |
| 4. Foreign travel | 319.03 | 1,404.80 | 1,085.77 | 372.43 | 1,249.64 | 877.21 | 477.13 | 1,279.65 | 802.52 |
| 5. International investment income | 1,075.01 | 58.60 | Dr 1,016.41 | 901.38 | 85.95 | Dr 815.43 | 691.72 | 81.24 | Dr 610.48 |
| 6. Other goods, services & income: government | 241.33 | 848.12 | 606.79 | 298.04 | 415.88 | 116.72 | 314.18 | 394.29 | 80.11 |
| 7. Other goods, services & income: private | 294.36 | 184.32 | 110.04 | 266.51 | 211.27 | Dr 55.24 | 258.81 | 148.94 | Dr 111.87 |
| 8. Unrequited transfers-government | 7.03 | 351.52 | 344.49 | 5.81 | 238.92 | 233.11 | 4.67 | 370.30 | 365.63 |
| 9. Unrequited transfers-private | 171.12 | 583.83 | 412.71 | 112.29 | 1,162.00 | 1,049.71 | 12.04 | 1,247.76 | 1,235.72 |
| Total | 8,113.93 | 8,404.99 | 291.06 | 10,125.55 | 9,086.69 | Dr 1,038.86 | 10,587.04 | 10,355.88 | Dr 231.16 |
| of which, Visible balance | 4,936.21 | 4,150.89 | Dr 785.32 | 6,787.22 | 4,822.42 | Dr 1,964.80 | 7,335.32 | 5,822.92 | Dr 1,512.40 |
| Invisible balance | 3,177.72 | 4,254.10 | 1,076.38 | 3,340.33 | 4,274.27 | 933.94 | 3,231.72 | 4,532.94 | 1,301.22 |
| B. Capital Account | | | | | | | | | |
| 10. Government long-term | | Dr 317.49 | Dr 317.49 | 904.66 | 889.90 | Dr 14.76 | 1,039.93 | 1,054.20 | 14.27 |
| 11. Private long-term | 0.17 | Dr 120.47 | Dr 120.64 | 149.84 | 129.22 | Dr 20.62 | 128.81 | 112.08 | Dr 16.73 |
| 12. Parastatals long-term | | Dr 285.85 | Dr 285.85 | 298.51 | 151.40 | Dr 147.11 | 251.29 | 70.15 | Dr 181.14 |
| 13. Short-term | | 688.70 | 688.70 | 0.00 | 819.70 | 819.70 | 0.00 | 1,865.87 | 1,865.87 |
| Total | 0.17 | Dr 35.11 | 35.28 | 1,352.91 | 1,990.22 | 637.41 | 1,420.03 | 3,102.30 | Dr 308.07 |
| C. Errors and Omissions | | | 9.05 | | | 24.54 | | | 1,163.02 |
| D. Overall Balance | | | 264.83 | | | Dr 368.91 | | | |
| E. Monetary Movement | | | | | | | | | |
| 14. Change in reserves | 448.67 | | Dr 448.67 | cr 420.53 | | 420.53 | 1,081.52 | | Dr 1,081.52 |
| 15. Transactions with IMF | | 46.84 | 46.84 | | Dr 93.72 | Dr 93.72 | | 119.37 | Dr 119.37 |
| 16. Change in other liabilities | | 137.20 | 137.20 | | 42.10 | 42.10 | | 37.87 | 37.87 |
| Total Monetary Movements | 448.67 | 183.84 | Dr 264.83 | cr 420.53 | | 368.91 | 1,081.52 | 81.50 | Dr 1,163.02 |

Source: Economic Survey 1997

Change in Balance of Payments Magnitudes

| | 1994 | 1995 | 1996 |
|---|-----------|-----------|----------|
| 1. Exports(FOB) | 712.57 | 671.53 | 1,000.50 |
| 2. Imports(FOB) | 607.05 | 1,851.01 | 548.10 |
| 3. Services(net) | -160.18 | -868.26 | 48.75 |
| 4. Transfers(net) | 57.90 | 525.82 | 318.53 |
| 5. Change on current account | 3.24 | -1,321.92 | 819.68 |
| 6. Private long-term capital(net) | 95.00 | 100.22 | 3.89 |
| 7. Public long-term capital(net) | -759.53 | 441.47 | -5.00 |
| 8. Change on basic balance(net balance on line 5-7) | 851.29 | -780.23 | 818.37 |
| 9. Short term capital, errors and omissions(net) | 167.98 | 135.55 | 724.50 |
| 10. Net change on all above items(monetary movements) | -1,019.27 | -633.74 | 1,531.93 |

Table K.1.1.2-4 Gross Receipts on Recurrent Account of Central Government

| | (K&Million) | | | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 1992/93 | 1993/94 | 1994/95 | 1995/96** | 1996/97+ |
| DIRECT TAXATION | | | | | |
| Income Tax | 998.52 | 1,838.36 | 2,175.29 | 2,404.12 | 2,324.88 |
| Other | - | - | - | - | - |
| Sub-Total | 998.52 | 1,838.36 | 2,175.29 | 2,404.12 | 2,324.88 |
| INDIRECT TAXATION | | | | | |
| Sales Tax/VAT on Domestic Manufactures | 406.54 | 651.24 | 675.00 | 737.56 | 737.23 |
| Sales Tax/VAT on imports | 700.60 | 798.48 | 551.69 | 682.63 | 786.09 |
| Import Duties*** | 459.15 | 739.64 | 929.91 | 1,058.78 | 1,175.30 |
| Excise Duties | 418.35 | 556.27 | 966.61 | 1,130.59 | 1,297.40 |
| Export Duties | 0.22 | 0.30 | - | - | - |
| Trading Licences | 11.28 | 11.01 | 18.83 | 17.47 | 28.65 |
| Licences and Fees Under Traffic Act | 16.26 | 19.53 | 21.30 | 22.97 | 44.30 |
| Other Taxes, Licences and Duties | 59.78 | 89.38 | 66.90 | 83.15 | 76.94 |
| Sub-Total | 2,072.18 | 2,865.85 | 3,230.24 | 3,733.15 | 4,145.91 |
| OTHER REVENUE AND INCOME | | | | | |
| Compulsory Fees, Fines and Penalties | 40.56 | 76.16 | 64.83 | 79.69 | 88.73 |
| Income From Poverty | 241.86 | 58.91 | 155.53 | 503.62 | 322.15 |
| Current Transfers | 8.74 | 9.66 | 28.71 | 9.82 | 28.69 |
| Sales of Goods and Services | 78.85 | 101.90 | 361.99 | 421.57 | 507.60 |
| Other | 35.37 | 100.84 | 119.95 | 58.90 | 28.46 |
| Sub-Total | 405.38 | 347.47 | 731.01 | 1,073.60 | 975.63 |
| Total | 3,476.08 | 5,051.68 | 6,136.54 | 7,210.87 | 7,446.42 |

Source: Economic Survey 1997

Table K.1.1.2-5 Central Government Expenditure on Main Services

| | 1992/93 | | | 1993/94 | | | 1994/95 | | | 1995/96 | | | 1996/97 | | |
|--------------------------------------|---------------------|---------------------|----------|---------------------|---------------------|----------|---------------------|---------------------|----------|---------------------|---------------------|----------|---------------------|----------|-----------|
| | Development Account | | Total | Development Account | | Total | Development Account | | Total | Development Account | | Total | Development Account | | Total |
| | Recurrent Account | Development Account | | Recurrent Account | Development Account | | Recurrent Account | Development Account | | Recurrent Account | Development Account | | | | |
| General Public Administration | 243.13 | 189.75 | 432.88 | 276.55 | 233.71 | 510.26 | 483.40 | 490.29 | 973.69 | 613.43 | 271.16 | 884.59 | 827.54 | 633.17 | 1,460.71 |
| General Administration | 68.26 | 5.27 | 73.53 | 118.16 | 3.42 | 121.58 | 1,027.61 | 5.30 | 1,032.91 | 128.00 | 13.86 | 141.86 | 116.54 | 12.70 | 129.24 |
| External Affairs | 213.96 | 17.65 | 231.61 | 280.56 | 9.21 | 289.77 | 371.14 | 12.64 | 383.78 | 391.16 | 15.74 | 406.90 | 481.44 | 22.15 | 483.59 |
| Public Order and Safety | 525.35 | 212.67 | 738.02 | 675.27 | 246.34 | 921.61 | 1,827.15 | 508.23 | 2,335.38 | 1,132.59 | 300.56 | 1,433.15 | 1,405.52 | 688.02 | 2,073.54 |
| Total | 243.70 | 26.61 | 270.31 | 329.98 | 12.81 | 342.79 | 308.57 | 6.29 | 314.86 | 440.06 | 11.89 | 451.95 | 525.43 | 17.90 | 543.33 |
| Defence | 783.78 | 71.01 | 854.79 | 1,004.32 | 66.33 | 1,069.65 | 1,326.21 | 87.57 | 1,413.78 | 1,491.21 | 94.94 | 1,586.15 | 1,633.29 | 148.40 | 1,787.69 |
| Education | 175.30 | 56.95 | 232.25 | 229.33 | 97.73 | 327.06 | 295.28 | 55.50 | 350.78 | 370.60 | 83.86 | 454.46 | 414.21 | 276.86 | 691.07 |
| Health | 4.37 | 4.76 | 9.13 | 9.79 | 27.99 | 37.78 | 77.32 | 78.09 | 155.41 | 16.56 | 70.56 | 100.09 | 18.93 | 62.61 | 81.54 |
| Housing and Community Welfare | 51.96 | 43.23 | 95.19 | 52.40 | 18.26 | 70.66 | 2.40 | 0.00 | 2.40 | 82.68 | 70.56 | 153.34 | 95.80 | 52.83 | 148.63 |
| Social Welfare | | | | | | | | | | | | | | | |
| Economic Services | 31.29 | 43.44 | 74.73 | 41.04 | 87.12 | 128.16 | 53.88 | 51.81 | 105.69 | 63.53 | 58.75 | 122.28 | 76.57 | 141.87 | 218.44 |
| General Administration | 129.80 | 201.1 | 330.90 | 180.62 | 302.88 | 483.50 | 184.36 | 192.25 | 376.51 | 216.10 | 170.53 | 386.63 | 229.53 | 331.79 | 561.32 |
| Agriculture, Forestry & Fishing | 47.00 | 17.4 | 64.40 | 59.73 | 28.38 | 88.11 | 74.99 | 13.94 | 88.93 | 70.39 | 11.23 | 81.62 | 94.51 | 34.10 | 128.61 |
| Mining, Manufacturing & Construction | 33.14 | 41.34 | 74.48 | 44.30 | 38.83 | 83.13 | 53.37 | 84.81 | 138.18 | 54.88 | 113.05 | 167.93 | 62.85 | 156.43 | 219.28 |
| Electricity, Gas, Steam and Water | 18.05 | 116.14 | 134.19 | 54.75 | 99.96 | 154.71 | 136.61 | 132.14 | 268.75 | 190.73 | 192.84 | 383.57 | 223.33 | 288.58 | 511.91 |
| Roads | 11.14 | 15.43 | 26.57 | 6.27 | 0.42 | 6.69 | 10.36 | 94.94 | 105.30 | 11.79 | 184.47 | 196.26 | 16.31 | 118.91 | 135.22 |
| Other Transport & Communications | 137.44 | 1.33 | 138.77 | 38.37 | 0.59 | 38.96 | 46.49 | 0.65 | 47.14 | 47.56 | 3.52 | 51.08 | 54.40 | 10.17 | 64.57 |
| Other Economic Services | 407.86 | 436.18 | 844.04 | 405.08 | 558.18 | 963.26 | 580.06 | 570.54 | 1,130.60 | 654.98 | 734.39 | 1,389.37 | 757.60 | 1,081.85 | 1,839.65 |
| Total Economic Services | | | | | | | | | | | | | | | |
| Other Services: Including | 3,123.21 | 0 | 3,123.21 | 5,274.90 | 0.00 | 5,274.90 | 3,447.34 | 0.00 | 3,447.34 | 3,601.85 | 0.00 | 3,601.85 | 2,982.35 | 0.00 | 2,982.35 |
| Public debt | 5,315.53 | 851.41 | 6,166.94 | 7,981.07 | 1,026.64 | 9,007.71 | 7,899.33 | 1,306.22 | 9,205.55 | 7,790.53 | 1,379.83 | 9,170.36 | 7,839.33 | 2,308.47 | 10,147.80 |
| Total | | | | | | | | | | | | | | | |

Source: Economic Survey 1997
 Statistics Abstract 1995

K. 1. 3 SOCIAL STATUS

Table K.1.1.3-1 Household Welfare Indicators (1994)

| | Rural | Urban | Total |
|---------------------------------------|--------|--------|--------|
| 1. Population | | | |
| Male(1,000) | 10,935 | 2,102 | 13,037 |
| Female(1,000) | 11,356 | 2,028 | 13,384 |
| Total(1,000) | 22,291 | 4,130 | 26,421 |
| 2. Household Head | | | |
| Male Head(%) | 73.8 | 81.8 | 75.5 |
| Female Head(%) | 26.2 | 18.2 | 24.5 |
| 3. Literacy Rate | | | |
| Male(%) | 71.6 | 94.2 | 76.6 |
| Female(%) | 39.0 | 76.4 | 44.7 |
| 4. High Education Level of Head | | | |
| Pre-school/Primary(%) | 41.6 | 34.0 | 40.1 |
| Secondary(%) | 17.6 | 43.0 | 22.8 |
| Secondary+(%) | 2.4 | 11.1 | 4.2 |
| None(%) | 36.7 | 9.2 | 31.1 |
| Not Stated(%) | 1.6 | 2.7 | 1.8 |
| 5. Occupation of Household Head | | | |
| Unpaid Family Worker(%) | 6.7 | 3.7 | 5.9 |
| Agricultural Farmer(%) | 57.9 | 2.4 | 46.5 |
| Skilled Worker(%) | 14.4 | 43.9 | 20.4 |
| Unskilled Worker(%) | 13.3 | 26.7 | 16.1 |
| Business Person(%) | 7.7 | 22.4 | 10.7 |
| 6. Household Expenditure/Income | | | |
| Mean Per Capita Income/year(Ksh) | 21,305 | 51,010 | 27,403 |
| Mean Per Capita Expenditure/year(Ksh) | 16,196 | 44,279 | 21,961 |
| Mean Household Expenditure/month(Ksh) | 6,365 | 11,373 | 7,393 |
| Food Share in Total Expenditure(%) | 73.7 | 60.3 | 71.0 |
| 7. Access to Sanitation(%) | 75.9 | 97.6 | 80.4 |
| 8. Access to Safe water(%) | 32.5 | 93.3 | 44.9 |

Source: Welfare Monitoring Survey II 1996

Table K.1.1.3-2 Distribution of Wage Employment by Industry and Income Group (1994)

| | less than 2,000 | 2,000~3,999 | 4,000~5,999 | 6,000~7,999 | 8,000~14,999 | 15,000~19,999 | 20,000~24,999 | 25,000~29,999 | Above 30,000 | Total |
|---|-----------------|-------------|-------------|-------------|--------------|---------------|---------------|---------------|--------------|-----------|
| 1. Agriculture and Forestry | 3,264 | 5,942 | 20,655 | 66,010 | 56,845 | 17,981 | 9,460 | 4,316 | 512 | 184,985 |
| Agriculture and hunting | 2 | 3,908 | 5,977 | 8,318 | 1,131 | 256 | 234 | 91 | 7 | 19,924 |
| Forestry and logging | 3 | 4 | 20 | 53 | 55 | 18 | 23 | 15 | 0 | 191 |
| Fishing | 3,269 | 9,854 | 26,652 | 74,381 | 58,031 | 18,255 | 9,717 | 4,422 | 519 | 205,100 |
| Sub-Total | 680 | 220 | 1,092 | 9,607 | 35,671 | 36,302 | 34,249 | 32,130 | 4,711 | 154,662 |
| 2. Mining and Quarrying | 0 | 0 | 0 | 44 | 8,531 | 4,963 | 2,785 | 5,457 | 190 | 21,970 |
| 3. Manufacturing | 0 | 4 | 1,064 | 2,181 | 16,098 | 12,345 | 10,916 | 7,263 | 740 | 50,611 |
| 4. Electricity and Water | 37 | 291 | 1,117 | 2,905 | 17,121 | 19,287 | 29,512 | 26,552 | 7,572 | 104,394 |
| 5. Construction | 17 | 916 | 14 | 818 | 9,320 | 17,370 | 21,847 | 21,320 | 2,256 | 73,878 |
| 6. Trade, Restaurants and Hotels | 9 | 2,403 | 5,315 | 875 | 11,471 | 9,603 | 8,976 | 19,240 | 9,622 | 67,514 |
| 7. Transport and Communication | 1,696 | 638 | 5,126 | 50,123 | 156,076 | 178,854 | 146,359 | 77,584 | 19,377 | 635,833 |
| 8. Finance, Insurance, Real Estate and Bussines | 5,716 | 14,344 | 40,407 | 141,228 | 312,773 | 297,522 | 264,837 | 194,308 | 44,993 | 1,316,128 |
| 9. Community, Social and Personal Services | | | | | | | | | | |
| Grand Total | | | | | | | | | | |

Source: Statistical Abstract 1995

Table K.1.1.3-3 Income Group by Sex (1994)

| | Male | Female | Total |
|-----------------|---------|---------|-----------|
| Less than 2,000 | 3,754 | 1,962 | 5,716 |
| 2,000~3,999 | 9,809 | 4,535 | 14,344 |
| 4,000~5,999 | 31,027 | 9,380 | 40,407 |
| 6,000~7,999 | 87,719 | 53,509 | 141,228 |
| 8,000~14,999 | 226,511 | 86,262 | 312,773 |
| 15,000~19,999 | 213,592 | 83,930 | 297,522 |
| 20,000~24,999 | 186,900 | 77,937 | 264,837 |
| 25,000~29,999 | 157,532 | 36,777 | 194,309 |
| Above 30,000 | 36,813 | 8,181 | 44,994 |
| Total | 953,657 | 362,473 | 1,316,130 |

Source: Statistical Abstract 1995

Table K.1.1.3-4 National Monthly Urban Food Poverty Line per Adult Equivalent, 1994

| Food Item | ALL URBAN (using internal expenditure weights) | | | | | | | | | | Food expenditure at poverty line Kshs. 1994 |
|-------------|---|--|-------------------|-----------------------------|--|-----------------------------|--|----------------------|--------|--|---|
| | Monthly Consumption Kshs./adult equivalent 1994 | Monthly Consumption Kg./adult equivalent | Calories per 100g | Calories produced per month | Calories produced as ratio of total intake | Calories produced per month | Quality needed to meet requirement Kg./month | Prices Kshs./kg 1994 | | | |
| Bread | 154.60 | 5.31 | 240 | 12,746.14 | 9.45 | 6,380.09 | 2.66 | 29.11 | 77.39 | | |
| Maize | 252.21 | 14.22 | 340 | 48,337.88 | 35.85 | 24,195.57 | 7.12 | 17.74 | 126.24 | | |
| Cereal | 96.92 | 3.40 | 330 | 11,218.38 | 8.32 | 5,615.37 | 1.70 | 28.51 | 48.51 | | |
| Meat | 247.12 | 2.19 | 224 | 4,903.44 | 3.64 | 2,454.42 | 1.10 | 112.89 | 123.70 | | |
| Fish | 35.30 | 0.52 | 230 | 1,192.57 | 0.88 | 596.94 | 0.26 | 68.08 | 17.67 | | |
| Milk | 167.87 | 6.22 | 80 | 4,973.93 | 3.69 | 2,489.70 | 3.11 | 27.00 | 84.03 | | |
| Eggs | 42.23 | 0.45 | 140 | 633.81 | 0.47 | 317.26 | 0.23 | 93.28 | 21.14 | | |
| Oils & fats | 137.42 | 1.61 | 880 | 14,125.64 | 10.47 | 7,070.60 | 0.80 | 85.61 | 68.79 | | |
| Fruits | 50.71 | 3.56 | 90 | 3,204.99 | 2.38 | 1,604.26 | 1.78 | 14.24 | 25.38 | | |
| Vegetables | 205.57 | 15.17 | 40 | 6,068.49 | 4.50 | 3,037.59 | 7.59 | 13.55 | 102.90 | | |
| Beans | 74.15 | 2.04 | 310 | 6,332.37 | 4.70 | 3,169.67 | 1.02 | 36.30 | 37.12 | | |
| Roots | 72.48 | 6.40 | 140 | 8,956.05 | 6.64 | 4,482.96 | 3.20 | 11.33 | 36.28 | | |
| Sugar | 146.23 | 3.22 | 375 | 12,083.79 | 8.96 | 6,048.55 | 1.61 | 45.38 | 73.20 | | |
| Tea/coffee | 64.71 | 0.31 | 24 | 73.96 | 0.05 | 37.02 | 0.15 | 209.99 | 32.39 | | |
| Total | | | | 134,851.41 | 100.00 | 67,500.00 (2,250x30) | | | 874.72 | | |

Source: Economic Survey 1997

Table K.1.1.3-5 National Monthly Rural Poverty Line per Adult Equivalent, 1994

| Food Item | Monthly Consumption Kshs./adult equivalent | Prices Kshs./kg 1982 | Monthly Consumption Kg./adult equivalent in 1982 | Calories per 100g | ALL RURAL | | | Quality needed to meet requirement Kg./month | Prices Kshs./kg 1994 | Food expenditure at poverty line in Kshs. 1994 |
|-------------|--|----------------------|--|-------------------|----------------------------------|---|-----------------------------|--|----------------------|--|
| | | | | | Calories produced per month 1982 | Calories produced as ratio of total intake 1982 | Calories produced per month | | | |
| Bread | 2.35 | 4.38 | 0.54 | 240 | 1,287.67 | 1.65 | 1,113.71 | 29.35 | 13.62 | |
| Maize | 24.46 | 1.83 | 13.37 | 340 | 45,444.81 | 58.23 | 39,305.20 | 16.95 | 195.95 | |
| Cereals | 4.66 | 2.69 | 1.73 | 330 | 5,716.73 | 7.33 | 4,944.40 | 29.39 | 44.33 | |
| Meat | 11.10 | 13.72 | 0.81 | 200 | 1,618.08 | 2.07 | 1,399.47 | 113.51 | 79.43 | |
| Fish | 2.11 | 13.40 | 0.16 | 230 | 362.16 | 0.46 | 313.24 | 80.44 | 10.96 | |
| Milk | 13.43 | 3.30 | 4.07 | 80 | 3,255.76 | 4.17 | 2,815.90 | 27.15 | 95.56 | |
| Eggs | 1.05 | 7.88 | 0.13 | 140 | 186.55 | 0.24 | 161.35 | 93.93 | 10.83 | |
| Oils & fats | 5.69 | 16.27 | 0.35 | 880 | 3,077.57 | 3.94 | 2,661.79 | 82.03 | 24.81 | |
| Fruits | 3.74 | 3.11 | 1.2 | 90 | 1,082.32 | 1.39 | 936.09 | 13.57 | 14.11 | |
| Vegetables | 6.99 | 2.24 | 3.12 | 40 | 1,248.21 | 1.60 | 1,079.58 | 14.63 | 39.49 | |
| Beans | 9.31 | 4.99 | 1.87 | 310 | 5,783.77 | 7.41 | 5,002.38 | 34.12 | 55.06 | |
| Roots | 5.95 | 2.49 | 2.39 | 140 | 3,345.38 | 4.29 | 2,893.42 | 12.88 | 26.62 | |
| Sugar | 8.15 | 5.45 | 1.50 | 375 | 5,607.80 | 7.19 | 4,850.18 | 48.61 | 62.87 | |
| Tea/coffee | 2.14 | 19.06 | 0.11 | 24 | 26.95 | 0.03 | 23.31 | 302.30 | 29.36 | |
| Total | 101.13 | | | | 78,043.74 | 100.00 | 67,500.00 | | 702.99 | |

Source: Economic Survey 1997

Table K.1.1.3-6 Weight of Major Items in Household Expenditure

| | Monthly Income Class | | |
|------------------------------|----------------------------|-------------------------|------------------------|
| | Lower (less than 2,000) | Middle (2,000-7,999) | Upper (above 8,000) |
| 1. Food | 0.2133 | 0.0772 | 0.0542 |
| Cereals and Cereals Products | 0.0805 | 0.0527 | 0.0436 |
| Wheat Products | 0.2938 | 0.1299 | 0.0978 |
| Sub-Total | 0.0902 | 0.1862 | 0.2067 |
| 2. Meat | 0.0304 | 0.0346 | 0.0397 |
| 3. Fish | 0.1083 | 0.1266 | 0.1000 |
| 4. Dairy Products | 0.0701 | 0.0775 | 0.0793 |
| 5. Oil and Fats | 0.0311 | 0.0521 | 0.0613 |
| 6. Fruits | 0.1165 | 0.0869 | 0.0958 |
| 7. Vegetables | 0.0613 | 0.0285 | 0.0249 |
| 8. Roots | 0.0208 | 0.0181 | 0.0108 |
| 9. Others | 0.1775 | 0.2596 | 0.2837 |
| Total | 1.0000 | 1.0000 | 1.0000 |

Source: Statistical Abstract 1995

Table K.1.1.3-7 Rural Food Poverty Ranking by Province

| Province | 1982 | | 1992 | | 1994 | |
|---------------|-----------|--------|-----------|--------|-----------|--------|
| | Headcount | % Rank | Headcount | % Rank | Headcount | % Rank |
| Coast | 76.25 | 5 | 63.00 | 2 | 50.95 | 4 |
| Eastern | 64.58 | 2 | 62.31 | 1 | 59.50 | 7 |
| Central | 37.89 | 1 | 67.83 | 3 | 32.95 | 1 |
| Rift Valley | 69.63 | 3 | 81.02 | 6 | 45.75 | 3 |
| Nyanza | 77.08 | 6 | 70.72 | 4 | 41.31 | 2 |
| Western | 73.25 | 4 | 78.41 | 5 | 52.25 | 5 |
| North Eastern | - | - | - | - | 58.55 | 6 |
| Total Rural | 65.53 | | 71.78 | | 47.19 | |

Note. North Eastern was not covered during the previous surveys.

Table K.1.1.3-8 Rural Absolute Poverty Ranking by Province

| Province | 1982 | | 1992 | | 1994 | |
|---------------|-----------|--------|-----------|--------|-----------|--------|
| | Headcount | % Rank | Headcount | % Rank | Headcount | % Rank |
| Coast | 54.55 | 5 | 43.50 | 3 | 55.63 | 5 |
| Eastern | 47.73 | 2 | 42.16 | 2 | 57.75 | 6 |
| Central | 25.69 | 1 | 35.89 | 1 | 31.93 | 1 |
| Rift Valley | 51.05 | 3 | 51.51 | 5 | 42.87 | 3 |
| Nyanza | 57.88 | 6 | 47.41 | 4 | 42.21 | 2 |
| Western | 53.79 | 4 | 54.81 | 6 | 53.83 | 4 |
| North Eastern | - | - | - | - | 58.00 | 7 |
| Total Rural | 47.89 | | 46.33 | | 46.75 | |

Note. North Eastern was not covered during the previous surveys.
Source. Economic Survey 1997

Table K.1.1.3-9 Number of Schools by Type

| | (unit: number) | | | | | | | | | |
|-----------------------------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1994 |
| Primary | 13,392 | 13,849 | 14,288 | 14,691 | 14,864 | 15,196 | 15,465 | 15,804 | 15,906 | 15,906 |
| Secondary | 2,485 | 2,592 | 2,717 | 2,654 | 2,678 | 2,647 | 2,640 | 2,639 | 2,834 | 2,834 |
| Teacher training | 22 | 22 | 23 | 24 | 24 | 26 | 29 | 28 | 28 | 28 |
| Technical training | 22 | | 19 | 19 | 18 | 18 | 18 | 18 | 20 | 20 |
| Institutes | 15,921 | 16,463 | 17,047 | 17,388 | 17,584 | 17,887 | 18,152 | 18,489 | 18,788 | 18,788 |
| Total | | | | | | | | | | |
| Source: Statistical Abstract 1995 | | | | | | | | | | |

Table K.1.1.3-10 Pupils Enrolled

| | (unit: number) | | | | | | | | | |
|-----------------------------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1994 |
| Primary | 4,843,432 | 5,031,340 | 5,123,581 | 5,389,148 | 5,392,319 | 5,455,996 | 5,563,987 | 5,428,396 | 5,557,008 | 5,557,008 |
| Secondary | 458,712 | 522,261 | 54,092 | 640,735 | 618,461 | 614,161 | 629,062 | 531,342 | 619,839 | 619,839 |
| Teacher training | 15,644 | 17,817 | 18,430 | 20,105 | 21,091 | 19,161 | 19,154 | 17,696 | 17,435 | 17,435 |
| Technical training | 6,118 | | 4,021 | 4,100 | 5,906 | 6,849 | 7,654 | 7,891 | 8,148 | 8,148 |
| Total | 5,323,906 | 5,571,418 | 5,200,124 | 6,054,088 | 6,037,777 | 6,096,167 | 6,219,857 | 5,985,325 | 6,202,430 | 6,202,430 |
| Source: Statistical Abstract 1995 | | | | | | | | | | |

Table K.1.1.3-11 Primary School Enrollment

| | (unit: number) | | | | |
|---------------|----------------|---------|---------|---------|---------|
| | 1990 | 1991 | 1992 | 1993 | 1994 |
| Nyeri | 178,725 | 175,038 | 177,559 | 171,702 | 174,264 |
| Kirinyaga | 106,572 | 108,332 | 111,190 | 112,659 | 112,990 |
| Embu | 107,753 | 109,876 | 114,019 | 110,604 | 111,796 |
| Meru | 273,944 | 292,588 | 301,192 | 211,355 | 111,427 |
| Thiraka Nithi | - | - | - | 74,274 | 74,165 |
| Nyanbene | - | - | - | - | 103,525 |
| Total | 666,994 | 685,834 | 703,960 | 680,594 | 688,167 |

Source: Statistical Abstract 1995

Table K.1.1.3-12 Secondary School Enrollment

| | (unit: 1,000) | | | | |
|---------------|---------------|-------|-------|-------|-------|
| | 1990 | 1991 | 1992 | 1993 | 1994 |
| Nairobi | 34.2 | 35.9 | 34.0 | 15.0 | 31.7 |
| Coast | 40.4 | 41.5 | 40.0 | 30.0 | 37.0 |
| North Eastern | 3.1 | 3.4 | 12.0 | 1.0 | 3.6 |
| Eastern | 115.3 | 113.4 | 125.0 | 104.0 | 112.9 |
| Central | 140.2 | 124.7 | 122.0 | 118.0 | 129.7 |
| Rift Valley | 121.7 | 119.8 | 95.0 | 111.0 | 121.9 |
| Nyanza | 97.5 | 90.9 | 89.0 | 81.0 | 105.2 |
| Western | 88.3 | 88.9 | 62.9 | 71.0 | 77.9 |
| Total | 640.7 | 618.5 | 579.9 | 531.0 | 619.9 |

Source: Statistical Abstract 1995

Table K.1.1.3-13 Female Population by Highest Level of Education

| Age Groups | None | | Pre-school/Primary | | Secondary | | Secondary + | | Not Stated | |
|-------------|------------|------|--------------------|------|------------|------|-------------|-----|------------|-----|
| | Population | % | Population | % | Population | % | Population | % | Population | % |
| 12-14 | 90,785 | 7.7 | 1,057,144 | 89.6 | 29,837 | 2.5 | - | - | 2,476 | 0.2 |
| 15-19 | 113,588 | 8.2 | 920,749 | 66.6 | 319,872 | 23.2 | 15,447 | 1.1 | 12,036 | 0.9 |
| 20-24 | 124,791 | 10.1 | 673,612 | 54.7 | 372,774 | 30.3 | 34,213 | 2.8 | 26,821 | 2.2 |
| 25-29 | 156,881 | 15.1 | 538,689 | 51.8 | 290,936 | 28.0 | 39,874 | 3.8 | 14,384 | 1.4 |
| 30-34 | 207,246 | 24.5 | 377,204 | 44.6 | 217,584 | 25.7 | 27,928 | 3.3 | 15,444 | 1.8 |
| 35-39 | 239,122 | 36.8 | 282,663 | 43.5 | 98,050 | 15.1 | 21,336 | 3.3 | 8,431 | 1.3 |
| 40-44 | 242,071 | 50.7 | 164,507 | 34.4 | 51,987 | 10.9 | 10,580 | 2.2 | 8,478 | 1.8 |
| 45-49 | 187,124 | 56.1 | 123,077 | 36.9 | 17,223 | 5.2 | 2,248 | 0.7 | 3,596 | 1.1 |
| 50+ | 914,491 | 84.3 | 140,960 | 13.0 | 14,592 | 1.3 | 9,211 | 0.8 | 5,953 | 0.5 |
| Rural Urban | 2,133,978 | 31.1 | 3,634,295 | 53.0 | 952,611 | 13.9 | 66,038 | 1.0 | 73,355 | 1.1 |
| Urban | 142,121 | 10.4 | 644,310 | 47.2 | 459,944 | 33.7 | 94,799 | 6.9 | 24,262 | 1.8 |
| Total | 2,276,099 | 27.7 | 4,278,605 | 52.0 | 1,412,556 | 17.2 | 160,837 | 2.0 | 97,617 | 1.2 |

Source: Welfare Monitoring Survey II, 1996

Table K.1.1.3-14 Population by Education (high level completed), 1989

| | None | Primary | | Secondary | | University | Not Stated | Total |
|-------------------|------------------|------------------|------------------|------------------|----------------|---------------|----------------|-------------------|
| | | St. 1-4 | St. 5-8 | Form 1-4 | Form 5+ | | | |
| Male | | | | | | | | |
| 6-9 | 619,546 | 597,371 | 2 | 1 | | | 131,449 | 1,348,369 |
| 10-14 | 159,060 | 903,401 | 403,618 | 5,647 | | | 32,319 | 1,504,045 |
| 15-19 | 88,124 | 165,173 | 696,692 | 201,131 | 8,661 | 589 | 17,613 | 1,177,983 |
| 20-24 | 76,315 | 67,876 | 372,750 | 298,740 | 41,078 | 10,283 | 22,552 | 889,594 |
| 25-29 | 86,605 | 67,226 | 290,631 | 278,150 | 30,666 | 11,218 | 17,978 | 782,474 |
| 30-34 | 92,400 | 62,903 | 198,803 | 188,566 | 17,080 | 10,886 | 13,135 | 583,773 |
| 35-39 | 89,145 | 59,987 | 164,226 | 117,832 | 10,447 | 9,098 | 10,214 | 460,949 |
| 40-44 | 86,907 | 54,184 | 135,971 | 70,222 | 5,937 | 6,817 | 7,895 | 367,933 |
| 45-49 | 90,007 | 57,240 | 89,524 | 31,335 | 2,911 | 4,152 | 5,958 | 281,127 |
| 50-54 | 93,672 | 56,751 | 60,022 | 16,736 | 1,373 | 2,587 | 4,765 | 235,906 |
| 55-59 | 84,547 | 44,272 | 35,026 | 9,472 | 789 | 1,338 | 3,573 | 179,017 |
| 60+ | 329,330 | 101,389 | 43,567 | 8,986 | 844 | 1,628 | 10,215 | 495,959 |
| Not stated | 3,622 | 997 | 1,590 | 841 | 56 | 33 | 7,607 | 14,746 |
| Total | 1,899,280 | 2,238,770 | 2,492,422 | 1,227,659 | 119,842 | 58,629 | 285,273 | 8,321,875 |
| Female | | | | | | | | |
| 6-9 | 592,400 | 619,977 | 5 | 5 | | | 127,897 | 1,340,284 |
| 10-14 | 169,356 | 827,277 | 451,422 | 6,517 | | | 31,075 | 1,485,647 |
| 15-19 | 132,840 | 135,709 | 714,026 | 192,593 | 7,275 | 587 | 17,682 | 1,200,712 |
| 20-24 | 164,100 | 83,908 | 445,402 | 275,897 | 20,083 | 5,760 | 18,190 | 1,013,340 |
| 25-29 | 222,593 | 92,471 | 289,562 | 212,011 | 11,296 | 5,608 | 13,748 | 847,289 |
| 30-34 | 228,692 | 73,394 | 159,822 | 95,732 | 4,134 | 4,194 | 9,683 | 575,651 |
| 35-39 | 222,527 | 63,495 | 114,583 | 44,318 | 1,963 | 2,851 | 8,207 | 457,944 |
| 40-44 | 222,161 | 52,085 | 64,139 | 16,241 | 1,010 | 1,676 | 6,933 | 364,245 |
| 45-49 | 206,232 | 43,431 | 29,477 | 6,410 | 599 | 940 | 6,316 | 293,405 |
| 50-54 | 185,131 | 30,245 | 15,931 | 3,406 | 353 | 542 | 5,010 | 240,618 |
| 55-59 | 147,160 | 20,081 | 8,015 | 1,556 | 217 | 297 | 3,829 | 181,155 |
| 60+ | 473,082 | 31,363 | 9,749 | 2,075 | 417 | 465 | 13,488 | 530,639 |
| Not stated | 5,473 | 738 | 949 | 327 | 26 | 19 | 2,971 | 10,503 |
| Total | 2,971,747 | 2,074,174 | 2,303,082 | 857,088 | 47,373 | 22,939 | 265,029 | 8,541,432 |
| Both sexes | | | | | | | | |
| 6-9 | 1,211,946 | 1,217,348 | 7 | 6 | 0 | 0 | 259,346 | 2,688,653 |
| 10-14 | 328,416 | 1,730,678 | 855,040 | 12,164 | 0 | 0 | 63,394 | 2,989,692 |
| 15-19 | 220,964 | 300,882 | 1,410,718 | 393,724 | 15,936 | 1,176 | 35,295 | 2,378,695 |
| 20-24 | 240,415 | 151,784 | 818,152 | 574,637 | 61,161 | 16,043 | 40,742 | 1,902,934 |
| 25-29 | 309,198 | 159,697 | 580,193 | 490,161 | 41,962 | 16,826 | 31,726 | 1,629,763 |
| 30-34 | 321,092 | 136,297 | 358,625 | 284,298 | 21,214 | 15,080 | 22,818 | 1,159,424 |
| 35-39 | 311,672 | 123,482 | 278,809 | 162,150 | 12,410 | 11,949 | 18,421 | 918,893 |
| 40-44 | 309,068 | 106,269 | 200,110 | 86,463 | 6,947 | 8,493 | 14,828 | 732,178 |
| 45-49 | 296,239 | 100,671 | 119,001 | 37,745 | 3,510 | 5,092 | 12,274 | 574,532 |
| 50-54 | 278,803 | 86,996 | 75,953 | 20,142 | 1,726 | 3,129 | 9,775 | 476,524 |
| 55-59 | 231,707 | 64,353 | 43,041 | 11,028 | 1,006 | 1,635 | 7,402 | 360,172 |
| 60+ | 802,412 | 132,752 | 53,316 | 11,061 | 1,261 | 2,093 | 23,703 | 1,026,598 |
| Not stated | 9,095 | 1,735 | 2,539 | 1,168 | 82 | 52 | 10,578 | 25,249 |
| Total | 4,871,027 | 4,312,944 | 4,795,504 | 2,084,747 | 167,215 | 81,568 | 550,302 | 16,863,307 |

Source: Statistical Abstract 1995

Table K.1.1.3-15 School Attendants in Urban Population by Age Group (1989)

| | At School | Left School | Never Attended | Not Stated | Total |
|-------------------|----------------|------------------|----------------|----------------|------------------|
| Male | | | | | |
| 6-9 | 125,645 | 3,910 | 26,941 | 24,151 | 180,647 |
| 10-14 | 166,710 | 9,603 | 7,704 | 5,060 | 189,077 |
| 15-19 | 106,425 | 65,321 | 7,442 | 5,823 | 185,011 |
| 20-24 | 30,004 | 221,407 | 9,999 | 13,636 | 275,046 |
| 25-29 | 7,656 | 249,006 | 13,050 | 10,707 | 280,419 |
| 30-34 | 4,032 | 171,208 | 13,567 | 7,639 | 196,446 |
| 35-39 | 2,588 | 119,671 | 12,350 | 5,417 | 140,026 |
| 40-44 | 1,852 | 84,224 | 11,791 | 3,955 | 101,822 |
| 45-49 | 1,063 | 53,281 | 11,713 | 2,666 | 68,723 |
| 50-54 | 703 | 34,877 | 12,085 | 1,930 | 49,595 |
| 55-59 | 354 | 17,282 | 8,868 | 1,182 | 27,686 |
| 60+ | 690 | 20,863 | 23,294 | 2,062 | 46,909 |
| Age Not Stated | 109 | 734 | 209 | 5,466 | 6,518 |
| Total | 447,831 | 1,051,387 | 159,013 | 89,694 | 1,747,925 |
| Female | | | | | |
| 6-9 | 129,804 | 4,465 | 28,114 | 23,996 | 186,379 |
| 10-14 | 170,181 | 16,909 | 13,816 | 5,107 | 206,013 |
| 15-19 | 92,711 | 101,596 | 15,415 | 5,564 | 215,286 |
| 20-24 | 17,937 | 199,585 | 20,334 | 9,730 | 247,586 |
| 25-29 | 5,303 | 166,885 | 27,897 | 5,679 | 205,764 |
| 30-34 | 2,634 | 87,243 | 25,912 | 3,240 | 119,029 |
| 35-39 | 1,531 | 55,619 | 23,023 | 2,200 | 82,373 |
| 40-44 | 901 | 29,761 | 20,759 | 1,640 | 53,061 |
| 45-49 | 498 | 16,373 | 17,656 | 1,221 | 35,748 |
| 50-54 | 292 | 9,376 | 15,356 | 963 | 25,987 |
| 55-59 | 169 | 5,031 | 10,470 | 555 | 16,225 |
| 60+ | 466 | 8,197 | 33,936 | 1,626 | 44,225 |
| Age Not Stated | 97 | 334 | 292 | 1,714 | 2,437 |
| Total | 422,524 | 701,374 | 252,980 | 63,235 | 1,440,113 |
| Both Sexes | | | | | |
| 6-9 | 255,449 | 8,375 | 55,055 | 48,147 | 367,026 |
| 10-14 | 336,891 | 26,512 | 21,520 | 10,167 | 395,090 |
| 15-19 | 199,136 | 166,917 | 22,857 | 11,387 | 400,297 |
| 20-24 | 47,941 | 420,992 | 30,333 | 23,366 | 522,632 |
| 25-29 | 12,959 | 415,891 | 40,947 | 16,386 | 486,183 |
| 30-34 | 6,666 | 258,451 | 39,479 | 10,879 | 315,475 |
| 35-39 | 4,119 | 175,290 | 35,373 | 7,617 | 222,399 |
| 40-44 | 2,753 | 113,985 | 32,550 | 5,595 | 154,883 |
| 45-49 | 1,561 | 69,654 | 29,369 | 3,887 | 104,471 |
| 50-54 | 995 | 44,253 | 27,441 | 2,893 | 75,582 |
| 55-59 | 523 | 22,313 | 19,338 | 1,737 | 43,911 |
| 60+ | 1,156 | 29,060 | 57,230 | 3,688 | 91,134 |
| Age Not Stated | 206 | 1,068 | 501 | 7,180 | 8,955 |
| Total | 870,355 | 1,752,761 | 411,993 | 152,929 | 3,188,038 |

Source: Statistical Abstract 1995

Table K.1.1.3-16 Life Expectancy

| | |
|---------------------------|----|
| Kenya | 59 |
| High Income | 77 |
| Middle Income | 67 |
| Low Income | 63 |
| Source: Fact Book 1997/98 | |

Table K.1.1.3-17 Literacy Rate (%)

| | |
|---------|------|
| Female | 63.3 |
| Male | 75.7 |
| Average | 69.4 |

Table K.1.1.3-18 Ethnic Group Growth Rate of Population

| Tribe | (Million) | | Annual Growth (%) |
|---------------------------|-----------|------|----------------------|
| | 1979 | 1989 | |
| Kikuyu | 3.20 | 4.46 | 3.40 |
| Luhya | 2.20 | 3.08 | 3.80 |
| Luo | 1.95 | 2.65 | 3.10 |
| Kalenjin | 1.73 | 2.46 | 3.60 |
| Kamba | 1.65 | 2.45 | 4.10 |
| Kisii | 0.94 | 1.32 | 3.40 |
| Meru | 0.84 | 1.09 | 2.60 |
| Mijikenda | 0.73 | 1.01 | 3.20 |
| Masai | 0.24 | 0.38 | 4.60 |
| Turkana | 0.20 | 0.28 | 3.20 |
| Source: Fact Book 1997/98 | | | |

Table K.1.1.3-19 Farming Practices by Sex

| | | (unit:%) | | | |
|-----------|--------|----------|---------|------------|---------|
| | | Planting | Weeding | Harvesting | Selling |
| Maize | Male | 54 | 55 | 54 | 24 |
| | Female | 87 | 87 | 89 | 52 |
| Potatoes | Male | 8 | 8 | 8 | 4 |
| | Female | 13 | 13 | 14 | 7 |
| Coffee | Male | 13 | 12 | 11 | 10 |
| | Female | 13 | 16 | 16 | 13 |
| Tea | Male | 5 | 5 | 5 | 4 |
| | Female | 7 | 7 | 6 | 6 |
| Pyrethrum | Male | 5 | 5 | 5 | 4 |
| | Female | 7 | 7 | 6 | 5 |
| Cotton | Male | 6 | 6 | 6 | 5 |
| | Female | 8 | 8 | 8 | 5 |

Source: Integrated Rural Survey 1976-1979

Note: Farmers aged more than 15 years for both sex

Table K.1.1.3-20 House Keeping

| | | (unit:%) | |
|---------------------|--------|----------|-----------|
| | | Always | Sometimes |
| Care for poultry | Male | 3.0 | 3.5 |
| | Female | 9.2 | 2.5 |
| Feeding for animals | Male | 8.1 | 3.7 |
| | Female | 12.3 | 12.3 |
| Grazing cattle | Male | 25.2 | 13.1 |
| | Female | 14.1 | 14.0 |
| Milking | Male | 11.8 | 6.3 |
| | Female | 37.4 | 4.9 |
| Grazing goats/sheep | Male | 20.9 | 12.5 |
| | Female | 26.7 | 12.2 |
| Cooking | Male | 4.7 | 3.4 |
| | Female | 90.0 | 1.3 |
| Care for child | Male | 1.3 | 4.7 |
| | Female | 63.2 | 2.4 |
| Purchasing food | Male | 22.9 | 22.8 |
| | Female | 71.4 | 11.3 |
| Fetching water | Male | 5.1 | 3.0 |
| | Female | 89.1 | 1.9 |
| Procuring fuel wood | Male | 5.2 | 3.7 |
| | Female | 88.6 | 2.3 |
| Clearing house | Male | 4.6 | 2.8 |
| | Female | 89.7 | 2.0 |

Source: Integrated Rural Surveys 1976-1979

Table K.1.1.3-21 Pattern of Change of Fetching Water during Wet and Dry Seasons

| Time taken to collect water during wet season | Time Taken to Collect Water during Dry Season | | | | | |
|---|---|-----------|------------|------------|------------|---|
| | less than 5 min. | 6-15 min. | 16-30 min. | 31-45 min. | 46-60 min. | 61-90 min. 91-120 min. more than 120 min. |
| Less than 5 min. | 78.6 | 4.5 | 7.7 | 1.5 | 3.3 | 0.8 |
| 6-15 min. | 2.6 | 77.0 | 9.8 | 1.2 | 3.8 | 0.7 |
| 16-30 min. | 0.4 | 1.7 | 72.6 | 5.4 | 8.1 | 3.1 |
| 31-45 min. | 0.2 | 0.4 | 6.4 | 65.5 | 9.4 | 5.9 |
| 46-60 min. | 0.6 | 0.6 | 1.7 | 2.5 | 63.3 | 6.1 |
| 61-90 min. | 0.6 | 0.6 | 0.8 | - | 10.3 | 73.2 |
| 91-120 min. | 0.3 | - | 2.2 | - | - | 2.7 |
| more than 120 min. | 1.5 | - | 0.2 | - | 1.4 | - |

Source: Welfare monitoring survey II 1996

K. 1.4 SOCIAL INDICATOR OF UNDP

Table K.1.1.4-1 Social Indicators of UNDP

| | HDI Rank | Food Production per Capita Index (1979-81=100) (1993) | Agricultural Production (as of GDP) (1994) | Food Consumption | | Daily Calorie Supply per capita (1992) | Total kg (1990-1992) | Change Since 1980-82 (%) (1990-1992) | Food Imports (as % of Merchandise Imports) (1980) | Cereal imports (1,000 ton) (1994) | Food Aid in Cereals (1,000 ton) (1994) |
|---------------------------|----------|---|--|---|-------------|--|----------------------|--------------------------------------|---|-----------------------------------|--|
| | | | | (as of Total Household Consumption) (1980-1985) | (1980-1985) | | | | | | |
| High Human Development | - | 104 | 8 | 32 | 2,894 | 20 | 3 | 12 | 5 | 35,810 | - |
| Medium Human Development | - | 133 | 16 | 54 | 2,730 | 11 | 68 | - | 8 | 80,572 | - |
| Low Human Development | - | 113 | 32 | 51 | 2,262 | 5 | 19 | 14 | 11 | 12,861 | 4,396 |
| All Developing Countries | - | 123 | 15 | 51 | 2,553 | 9 | 44 | 13 | 7 | 129,243 | 6,427 |
| Least Developed Countries | - | 94 | 37 | - | 2,054 | 7 | 12 | 15 | 16 | 7,651 | 3,752 |
| Sub-Saharan Africa | - | 97 | 20 | 45 | 2,096 | 8 | -8 | 11 | 10 | 10,162 | 2,752 |
| Industrial Countries | - | 96 | 3 | - | - | 29 | 19 | 11 | 6 | 90,212 | - |
| World | - | 118 | 6 | - | - | 13 | 39 | 11 | 6 | 219,455 | - |
| Kenya | 134 | 83 | 29 | 38 | 2075 | 7 | 107 | 8 | 15 | 622 | 102 |
| Ghana | 132 | 115 | 46 | 50 | 2206 | 25 | 16 | 10 | 9 | 311 | 101 |
| Cameroon | 133 | 79 | 32 | 24 | 1981 | 10 | -26 | 9 | 11 | 226 | 2 |
| South Africa | 90 | 74 | 5 | 34 | 2705 | 10 | 10 | 3 | 5 | 913 | - |
| Botswana | 97 | 69 | 5 | 25 | 2288 | 4 | 21 | - | 13 | 175 | 7 |
| Egypt | 109 | 114 | 20 | 49 | 3336 | 7 | 33 | 32 | 22 | 9,200 | 179 |
| Zimbabwe | 129 | 78 | 15 | 40 | 1989 | 2 | -44 | 3 | 3 | 100 | 4 |
| Congo | 130 | 79 | 10 | 37 | 2297 | 33 | 16 | 19 | 17 | 86 | 12 |
| Nigeria | 141 | 129 | 43 | 48 | 2125 | 5 | -67 | 17 | 13 | 1,078 | - |
| Tanzania | 149 | 76 | 57 | 64 | 2021 | 15 | 27 | 13 | 8 | 195 | 118 |
| Ethiopia | 170 | 86 | 57 | 49 | 1610 | 0 | 0 | 8 | 20 | 928 | 720 |

Source: Human Development Report 1997

Table K.1.1.4-2 Human Development Index of UNDP

| | HDI Rank | Life | | | Adult Literacy | | | Combined 1st, 2nd & 3rd level | | | Adjusted | | | Human Development | | |
|---------------------------|----------|----------------------------|----------------------|-------------------------|----------------------------|----------------------------|----------------------------|-------------------------------|-----------------|-----------|--------------------|---|--|-------------------|--|--|
| | | Expectancy at Birth (1994) | Literacy Rate (1994) | Gross Enrollment (1994) | Real GDP per Capita (1994) | Real GDP per Capita (1994) | Real GDP per Capita (1994) | Life Expectancy Index | Education Index | GDP Index | Index Value (1994) | Real GDP per Capita Rank minus HDI Rank | | | | |
| High Human Development | - | 74.6 | 97.0 | 80 | 17,052 | 6,040 | 0.83 | 0.91 | 0.98 | 0.907 | - | | | | | |
| Medium Human Development | - | 67.1 | 82.6 | 64 | 3,352 | 3,352 | 0.70 | 0.76 | 0.54 | 0.667 | - | | | | | |
| Low Human Development | - | 56.1 | 49.9 | 47 | 1,308 | 1,308 | 0.52 | 0.49 | 0.20 | 0.403 | - | | | | | |
| All Developing Countries | - | 61.8 | 69.7 | 56 | 2,904 | 2,904 | 0.61 | 0.65 | 0.46 | 0.576 | - | | | | | |
| Least Developed Countries | - | 50.4 | 48.1 | 36 | 965 | 965 | 0.42 | 0.44 | 0.14 | 0.336 | - | | | | | |
| Sub-Saharan Africa | - | 50.0 | 55.9 | 42 | 1,377 | 1,377 | 0.42 | 0.51 | 0.21 | 0.380 | - | | | | | |
| Industrial Countries | - | 74.1 | 98.5 | 83 | 15,986 | 6,037 | 0.82 | 0.93 | 0.98 | 0.911 | - | | | | | |
| World | - | 63.2 | 77.1 | 60 | 5,798 | 5,798 | 0.64 | 0.71 | 0.94 | 0.764 | - | | | | | |
| Kenya | 134 | 53.6 | 77.0 | 55 | 1,404 | 1,404 | 0.48 | 0.70 | 0.22 | 0.463 | 5 | | | | | |
| Ghana | 132 | 58.6 | 63.4 | 44 | 1,960 | 1,960 | 0.53 | 0.57 | 0.31 | 0.468 | -8 | | | | | |
| Cameroon | 133 | 55.1 | 62.1 | 46 | 2,120 | 2,120 | 0.50 | 0.57 | 0.33 | 0.468 | -12 | | | | | |
| South Africa | 90 | 63.7 | 81.4 | 81 | 4,291 | 4,291 | 0.64 | 0.81 | 0.69 | 0.716 | -10 | | | | | |
| Botswana | 97 | 52.3 | 68.7 | 71 | 5,367 | 5,367 | 0.45 | 0.69 | 0.87 | 0.673 | -30 | | | | | |
| Egypt | 109 | 64.3 | 50.5 | 69 | 3,846 | 3,846 | 0.66 | 0.57 | 0.62 | 0.614 | -20 | | | | | |
| Zimbabwe | 129 | 49.0 | 84.7 | 68 | 2,196 | 2,196 | 0.40 | 0.79 | 0.35 | 0.513 | -10 | | | | | |
| Congo | 130 | 51.3 | 73.9 | 56 | 2,410 | 2,410 | 0.44 | 0.68 | 0.38 | 0.500 | -14 | | | | | |
| Nigeria | 141 | 51.0 | 55.6 | 50 | 1,351 | 1,351 | 0.43 | 0.54 | 0.21 | 0.393 | 1 | | | | | |
| Tanzania | 149 | 50.3 | 66.8 | 34 | 656 | 656 | 0.42 | 0.56 | 0.09 | 0.357 | 21 | | | | | |
| Ethiopia | 170 | 48.2 | 34.5 | 18 | 427 | 427 | 0.39 | 0.29 | 0.05 | 0.244 | 4 | | | | | |

Source: Human Development Report 1997

Table K.1.1.4-3 Human Poverty Index (HPI)

| | HPI Ranking | HPI Value (%) |
|--------------|----------------|------------------|
| South Africa | - | - |
| Botswana | 29 | 22.9 |
| Egypt | 44 | 34.8 |
| Swaziland | - | - |
| Namibia | 59 | 45.1 |
| Zimbabwe | 17 | 17.3 |
| Ghana | 43 | 32.6 |
| Kenya | 32 | 26.1 |
| Lesotho | 35 | 27.5 |
| Nigeria | 54 | 41.6 |
| Zambia | 45 | 35.1 |
| Tanzania | 50 | 39.7 |
| Angola | - | - |
| Sudan | 57 | 42.3 |
| Uganda | 53 | 41.3 |
| Malawi | 60 | 45.8 |
| Mozambique | 72 | 50.1 |
| Eritrea | - | - |
| Ethiopia | 75 | 56.2 |
| Sierra Leone | 77 | 59.2 |
| Somalia | - | - |

Source: Human Development Report 1997, UNDP

Note: HPI, given for 78 developing countries.