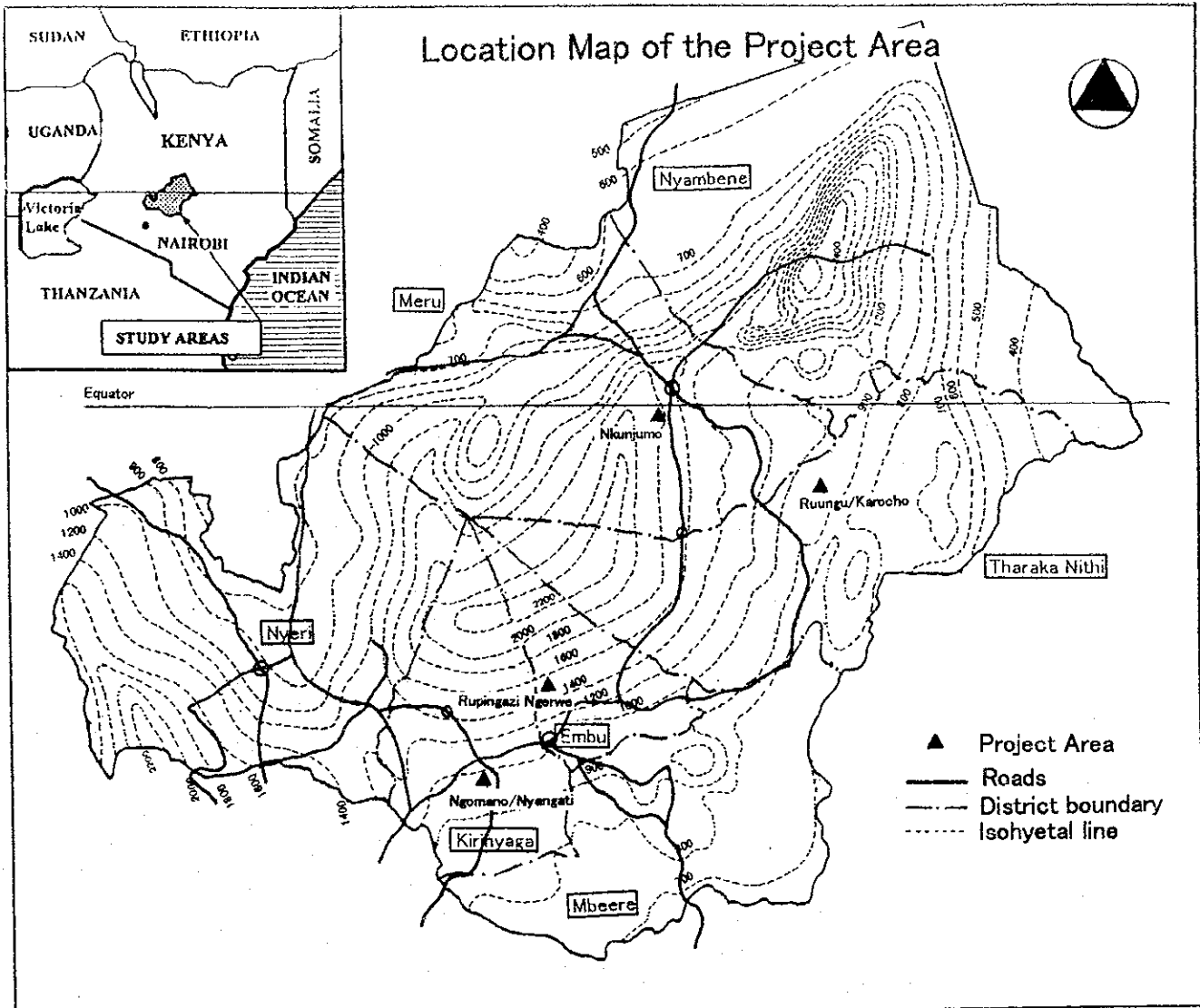


## K.2 SOCIO AND AGRO-ECONOMY

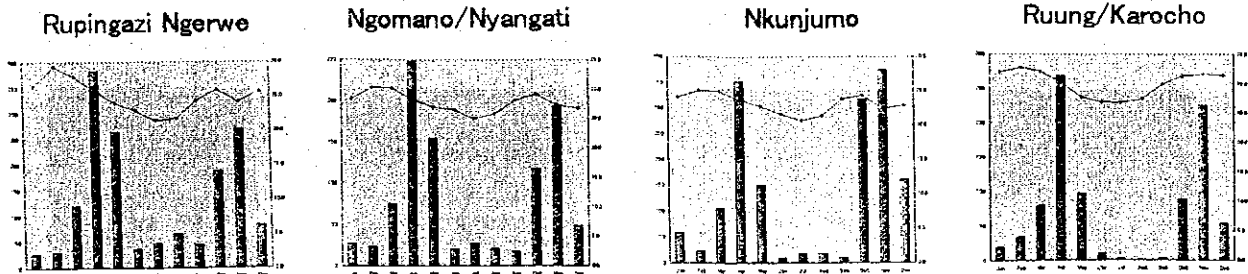
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### Monthly Rainfall and Mean temperature



	Rupingazi Ngerwe	Ngomano/Nyangati	Nkunjumo	Ruung/Karocho
1. Province	Eastern	Central	Eastern	Eastern
2. District	Embu	Kirinyaga	Meru	Tharaka Nithi
3. Annual rainfall(mm)	1,364	1,014	1,259	847
4. Total area(ha)	166	376	160	NA
5. Elevation(m)	1,600	1,200	1,600	750
6. Present irrigable area(ha)	1	13	16	0
7. Population	2,200	1,300	2,200	2,300
8. Averaged family size	7.6	6.6	7.4	7.9
9. No. of farm households	300	200	300	300
Of which, member	60	68	140	164
non-member	240	132	160	136
10. Average farm size(ha)	1.33	1.50	1.10	2.80

Table K.2.2-1 Summarized Results of the Farm Economic Survey

	Rupingazi Ngerwe	Ngomano/Nyangati	Nkunjumo	Ruungu/Karocho
1. Family size (persons/family)	7.6	6.6	7.4	7.9
2. Sex ratio of family members: Male(%)	48.4	51.9	50.2	50.6
Female(%)	51.6	48.1	49.8	49.4
3. Educational status of family head:				
Never studied(%)	7.5	15.0	17.5	6.7
Primary school(%)	45.0	50.0	52.5	66.7
Secondary school(%)	37.5	32.5	22.5	10.0
High school(%)	0.0	0.0	0	10.0
Diplomatic(%)	0.0	2.5	7.5	3.3
Vocational school(%)	10.0	0.0	0	3.3
4. Adult literacy(%)	87.5	90.0	80.0	100.0
5. Farm labour per family:	4.9	4.2	4.9	3.4
Full-time(persons)	3.4	2.2	2.0	1.6
Part-time(persons)	1.5	2.0	2.9	1.7
6. Female farm labour ratio(%)	51.1	45.8	50.8	50.5
7. Farm size per household(ha)	1.33	1.50	1.10	2.80
8. Annual farm household income(Ksh/year):	50,000	58,500	46,200	19,200
Crop income(Ksh/year)	37,500	40,800	30,400	6,700
Animal income(Ksh/year)	6,100	3,100	3,200	1,500
Off-farm income(Ksh/year)	6,400	14,600	12,600	11,000
9. Ratio of farm households holding title deed(%)	70.0	42.5	55.0	0
10. Self-sufficiency of maize:				
Met(%)	55.0	48.6	25.0	20.0
Not met(%)	45.0	51.4	75.0	80.0
Main reason for not meeting	Small farm size	Water shortage/drought	Small farm size	Low rainfall/drought
11. Major crops:	Maize	Maize	Maize, Beans	Maize, Millet, Pigeon pea
Food crops	Cabbage, tomatoes, Kale	Tomatoes, F. beans, Chillies	Cabbage, Kale, Carrots	None
Vegetables	Coffee, bananas, macadamia	Bananas	Bananas, Orange	Cashew nut, Mangoes
Fruit/tree crops	Yes(%)	20.0	47.5	20.0
12. Burden/Credit:	40.0	80.0	52.5	80.0
No(%)	60.0			
13. Migrant workers:				
Yes(%)	22.5	41.0	40.0	30.0
No(%)	77.5	59.0	60.0	70.0
Amount earned(ksh/month)	5,000	5,300	3,700	5,000
14. Livestock:				
Cattle(head/FHH)	1.45	1.60	1.23	1.70
Goats(head/FHH)	0.73	1.23	0.85	2.20
Sheep(head/FHH)	0.35	0.35	0.38	0.70
15. Agricultural Problems in the area in Ranking	1. Insufficient water	1. Insufficient water	1. Insufficient water	1. Insufficient water
	2. Poor bargaining power	2. Poor bargaining power	2. High cost of inputs	2. Low crop yield
	3. Low price of crops	3. High cost of inputs	3. Credit services	3. High cost of inputs
	4. High cost of inputs	4. Low price of crops	4. Low price of crops	4. Poor marketing
	5. Low crop yield	5. Low crop yield	5. Poor bargaining power	5. Low price of crops
16. Intention to farming types in number:				
Maize+Maize	0	1	0	0
Maize+Vegetables	31	19	19	29
Vegetables+Vegetables	7	5	18	1
Maize+Fruits	0	1	0	0
Maize+Animal	1	1	0	0
Maize+Coffee	1	0	0	0
Mix farming	0	11	1	0
Rice	0	2	0	0
Maize+Vegetable+Coffee	0	0	2	0
17. Demand for the Project in Ranking	1. Irrigation	1. Irrigation	1. Irrigation	1. Irrigation
	2. Market roads	2. Market roads	2. Market roads	2. Market roads
	3. Rural roads	3. Domestic water	3. Credit services	3. Rural roads
	4. Credit services	4. Credit services	4. Post harvest facilities	4. School
	5. Electricity	5. Electricity	5. Electricity	5. Credit services
18. Present land use	Refer to attached paper	Refer to attached paper	Refer to attached paper	Refer to attached paper
19. Major problems on marketing:	Low price of crops	Low price of crops	Low price of crops	Poor road
	Preservation	Poor storing	Lack in storing facilities	Low price of crops
	Poor roads	Strict grading by brokers	Lack in knowledge of grading	Lack of transport means
	Brokers	Exploitation by brokers	No bargaining power	Lack of market
	Lack of knowledge	Lack of group marketing	Transportation means	Long distance to market
20. By-law of the irrigation project/scheme	Refer to attached paper	Refer to attached paper	Refer to attached paper	Refer to attached paper

Figure K.2.2-1 Classification of Farm Household's Income

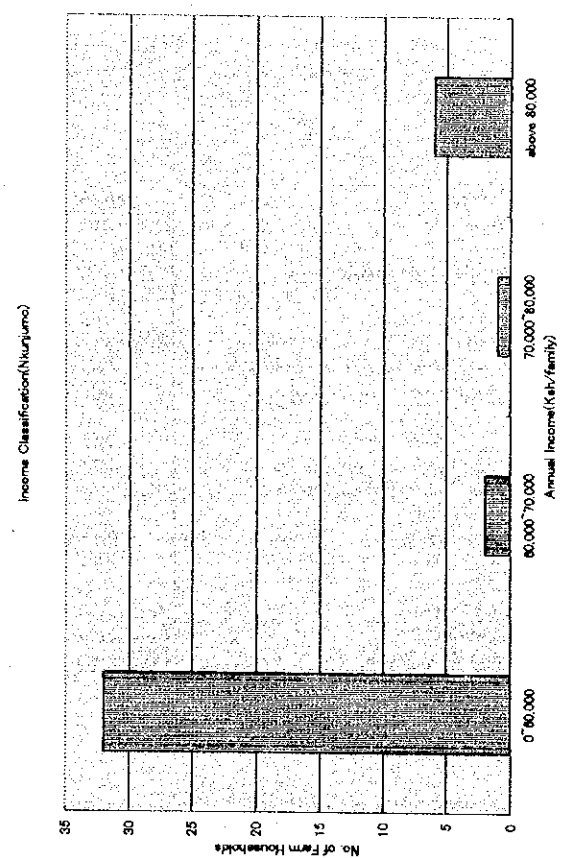
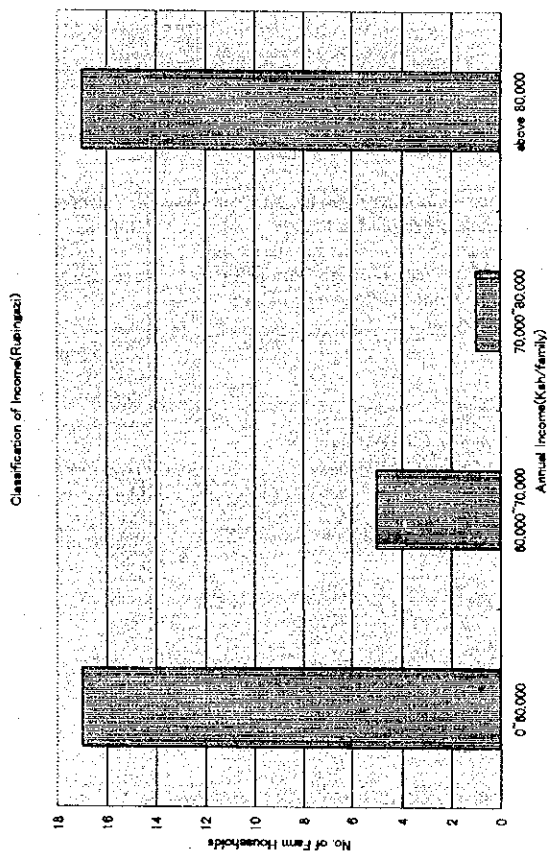
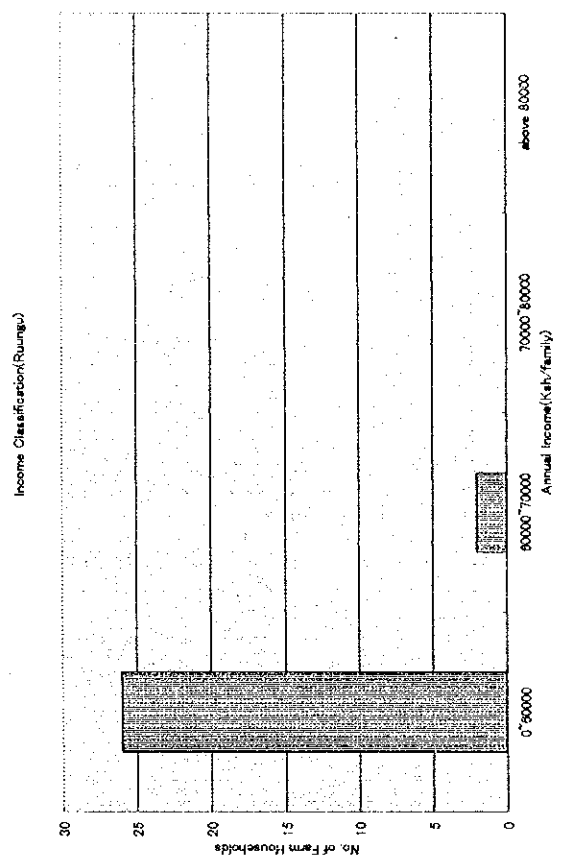
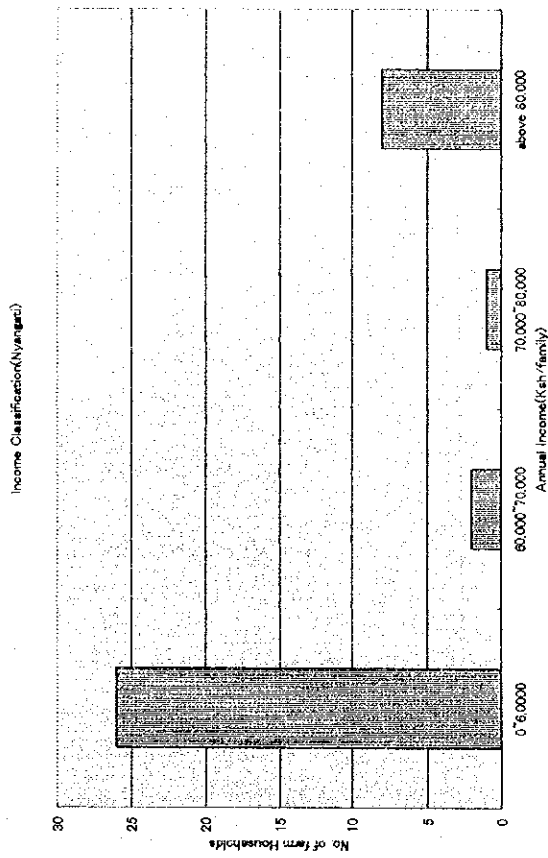
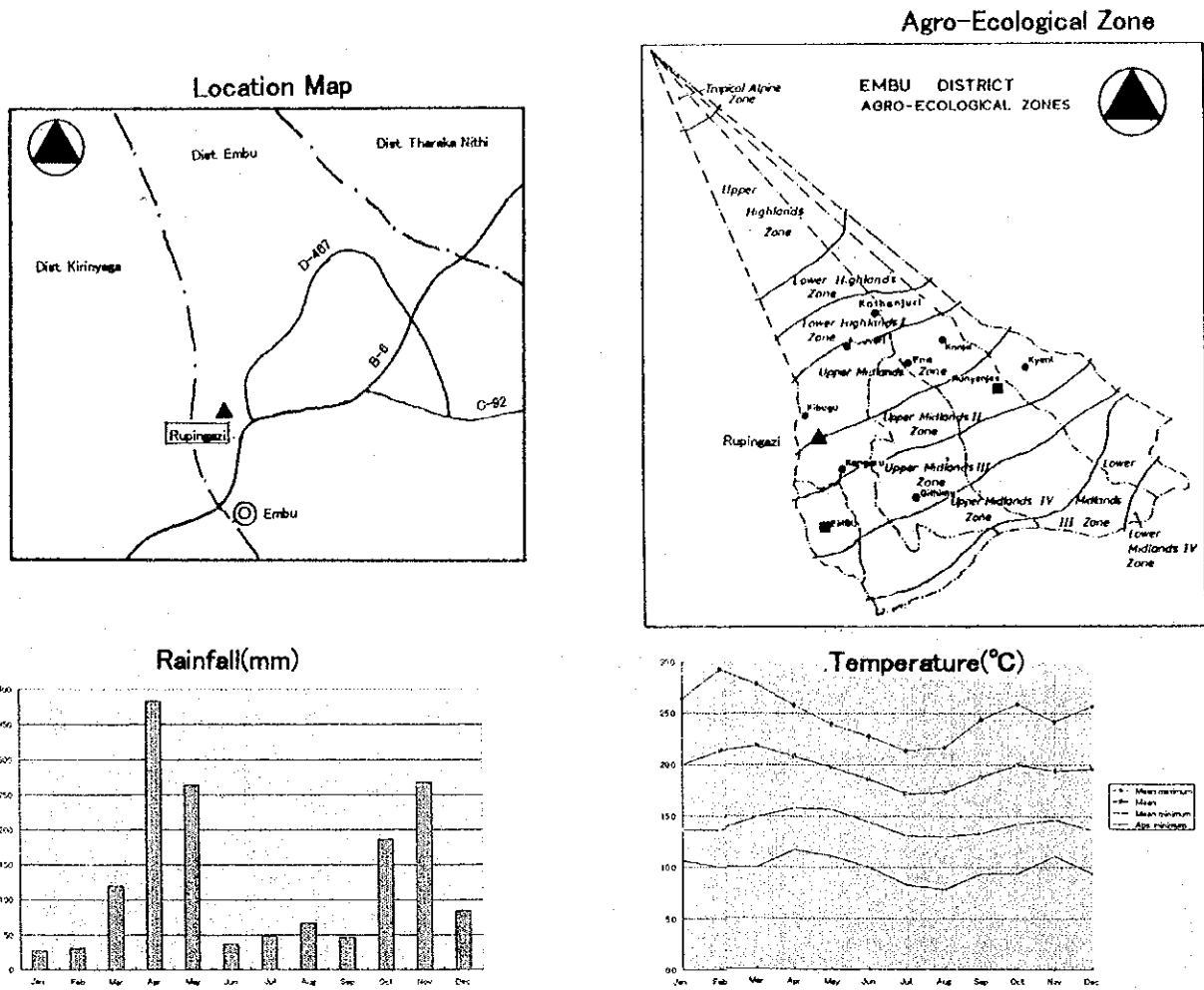


Figure K.2.2-2 Ruringazi Ngerwe Irrigation Scheme



1. Total Area(ha)	186.19	13. Average Annual Farm Income(Ksh/family)	50,000
2. Elevation(m)	1,800	14. Crops Currently Marketed	Coffee,
3. Distance to the Nearest Town(km)	15 km to Embu	15. Distance to the Nearest Market(km)	2 km to Kebugu
4. Present Irrigable Area(ha)	1.0	16. Road Condition of the Market Roads	Slippery during rainy season
5. Tribe	Embu	17. Major Constraint in Agriculture	
6. Population(persons)	2,200	in Ranking	1 Insufficient water
7. Electricity	Supplied for public use		2 Poor bargaining power
8. Average Family Size(person/family)	7.6		3 Low price of crops
9. Total Number of Farm households	300		4 High cost of inputs
Of which, Member of Irrigation Project	60	18. Farmer's Demand for the Project in Ranking	5 Low crop yield
Non-member	240		
10. Average Farm Size(ha/family)	1.33		
11. Average Number of Livestock per Family			
Cattle(head)	1.45		1 Irrigation
Goats(head)	0.73		2 Market roads
Sheep(head)	0.35		3 Rural roads
12. Major Crops			4 Credit services
Food Crops	Maize		5 Electricity
Vegetables	Cabbage, tomato, kale		
Fruits, Tree Crops	Coffee, banana, macadamia		



Table K.2.2-3 By-Law of Rupingazi Ngerwe Irrigation Scheme

By-Law No. 1 Membership

A member with full water right must meet the following;

- Have the land title deed i.e. own the land
- Be the head of a household
- Registered with Ksh 50 proposed by Ephantus Gicovi and seconded by Richard Gitu. A member must contribute 300 Ksh every year for the project account. Proposed by Lawrence Mugo seconded by Joseph Kariuki Metumi.

By-Law No. 2 Obligation of Members

The members must observe individual and communal tasks which involve the following;

- Taking water according to timetable
- Attend Harambee work
- Abide with the contributions passed by committee
- Attend members meeting whenever called
- Clean water canal in one Shamba
- Take care of the canal

By-Law No.3. Penalties of the Internal Breakers

- 3A. Taking water out of planned timetable and general misuse of water. A member will be fined proposed by Elizaphan Njagi Kiboko seconded by Shadrack Mugo Kanyenyu.
- 3B. Refusal to attend harambee meeting fine is 50 Ksh proposed by Salesio Njeru Toma seconded by Njagi Kathendu.
- 3 C. Refusal to clean canal in ones shamba fine will be 300 Ksh proposed by Shadrack Mugo seconded by Salesio Njeru Toma.

Residual of a member to meet the above, the following will be done;

- Cut water flow to his farm
- Court action if one continues to own a system that has been refused.

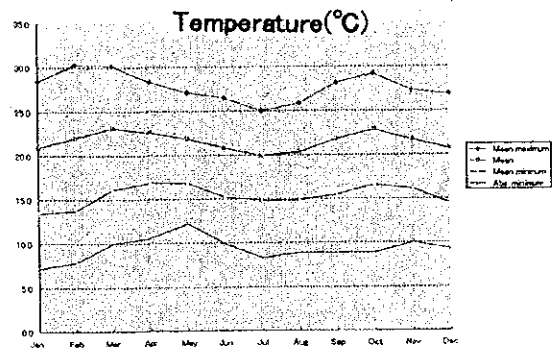
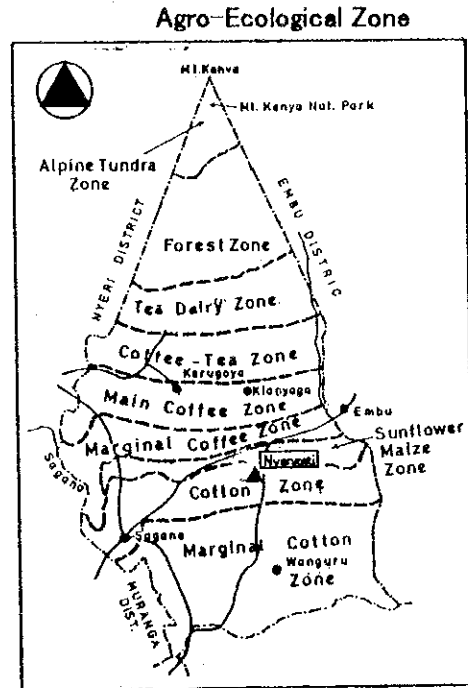
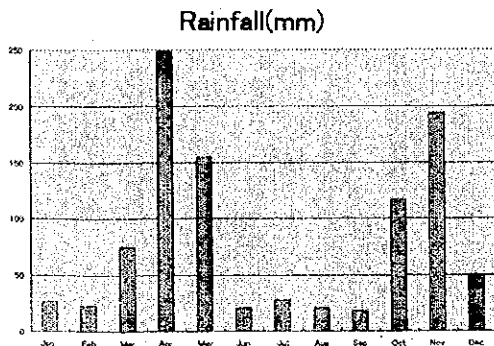
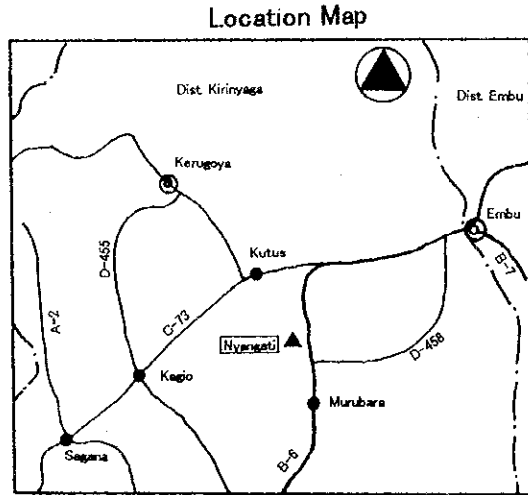
By-Law No.4 Management

The committee will be elected every three years. The scheme committee will always meet and formulate the internal rules which will be forwarded to the members.

The committee will be in charge of GOK items to be stored in the member forms. This was agreed and passed unanimously by all members.



Figure K.2.2-3 Ngomano / Nyangati Water Furrow Project



1. Total Area(ha)	375.75	13. Average Annual Farm Income(Ksh/family)	58,500
2. Elevation(m)	1,200	14. Crops Currently Marketed	F. beans, tomatoes
3. Distance to the Nearest Town(km)	10 km to Kutus	15. Distance to the Nearest Market(km)	10 km to Kutus
4. Present Irrigable Area(ha)	13.0	16. Road Condition of the Market Roads	Near to the road c-73
5. Tribe	Kikuyu	17. Major Constraint in Agriculture	
6. Population(persons)	1,300	in Ranking	1 Insufficient water
7. Electricity	None		2 Poor bargaining power
8. Average Family Size(person/family)	6.6		3 High cost of inputs
9. Total Number of Farm households	200		4 Low price of crops
Of which, Member of Irrigation Project	88		5 Low crop yield
Non-member	132	18. Farmer's Demand for	
10. Average Farm Size(ha/family)	1.50	the Project in Ranking	1 Irrigation
11. Average Number of Livestock per Family			2 Market road
Cattle(head)	1.60		3 Domestic water supply
Goats(head)	1.23		4 Credit services
Sheep(head)	0.35		5 Electricity
12. Major Crops			
Food Crops	Maize		
Vegetables	Tomato, F. Bean, Chillies		
Fruits, Tree Crops	Bananas		



Table K.2.2-5 By-Law of Ngomano / Nyangati Water Furrow Project

Listed here below are By-Laws as agreed upon by members of the above group in a special general meeting held on 3/2/1996 and attended by about 30 members, with respect to the proper utilization of the water from the said furrow;

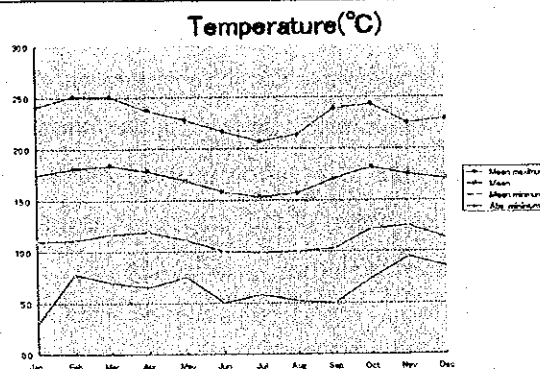
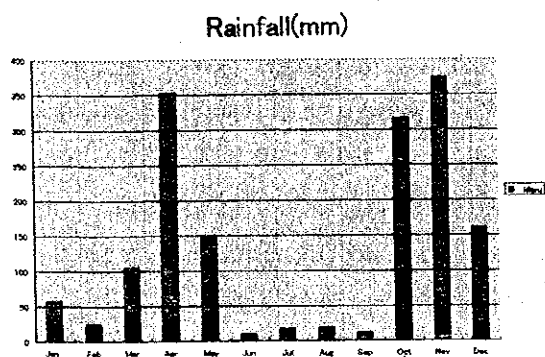
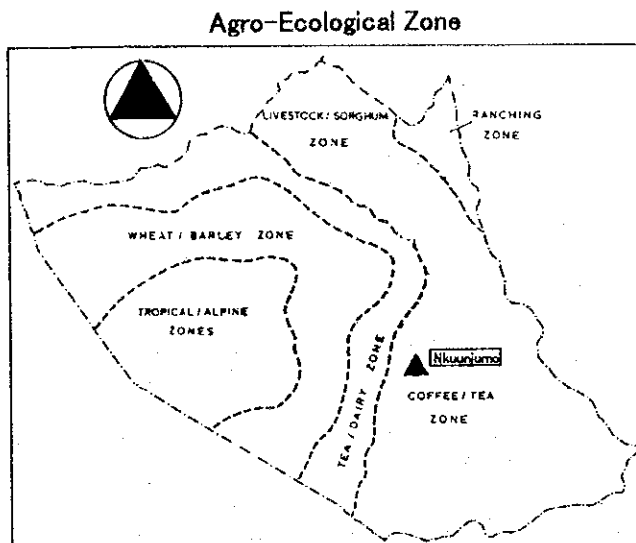
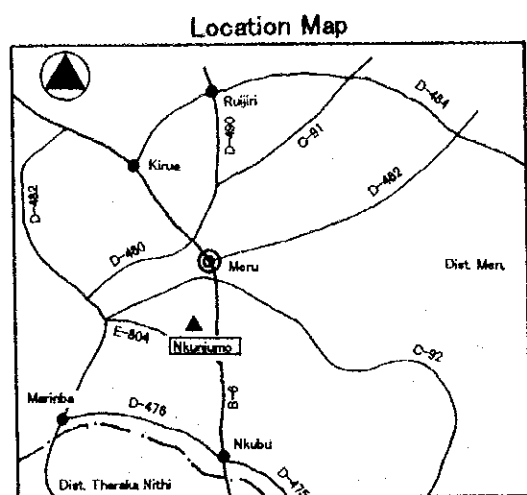
1. If any member or non-member of the group grows crops using water from the said furrow by way of irrigation without authority from the management committee of the said group, the member will invade the Shamba (farmland) where such crops are grown and uproot them subject to a written warning having been issued to the offender prior to the uprooting of the crops.
2. If one persists in contravening the above requirement, he will be denied the right to use the furrow water for a period of three months.
3. Each member or non-member through whose land (Shamba) the furrow passed shall be required to leave a three foot strip along the furrow free from any growing crops as a gang-way to facilitate inspection of the furrow by water guards appointed by the group.
4. No cultivation of root crops such as arrow roots, cassava, sweet potatoes etc. is allowed along the bank of the furrow. Such crops may only be grown about six feet from the furrow in order that the harvesting of such crops does not interfere in any way with the free flow of the water.

It is wish of the members that for the purpose of enforcement of the By-Laws, the office of the chief Nyangati Location to be approached and asked to facilitate the adoption of the By-Laws by all relevant Government bodies.

Copies to: The chief-Nyangati Location  
The Asst. Chief-Nyangati Sub-Location  
The C.D.A Nyangati Location  
The O.C.S Wanguru Police station  
The Magistrate Wanguru

Signed by Chairman:

Figure K.2.2-4 Nkunjumo Water Project



1. Total Area(ha)	160.28	13. Average Annual Farm Income(Ksh/family)	46,200
2. Elevation(m)	1,800	14. Crops Currently Marketed	Coffee
3. Distance to the Nearest Town(km)	8 km to Meru	15. Distance to the Nearest Market(km)	6 km to Meru
4. Present Irrigable Area(ha)	16.0	16. Road Condition of the Market Roads	Near to the national road B-6
5. Tribe	Meru	17. Major Constraint in Agriculture	
6. Population(persons)	2,200	in Ranking	1 Insufficient water
7. Electricity	None		2 High cost of inputs
8. Average Family Size(person/family)	7.4		3 Credit services
9. Total Number of Farm households	300		4 Low price of crops
Of which, Member of Irrigation Project	140		5 Poor bargaining power
Non-member	160	18. Farmer's Demand for	
10. Average Farm Size(ha/family)	1.10	the Project in Ranking	1 Irrigation
11. Average Number of Livestock per Family			2 Market road
Cattle(head)	1.23		3 Credit services
Goats(head)	0.85		4 Post harvest facilities
Sheep(head)	0.38		5 Electricity
12. Major Crops			
Food Crops	Maize, Beans		
Vegetables	Cabbage, Kale, Carrots		
Fruits, Tree Crops	Banana, Citrus		



Table K.2.2-7 By-Law of Nkunjumo Water Project

1. For any body to be a member of project one must have paid entrance fee of 20 Ksh.
2. For one to be allowed to start using water one must complete the contribution of 800 Ksh.
3. Whoever has contributed more that 800 Ksh would have his money refunded when those who had not paid money.
4. Any member who has paid entrance fee and contribute more than 100 Ksh but has not completed his contribution of 820 Ksh will have a outlet fixed on the main pipe in his farm but it will be closed until he completes his payment for his water to operate.
5. The money that will be used to buy the closing of the outlet and opening of the outlet when one completes his contribution will be repaid to the project by the owner of the farm.
6. Any member who will absent himself from the manual work would be paying 20 ksh as a fine per day. After the work of digging the trench will be over all the days one might be absent will be multiplied with 20 Ksh and added to ones contribution of 800 Ksh so it will be more.
7. The water is for domestic and livestock use only.
8. No member would be allowed to irrigate his crops with water directly from the main pipe.
  - a) I f one wants to irrigate his crops he/she should have storage tank.
  - b) No member would be allowed to fit two outlets from the main pipe.
9. Every member must care for the pipes passing through his farm and make sure they are not damages by anybody. If damaged by him/her or repairing the damaged section.
10. Those BY-Laws were passed by all the members. Anybody who may break any one of those by-laws;
  - a) He will be expelled from the project.
  - b) If the damage is great one can be sued in a court o f law.
11. If one wants to come back after being expelled one would be ;
  - a) fined.
  - b) apologize in a members meeting or both.
12. These By-Laws were led, known, and accepted and passed by all signed by chairman.

Signed by Chairman

Treasurer

Secretary

Witness-Asst. Chief

Mariene Sub-location

### Amendment of Some of Nkunjumo Water Project By-Laws

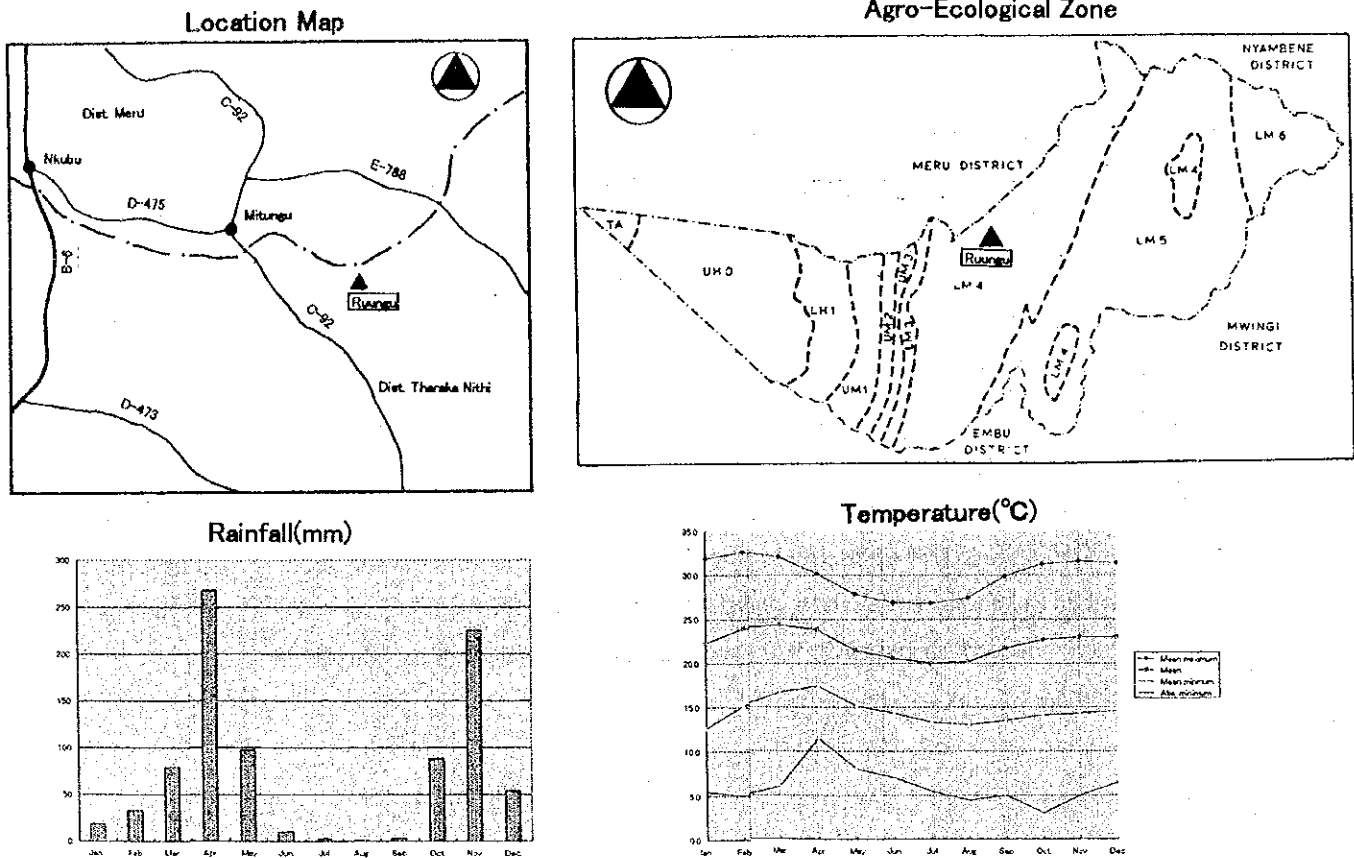
These By-laws were amended by members in their meeting on 10/8/90.

This was necessary for the water was increased. The entrance fee was raised to;

1. 820 Ksh for a new member. From 20 Ksh of 1977. Min.9/90
2. The contribution was raised from 800 Ksh to 820 Ksh including the entrance fee.
3. By-law 6 and 7 was amended to lead, for the water was more, members could now use it for domestic use and simple irrigation. Members were allowed to grow some vegetables of all kinds but mostly the people who had storage tanks.
4. The people who are not member should never attend members meeting Min. 7/90.
5. After more improvement up to 1994 members were allowed to do more irrigation. Also the fines were raised to 50 Ksh per day from 20 Ksh because of manual work done, any new member who has never done any work should pay 6,820 to be a full member using water. Min.04/94

Chairman

Figure K.2.2-5 Ruungu / Karocho Irrigation Project



1. Total Area(ha)		13. Average Annual Farm Income(Ksh/family)	19,200
2. Elevation(m)	750	14. Crops Currently Marketed	Maize
3. Distance to the Nearest Town(km)	12 km to Mitungu	15. Distance to the Nearest Market(km)	12 km to Mitungu
4. Present Irrigable Area(ha)	0	16. Road Condition of the Market Roads	Long distance and rough way
5. Tribe	Tharaka	17. Major Constraint in Agriculture	
6. Population(persons)	2,300	in Ranking	1 Insufficient water
7. Electricity	None		2 Low crop yield
8. Average Family Size(person/family)	7.9		3 High cost of inputs
9. Total Number of Farm households	300		4 Poor marketing
Of which, Member of Irrigation Project	164	18. Farmer's Demand for	5 Low price of crops
Non-member	136	the Project in Ranking	
10. Average Farm Size(ha/family)	2.80		1 Irrigation
11. Average Number of Livestock per Family			2 Market roads
Cattle(head)	1.70		3 Rural roads
Goats(head)	2.2		4 School
Sheep(head)	0.7		5 Credit services
12. Major Crops			
Food Crops	Maize, millet, pigeon pea		
Vegetables	None		
Fruits, Tree Crops	Cashew nut, mongoes		



Table K.2.2-8 Present Land Use of Ruungu / Karocho Irrigation Project

Farm Size (ha)	1st Rain (ha)				2nd Rain (ha)				Dry Season (ha)				Annual Total (ha)				Tree crops (ha)					
	Pigeon Pea	Sorghum	Cotton	Cow Pea	Millet	Maize	Cotton	Sorghum	Gram	total	Carrots	Millet	Beans	Maize	total	Sub-Total	Maize	Peas	nut	Citrus	Total	
1	2.02	0.20	0.80	0.40	0.40	0.40	0.40	0.40	0.20	1.20	0.00	0.00	0.00	0.00	0.00	2.80	0.10	0.10	0.10	0.10	0.20	
2	1.21		0.20	0.40	0.40	0.40	0.40	0.40	0.40	1.20	0.00	0.00	0.00	0.00	0.00	0.00	2.20	0.10	0.10	0.10	0.10	
3	1.42		0.20	0.40	0.80	1.00	0.80	0.80	0.40	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.10	0.10	0.10	0.20	
4	6.07	1.21		0.40	0.80	0.80	0.80	0.80	1.61	6.06	0.00	0.00	0.00	0.00	0.00	0.00	6.86	0.20	0.03	0.03	0.20	
5	2.73			0.40	0.40	0.80	0.40	0.40	0.40	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.04	0.01	0.01	0.05	
6	3.24			0.40	0.40	0.80	0.40	0.40	0.40	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.00	
7	5.67			0.40	0.40	0.80	0.40	0.40	0.40	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.00	
8	3.24			0.40	0.40	0.80	0.40	0.40	0.40	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.00	
9	4.05			1.21	2.02	4.43	0.80	0.80	0.40	2.40	0.00	0.00	0.00	0.00	0.00	0.00	6.83	0.10	0.10	0.10	0.10	
10	2.43	0.40		0.80	2.02	2.00	0.20	0.80	0.40	3.02	0.00	0.00	0.00	0.00	0.00	0.00	6.04	0.10	0.10	0.10	0.10	
11	4.05			0.80	2.02	3.02	0.40	0.80	0.40	1.60	0.00	0.00	0.00	0.00	0.00	0.00	4.22	0.10	0.10	0.10	0.10	
12	2.02			0.80	0.80	1.80	0.40	0.80	0.40	1.60	0.00	0.00	0.00	0.00	0.00	0.00	3.40	0.10	0.10	0.10	0.10	
13	2.43			1.21	0.40	2.01	0.80	1.21	0.20	2.21	0.00	0.00	0.00	0.00	0.00	0.00	4.22	0.10	0.10	0.10	0.10	
14	2.02			0.20	0.40	0.80	0.80	1.21	0.20	2.41	0.00	0.00	0.00	0.00	0.00	0.00	3.21	0.10	0.10	0.10	0.10	
15	2.02			0.20	0.20	0.80	0.80	1.20	0.20	2.20	0.00	0.00	0.00	0.00	0.00	0.00	4.41	0.07	0.06	0.06	0.19	
16	2.02			0.40	0.20	1.00	0.60	0.80	0.20	1.60	0.00	0.00	0.00	0.00	0.00	0.00	2.60	0.10	0.10	0.10	0.20	
17	2.02			0.20	0.40	0.80	0.40	0.80	0.20	2.21	0.00	0.00	0.00	0.00	0.00	0.00	3.21	0.10	0.10	0.10	0.10	
18	3.24			0.40	0.40	0.80	0.80	1.60	0.40	3.20	0.00	0.00	0.00	0.00	0.00	0.00	4.80	0.00	0.00	0.00	0.00	
19	1.62			0.80	0.80	1.60	0.80	1.60	0.40	3.20	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00	0.00	0.00	
20	2.12			0.40	1.21	2.01	0.40	0.80	0.40	3.20	0.00	0.00	0.00	0.00	0.00	0.00	6.40	0.02	0.02	0.02	0.02	
21	8.07			1.21	3.20	3.20	1.21	1.21	2.42	8.84	0.00	0.00	0.00	0.00	0.00	0.00	4.84	0.01	0.02	0.03	0.03	
22	5.67			1.21	1.21	2.42	0.80	1.21	0.00	5.67	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.01	0.03	0.04	0.04	
23	1.82	0.40		0.40	0.40	1.60	0.40	0.80	0.20	1.20	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.20	0.20	0.20	0.40	
24	1.62			0.40	0.40	0.80	0.80	1.60	0.80	1.60	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.20	0.20	0.20	0.40	
25	1.62			0.80	0.40	1.60	0.80	1.60	0.80	1.60	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.20	0.20	0.20	0.40	
26	1.62			0.80	0.80	1.60	0.80	1.60	0.80	1.60	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.20	0.20	0.20	0.40	
27	1.62	0.40		0.40	0.40	0.80	0.40	0.80	0.40	1.20	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	
28	3.24			0.40	0.40	0.80	1.21	2.81	0.40	4.01	0.00	0.00	0.00	0.00	0.00	0.00	3.21	0.00	0.00	0.00	0.00	
29	3.24			0.40	0.40	0.80	0.80	2.00	0.40	4.01	0.00	0.00	0.00	0.00	0.00	0.00	4.01	0.00	0.00	0.00	0.00	
30	1.82			0.40	0.40	0.80	0.80	1.60	0.40	3.04	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.10	0.10	0.10	0.10	
2.80	2.61	6.00	1.40	0.40	1.40	15.04	23.27	46.11	1.10	14.44	1.20	24.69	0.80	2.20	5.61	50.04	0.00	0.00	0.00	0.00	98.95	
%	5.7	13.0	3.0	0.9	3.0	32.6	50.5	100.0	2.2	28.9	2.4	49.3	1.6	4.4	11.2	100.0	0.00	0.00	0.00	0.00	65.2	
Total holding																						15.8
																						103.0

Table K.2.2-9 By-Law of Ruungu / Karocho Irrigation Project

- 1.(a) If a member refuses willingly to pay the security fund will lose his membership. His money will be refunded after completion of paying the loan.
- 1.(b) If a member is not able to pay his/her security fund, his group will pay for him and thereafter he pays the group.
- 2.(a) If a member refuses willingly to pay the loan, his water will be stopped and divided to other members who will meet his loan.
- 2.(b) If a member is unable to pay the loan on an understood basis, he will be required to find for one who will use his water to pay the loan.
- 3.(a) A member willing to sell his shamba before completing paying the loan, will be allowed to sell not unless when the buyer and him(purchaser) agree together that the buyer will pay for the loan. This should be done before the Chief/Ass. Chief.
- 3.(b) If the buyer refuses to pay the loan willingly by law 2.(a) will take part.
- 4.(a) If a member refuses to attend a farmer's meeting he/she will be fined Ksh 100 and if he/she repeats this three times, he will lose his/her membership.
- 4.(b) If a member is thirty minutes late he will pay Ksh 20 and if he comes at the ending time of the meeting he will be counted as an absentee.
- 4.(c) A member who fails to attend the meeting without a permission will be fined.
- 4.(d) A leader who calls for a meeting and fails to attend without a good reason, will pay Ksh 200 and if he continues to do that will lose his leadership. If he refuses to pay fine and continues breaking the law, By-Law 4.(a) will take part.
5. If a member becomes a trouble-maker will be cautioned by committees and if he continues, will pay Ksh 50 fine. If he refuses, he will be called again by the committees and if refuses to avail himself his water will be cut off.
6. A member who asks for permission from work, will send for one to represent him or pay money paid for a day.
- 7.(a) A member who steals water will pay Ksh 500 fine.
- 7.(b) If he continues stealing, he will pay Ksh 1,000 and third time Ksh 2,000 and lastly his water be disconnected.
- 7.(c) He who is not a member steals water will be taken to court to answer.
8. A member who will use water from the main canal wrongly, will be warned first time and if he continues will pay Ksh 200 and then Ksh 1,000 and if he doesn't will be called by committees.

committees.

9. If a water attendant get into an attempt of selling (bribed) water to someone so that he can get more water will pay Ksh 1,000 and same case will apply to victim.
10. If a member dies having not completed pay his loan his next of kid will pay the loan, and if he is unable the committees will decide what to do.
11. Renewals of committees will always be done after one year, the same committees can be elected or other new members. This starts when the construction of the project is over.
12. He who will be found stealing crops will be sued to court.
13. Selling and planting of crops will be operated as groups (altogether).
- 14.(a) Non-members will not be allowed to wash their clothes in the main canal.
- 14.(b) A non-member who washes his clothes in the main canal will be sued to court.
15. The main canal will be maintained by the scheme committees whereas the groups will care for the feeder canals.
16. Financial report will be written and read by the scheme committee and SISDO every year.
17. By-laws will be looked upon, screened and agreed with after every year on a public(farmer's meetin
18. If the office bearers fails to perform their duties well will be sacked and a meeting called for replacement.

Signature

Chairman:

Secretary:





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