

ATTACHMENT - A

***FARMERS' INTENTION SURVEY
AND PUBLIC MEETING***

**THE SMALLHOLDER IRRIGATION PROJECTS
IN
CENTRAL WAMI RIVER BASIN, MOROGORO**

**ATTACHEMENT - A
FARMERS' INTENTION SURVEY
AND PUBLIC MEETING**

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CHAPTER I. SURVEY ON FARMERS' INTENTION TO THE PROPOSED DEVELOPMENT PLANS

1.1 Objectives and Outline of Survey

The proposed rehabilitation plans under the master plan level were prepared to sixteen (16) project areas based on the farm interview survey carried out to 160 samples at the initial stage and four (4) priority project areas were selected as a result of this study. These plans include not only for rehabilitation of the irrigation facilities but also for improvement of farming and strengthening of the farmers' societies. Following this interview survey, a survey on farmers' intention to the proposed plans formulated at the master plan stage was conducted to 4 priority areas.

The objectives of the survey are (i) to grasp farmers' intention to the proposed plan formulated at the master plan stage, (ii) to obtain farmers' opinions/suggestions and requests to the projects, and (iii) to collect additional data in order to make study on suitable rehabilitation plans from the stand point of farmers' capability. The outline of the survey is as follows:

- 1) Survey period: June 1997
- 2) Procedure of survey

The survey was made by the following procedure.

- Selection of farmers
- Explanation of proposed plan to the farmers
- Discussion and collect of farmer's intention to the proposed plan

The interview to farmers was carried out directly by the expert and counterpart of the Study Team, in order to take farmers' well understanding on the proposed plans to be explained to them.

The proposed plan to be explained to the farmers are as follows. The details are presented in Table I-1.

- a) General background of the farmers
- b) Farming plan
- c) Irrigation and drainage plan
- d) Proposed farmers' society (water users' group)
- e) Improvement of agricultural credit
- f) Improvement of marketing
- g) Farmers' participation to the construction works
- h) Land acquisition
- i) Women's participation in Development
- j) Closing existing canals during the construction of the project
- k) Land allocation of irrigated land
- l) Other requests or suggestions to the project

- 3) Number of samples

The number of farmers selected for interview is 104 persons including 38 leaders of the village governments and WUGs, 47 men's farmers and 19 women's farmers, as shown below. These farmers were selected randomly from each project area, except for leaders.

	Mgeta	Mgongola	Mkula	Mwega	Total
Village Leaders	5	6	6	8	25
Leaders of WUA/IG	2	6	-	5	13
Farmers - Irrigated Field	11	2	3	12	28
Farmers - Non Irrigated Field	2	6	11	-	19
Farmers' Women	5	5	5	4	19
Total	25	25	25	29	104

1.2 Result and Findings of Survey

A result of the survey is summarized as follows, and the details are shown in Table A-1.

1) Agricultural Development Plan

- (a) In the proposed plans various crops are proposed to be introduced in each project area after rehabilitation. In all schemes, many farmers have requested to cultivate high income crops such as vegetables and bean.
- (b) Over 90% of samples have desired to have more large size of farm land. Major reason is to improve their living standard.
- (c) In addition to the proposed plans, the farmers have a lot of requests to improve and develop the present farming situation. Of these, major request is to introduce mechanical power (tractors for land preparation and transportation of products).

2) Rehabilitation Plan for Irrigation Facilities

- (a) Almost all farmers have basically satisfied the proposed rehabilitation plan of irrigation facilities, and they have desired to implement such rehabilitation projects as quickly as possible.
- (b) In general, farmers in the existing irrigation systems have requested to construct lining canals in order to solve present problems on maintenance of earth canals.
- (c) Through the discussion with sample farmers, they have requested to the study team that the project should develop more wide area

3) Proposed Water Users' Group

- (a) All farmers have well understood that irrigation facilities rehabilitated and constructed by the Project should be operated and maintained by the farmers themselves. All samples have agreed to the proposed organization of WUG formulated in the master plan study with its establishment after the project.
- (b) In the proposed plans, it is recommended to establish women's group under the new society, which aims to improve their living and encourage more active participation of women in public affair. All sample farmers have agreed to establish such a group, and the leaders have stated that the society can support to promote their activities.
- (c) All farmers are willing to participate in the new farmers' society proposed in the master plan study. They have desired to have such a new society

which has various activities such as marketing and credit services as well as the rehabilitation of the irrigation facilities. All proposed articles to be added to the present bye-laws are accepted by all farmers without any other comment.

4) Others

- (a) The Project requires some land for construction of irrigation facilities. To the land acquisition of such right of way, over 90% of samples have agreed on its acquisition without compensation.
- (c) Over 80% of samples have positive attitude for participation to the project construction works.

Overall, almost all the sample farmers in the five (5) priority areas have agreed basically all proposed plans formulated by the master plan study, and much appreciated to implement the rehabilitation projects according to these plans.

CHAPTER II. PUBLIC MEETING

2.1 Objectives and Outline of Public Meeting

2.1.1 Objectives of Public Meeting

The plans for O&M system of the projects and for establishment of the Water Users' Group (WUG) should be formulated, taking into consideration the farmers' intention, traditional customs, social and economic background, etc. In order to meet the above requirements, the public meetings were held to discuss with the farmers, government staff concerned and village government on the plans and components of the Project. The results of the meetings were fully used for formulation of the optimum improvement plans.

2.1.2 Outline of Public Meeting

(I) Proposed Rehabilitation Plan to be Discussed

The contents of the plan discussed at the meeting are outlined below.

- 1) Farmers' intention to the proposed irrigation development plan
 - Total project area to be developed
 - Irrigation and drainage plan including head works, irrigation and drainage facilities, canal layout, farm road, on-farm development, improvement of access roads, etc.
 - Irrigation plan (method)
 - Requests for irrigation facilities
- 2) Farmers' intention for farming plan
 - Proposed crops and cropping patterns to be introduced at each scheme
 - Farmers' opinions or suggestions about the proposed cropping pattern
- 3) Farmers' intention to the proposed WUG/WUC
 - Farmers' duties for O&M of the project
 - Proposed organizational structure
 - Farmers' intention to WUG's activities including O&M, women's group, marketing of farm inputs, agricultural credit (group loan system), and agricultural extension
 - Irrigation service charge
 - Articles and by-laws necessary for O&M
 - Irrigation meeting under presidency of WUG.
- 4) Improvement of agricultural credits
 - Farmers' interest and participation for group loan system to be proposed in the project
 - Possibility for loan management by WUG
- 5) Improvement of marketing
 - Farmers' interest and participation to proposed marketing system
 - Possibility of management by WUG
- 6) Women's participation in development
- 7) Farmers' requests or suggestions to the Project
- 8) Specific items to be confirmed with farmers
 - Farmers' participation to the Project
 - Land ownership of the lands to be developed and land acquisition for the right of way
 - Closing existing canals during the construction of the Project.
 - Land allocation and its executing agency

All plans formulated the Interim Report were reviewed, based on the results of the second stage field works including the survey of farmers' intention and the topographic mapping. The main points of the plans thus modified are the irrigable area, canal layout and proposed cropping patterns, and other project components such as strengthening of WUG and marketing are almost the same as that formulated in the Interim Report. The agenda of the public meeting mentioned above are for the proposed rehabilitation plan including these review results.

(2) Implementing Schedule, Programme and Procedure

The public meetings were held at each project site according to the following implementation schedule and programmes:

Implementing Schedule and Programmes of the Meeting			
SCHEDULE	Mwega Scheme	11 & 12 July 1997	Maloto Village
	Mkula Scheme	17 & 18 July 1997	Mkula Village
	Mgongola Scheme	24 & 25 July 1997	Mkindo Village
	Mgeta Scheme	26 July 1997	Langali Village
PROGRAMME OF PUBLIC MEETING			
1st Day	1. Opening Address and Explanation of Public Meeting		
	2. Explanation of the Project		
	2.1 Objectives of the Project 2.2 Component of the Project 2.3 Outline of the Development Plan (a) Irrigation Plan (b) Farming Plan (c) Strengthening Plan of Agricultural Supporting Services (d) Proposed Water Users' Association 2.4 Beneficiaries' (Farmers') Duties		
	3. Field Investigation with Representatives of Farmers		
2nd Day	1. Discussion with Farmers for Proposed Development Plan		
	2. Collection of Farmers' Requests and Suggestions to the Project		
	3. Confirmation of Several Important Items by Both Parties (Farmers and RALDO Office / Zonal Irrigation Office / Study Team)		

The public meeting was held for two days for each scheme. The first day was the explanation of the proposed plans and the second day for discussion about the plans. The meeting at Mgeta scheme was held for one day only.

At the opening address, the objectives of the meeting were explained to the attendants. Then, the study team and counterpart experts made the detailed explanation of the proposed plans and project component to the attendants according to the "Briefing Note" prepared by the study team. To take full understanding of the attendants, a leaflet showing outline of the plans was distributed to the farmers, and the development areas and location of the main facilities were presented by the use of the project layout maps. In addition, field investigations in the project areas were carried out by the attendants, and the boundary of the development areas and location of the facilities were confirmed by them at the fields. The languages used at the meeting were Swahili.

After the explanation, discussions were made by the attendants according to the agenda, and then agenda were proceeded to the vote (see Table A-2). In parallel with these discussions and votes, farmers' requests and suggestions to the Project were collected. No agreement was made between the both parties, because the implementation of the project itself is not decided yet at this study stage.

(3) Attendance

The attendants total up to 1,500 farmers consisting of the farmers, leaders of WUGs, leaders of village government, study team, and government officials involved to the Project. The details of the attendance are as follows:

Attendance of the Public Meetings					
	Mgeta	Mgongola	Mkula	Mwega	Whole
Attendance					
1) Farmers					
- Leaders of Village	9	9	13	6	37
- Leaders of WUAs/WUGs	*	1	-	4	5
- Farmers	277	345	448	250	1,320
Total	286	355	461	260	1,362
2) Government Agencies Concerned					
- RAS	-	1	1	1	
- DC	1	1	1	-	
- RALDO	1	1	1	1	
- Zonal Irrigation Office	3	5	3	3	
- DALDO's Office	-	-	3	1	
- DEO	1	1	1	-	
- VEO	-	3	1	1	
- Irrigation technician	-	1	-	-	
- Ward Office	1	1	1	2	
3) Study Team	4	2	2	2	
Population	4,400	8,470	2,940	5,270	21,080
Household	890	1,690	490	710	3,780

Remarks: RAS: Regional Administrative Secretary
DC: District Commissioner
RALDO: Regional Agriculture and Livestock Development Officer
DALDO: District Agriculture and Livestock Development Officer
DED: Division Extension Officer
VEO: Village Extension Officer

2.2 Result of Meeting and Findings

Basically all proposed plans for projects rehabilitation were accepted among the farmers in each scheme, and useful suggestions with their well understandings of the projects were obtained through the meetings. The details of the results by each scheme are presented in Table A-2, and the main highlights of the whole schemes are summarized as follows:

1) Development Area

The farmers in Mkula scheme said that total irrigable area in the dry season is too small for providing lands to all farmers. The study team explained them about limited water resource of Mkula river, then farmers agreed with the area. In connection with this matter, the study team explain them that all water available at intake site will turn to the irrigation area, and no water flows into downstream during the dry season. All farmers agreed about it. In the Mgongozi area, there are some community lands estimating at about 70 acres. All Mgongozi farmers agreed that these lands are included in the project area.

2) On-farm Development

No on-farm development works are provided by the Project, and these are entrusted to the farmers. Namely, the farmers should carry out levelling and construction of field ditches. Almost all farmers in the Schemes accepted to make levelling and field ditches by themselves.

3) Closing existing canals during the construction period

Water supply of existing irrigation system will be stopped during the construction period of the Project. In addition, the project does not pay any compensations to those losses. All farmers in the Schemes agreed with this closing. In case of Mwega scheme, at first some farmers disagreed, then they had discussion about this matter among them. As the result of discussion, all farmers agreed with the closing of existing canals.

4) Irrigation Service Fee

All farmers in the four schemes show a good understanding for collecting irrigation service charge after the Projects. There are two ways for its payment, "cash payment" and "in kind." The farmers in Mgeta and Mkula schemes want to have cash payment, and 80% of Mgongola farmer's said that "in kind" is easy to pay its charge. In Mwega scheme, 30% of Mgongozi farmers hold fast to payment in kind.

5) Organizational Structure and Activities of WUG

A WUG having multi-functions including not only O&M of irrigation facilities but also agricultural supporting activities will be proposed to the project. Almost all farmers in the schemes have agreed with this WUG. As for the marketing services by WUG, however, the farmers in Mgeta scheme disagreed, and they want to have individual shipping of products. For the leaders of the executive committee of WUG, many women had pointed out that those positions should be given to the farmers irrespective of their gender.

6) Farmers' Participation in Rehabilitation Works

Almost all farmers in the schemes agreed to participate the rehabilitation works. They have fully understood that no labour charge will be paid to such works. In Mkula scheme, at first, many farmers had requested to pay labour charge. Then they had hot discussion about farmers' participation. Finally almost all farmers accepted this participation without labour charge. In Mwega scheme, a leader of Canal-B said that the plan itself is accepted by all farmers, but excavations at some places are very hard work. The study team explained that the project will use heavy equipment for such excavations. The leader agreed with it, and said that farmers provide security people for watching of those equipment.

7) Land Acquisition for Right of Way

The project requires some lands for construction of irrigation facilities (intake, canals, etc.). These lands should be provided by the beneficiaries themselves, and the project does not pay its land compensation, because the facilities are constructed for the farmers' benefits. All farmers agreed with such land acquisition for right of way, but they said that it is necessary to compensate losses of houses, crops and fruits trees.

8) Land Allocation

The benefits of the Project should be provided equally to all farmers in the Schemes. In Mgongola and Mkula schemes, it will be necessary to implement land re-allocation from the standpoint of above even distribution of the benefits. The study team asked its necessity to them. Over 90% of attendants in Mgongola scheme were of the opinion that its land re-allocation is

needed. In case of Mkula scheme, at first, many farmers had unrecognized the necessity of its land re-allocation. Then the District Government and RALDO office explained them that the benefits should be provided to the farmers equally and as many as possible. As a result, about 90% of attendants taken a view of its necessity.

In each meeting, the study team confirmed about the following items with farmers: i) all irrigation facilities constructed by the Project should be operated and maintained by the farmers themselves; ii) farmers should organise WUG for O&M of irrigation facilities; and iii) the lands required for construction of irrigation facilities should be provided by the farmers without compensation.

Table A - 1 Farmers' Intention Survey (1/18)

Items	Mgeta	Mgongola	Mkula	Mwega
Number of Samples				
Village Leaders	5	6	6	8
Leaders of WUG/IG	2	6	-	5
Farmers - Irrigated Field	11	2	3	12
Farmers - Non Irrigated Field	2	6	11	-
Farmers' Women	5	5	5	4
Total	25	25	25	29
Q-1 Background of the Farmers				
1.1 School graduated:			100%	90%
(a) Primary School	84%	68%	-	3%
(b) Secondary - Ordinary Level	16%	12%	-	-
(c) Secondary - Advanced Level	-	-	-	3%
(d) Institute	-	-	-	-
(e) University	-	20%	-	3%
(f) Non	-	-	-	22
1.2 Experience for agriculture (years)	19	19	23	7.1
1.3 Family size (except for families living at outside)	6.3	6.4	7.2	7.1
1.4 Land holding and land tenure				
(1) Total holding area (ac.)	8.6	9.5	8.9	9.6
(2) Breakdown of holding area				
(a) Paddy-Irrigated (ac.)	-	0.7	0.2	2.4
(b) Paddy-Non irrigated (ac.)	-	5.3	4.1	0.4
(c) Upland-Irrigated (ac.)	3.9	0.2	-	4.9
(d) Upland-Non irrigated (ac.)	4.0	1.7	3.4	0.6
(e) Grass Land (ac.)	0.1	1.0	0.1	-
(f) Homestead (ac.)	0.7	0.6	0.3	0.2
(g) Others (ac.)	-	0.1	0.9	1.0
1.5 Livestock raising (head/household)				
(1) Cattle	-	-	-	1.8
(2) Horses	-	-	-	-
(3) Goats	1.6	0.3	1.1	4.2
(4) Sheep	-	-	0.2	0.9
(5) Hogs (Pig)	2.6	-	-	-
(6) Chickens	9.6	9.8	9.3	10.2
(7) Ducks	2.6	0.7	9.6	2.2
(8) Rabbits	1.0	-	0.3	0.3
(9) Others	-	-	-	-
1.6 Inventory of farm machinery and equipment (No./household)				
(1) 4-Wheel tractor	-	-	-	-
(2) 2-Wheel tractor	-	-	-	-
(3) Knapsack type sprayer	0.44	0.16	0.28	0.24
(4) Thresher with engine	-	-	-	0.03
(5) Rice mill or mill	-	-	-	0.03
(6) Water pump	-	-	1.20	5.83
(7) Hand hoe	0.48	-	-	-
1.7 Home facilities (No./household)				
(1) Oil cooker	0.92	0.52	0.48	0.45
(2) Electric cooker	0.04	-	-	-
(3) Refrigerator	-	-	-	-
(4) Electric fan	-	-	-	-
(5) Bicycle	0.08	0.76	0.80	0.93

Table A - 1 Farmers' Intention Survey (2/18)

Items	Mgeta				Mgongola				Mkula				Mwega				
(6) Motorcycle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(7) Television	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(8) Radio	0.68	-	-	-	0.56	-	-	-	0.44	-	-	-	-	-	-	0.41	-
(9) Radio Cassette	0.60	-	-	-	0.44	-	-	-	0.28	-	-	-	-	-	-	0.55	-
(10) Sewing machine	0.04	-	-	-	0.04	-	-	-	0.04	-	-	-	-	-	-	-	-
(11) Truck/Pick-up	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-
(12) Car	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(13) Charcoal stove	0.84	-	-	-	0.48	-	-	-	0.64	-	-	-	-	-	-	0.66	-
1.8 Cash farm income in the last one year	No. of Farmers	%	Average Income	Proportion %	No. of Farmers	%	Average Income	Proportion %	No. of Farmers	%	Average Income	Proportion %	No. of Farmers	%	Average Income	Proportion %	
(1) Crops grown in the farmland																	
(a) Paddy	21	88%	-	-	25	100%	217,080	88.9%	24	96%	119,336	31.4%	24	86%	76,517	26.3%	
(b) Maize	20	83%	8,458	5.0%	21	84%	2,880	1.2%	19	76%	36,096	9.5%	27	96%	11,745	4.0%	
(c) Beans	19	79%	65,167	38.6%	-	-	-	-	-	-	-	-	18	64%	38,828	13.3%	
(d) Cabbages	13	54%	53,204	31.5%	-	-	-	-	-	-	-	-	-	-	-	-	
(e) Irish/Round Potatoes	2	8%	10,500	6.2%	-	-	-	-	-	-	-	-	24	86%	141,052	48.5%	
(f) Onions	4	17%	-	-	-	-	-	-	5	20%	41,720	11.0%	-	-	-	-	
(g) Cassava	6	25%	5,615	3.3%	-	-	-	-	-	-	-	-	-	-	-	-	
(h) Garden peas	2	8%	3,279	1.9%	-	-	-	-	1	4%	2,800	0.7%	-	-	-	-	
(i) Pepper	3	13%	1,250	0.7%	-	-	-	-	-	-	-	-	-	-	-	-	
(j) Sweet potatoes	1	4%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(k) Cowpeas	1	4%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(l) Pigeon peas	1	4%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(m) Sugar cane	2	8%	313	0.2%	1	4%	1,800	0.7%	9	36%	140,652	37.0%	-	-	-	-	
(n) Tomatoes	-	-	-	-	2	8%	2,920	1.2%	1	4%	6,000	1.6%	6	21%	19,483	6.7%	
(o) Chinese cabbages	-	-	-	-	-	-	-	-	1	4%	2,400	0.6%	-	-	-	-	
(p) Pineapples	-	-	-	-	1	4%	1,920	0.8%	1	4%	-	-	-	-	-	-	
(q) Sesame	-	-	-	-	1	4%	-	-	-	-	-	-	-	-	-	-	
(r) Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(2) Crops grown in the homestead																	
(a) Maize	3	13%	-	-	1	4%	-	-	1	4%	-	-	-	-	-	-	-
(b) Irish/Round Potatoes	3	13%	-	-	1	4%	-	-	-	-	-	-	-	-	-	-	-
(c) Cassava	2	8%	2,500	1.5%	2	8%	-	-	-	-	-	-	-	-	-	-	-
(d) Beans	2	8%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(e) Tomatoes	3	13%	1,146	0.7%	3	12%	4,360	1.8%	1	4%	-	-	-	-	-	-	-
(f) Cabbages	1	4%	729	0.4%	-	-	-	-	-	-	-	-	-	-	-	-	-
(g) Sweet potatoes	2	8%	83	0.0%	6	24%	800	0.3%	1	4%	600	0.2%	-	-	-	-	-
(h) Chinese Cabbages	1	4%	263	0.2%	-	-	-	-	-	-	-	-	-	-	-	-	-
(i) Onions	1	4%	771	0.5%	-	-	-	-	1	4%	360	0.1%	-	-	-	-	-
(j) Yam	1	4%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(k) Vegetables	-	-	-	-	1	4%	-	-	3	12%	2,560	0.7%	-	-	-	-	-
(l) Cowpeas	-	-	-	-	2	8%	-	-	-	-	-	-	-	-	-	-	-
(m) Pigeon peas	-	-	-	-	1	4%	-	-	-	-	-	-	-	-	-	-	-
(n) Okra	-	-	-	-	2	8%	-	-	-	-	-	-	-	-	-	-	-
(o) Amaranths (leafy vegetable)	-	-	-	-	1	4%	-	-	-	-	-	-	-	-	-	-	-
(p) Pineapples	-	-	-	-	1	4%	160	0.1%	-	-	-	-	-	-	-	-	-
(3) Perennial crops																	
(a) Coconuts	-	-	-	-	17	68%	11,360	4.7%	6	24%	11,480	3.0%	-	-	-	-	-
(b) Banana	24	100%	12,417	7.4%	4	16%	400	0.2%	5	20%	5,440	1.4%	10	36%	3,397	1.2%	
(c) Coffee	8	33%	3,096	1.8%	-	-	-	-	2	8%	2,840	0.7%	-	-	-	-	-
(d) Peaches	1	4%	100	0.1%	-	-	-	-	-	-	-	-	-	-	-	-	-
(e) Mangoes	1	4%	-	-	3	12%	-	-	-	-	-	-	-	-	-	-	-
(f) Oranges	-	-	-	-	2	8%	412	0.2%	2	8%	400	0.1%	-	-	-	-	-
(g) Avocados	-	-	-	-	-	-	-	-	1	4%	7,200	1.9%	-	-	-	-	-
(4) Annual farm income (cash) (Tsh.)			168,890	100.0%			244,092	100.0%			379,884	100.0%			291,021	100.0%	

Table A - 1 Farmers' Intention Survey (3/18)

Items	Mgeta	Mgongola	Mkula	Mweza
1.9 Annual non-farm income (cash) (Tsh.)	186,375	55,527	106,560	168,386
1.10 Annual living expenses (cash) (Tsh.)	358,500	352,656	278,960	366,207
1.11 Problems on farming? (Plural answer)				
(1) Low yield of crops	100%	92%	96%	100%
(2) Levelling problem of paddy field	-	84%	48%	24%
(3) Drainage problem	24%	44%	48%	31%
(4) Drought damage	96%	92%	84%	66%
(5) Flood damage	20%	64%	68%	66%
(6) Damage of pests and diseases	100%	96%	92%	100%
(7) Weed damages	36%	88%	76%	62%
(8) Damage by wild animal	20%	84%	56%	97%
(9) Difficulty for hiring animal/mechanical power	-	100%	84%	86%
(10) Labour shortage	-	40%	28%	3%
(11) Difficulty for obtaining seeds/seedlings	72%	48%	40%	59%
(12) Difficulty for purchasing agro-chemicals	80%	76%	88%	83%
(13) Difficulty for purchasing fertilizers	84%	60%	88%	86%
(14) Expensive of farm inputs such as seeds, fertilizers and agro-chemicals	88%	96%	100%	97%
(15) Lack of farm road	84%	56%	64%	59%
(16) Marketing problems for products	88%	80%	96%	83%
(17) Lack of storage facilities	20%	68%	24%	31%
(18) Lack of drying floor	20%	40%	28%	17%
(19) Loan problems	92%	88%	100%	97%
Others	1- Poor soil fertility 1- Poor farm tools eg. hand hoc. 1- Operation and maintenance of canals 1- Low prices of crops 1- Poor germination of seeds	11- Damage by Quela-quela 6- Low farmgate price of paddy. 2- Damage by Quela-quela & monkey 2- Transportation facilities for products. 1- Damage by army worm and locust. 1- Farming activities are not properly coordinated due to lack of cropping calendar. 1- Lack of cash for buying inputs. 1- Hiring cost of mechanical power is expensive. 1- Informal money lenders who demand high interest rate. 1- Lack of improved farming technique. 1- Lack of technical assistance about good agronomic practices 1- No drying sheet. 1- No qualified agric. extension 1- No shop which supply farm inputs in and around the village 1- High production costs	12- Bird damage (Quela-quela) 2- Poor soil fertility 1- Lack of appropriate technology in rice production 1- Land ownership and farm boundaries	2- Bird damage (Quela-quela) 1- Soil erosion 1- Poor soil fertility
1.12 Existing farmers' society (water users' group)	(No WUG)			
Number of answer		9	(Existing organization is inactive.)	29
(1) What are purposes of the farmers' society in your irrigation area?				
(a) Operation and maintenance of irrigation facilities		67%		90%
(b) Cooperative purchasing and shipping		44%		3%
(c) Loan arrangement to the farmers		11%		-
(d) Social activities to the village people		-		-
Others		-		-

Table A - 1 Farmers' Intention Survey (4/18)

Items	Mgeta	Mgongola	Mkula	Mwega
(2) What are problems for activities of the farmers' society in your irrigation area ? (a) Almost no function to operate and maintain the irrigation facilities. (b) The farmers have no interest to the society's activities. (c) No leaders (d) No fund to operate and maintain the irrigation facilities (e) No definitive articles and by laws for farmers activities (f) No participation to the farmers' societies Others		- 33% - 67% 11%		- - 52% 7%
		1- No problem in WUG 1- The cooperation in society's activities is weak. 1- WUG is not well established. 1- Water is not enough.		4- Damage of canals 2- Water shortage 1- Some farmers are not cooperative 1- Weed problem
1.13 Questions for the farmers having irrigated field. Number of answer	23	12	3	29
Operation and maintenance of existing irrigation system				
(1) Do you need the rehabilitation of irrigation facilities ? Yes No	100% -	100% -	100% -	100% -
(2) Can you satisfy with quantity of irrigation water ? Yes No	30% 70%	33% 67%	- 100%	21% 79%
(3) Did you receive irrigation water on time ? Yes No	50% 50%	67% 33%	67% 33%	21% 79%
(4) What problems do you have in your irrigation system ? (a) Leakage of canals. (b) Damages of canal. (c) No water measuring devices. (d) Weeds, soil and inert matter gathered in canals. (e) Damage of intake facilities. (f) Illegal water usage by the farmers. (g) Water is controlled by specific farmers. (h) Water shortage. Others	100% 96% 91% 96% 96% 74% 22% 78% None	83% 92% 67% 100% 33% 100% 8% 83%	21% 21% 21% 21% 21% 7% 7% 14%	100% 97% 100% 100% 97% 79% 62% 83%
		1- During the dry season, there is a water shortage for irrigation and no irrigation schedule.		1- Destruction of the canals by domestic animal. 1- The canals are very narrow. 1- The canals are frequency destroyed by floods. 1- The canals were not properly design in terms of its capacity.
(5) Do you want to take more water ? Yes No If "Yes".	83% 17%	100% -	67% 33%	90% 10%
(a) A little (b) Two times (c) Three times	- 42% 58%	33% 42% 25%	- - 100%	- 31% 69%
(6) Do you think that you have some responsibility for operation and maintenance of the irrigation facilities ? Yes No	100% -	100% -	100% -	100% -
1.14 Questions for the farmers having irrigated field. Irrigation service charge	No fixed ISC	No fixed ISC	No answer	Mgongozi area has a plan to collect fixed ISC, but it is not started yet.

Table A - 1 Farmers' Intention Survey (5/18)

Items	Mgeta	Mgongola	Mkula	Mwega
Q-2 Farmers' Intention for Farming Plan 2.1 Do you agree to the proposed crops? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → Which crop do you want to cultivate?	Agricultural development plan a) Proposed crops Rainy season : Beans Dry season : Cabbages and beans b) Cropping intensity : 200%	Agricultural development plan a) Proposed crops Rainy season : Paddy Dry season : Paddy b) Cropping intensity : 200%	Agricultural development plan a) Proposed crops Rainy season : Paddy and Maize 800 ac. Dry season : Maize and Beans 350 ac. b) Cropping intensity: 140%	Nyungu-Mgogou a) Proposed crops R. season: Paddy 25 ac., Maize 350 ac. D. season: Beans 25 ac., Onions 350 ac. b) Cropping intensity: 200% Majole a) Proposed crops R. season: Paddy 125 ac., Maize 875 ac. D. season: Beans 125 ac., Onions 875 ac. b) Cropping intensity: 200%
	63% 38% RS DS 2- Maize & Beans Cabbages, Onion, Irish Potatoes 1- Beans & Cabbages Beans & Cabbages 1- Beans & Maize Beans & Cabbages 1- Beans & Maize Cabbages & Irish Potatoes 1- Maize & Beans Beans & Cabbages 1- Maize & Beans Cabbages & Irish potatoes 1- Maize & Beans Cabbages, Beans, Irish Potatoes	68% 32% RS DS 2- Paddy Vegetables 2- Paddy Maize 1- Paddy Maize or beans 1- Paddy Maize, beans, vegetables 1- Paddy Tomatoes 1- Paddy & maize Vegetables (onions & tomatoes)	84% 16% RS DS 1- Paddy & Maize Maize & Paddy 1- Paddy & Maize Maize & Vegetables 1- Paddy & Maize Maize, Onions, Beans, Vegetables (Tomatoes & Amaranthus) 1- Paddy & Tomatoes Maize & Beans	86% 14% RS DS 1- Maize, Paddy, Beans & Tomatoes Onions & Maize 1- Including Groundnuts Including Cabbages 1- Paddy & Maize Onions, Beans & Maize 1- Paddy & Maize Onions, Beans & Tomatoes
2.3 Do you agree to the double cropping per one year? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → Reasons:	100% -	100% -	100% -	100% -
2.4 Farmers' intention for the land holding area. (1) At present, how many acre do you have farm land? Paddy field - Irrigated (ac.) - Rainfed (ac.) Upland field - Irrigated (ac.) - Rainfed (ac.) (2) Do you want to have more farm land? <input checked="" type="checkbox"/> Yes Paddy field - Irrigated (ac.) - Rainfed (ac.) Upland field - Irrigated (ac.) - Rainfed (ac.) <input type="checkbox"/> No (3) Why do you want this area?	- - 4.0 3.9 96% - - 3.0 0.8 4% 1- In order to get more yield for food consumption and sell the extra for raising income.	0.6 4.9 - 2.0 88% 1.8 0.8 0.2 0.6 12% 6- To increase crop yield and income. 5- Food security. 4- So as to sustain family requirement. 3- To increase income. 2- To increase crop yield. 1- Big family 1- For more crop production to meet family expansion. 1- Irrigated area is more productive. 1- One acre is very small. 1- To be able to cultivate twice a year (increase yield). 1- To make full use of labour available.	0.2 4.9 0.0 1.8 92% 2.6 0.5 1.0 1.6 8% 8- To increase income to sustain the family and raise living standard. 8- To increase yields 3- To get enough food for family and sell the extra amount to raise income. 2- To produce more crops to meet the family's demand, because family is too big. 1- Need more area in order to distribute the farm land to children. 1- Irrigated agriculture is more reliable than rainfed agriculture, and make possible to increase yields.	2.4 0.4 3.9 0.1 90% 3.8 - 3.1 0.1 10% 10- To get enough food and income for family. 8- Increase yield 2- Increase yield and selling surplus crops. 2- To get more income 1- Very small area to sustain the family. 1- Increase the level of income 1- To expand farm land with the idea of getting more income 1- To get more crops for family

Table A - 1 Farmers' Intention Survey (6/18)

Items	Mgeta	Mgongola	Mkula	Mwega
Q-3 Farmers' Intention to the Proposed Irrigation and Drainage Plan 3.1 Do you agree to the proposed irrigation and drainage plan? (1) Head works <input type="checkbox"/> Yes <input type="checkbox"/> No (2) Irrigation and drainage facilities <input type="checkbox"/> Yes <input type="checkbox"/> No (3) No farm road is provided by the project. <input type="checkbox"/> Yes <input type="checkbox"/> No	Proposed Irrigation and Drainage Development Plan a) <u>Total irrigable area:</u> Approximately 125 acres for implementation (As a model design of the facilities: 12.5 acres) b) <u>Villages covered by the project:</u> Langali village c) <u>Proposed facilities</u> Head works: Construction of permanent structure at current intake points - Type of weir: (No specific name) - Intake: Perforated pipe with sand and gravel filter Irrigation and drainage facilities: Improvement of existing trunk systems) - Major irrigation canals: Pipeline - Tertiary canals: None - Major drainage canals: None - Flood protection dike: None Farm roads: None On-farm development: None Improvement of access roads - Road surface improvement about 0.5 km - Rock cutting & filling d) <u>Irrigation plan (method)</u> Gravity and continuous irrigation	Proposed Irrigation and Drainage Development Plan a) <u>Total irrigable area:</u> Rainy season :1,500 acres Dry season :1,500 acres b) <u>Villages covered by the project:</u> Mkindo, Dihombo, Hembeti c) <u>Proposed facilities</u> Head works: Newly constructed - Type of weir: Fixed weir - Intake: Steel gated inlet Irrigation and drainage facilities - Major irrigation canals: Newly constructed, lining canal 3.5km & earth canal 9km - Tertiary canals: Newly constructed, earth canals - Major drainage canals: Newly constructed, earth drain 17km - Flood protection dike: Newly constructed, 15 km long Farm roads: Newly constructed, 19km long (inspection roads along the main and secondary canals) On-farm development: Rough levelling Improvement of access roads: None d) <u>Irrigation plan (method)</u> Gravity and continuous irrigation	Proposed Irrigation and Drainage Development Plan a) <u>Total irrigable area</u> Rainy season :800 acres Dry season :350 acres b) <u>Villages covered by the project</u> Mkula c) <u>Proposed facilities</u> Head works: Improvement of existing weir, protection against water leakage - Type of weir: Fixed weir - Intake: Steel gated inlet Irrigation and drainage facilities: Improvement and extension - Major irrigation canals: Reconstruction of headrace 175m, heighten 450m & construction of lining canal 3km - Tertiary canals: New construction of earth canals - Major drainage canals: New construction of earth drain 5km - Flood protection dike: New construction of 2.5 km long Farm roads: New construction of inspection roads along the main and secondary canals On-farm development: Rough levelling Improvement of access roads: None d) <u>Irrigation plan (method)</u> Gravity and continuous irrigation	Nyinga-Mgongozi Mwega a) <u>Total irrigable area</u> 375 ac. b) <u>Villages covered by the project</u> Nyinga and Mgongozi Mwega c) <u>Proposed facilities</u> Head works: Unification of existing intakes - Type of weir : Stoplog gate type - Intake : Steel gated inlet Irrigation and drainage facilities: New construction of main canals - Major irrigation canals: Constion of lining canal 6.6km - Tertiary canals None - Major drainage canals None - Flood protection dike None Farm roads None On-farm development None Improvement of access roads - Provision of some cross drain - Provision of side ditches - Improvement of alignment & embankment about 0.5 km d) <u>Irrigation plan (method)</u> Gravity and continuous irrigation Malolo a) <u>Total irrigable area</u> 1,000 ac. b) <u>Villages covered by the project</u> c) <u>Proposed facilities</u> Head works: Largely improvement of Intake-B & replacement of Intake-A - Type of weir : Stoplog gate type - Intake : Steel gated inlet Irrigation Improvement - Major irrigation canals: Lining Canal-A and construction of earth canal 2.2km - Tertiary canals None - Major drainage canals None - Flood protection dike None Farm roads None On-farm development None Improvement of access roads - Provision of some cross drain - Embankment about 1.2 km - Construction of 13 m superstructure for one bridge - Provision of gabion d) <u>Irrigation plan (method)</u> Gravity and continuous irrigation
		100% 100% 88% 12%	100% 100% 100%	100% 100% 100%

Table A - 1 Farmers' Intention Survey (7/18)

Items	Mgeta	Mgongola	Mkula	Mwega
<p>(4) No on-farm development works including final levelling and construction of field ditches are provided by the project.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	100%	88% 12%	100%	93% 7%
<p>(5) Do you agree with the above plan of access roads ?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	88% 12%	84% 16%	92% 8%	90% 10%
<p>3.2 Do you agree to the irrigation plan (gravity and continuous irrigation) ?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	100%	100%	100%	100%
<p>3.3 Do you have requests for irrigation facilities ?</p>	<ul style="list-style-type: none"> 1- Location of canals should be designed afresh so as to accommodate more farm land. 1- For some canals, cement should be used. 1- In some places along the canal, cement will be needed. 1- The irrigation facilities should be extended to all farmers in the village. 1- Canals should be constructed by cement. 	<ul style="list-style-type: none"> 1- Main canal should be lined (construction using cement). 1- Construction should process faster to reduce any inconvenience. 1- He proposed that the Project should also construct a dam to store water that can be used for irrigation during the dry season. 1- The project should also consider upstream farmers. 1- Because the project was not there before, there is a need for training phase, to educate farmers, how to drain out excess water, how to operate irrigation facilities, how to organize farmers' group. 1- The project should start as soon as possible. 1- Bridge to join Mkindo village and project area (Phase III) 1- Input loan to small farmers. 1- Requesting for other varieties of paddy to be introduced, many high yielding varieties so as to raise yield, eventually increase in income to the farmers. 1- A farmer fills that the security of the intake facilities is poor so it should be reinforced. 	<ul style="list-style-type: none"> 1- The intake should be constructed in such a way that the amount of water taken from the river for irrigation would affect domestic water supply. 	<ul style="list-style-type: none"> 2- The canals should be lined with cement. 1- Intake B should also be closed and improve Nyinga intake, so that it can supply water for irrigation up to Maiolo. 1- Small bridges should also be provided to enable crossing by farmers to either side of canal. 1- The canals should be extended to cover all irrigable land. 1- Improvement of canals. 1- The soils are unstable, thus the canals should be lined with cement. 1- The dam can be constructed at upper in case of water shortage. canal C should be re-constructed to reduce flood damage. 1- There should be special provision water by animal and for domestic use.

Table A - 1 Farmers' Intention Survey (8/18)

Items	Mgeta	Mgongola	Mkula	Mwega
Q-4 Farmers' Intention to the Proposed Farmers' Society (Water Users' Group)				
After the construction, the farmers should operate and maintain all irrigation facilities which are constructed by the project. In order to operate and maintain the facilities, the farmers' society will be established in the project area. The members of this society consist of the farmers who use irrigation water. The money required for operation and management will be covered by irrigation service charge which is collected from the members. The collection of irrigation service charge will be done by the members themselves.				
4.1 For the operation and maintenance of irrigation facilities by the society:				
(1) Do you agree ?	100%	100%	100%	100%
<input type="checkbox"/> Yes				
<input type="checkbox"/> No	-	-	-	-
(2) Do you participate to its farmers' society ?	100%	100%	100%	100%
<input type="checkbox"/> Yes				
<input type="checkbox"/> No	-	-	-	-
4.2 Do you agree its proposed organizational structure ?				
<input type="checkbox"/> Yes	100%	96%	100%	100%
<input type="checkbox"/> No	-	4%	-	-
Reason:		1- There is no place where the Government will have control power over the group, e.g. to monitor WUG's activities and leaders capability.		
4.3 Farmers' intention to the society's activities				
(1) Operation and maintenance activities				
The society operates and maintains all of irrigation facilities, and these activities are managed by the O&M section under the executive committee. Do you agree this activities ?				
<input type="checkbox"/> Yes	100%	100%	96%	100%
<input type="checkbox"/> No	-	-	4%	-
Reason:			1- The O&M should not be included in the society, and have independent leadership.	
(2) Activities of the women's group under the executive committee.				
This group under the executives committee promote the women's activities such as processing and health care. in order to encourage greater participation of women in public affair. Do you agree this activity ?				
<input type="checkbox"/> Yes	100%	100%	100%	100%
<input type="checkbox"/> No	-	-	-	-
(3) Marketing services of farm inputs managed by the marketing and credit section under the executive committee. Do you agree this activity ?				
<input type="checkbox"/> Yes	100%	100%	92%	100%
<input type="checkbox"/> No	-	-	8%	-
Reason:			1- This should be handled by the branch of other cooperatives. 1- Marketing and credit section should be changed to credit section only.	
(4) Group loan system managed by the marketing and credit section under the executive committee. Do you agree this activity ?				
<input type="checkbox"/> Yes	100%	100%	96%	100%
<input type="checkbox"/> No	-	-	4%	-
Reason:			1- Individual farmers should be allowed to process for their loans.	

Table A - 1 Farmers' Intention Survey (9/18)

Items	Mgeta	Mgongola	Mkula	Mwega
<p>(5) Marketing services of farm products managed by the marketing and credit section under the executive committee. Do you agree this activity ?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Reason:</p>	<p>96% 4%</p> <p>1- It is difficult to manage marketing services using the executive committee. Every farmer should look his own market.</p>	<p>100% -</p>	<p>88% 12%</p> <p>1- Individual farmers should be allowed to look for markets. 1- Marketing services are available from other society. 1- It will be difficult to trust members of marketing and credit in securing good markets.</p>	<p>100% -</p>
<p>(6) Supporting activities of agricultural extension managed by the agricultural section under the executive committee. The extension activity it self is carried out by the government's extension office. The farmers' society support its activities in order to make smooth communication between the farmers and the extension office. Do you agree this activity ?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>100% -</p>	<p>100% -</p>	<p>100% -</p>	<p>100% -</p>
<p>(7) Auditing system</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>100% -</p>	<p>100% -</p>	<p>100% -</p>	<p>100% -</p>
<p>4.4 All of the operation and maintenance costs are covered by irrigation service fees collected from the farmers.</p>				
<p>(1) For the payment of such irrigation services charge, there are two methods; i.e., in cash and in kind.</p> <p>Which method do you like ?</p> <p><input type="checkbox"/> In cash</p> <p>Reason :</p>	<p>92%</p> <p>4- Easy to pay 1- Difficulty to store crops. 1- Some farmers didn't harvest, and deposit of products need for home consumption. 1- In-kind will have a marketing problem especially for vegetables. 1- It is easier to pay cash than products, because prices of crops are not stable. 1- It is better for farmers to sell their crops and pay cash. 1- Price of products fluctuates. 1- Cash is easier and can be stored, but vegetables can not store. 1- They can easily set exactly date of paying. 1- Cash payment is better than "in kind" base. Sometime farmers pay perishable crops. 1- Cash is easier and can easily store than crops such as vegetables.</p>	<p>48%</p> <p>1- "In kind" is difficult to handle it. 1- Cash payment make quick maintenance of damaged facilities. 1- He will help to over pay or under pay, which will result in failure to fulfil what is required. 1- To buy things like cement and other industrial product needed in maintenance when in cash is difficult cleaning. 1- It is simple to manage cash than in kind. 1- Cash is easy to handle, whereas something to be paid in kind can be destroyed by pests or rodents as a result can not cover the required charge rates. 1- Cash will facilitate operation and maintenance of irrigation facilities quickly. 1- Paddy price fluctuate, therefore farmers will get a loss by paying in kind.</p>	<p>76%</p> <p>4- It is easy to pay cash than "in kind" 2- It is easy to collect money than crops. 1- Difficult to inspect good crop quality offered by farmers, and also marketing will be problem. 1- Farmers can store the crop up to the time where the price of farm products is high. 1- Prices of crops will be cheaper than expected amount. 1- Products may be destroyed by storage pests before been sold, thus reduce the amount of cash. 1- The society need to sell products to get cash income, and this activity is very labourious.</p>	<p>72%</p> <p>7- Easy to pay. 1- Crop prices fluctuate. 1- Easy to collect it. 1- Easy to handle. Farm product needs marketing which will be laborious. 1- Paying in cash is much easier, because some crops have no market. 1- Price of crops fluctuates, thus farmers may get a loss of paying more crops. 1- Sometime its not easy to get a market for some farmers. 1- There is no market for some crops for some period, so it is better to pay cash. 1- To avoid complication that may arise in paying in kind.</p>
<p><input type="checkbox"/> In kind</p> <p>Reason :</p>	<p>8%</p> <p>1- No need to sell the products so as to get cash 1- Money may not be ready available.</p>	<p>52%</p> <p>3- Easy to pay. 2- Easily available than cash. 1- He doesn't have money. 1- It is labourious to sell products to get cash. 1- Because this is easily obtained, and are within the farmers' environment.</p>	<p>24%</p> <p>1- By the time of harvesting, farmers can easily pay in kind. Moreover the society can get more profit by selling the products at higher prices. 1- At least every farmer can afford to have crops.</p>	<p>28%</p> <p>2- After harvesting every farmer has some crops, so it is easy for them to pay crops. 1- Farmers will not be required to sell the products. 1- It is easy to get crops for most of the farmers than money.</p>

Table A - 1 Farmers' Intention Survey (10/18)

Items	Mgeta	Mgongola	Mkula	Mwega
		<ul style="list-style-type: none"> 1- Because of the problem of availability of cash, it is easy to pay in kind, which can be done during the harvesting season. 1- Market for farm products is not well organized. 1- Simple to handle. In case of money it is not available. 1- At the time of harvesting, it is easy to pay in kind than in cash. 1- It is simple to pay quickly than cash. 1- He can easily pay after harvest. 	<ul style="list-style-type: none"> 1- The farmer will prefer to pay paddy because at least every farmer has paddy. 1- It is easier to pay in terms of crops. 1- All farmers have crops so they will pay in terms of crops after harvesting. 1- Farmer can easily pay crop at the time of harvesting than cash. 	<ul style="list-style-type: none"> 1- Most farmer prefer paying by crops. 1- Payment in terms of "in kind" is easier than "in cash."
<p>(2) Do you pay its irrigation service charge ?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Reason :</p>	<p>100%</p> <p>-</p>	<p>96% 4%</p> <p>1- No charges are paid, because farmers are responsible for operation and maintenance of the irrigation facilities.</p>	<p>100%</p> <p>-</p>	<p>100%</p> <p>-</p>
<p>(3) If we proposed "in cash", do you agree ?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Reason :</p>	<p>96% 4%</p>	<p>96% 4%</p> <p>1- It is easy to pay in kind, because of marketing problem.</p>	<p>92% 8%</p>	<p>90% 10%</p>
<p>(4) Irrigation service charge will be collected by the collectors (leaders) of the farmers' society. Do you agree ?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>100%</p> <p>-</p>	<p>100%</p> <p>-</p>	<p>96% 4%</p>	<p>100%</p> <p>-</p>
<p>(5) Do you have ideas for collecting ISC ?</p>	<ul style="list-style-type: none"> 1- ISC should be collected every season. 1- Receipt should be issued. 1- The society should issue receipt to justify payment. 1- Receipt should be provided in any transactions. 1- Receipt should be provided when paying ISC. 1- Strong and close supervision in collecting and auditing ISC. 	<ul style="list-style-type: none"> 1- The executive committee should be trained on "how to keep cash account" and to make sure that no defaults are encountered. 1- After collection of ISC, every- thing should be handled to the treasurer and not chairman, vice-chairman or secretary. 1- Collectors of ISC should come with receipt delivery notes. 1- Records should be kept on expenditures and revenues. 1- Bank statement should be given to indicate that money has been deposited. 1- To enforce security, it is better to have some people to guard the irrigation facilities. 1- In the past, they tried to pay one bag of paddy for each farmer, but it was very difficult to manage paddy. 1- Punishment system should be introduced to those who will mismanage ISC. 	<ul style="list-style-type: none"> 1- There should be a tight system to monitor collection and deposit of ISC to the bank account. 	<ul style="list-style-type: none"> 1- The chairman of WUG should also supervise collection of ISC. 1- There should be a close supervision and auditing to ensure the proper use of these charges. 1- ISC should be paid before or at the beginning of the season.

Table A - 1 Farmers' Intention Survey (11/18)

Items	Mgeta	Mgongola	Mkula	Mwega
(6) If we will propose following collecting system, do you agree ?	<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 10px; width: 45%;"> <pre> graph TD Farmers[Farmers] -- "Collect after each season" --> EC[Members of the Executive Committee / Furrow Committee] EC -- "Receipt" --> EC EC -- "Hand over within a day" --> TCS[Treasurer, Chairman, Vice Chairman & Secretary] TCS -- "Deposit within 1-2 days" --> BA((Bank Account)) Auditors[Auditors] --> EC Auditors --> TCS </pre> </div> <div style="width: 50%;"> <p>Irrigation service charge (ISC) will be collected after each cropping season. All members of the executive committee and furrow committee would collect ISC directly from the farmers, and collected amount will be deposited immediately in a WUA's bank account. For the collecting of ISC, the members could form a group consisting of 2-3 members, so they do not collect it alone. The treasurer manages all these transactions, and auditors should check their collection.</p> </div> </div>			
<input type="checkbox"/> Yes <input type="checkbox"/> No	100%		100%	100%
4.5 The following articles will be proposed to include in the "Articles and By-laws" in your society at present. Do you agree ?				
Article-1 The society has the right to collect ISC from the beneficiary who received irrigation services from the society, and the beneficiary has the duty to pay its ISC to the society.	100%	100%	96%	100%
<input type="checkbox"/> Yes <input type="checkbox"/> No			4%	
Article-2 The society inflicts a punishment on the beneficiary who uses irrigation water and facilities illegally and is not able to pay ISC.	100%	100%	96%	100%
<input type="checkbox"/> Yes <input type="checkbox"/> No			4%	
Article-3 The farmers have the duty to participate in the co-operative works on O&M to be planned by the society.	100%	100%	100%	100%
<input type="checkbox"/> Yes <input type="checkbox"/> No				
Article-4 The tenant beneficiary has a right to join the society with the election to the executive members, and is in duty bound to pay ISC and membership fees, as well as the owner beneficiary.	100%	88%	100%	100%
<input type="checkbox"/> Yes <input type="checkbox"/> No		12%		
4.6 The project will propose to establish an irrigation meeting under presidency of farmers' society (WUG)	<p>Objectives: The production activities of crops are linked closely with various agricultural support activities including extension services, machinery services, supply of farm inputs, credit services, etc., which are implemented by the Government and private sectors. In order to coordinate between the farming and these supporting services, it is proposed to hold an irrigation meeting under the presidency of the water users' association.</p> <p>Members: The meeting will be held before each cropping season, and would consist of the following members:</p> <ul style="list-style-type: none"> i) All beneficiaries, ii) Committee members of WUA, iii) Officers of DALDO' offices, iv) VEO and Irrigation Technician. v) Members of village government, and vi) Private sectors including banks, NGO, owners of machinery, dealers of farm inputs, etc. <p>Activities: VEO and Irrigation Technician would provide necessary support to hold this meeting by WUA. The farmers would discuss necessary supporting services with the above members, and later WUA would request to the related agencies for those support services.</p>			
(1) Do you agree to establish this irrigation meeting ?	100%	100%	100%	100%
<input type="checkbox"/> Yes <input type="checkbox"/> No				

Table A - 1 Farmers' Intention Survey (12/18)

Items	Mgeta	Mgongola	Mkula	Mwega
(2) Do you think that your society can arrange this irrigation meeting ?				
(a) Yes. It is possible without any support from the Government.	28%	4%	52%	17%
(b) Yes. If the DALDO Office or other agencies support to the society, it is possible.	72%	96%	48%	83%
(c) No. It is impossible.	-	-	-	-
(3) Would you attend this irrigation meeting ?				
Yes	100%	100%	100%	100%
No	-	-	-	-
Q-5 Improvement of Agricultural Credits (Group Loan System)				
5.1 Do you think that your society can introduce this loan system ?				
(1) Yes. It is possible without any support from the Government.	23%	4%	36%	21%
(2) Yes. If the DALDO Office or other agencies support to the society, it is possible.	73%	96%	64%	79%
Necessary support	<ul style="list-style-type: none"> 4- Technical advice 1- To full follow-up of farmers' loan requests 1- To assist any technical support 1- Technical advice from government will be needed. 1- Access to banks 1- Follow-up 1- Technical advice and support 1- Technical advice and agricultural inputs. 1- Make follow-up of farmers requests. 1- To send farmers' loan requests to the relevant agencies. 	<ul style="list-style-type: none"> 10- Technical advice for handling loan system. 4- Training on managing of credit. 1- Assistance will be required to process loans. 1- Communication between WUG and other agencies. 1- Financial assistance. 1- Information on access to credit. 1- Training to leaders who can help to organise how to get loans. 	<ul style="list-style-type: none"> 7- Technical advice 4- Technical support at the beginning, but later on they will do it by themselves. 2- Making follow-up 2- Processing for loan 	<ul style="list-style-type: none"> 18- Technical support at the beginning 5- Advice for loan processing.
(3) No. It is impossible.	4%	-	-	-
5.2 Do you participate to this loan system ?				
Yes	100%	100%	100%	100%
No	-	-	-	-
Q-6 Improvement of Marketing				
6.1 Do you think that your society can introduce this marketing system ?				
(1) Yes. It is possible without any support from the Government.	32%	8%	32%	14%
(2) Yes. If the DALDO Office or other agencies support to the society, it is possible.	68%	92%	68%	86%
Necessary support	<ul style="list-style-type: none"> 5- Technical advice 2- Transportation of farm products 2- Technical advice of finding marketing area. 1- Transportation of farm products 1- Technical advice of DALDO Office 1- To assist any technical support 	<ul style="list-style-type: none"> 5- Assist to research for a good and reliable market. 4- Training by people who know marketing procedure. 2- Communication between our WUG and other agencies. 2- Technical assistance from people who are knowledgeable about marketing of products. 	<ul style="list-style-type: none"> 7- Technical advice 4- Technical support at the beginning, but later on farmers will do it by themselves. 2- Looking for good markets 1- Where to find good market 1- Transportation of the products to the markets. 	<ul style="list-style-type: none"> 16- Technical support at the beginning 12- Technical advice 5- Where to find good markets for farm products. 2- To find markets outside the country and improve local marketing facilities.

Table A - 1 Farmers' Intention Survey (13/18)

Items	Mgeta	Mgongola	Mkula	Mwega
(3) No. It is impossible.	-	2- Facilitate information between agencies and WUG. 1- Assistance to acquire marketing of products even outside the country. 1- Establishment of product standards 1- Need educated personnel who know about good markets for their products.	-	-
6.2 Do you participate to this marketing activities ? <input type="checkbox"/> Yes <input type="checkbox"/> No Reason:	96% 4%	100%	96% 4%	100%
	1- Everyone should find his/her own markets.		1- He want to look for markets that will offer good prices, and to sell his products at his own market.	
Q-7 Farmers' Participation to the Construction Works				
If we will proposed the following farmers' participation plan, do you agree ?				
<input type="checkbox"/> Yes <input type="checkbox"/> No No answer Farmers' opinions	Objective : Training of operation and maintenance works Method : Farmers participate the construction works for canals and farm roads, but no labour charge is paid to these works. Merits : Farmers will have some knowledge and practices on maintenance work of the facilities. Facilities constructed by this system belong the farmers, any other people and the Government can not tackle those facilities. Demerits : The farmers' income will be decrease during the participation period, because no labour charge is paid.			
	100%	92% 4% 4%	84% 4% 12%	83% - 17%
	1- I support to its participation plan. 1- The idea of farmers' participation is good. 1- I agree to participate in construction works. 1- This is very important, because the farmers will gain some knowledge and practices on maintenance. 6- Good idea 1- I want to have knowledge in construction works.	8- Support the idea. 1- The farmers should participate on rotational basis to give time to do other activities for their life. 1- Let farmers participate in groups, then groups work on rotational basis. This will allow farmers to attend other family obligations. 1- The project should find means of paying labour charges to farmers who will be engaged in the construction of irrigation facilities as a compensation. 1- Since it will take long time phase consider little payment, because farmers will have no means on earning life.	5- Farmers should participate in construction works. 2- Good idea 1- The farmer has agreed to the plan. 1- Support the opinion of farmers' participation. 1- The government should take the responsibility of construction without farmers' participation. 1- This is good plan, and farmers are willing to participate during the construction of the project.	11- It is a good idea/opinion. 8- Farmers agree with the participation to construction work and they will participate fully. 1- Support the idea of farmers participation.
Q-8 Land Acquisition				
8.1 The project requires some lands for construction of irrigation facilities (intake, canals, flood protection dike and farm roads). These lands should be provided by the beneficiaries themselves, and the project does not pay its land compensation, because the facilities are constructed for the benefit of farmers. Do you agree ?				
<input type="checkbox"/> Yes <input type="checkbox"/> No Reason :	96% 4%	92% 8%	100%	90% 10%
	1- Some farmers may lose a piece of farm land, even if they don't need that irrigation water due to location of the canal with respect to their farms.	1- Because the farmers depend on that land, therefore it is better to be compensated so as to substitute for another. 1- Farmers will lose their lands.		1- No one will agree to lose his piece of land without compensation. 1- The project should compensate for lost crop. 1- A farmer has very small piece of land, therefore he does not like to lose it.

Table A - 1 Farmers' Intention Survey (14/18)

Items	Mgeta	Mgongola	Mkula	Mwega
8.2 Who arrange this land acquisition ? Village Government Farmers themselves WUG to be established	21% 71% 8%	92% 8% -	64% 32% 4%	45% 52% 3%
8.3 If the project constructs canal in your field without land compensation, do you agree ? <input type="checkbox"/> Yes <input type="checkbox"/> No Reason :	95% 5% 1- Every piece of land have value, thus need to be compensated if lost.	92% 8% 1- Because he has only a piece of land, and he depends on agricultural production from this land. 1- To compensate the lost land.	100% -	90% 10% 1- If the field has no crop, he agrees with its land acquisition. 1- The project should compensate for lost crop.
8.4 If outsiders' lands will be included in the irrigation area, they can cultivate those land, or lost it cultivation right after implementation of the project. They can cultivate. They can not cultivate. No answer	75% 25% -	63% 21% 17%	80% 20% -	80% 20% -
Q-9 Women's Participation in Development				
9.1 If we propose the following ideas, do you agree ?				
(1) Appointment of women's leaders in the farmers' organizations in order to encourage greater participation of women in public affairs. <input type="checkbox"/> Yes <input type="checkbox"/> No	100% -	100% -	100% -	100% -
(2) Establishment of women's group and encouragement of value-added processing of crops by these women's groups in order to improve their employment opportunities, and <input type="checkbox"/> Yes <input type="checkbox"/> No	100% -	100% -	100% -	100% -
(3) Encouragement of livestock farming including poultry, sheep, goats, etc. by the women's groups. <input type="checkbox"/> Yes <input type="checkbox"/> No	100% -	100% -	100% -	100% -
9.2 <i>Questions for women</i> For women's participation to the project, do you have ideas and requests ?	1- Women should be allowed to contest in any position of leadership in the society.	1- Women should be given a first priority during land allocation. 1- She requests for more assistance in encouraging women activities in development. 1- Women should participate in all activities in the project. 1- I support the idea of women's participation to the project. 1- There should be ways of improving life of rural women farmers by supporting them for development activities. 1- Include more women than men in the project.	2- If possible the project provide assistance to women groups like sewing machines. 1- She would be ready to participate in any works which she will be required to do. 1- They should be allowed to contest in all leadership position in WUG. 1- With regard to livestock farming, women farmers be assisted in diary farming to produce more milk which is a limiting commodity in the village. 1- Women can also participate in activities like making domestic appliances like pots, bowls etc. using clay soils. 1- Women group should be given a plot in the project area. 1- Women to be given a land during land allocation.	1- Seminars on women participation to the project should be conducted to women farmers. 1- Women farmers should be educated on the benefits of the project so as to create awareness. 1- Women farmers should be well involved and allowed to participate in project construction. 1- Women groups should be formed. 1- Women should be involved in these development activities.

Table A - 1 Farmers' Intention Survey (15/18)

Items	Mgeta	Mgongola	Mkula	Mwega
<p>Q-10 Closing existing canals during the construction of project <i>Questions for the farmers having irrigated field.</i> Water supply of existing irrigation system will be stopped during the construction period of the Project. (it may be 4-5 months in dry season.) The project does not pay compensation to close canals. (a) Agree closing canal and no compensation (b) Agree closing canal but with compensation (c) Disagree No answer</p>		<p>81% 10% 10%</p>	<p>72% - 28%</p>	<p>41% 24% 34%</p> <p>4- An alternative or temporary canal should be constructed before closing of the existing canals. 2- All farmers depend on canals for irrigation, thus their farming activities will be impaired. 2- All the farming activities will be stopped, thus a loss to the farmers. 1- Many farmers depend on this canal for irrigating their farm throughout the year. So people will suffer a lot if the canal is closed. 1- They will be forced to stop their farm activities that will reduce their income.</p>
<p>Q-11 Land allocation of irrigated land 11.1 Land tenure in the project area</p>	<p>(No land allocation in Mgeta scheme)</p>	<p>- Mkindo village government 4% - Mkindo Farmers 8% - Mkindo village 48% - Mkindo and Dihombo villages 8% - Mkindo, Dihombo and Hembeti villagers 16% - Mkindo and Dihombo villagers 8% - Hembeti ward 4% - Mkindo, Dihombo and Hembeti villages. 4%</p>	<p>a) Village government 44% b) Mkula farmers 56%</p> <p>11- The land belongs to the Mkula farmers. 5- Land belongs to village government which has already allocated it to the village government. 5- Mkula village government 1- Farmers are owner of the land which has been allocated to them by the village government. 1- The village government has divided the land to the farmers who are at present cultivating the land.</p>	<p>(No land allocation in Mwega scheme)</p>
<p>11.2 The project provide irrigation facilities to these lands. After the construction of irrigation facilities, how to allocate these lands to people ?</p>	<p>(No land allocation in Mgeta scheme)</p>	<p>4- Each farmer should get a maximum size of 2 acres. 2- Every farmer who had land in the area should be given 2 acres. 3- First priority should be given to the farmers who already have their own lands in the project area. Then remaining lands will be allocated to other farmers.</p>	<p>6- Every farmer should be given 2 acres. 6- The land should be equally distributed to farmers. 2- Every farmer should be given at least 3 acres. 1- All farmers have a certain piece of land in the proposed irrigation project. So it is suggested that every farmer should remain with his/her piece of land and no reallocation be done.</p>	<p>(No land allocation in Mwega scheme)</p>

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Table A - 1 Farmers' Intention Survey (16/18)

Items	Mgeta	Mgongola	Mkula	Mwega
	<i>(No land allocation in Mgeta scheme)</i>	<ul style="list-style-type: none"> 2- Farmers who need the land make an application to Mkindo village government. But the application should be pass via their respective village governments. 2- Village government allocate the lands to farmers. 2- Each farmer should be given 1 ac. 2- The land will be allocated to those farmers who will partici- pate in the construction of the irrigation facilities. This will be proceeded by applications to land owners. 1- The size of 0.5 to 1 acre be allocated to each farmers. 1- Every farmer should be given lands equivalent to the size before the project. 1- First the lands should be allocated to the respective government, and the village government can allocate them to farmers. 1- Land owners and village government reallocate lands to farmers. 1- Farmers should apply for the land to formed WUG through the village governments. 1- The lands should be divided equally to three villages, and each village will allocate plots to farmers. 1- The village government of three villages should take an inventory of people who can effectively cultivate in the irrigation area. 1- The Government should intervene and arrange land allocation. 1- No land allocation should be done, and it should be adopted land borrowing system. 1- The village government should carry out an inventory on land ownership, so that every farmer will be allocated an average size. 1- Land should be allocated afresh. 	<ul style="list-style-type: none"> 1- Every farmer should be given at least 1 acre. 1- Every Mkula farmer owns a piece of land in the project area, so no need to reallocate. 1- Land owners in the project area should be sit together, and area decide on fixed acreage that should be given to every farmer. 1- Farmers will sit and decide how much acreage for each farmer will be allocated. First consideration will be given to farmers who had land in the project area. 1- Firstly, every household should be given at least one acre. Then the remaining land will be diviated equally to all farmers in the village. 1- The farmers who were involved in the construction work to be given 1 acre. 1- Land be allocated to all household based on the family size. 1- The village government should take an inventory of land ownership, then each farmer will be given an area equivalent to the size of land held before const- ruction of the project. Right of way is given to the project. 1- The village government with an assistance from the government authorities. 1- The village government will allocate equal land to every farmer who is willing to cultivate in that area. 1- Village government should fix the acreage for each farmer. 	<i>(No land allocation in Mwega scheme)</i>

Table A - 1 Farmers' Intention Survey (17/18)

Items	Mgeta	Mgongola	Mkula	Mwega																																																															
11.3 Who or which organizations should arrange this land allocation ?	(No land allocation in Mgeta scheme)	<ul style="list-style-type: none"> - Mkindo village government 16% - WUA to be established 16% - Mkindo village government & WUA 8% - Mkindo village government, ward executive officer & land owners 8% - Three village governments & ward executive officer 8% - Three village governments 8% - DALDO, Mkindo village government & project staff 4% - Ministry, Mkindo village government & land owners 4% - Mkindo village government & land owners 4% - Mkindo village government & ward executive officer 4% - Mkindo village government, VEO & land owners 4% - Selected farmers 4% - Three village governments & land owners 4% - Three village governments & VEO 4% - VEO 4% 	<ul style="list-style-type: none"> - Village government 88% - WUA 4% - Village government and WUA 4% - Land allocation committee to be established by the farmers. 4% 	(No land allocation in Mwega scheme)																																																															
11.4 If you will join in the project, how many acre do you want to have irrigated field after the project ?	(No land allocation in Mgeta scheme)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Size (ac.)</th> <th>No. of farmers</th> <th>%</th> </tr> </thead> <tbody> <tr><td>1.0</td><td>3</td><td>12%</td></tr> <tr><td>2.0</td><td>13</td><td>52%</td></tr> <tr><td>3.0</td><td>3</td><td>12%</td></tr> <tr><td>4.0</td><td>3</td><td>12%</td></tr> <tr><td>5.0</td><td>1</td><td>4%</td></tr> <tr><td>6.0</td><td>1</td><td>4%</td></tr> <tr><td>10.0</td><td>1</td><td>4%</td></tr> <tr><td colspan="3">Average = 2.8 acres</td></tr> </tbody> </table>	Size (ac.)	No. of farmers	%	1.0	3	12%	2.0	13	52%	3.0	3	12%	4.0	3	12%	5.0	1	4%	6.0	1	4%	10.0	1	4%	Average = 2.8 acres			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Size (ac.)</th> <th>No. of Farmers</th> <th>%</th> </tr> </thead> <tbody> <tr><td>1.0</td><td>2</td><td>8%</td></tr> <tr><td>2.0</td><td>4</td><td>16%</td></tr> <tr><td>3.0</td><td>7</td><td>28%</td></tr> <tr><td>4.0</td><td>1</td><td>4%</td></tr> <tr><td>5.0</td><td>6</td><td>24%</td></tr> <tr><td>6.0</td><td>1</td><td>4%</td></tr> <tr><td>7.0</td><td>1</td><td>4%</td></tr> <tr><td>15.0</td><td>1</td><td>4%</td></tr> <tr><td>16.0</td><td>1</td><td>4%</td></tr> <tr><td>20.0</td><td>1</td><td>4%</td></tr> <tr><td colspan="3">Average = 5.2</td></tr> </tbody> </table>	Size (ac.)	No. of Farmers	%	1.0	2	8%	2.0	4	16%	3.0	7	28%	4.0	1	4%	5.0	6	24%	6.0	1	4%	7.0	1	4%	15.0	1	4%	16.0	1	4%	20.0	1	4%	Average = 5.2			(No land allocation in Mwega scheme)
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Q-12 Other requests or suggestions to the project	<ul style="list-style-type: none"> 5- The project should start as early as possible. 1- Farmers should arrange themselves for full participation to construction works. 1- Serious problems: slushing out of intake by flood and damage of canals by over flow 	<ul style="list-style-type: none"> 11- Request for farm machinery (tractors, threshers, rice mill, etc.) 5- Assistance of farm inputs delivery to farmers. If possible inputs shops should be introduced in the village so that they are easily available. 3- Farmers should be given credits for their farm inputs. 	<ul style="list-style-type: none"> 7- Construction of the project should be done as soon as possible. 6- The project should also provide tractor either as a loan or assistance to farmers. This will enable them to cultivate on-time and also perform other subsequent farm operation. 	<ul style="list-style-type: none"> 12- Farmers agree with the construction of the project. 7- Assistance of farm inputs supply 4- Access road to Ruaha should be well improved to facilitate easy transportation. 3- The project provide tractor on loan basis. 																																																															

Table A - 1 Farmers' Intention Survey (18/18)

Items	Mgeta	Mgongola	Mkula	Mwega
	<ul style="list-style-type: none"> 1- Existing loan system should be reviewed, because most farmers fail to pay loans due to great interest of banks. 1- All canals from intake to farmers' fields should be constructed by cement. 1- The pipes should be burrowed dipper to reduce damage by farmers. 1- I still stress on possibility of marketing and loan system which are proposed. 1- Good collector should be selected. 1- Farmer can be educated by this project. 1- A reservoir or dam should also be constructed in addition to the intake in order to take enough and stable water. 1- The project should also provide technical assistance after completion. 1- Supply of agricultural inputs 1- Ready to participate in all communal 1- The project should provide initial fund for repair (eg. for one year). 1- To give them ample time to collect their own funds. 1- Support to farm inputs supply. Close supervision of Government for construction and O&M. 1- Request for farm machinery 1- Close supervision of Government for collecting ISC 1- Mechanisation should be applied if possible, because farm works by hand hoes are very hard. 1- The society should introduce services of such farm inputs supply (selling fertilizers to farmers) 1- The project should also in cooperate the domestic water supply. 	<ul style="list-style-type: none"> 1- More extension workers should be added. 1- Since extension officers are the Government employees, in most case they get transferred and sometimes no replacement. Farmers be trained as extension agent in case they are not available. 1- The project should also provide good extension services. 1- Provide training opportunities to other schemes so as to know what others do, in order to improve their irrigation scheme. 1- The funding agents to the project should make sure that the project is complete rather than just leaving at some stages without completing. 1- Select few farmers to be trained on operation and maintenance of irrigation facilities, and be paid little amount of money to sustain themselves during the construction period, because they will have no means of their living. 1- Since the project is still at a younger stage, it will be better if there are some assistance of tools, inputs, and credits. 1- Request for introduction of vegetables (cabbages and tomatoes) to raise the income. 1- The project should also look for the appropriate crop varieties for the farmers. 1- Farm inputs like agro-chemicals should be subsidized. 1- Only one paddy variety should be chosen to be grown under the project. 1- Request for farm inputs. 1- If possible, the project assist farmers to search for a good and reliable market for the agricultural products. 1- Construct a small road between Mkindo village and the project area. 1- The project should also provide storage facilities. 1- The Government should make sure that the project is established. 1- Farmers hope these irrigation facilities will come very soon. 1- Training of farmers. 1- Knapsack type sprayer 1- Credit facilities 	<ul style="list-style-type: none"> 4- Need a technical support of about 3 years after the completion of the project. 3- The project should also consider storage facilities for farm products and inputs. 2- To improve supply of farm inputs 2- Construction work should start during the off-season (dry season) when farmers have already harvested their crops. The farmers are very busy for their farming during the rainy season, and they can not participate to construction work. 1- Request for high yielding and disease resistant varieties of crops. 1- Technical assistance on O&M should be extended after construction of the project. 1- There should be a close supervision of the project from the DALDO office after completion of the construction. 1- The project if possible assist in providing a milling machine. This will assist in increasing fund that will be needed in the maintenance and operation of irrigation facilities. 1- Construction of this project should really be done and not yet end up in paper only. 1- Need irrigation facilities to increase yields. 1- Fish farming should also be included in the project. 1- The Government should train farmers selected by the village for auditing and accounting money collected. 	<ul style="list-style-type: none"> 2- The project provide tractors. 2- The farmers need a good varieties of paddy and maize, which have tolerant to diseases and high yielding. 2- Canal A should be extended as long as possible like that canal B. Lining of the extended portion is no necessary (only earth canal). 1- Hydro-electric can also be obtained, if the intake are carefully planned. 1- The project should also assist farmers on the best way of controlling wild animals. 1- The project should inform earlier before closing the canals. 1- A temporary earth canal should be excavated by farmers for use when the main canal is closed. 1- The existing canals should not be closed during the construction. But the new canal should be constructed adjacent to the existing canal. 1- The project be extended to cover Blger area near Ruaha. 1- The project should construct a new canal adjacent to the existing one instead of its closing. 1- The project should extend construction of canal up to the areas which are not constructed now. These areas have a potential for irrigation. 1- Health service be improved. 1- Transport facilities for farm products needed to be improved. 1- The project should improve roads connecting Chabi- Mgogozo and Malolo and also Nyinga-Malolo. 1- Social facilities should also be improved, especially educational facilities (primary school). 1- Farmers should be educated on how to operate and maintain irrigation facilities, either through seminars or study tours. 1- Seminars should be conducted to women farmers, so that they become aware of women participation in irrigated agriculture. 1- Domestic water supply should also be planned in parallel with that for irrigation. 1- The project should construct dam for drinking water of livestock. 1- Women should be given more chance for WUC leadership.

Table A-2 Result for Public Meeting (1/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
Q-1 General					
1.1 Date and place	26 July 1997 Langali Village	24 & 25 July 1997 Mkindo Village	17 & 18 July 1997 Mkula Village	11 & 12 July 1997 Malolo Village	
1.2 Attendance	<u>Male</u> <u>Female</u> <u>Total</u>	<u>Male</u> <u>Female</u> <u>Total</u>	<u>Male</u> <u>Female</u> <u>Total</u>	<u>Malolo</u> <u>Nvinga-Mgogozi</u> <u>Grand</u> <u>M</u> <u>E</u> <u>T</u> <u>M</u> <u>E</u> <u>T</u> <u>Total</u>	
(1) Farmers					
- Leaders of Village	7 2 9	9 - 9	7 6 13	2 1 3 3 - 3 6	37
- Leaders of Irrigation Group	* * *	1 - 1	- - -	4 - 4 * * * 4	5
- Farmers	193 84 277	234 111 345	241 207 448	119 34 153 70 27 97 250	1,320
Total	200 86 286	244 111 355	248 213 461	125 35 160 73 27 100 260	1,362
(2) Government Agencies Concerned					
- RAS	-	1	1	-	1
- DC	1	1	1	-	-
- RALDO	1	1	1	-	3
- Zonal Irrigation Office	3	5	3	-	3
- DALDO's Office	-	-	-	-	1
- DEO	1	1	1	-	-
- VEO	-	3	1	-	1
- Irrigation technician	-	1	-	-	-
- Ward Office	1	1	1	-	2
(3) Study Team		2	2		2
1.3 Population	<u>Langali</u> <u>Bumu</u> 3,000 1,400 4,400	8,470	2,940	<u>Malolo</u> <u>Nvinga</u> <u>Mgogozi</u> 3,800 200 1,270 5,270	21,080
1.4 Household	600 290 890	1,690	490	480 50 180 710	3,780
1.6 Language used in the meeting	Swahili	Swahili	Swahili	Swahili	
Q-2 Farmers' Intention to the Proposed Irrigation Development Plan					
2.1 Total project area (Irrigable area)	Approximately 80 acres as a model design of the facilities.	Rainy season: 1,500 acres Dry season: 1,500 acres	Rainy season: 370 acres Dry season: 150 acres	<u>Malolo</u> <u>Nvinga-Mgogozi</u> R. season: 375 ac. R. season: 1,000 ac. D. season: 375 ac. D. season: 1,000 ac.	
Do you agree with the above project area? <i>(Show one's hand.)</i> Yes No	100% - - Almost all farmers said that total project area is not enough.	100% - - All farmers agreed that the Project includes all existing irrigation area.	100% - - Farmers said that total development area is too small for providing lands to all farmers. The study team explained them about limited water resource of Mkula river, then farmers agreed with the area.	72% 28% Farmers want to have more irrigation area. They said that it is possible to expand irrigation area by extending canals.	100% - In the Mgogozi area, there are community lands estimating at about 70 acres. All farmers in Mgogozi village agreed that these lands are included in the project area.

Table A-2 Result for Public Meeting (2/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
<p>2.2 Head works</p> <p>Do you agree with the above plan ? (Show one's hand.) Yes No</p>	<p>Construction of permanent structure at current intake points</p> <ul style="list-style-type: none"> - Type of weir (No specific name) - Intake: Perforated pipe with sand & gravel filter <p>100% -</p>	<p>Newly constructed</p> <ul style="list-style-type: none"> - Type of weir : Fixed weir - Intake : Steel gated inlet <p>100% -</p>	<p>Improvement of existing weir including protection against water leakage</p> <ul style="list-style-type: none"> - Type of weir : Fixed weir - Intake : Steel gated inlet <p>100% -</p>	<p>Construction of a new intake (All irrigation areas are covered by this new one, and all existing intakes will be closed.)</p> <ul style="list-style-type: none"> - Type of weir : Stoplog gate type - Intake : Steel gated inlet <p>100% -</p>	<p>- All water available at intake site will turn to the irrigation area, and no water flows into downstream during the dry season. All farmers agreed about it.</p> <p>- All farmers agreed with the construction of new intake which covers all irrigation areas. They also accepted for closing of all existing intakes.</p>
<p>2.3 Irrigation and drainage facilities :</p> <p>Do you agree with the above plan ? (Show one's hand.) Yes No</p>	<p>Improvement of existing trunk systems</p> <ul style="list-style-type: none"> - <u>Major irrigation canals</u> : Pipeline - <u>Tertiary canals</u> : None - <u>Major drainage canals</u> : None - <u>Flood protection dike</u> : None <p>100% -</p>	<ul style="list-style-type: none"> - <u>Major irrigation canals</u> Newly constructed lining canal 3.5km & earth canal 9km - <u>Tertiary canals</u> Newly constructed earth canals - <u>Major drainage canals</u> Newly constructed earth drain: 17km - <u>Flood protection dike</u> Newly const.: 15km <p>100% -</p>	<ul style="list-style-type: none"> - <u>Major irrigation canals</u> Reconstruction of head-race and construction of lining canals - <u>Tertiary canals</u> Construction of earth canals - <u>Major drainage canals</u> Construction of earth drains - <u>Flood protection dike</u> None <p>100% -</p>	<ul style="list-style-type: none"> - <u>Major irrigation canals</u> Construction of new major canals with improvement of existing major canals. Lining of major canals - <u>Tertiary canals</u> : None - <u>Major drainage canals</u> : None - <u>Flood protection dike</u> : None <p>100% -</p>	
<p>2.4 Farm road</p> <p>Do you agree ? (Show one's hand.) Yes No</p>	<p>No improvement of farm road is provided by the project.</p> <p>100% -</p>	<p>The farm roads (inspection roads) along the major canals are constructed by the project. But farm roads along the tertiary canals are not constructed.</p> <p>100% -</p>	<p>The farm roads (inspection roads) along the major canals are constructed by the project. But farm roads along the tertiary canals are not constructed.</p> <p>100% -</p>	<p>No improvement of farm road is provided by the project.</p> <p>100% -</p>	<p>- Farmers requested for construction of small bridges at crossing points of canals and roads.</p>

Table A-2 Result for Public Meeting (4/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
2.9 Do you have any other requests for irrigation facilities ?	<ul style="list-style-type: none"> - Farmers asked for water allocation method. The team made answer that rotational irrigation will be proposed with those technical services. - Request for movable pipeline system. - Request for irrigation system which can use water resources effectively. - Request for construction of reservoir dam. 	<ul style="list-style-type: none"> - Farmers requested some land clearance (removal of big trees) in the project area. - A farmer in Dihombo village asked that construction of flood protection dike along Mgongola river will adversely affect to the right bank area. 	<ul style="list-style-type: none"> - Secondary canal running along the main road should be protected by using cement because of flood water come from mountain. - Request for washing places in the canals. 	<ul style="list-style-type: none"> - Village chairman of Malolo requested that the Project should construct lining canals, and these canals should have some drinking basins for livestock. - Masai people also requested to construct drinking places for livestock. - Farmers suggested that canals should be protected from the flood come from mountain. 	
<p>Q-3 Farmers' Intention for Farming Plan</p> <p>Do you agree to the proposed crops ? (Show one's hand.)</p> <p>Yes No</p>	<p><u>Rainy season</u></p> <ul style="list-style-type: none"> - Maize & Beans <p><u>Dry Season</u></p> <ul style="list-style-type: none"> - Cabbages, Potatoes & Beans <p><u>Cropping Intensity</u> 200 %</p> <p>100%</p>	<p><u>Rainy season</u></p> <ul style="list-style-type: none"> - Paddy <p><u>Dry Season</u></p> <ul style="list-style-type: none"> - Paddy & Vegetables <p><u>Cropping Intensity</u> 200 %</p> <p>100%</p>	<p><u>Rainy season</u></p> <ul style="list-style-type: none"> - Paddy — 370 acres - Maize — 370 acres <p><u>Dry Season</u></p> <ul style="list-style-type: none"> - Maize — 150 acres - Beans — 150 acres <p><u>Cropping Intensity</u> 140 %</p> <p>100%</p>	<p><u>Rainy season</u></p> <ul style="list-style-type: none"> - Paddy - Maize <p><u>Dry Season</u></p> <ul style="list-style-type: none"> - Onions - Beans <p><u>Cropping Intensity</u> 200 %</p> <p>100%</p>	<p><u>Rainy season</u></p> <ul style="list-style-type: none"> - Paddy - Maize <p><u>Dry Season</u></p> <ul style="list-style-type: none"> - Onions - Beans <p><u>Cropping Intensity</u> 200 %</p> <p>100%</p>
<p>Q-4 Farmers' Intention to the Proposed Water Users' Group (Water Users' Cooperative)</p> <p>After the construction, the farmers should operate and maintain all irrigation facilities which are constructed by the Project. In order to operate and maintain the facilities, the water users' group (WUG) or water users' cooperative will be established in the project area. The members of this association consist of the farmers who use irrigation water. The money required for operation and maintenance will be covered by irrigation service charge which is collected from the members. The leaders of WUG will collect irrigation service charge from the farmers.</p>					

Table A-2 Result for Public Meeting (5/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
4.1 For the establishment of the association which operate and maintain the irrigation facilities:					
(1) After the construction, the farmers should operate and maintain all irrigation facilities which are constructed by the Project. Do you agree ? (Show one's hand.)	Yes No	100% -	100% -	100% -	100% -
(2) For O&M of irrigation facilities, the farmers should establish a water users' group. Do you agree with this establishment ? (Show one's hand.)	Yes No	100% -	100% -	100% -	100% -
(3) All of farmers who use irrigation water should join this WUG. Do you join this association ? (Show one's hand.)	Yes No	100% -	100% -	100% -	100% -
4.2 A WUG having various functions will be proposed to the project area. The proposed organizational structure of WUG is presented in Figure 2 in leaflet. Do you agree with this proposed organizational structure ? (Show one's hand.)	Yes No	100% -	100% -	100% -	100% -
4.3 Farmers' intention to the association's activities					
(1) <u>Operation and maintenance activities</u> The association operates and maintains all of irrigation facilities, and these activities are managed by the O&M section under the executive committee. Do you agree these activities ?	Yes	Yes	Yes	Yes	Yes
(2) <u>Activities of the women's group under the executive committee.</u> This group under the executives committee promote the women's activities such as processing of products and health care in order to encourage greater participation of women in public affair. Do you agree these activities ?	Yes	Yes	Yes	Yes	Yes
(3) <u>Marketing services of farm inputs</u> These services are managed by the marketing and credit section under the executive committee. Do you agree these activities ?	Yes	Yes	Yes	Yes	Yes
(4) <u>Marketing services of farm products</u> These services are managed by the marketing and credit section under the executive committee. Do you agree these activities ?	No	Yes	Yes	Yes	Yes
	- Many farmers disagreed with the above marketing services for products, and they want to have individual shipping of products.				

Table A-2 Result for Public Meeting (6/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
(5) <u>Agricultural credit services (group loan system)</u> These services are managed by the marketing and credit section under the executive committee. Do you agree to these activities ?	Yes	Yes	Yes	Yes	
(6) <u>Supporting activities of agricultural extension</u> These services are managed by the agricultural section under the executive committee. The extension activity itself is carried out by the government's extension officer. The farmers' association support these activities in order to make smooth communication between the farmers and the extension officer. Do you agree to these activities ?	Yes	Yes	Yes	Yes	
(7) <u>Auditing system</u> Do you agree this auditing system ?	Yes	Yes	Yes	Yes	
4.4 All of the operation and maintenance costs are covered by irrigation service charge collected from the farmers who use irrigation water.					
(1) Do you pay its irrigation service charge ? (Show one's hand.)	Yes 100% No -	100% -	100% -	100% -	
(2) For the payment of such irrigation services charge, there are two methods; i.e., in cash and in kind. Which method do you like ? (Show one's hand.)	<u>In cash</u> 98% - In case of cash payment, its amount is clear, but "in kind" is unclear on its value. - Easy to pay. Payment in kind is labourious for handling, and will have storage and quality losses.	20% - It is better to pay ISC by cash. Products will stock and sell at higher prices.	- - Almost all farmers said that either will do.	<u>Malolo</u> 100% <u>Nyinga-Mgongozi</u> 68%	WUG can not manage payment method of "in kind", because it is labourious. "Cash" is easy to pay and its management. <i>(All farmers in Malolo, Nyinga and a half of Mgongozi agreed with cash payment.)</i>
	<u>In kind</u> 2% - Easy to pay. It is possible to pay quickly. - Farmers have no money just after harvest, because almost all cash money are spend as production cost.	80% - Easy to pay. - WUG will have some profits, if those crops can sell at higher prices.	-	- 32%	WUG sell those products at good prices, then can get some profits.
(3) If we propose "in cash", do you agree ? (Show one's hand.)	Yes 100% No -	<i>(For the payment method of ISC and its recommendation, unclear answers were obtained from the farmers.)</i>	100% -	100% -	68% 32% <i>(RALDO explained them about merits of cash payment and demerits of "in kind", but Mgongozi farmers still have left in unrecognition of cash payment.)</i>

Table A-2 Result for Public Meeting (7/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
(4) Do you have ideas for collecting irrigation service charge ?	<ul style="list-style-type: none"> - The committee members of WUG should collect ISC. - Farmers form small groups and elect leaders. They collect ISC and send it to top leaders. ISC is deposited at WUG's bank account. - Farmers elect collectors, and ISC is collected by them. 	(No idea)	(No idea)	(No idea)	
(5) For the collection of irrigation service charge, the following system will be proposed to WUG.	<pre> graph TD Farmers[Farmers] -- "Collect after each season" --> Exec[Members of the Executive Committee / Furrow Committee] Exec -- "Receipt" --> Farmers Exec -- "Hand over within a day" --> Treas[Treasurer, Chairman, Vice Chairman & Secretary] Treas -- "Deposit within 1-2 days" --> Bank((Bank Account)) Auditors[Auditors] --> Exec Auditors --> Treas </pre>				<p>Irrigation service charge (ISC) will be collected after each cropping season. All members of the executive committee and furrow committee would collect ISC directly from the farmers, and collected amount will be deposited immediately in a WUA's bank account. For the collecting of ISC, the members could form a group consisting of 2-3 members, so they do not collect it alone. The treasurer manages all these transactions, and auditors should check their collection.</p>
Do you agree with the above collecting system ? (Show one's hand.)	Yes No	100% -	Majority -	Majority -	100% -
4.5 The following articles will be proposed to include in the "Articles and By-laws" in your WUG after the Project. Do you agree ? (Answer by clapping of hands)					
Article-1 Farmers who use irrigation water from the Project should be member of the association.	Yes	Yes	Yes	Yes	Yes
Article-2 The association has the right to collect ISC from the beneficiary who received irrigation services from the association, and the beneficiary has the duty to pay its ISC to the association.	Yes	Yes	Yes	Yes	Yes
Article-3 The association inflicts a punishment on the beneficiary who uses irrigation water and facilities illegally and is not able to pay ISC.	Yes	Yes	Yes	Yes	Yes
Article-4 The farmers have the duty to participate in the communal works on O&M to be planned by the association.	Yes	Yes	Yes	Yes	Yes
Article-5 The tenant beneficiary has a right to join the association with the election to the executive members, and is in duty bound to pay ISC and membership fees, instead of the owner beneficiary.	Yes	Yes	Yes	Yes	Yes

Table A-2 Result for Public Meeting (8/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole			
4.6 It is proposed to establish an irrigation meeting under presidency of WUG.								
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%; vertical-align: top;"> <p>Objectives The production activities including water management are closely linked to various agricultural support activities including extension services, machinery services, supply of farm inputs, credit services, etc., which are provided by the Government and private sectors. In order to coordinate between the production activities and these supporting services, it is proposed that an irrigation meeting is held under the presidency of the water users' group.</p> </td> <td style="width:33%; vertical-align: top;"> <p>Attendants The meeting will be held before each cropping season, and would consist of the following attendants: i) All beneficiaries, ii) Committee members of WUG, iii) Officers of DALDO's office, iv) VEO and Irrigation Technician, v) Members of village government, and vi) Private sectors including banks, NGOs, owners of farm machinery, dealers of farm inputs, etc.</p> </td> <td style="width:33%; vertical-align: top;"> <p>Activities VEO and Irrigation Technician will provide necessary support to WUG. The farmers would discuss necessary supporting services with the above attendants, and later WUG would request to the related agencies for those support services.</p> </td> </tr> </table>						<p>Objectives The production activities including water management are closely linked to various agricultural support activities including extension services, machinery services, supply of farm inputs, credit services, etc., which are provided by the Government and private sectors. In order to coordinate between the production activities and these supporting services, it is proposed that an irrigation meeting is held under the presidency of the water users' group.</p>	<p>Attendants The meeting will be held before each cropping season, and would consist of the following attendants: i) All beneficiaries, ii) Committee members of WUG, iii) Officers of DALDO's office, iv) VEO and Irrigation Technician, v) Members of village government, and vi) Private sectors including banks, NGOs, owners of farm machinery, dealers of farm inputs, etc.</p>	<p>Activities VEO and Irrigation Technician will provide necessary support to WUG. The farmers would discuss necessary supporting services with the above attendants, and later WUG would request to the related agencies for those support services.</p>
<p>Objectives The production activities including water management are closely linked to various agricultural support activities including extension services, machinery services, supply of farm inputs, credit services, etc., which are provided by the Government and private sectors. In order to coordinate between the production activities and these supporting services, it is proposed that an irrigation meeting is held under the presidency of the water users' group.</p>	<p>Attendants The meeting will be held before each cropping season, and would consist of the following attendants: i) All beneficiaries, ii) Committee members of WUG, iii) Officers of DALDO's office, iv) VEO and Irrigation Technician, v) Members of village government, and vi) Private sectors including banks, NGOs, owners of farm machinery, dealers of farm inputs, etc.</p>	<p>Activities VEO and Irrigation Technician will provide necessary support to WUG. The farmers would discuss necessary supporting services with the above attendants, and later WUG would request to the related agencies for those support services.</p>						
(1) Do you agree to establish this irrigation meeting ? (Answer by clapping of hands)	Yes	Yes	Yes	Yes				
(2) Do you think that your association can hold this irrigation meeting ?								
(a) Yes. It is possible without any support from the Government.	-	Majority	Majority	-				
(b) Yes. If the DALDO Office or other agencies support to the association, it is possible.	Majority	-	-	Majority				
(c) No. It is impossible.	-	-	-	-				
(3) Would you attend this irrigation meeting ? (Answer by clapping of hands)	Yes	Yes	Yes	Yes				
Q-5 Improvement of Agricultural Credits (Group Loan System)								
5.1 The group loan system will be proposed to improve credit facilities in the project area. Do you agree to introduce this loan system ? (Answer by clapping of hands)								
	Yes	Yes	Yes	Yes				
5.2 It is proposed that this group loan system is managed by the WUG to be established in the project area. Do you think that your association can manage this loan system ? (Answer by clapping of hands)								
(1) Yes. It is possible without any support from the Government.	Majority	-	Majority	-				
(2) Yes. If the DALDO Office or other agencies support to the association, it is possible. What support do you need ?	-	Majority	-	Majority				
		- Technical assistance for loan management - Supporting services of DALDO office (how to contact credit facilities and how to manage its system)		- Technical support - Training programme - Guarantee of DALDO for loan				
(3) No. It is impossible.	-	-	-	-				
5.3 Do you participate to this loan system ? (Answer by clapping of hands)								
	Yes	Yes	Yes	Yes				

Table A-2 Result for Public Meeting (9/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole																								
Q-6 Improvement of Marketing																													
6.1 As one of the improvement of marketing, a cooperative purchasing system of farm inputs will be proposed to the project area as shown in Figure 5 in your leaflet. A characteristic of this system is the package service which links closely with the credit (group loan system) and the technical services of farming. Do you agree to introduce this marketing system ? <i>(Answer by clapping of hands)</i>	Yes	Yes	Yes	Yes																									
6.2 It is proposed that this marketing system is managed by WUG to be established in the project area. Do you think that WUG can manage this marketing system ? <i>(Answer by clapping of hands)</i>																													
(1) Yes. It is possible without any support from the Government.	Majority	-	Majority	-																									
(2) Yes. If the DALDO Office or other agencies support to the association, it is possible. What support do you need ?	-	Majority - Guidance for "how to get internal and external markets." - Training programme for marketing	-	Majority - Assistance for technical matters - Training programme - Supporting on marketing research - Supporting services for transportation																									
(3) No. It is impossible.	-	-	-	-																									
6.3 Do you participate to this marketing system ? <i>(Answer by clapping of hands)</i>	Yes	Yes	Yes	Yes																									
Q-7 Farmers' Participation to the Construction Works																													
If we propose the following farmers' participation plan:																													
<table border="1"> <tr> <td>Objective</td> <td colspan="5">: 1) The irrigation facilities are constructed for the farmers' benefits. Therefore the farmers who take all benefits obtained from the project should participate its construction. 2) Training of maintenance through the participation to the construction works.</td> </tr> <tr> <td>Method</td> <td colspan="5">: Farmers participate the construction works of the project, but no labour charge is paid to these works.</td> </tr> <tr> <td>Merits</td> <td colspan="5">: 1) Farmers can have improved irrigation facilities which make possible to increase in yields. 2) Farmers will have various knowledges for maintenance of irrigation facilities.</td> </tr> <tr> <td>Demerits</td> <td colspan="5">: No labour charge is paid.</td> </tr> </table>						Objective	: 1) The irrigation facilities are constructed for the farmers' benefits. Therefore the farmers who take all benefits obtained from the project should participate its construction. 2) Training of maintenance through the participation to the construction works.					Method	: Farmers participate the construction works of the project, but no labour charge is paid to these works.					Merits	: 1) Farmers can have improved irrigation facilities which make possible to increase in yields. 2) Farmers will have various knowledges for maintenance of irrigation facilities.					Demerits	: No labour charge is paid.				
Objective	: 1) The irrigation facilities are constructed for the farmers' benefits. Therefore the farmers who take all benefits obtained from the project should participate its construction. 2) Training of maintenance through the participation to the construction works.																												
Method	: Farmers participate the construction works of the project, but no labour charge is paid to these works.																												
Merits	: 1) Farmers can have improved irrigation facilities which make possible to increase in yields. 2) Farmers will have various knowledges for maintenance of irrigation facilities.																												
Demerits	: No labour charge is paid.																												
7.1 Do you participate to the construction works by this plan ? <i>(Show one's hand.)</i>	Yes 100%	100%	100%	100%																									
	No -	-	-	-																									

Table A-2 Result for Public Meeting (10/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
<p>7.2 Do you have opinions or suggestions to this farmers' participation plan ?</p>	<ul style="list-style-type: none"> - A construction committee should be organized in the village government, and this committee arranges farmers' participation. - Village government manages the farmers' participation. Farmers form small groups, then these groups despatch labourer according to the request from village government. 	<ul style="list-style-type: none"> - Farmers organise small groups, then participate by each group. - Farmers need pre-information. - Each village selects leaders for its management, then farmers participate the construction works according to their management. 	<ul style="list-style-type: none"> - At first, many farmers had requested to pay labour charge. Then they had hot discussion about farmers' participation among them. Finally almost all farmers accepted this participation without labour charge. - Farmers asked to the study team that all of construction works are carried out by manual power. The team explained them that construction equipment will be used for heavy works. 	<ul style="list-style-type: none"> - A leader of Canal-B said that the plan itself is accepted by all farmers, but excavation at some places is very hard work. The study team explained that the project will use heavy equipment for such excavation. The leader agreed with it, and said that farmers provide security people for watching of those equipment. - At first, village governments carry out inventory survey for farmers who are beneficiaries. Then the farmers form groups and participate to construction work by each group. 	
<p>Q-8 Land Acquisition for Right of Way</p> <p>8.1 The project requires some lands for construction of irrigation facilities (intake, canals, etc.). These lands should be provided by the beneficiaries themselves, and the project does not pay its land compensation, because the facilities are constructed for the farmers' interests. Do you agree ? (Show one's hand.)</p>	<p>Yes 100%</p> <p>No -</p>	<p>100%</p> <p>-</p> <p>- Farmers requested some compensations for loss of houses, crops and fruit trees.</p>	<p>100%</p> <p>-</p>	<p>100%</p> <p>-</p> <p>- Land acquisition without compensation is no problem, but in case of houses and crops, it is necessary to compensate them.</p>	
<p>8.2 Who arrange this land acquisition ?</p>	<ul style="list-style-type: none"> - Village government - Land owners - Village government in collaboration with land owners 	<ul style="list-style-type: none"> - Village government 	<ul style="list-style-type: none"> - Village government 	<ul style="list-style-type: none"> - Village government 	
<p>Q-9 Women's Participation in Development</p> <p>9.1 If we propose the following ideas, do you agree ? (Answer by clapping of hands)</p>					
<p>(1) Appointment of women's leaders in the farmers' organizations in order to encourage greater participation of women in public affairs.</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	
<p>(2) Establishment of women's group and encouragement of value-added processing of crops by these women's groups in order to improve their employment opportunities.</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	

Table A-2 Result for Public Meeting (11/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole																		
(3) Encouragement of livestock farming including poultry, sheep, goats, etc. by the women's groups.	Yes	Yes	Yes	Yes																			
9.2 For women's participation to the project, do you have ideas and requests ?	<ul style="list-style-type: none"> - Request for special training for processing of crops and livestock raising. - Women should be involved to any project activities. - Women should participate to leadership of WUG. 	<ul style="list-style-type: none"> - In the proposed organisation of WUG, only one post is provided to women. All posts of the executive committee should be opened to both gender. - Request for loan of livestock raising. 	<ul style="list-style-type: none"> - Assistance of special loan for farming and livestock raising. - Study tour at advanced areas for irrigation farming and women's activities. 	<ul style="list-style-type: none"> - Despatching of expert for women's activities. - The Project should provide training programme and study tour at advanced areas for women's activities. - In the proposed organizational structure of WUG, only one position is provided to women. All positions and members of the WUG's executive committee should be opened to both genders. 																			
<p>Q-10 Closing existing canals during the construction of the Project.</p> <p>Water supply of existing irrigation system will be stopped during the construction period of the Project. (It may be a half year in the dry season.) The project does not pay compensation to close canals. (<i>Show one's hand.</i>)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">(1) Agree closing canal and no compensation</td> <td style="width: 10%; text-align: center;">100%</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">100%</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">100%</td> </tr> <tr> <td>(2) Agree closing canal but with compensation</td> <td style="text-align: center;">-</td> <td></td> <td style="text-align: center;">-</td> <td></td> <td style="text-align: center;">-</td> </tr> <tr> <td>(3) Disagree</td> <td style="text-align: center;">-</td> <td></td> <td style="text-align: center;">-</td> <td></td> <td style="text-align: center;">-</td> </tr> </table>	(1) Agree closing canal and no compensation	100%		100%		100%	(2) Agree closing canal but with compensation	-		-		-	(3) Disagree	-		-		-					<ul style="list-style-type: none"> - Some farmers disagreed to close canals. Farmers had discussion about this matter among them, then as the result of discussion, almost all farmers agreed with closing of canals during the construction period. Their understanding was that loss of cropping is only one season, but after the construction or improvement of irrigation facilities, farmers can receive a lot of benefits during the long years.
(1) Agree closing canal and no compensation	100%		100%		100%																		
(2) Agree closing canal but with compensation	-		-		-																		
(3) Disagree	-		-		-																		
<p>Q-11 Land allocation</p> <p>11.1 Land tenure</p>	<p><i>(No land allocation is planned for Mwega scheme.)</i></p>	<ul style="list-style-type: none"> - Public land - The lands belong to Mkindo village government - The lands belong to Mkindo villagers - Originally, farmers had entered freely and without registration, and they are now cultivating crops in the area. 	<ul style="list-style-type: none"> - The lands belong to Mkula farmers. 	<p><i>(No land allocation is planned for Mwega scheme.)</i></p>																			

Table A-2 Result for Public Meeting (12/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
<p>11.2 The project provides irrigation facilities to these lands. After the construction of irrigation facilities, do you need reallocation of lands covered by the project ? (Show one's hand.)</p> <p>Yes Reason :</p> <p>No Reason :</p>	<p>(No land allocation is planned for Mgeta scheme.)</p>	<p>94%</p> <ul style="list-style-type: none"> - Some lands for construction of irrigation facilities should be provided to the project. Therefore, it is necessary for re-allocation to all lands. - The benefits of the Project should provide equally to all farmers in three villages. <p>6%</p> <ul style="list-style-type: none"> - If land re-allocation is implemented, farmers will lose the lands required for inheritance to children. 	<p>92%</p> <p>(At first, many farmers had unrecognized the necessity of its land allocation. Then the district government and RALDO office explained them that the project benefits should be provided to the farmers equally and as many as possible.)</p> <p>8%</p>	<p>(No land allocation is planned for Mwega scheme.)</p>	
11.3 Who or which organizations arrange this land allocation ?		<ul style="list-style-type: none"> - Village government in collaboration with the district office. <p>(Study team explained them that land allocation in the project area should be implemented by the Tanzanian side.)</p>	<ul style="list-style-type: none"> - Village government 		
11.4 How to allocate these lands to people ?		<ul style="list-style-type: none"> - Priority of land allocation should put on land owners, though other farmers have lands in the project area. - Land should be allocated according to the family size. - Every farmer should be given one acre. 	<ul style="list-style-type: none"> - The size of lands to be allocated to the farmers should be decided according to their family size. - Lands should be allocated to the farmers in consideration of their land holding size before the project. 		
11.5 If the land allocation is carried out after the construction of the project, how many acre do you want to have irrigated fields ?		<p>(This item was canceled.)</p>	<p>(This item was canceled.)</p>		
<p>11.6 If there are farmers who come from out side area and their lands will be included in the irrigation area.</p> <p>(1) They can cultivate continuously at those lands after the project. (2) They can not cultivate after the project. (3) No answer</p>		<p>Majority</p>	<p>Majority</p>	<p>(Answer by clapping of hands)</p>	

Table A-2 Result for Public Meeting (13/13)

	Mgeta Scheme	Mgongola Scheme	Mkula Scheme	Mwega Scheme	Whole
<p>Q-12 Other requests or suggestions to the Project</p>	<ul style="list-style-type: none"> - Farmers need information before closing canals. - Shop for farm inputs - Training programme for farming, and study tour at internal and external areas. - Transportation facilities for farm products. - Request for knapsack type sprayers 	<ul style="list-style-type: none"> - The Project should provide shallow wells for potable water. - Construction of domestic water supply. - Request for providing farm machinery including tractors, rotary weeders, sprayers, rice mills, combine harvesters, etc. - Request for godowns of farm inputs. - Request for transportation facilities from farm to houses. - Training programme for farmers. - Request for construction of access road between Mkindo village and the project area. - Assistance to introduce a shop for farm inputs. - For the farmers' participation to the Project, the executing agency should make information to the farmers before the commencement of the construction. 	<ul style="list-style-type: none"> - Construction of piped water supply system. - An irrigation technician should be appointed to the Project. - Construction of godown for products. - Assistance for introduction of tractors. - If possible, the project provide rice mill machine. - Improvement of farm inputs supply - Marketing improvement for farm products. - Farmers requested to construct a small canal in the village for domestic use (living). The study team explained them that it is possible to use secondary and tertiary canals running near the village. 	<ul style="list-style-type: none"> - Farmers in Nyinga requested for construction of a small bridge between Nyinga and Mgogozi. - Request for construction of wells (farmers in Malolo). - The Project construct hydraulic power generation at intake weir, if possible. - For the farmers participation to the construction work, the Project provide transportation. - Request for loans of farm inputs and transportation facilities of farm products. - Request for construction of piped water supply system for living between intake weir and villages. - Request for introduction of hiring system of farm machinery (tractors). - Request for rice mill - Farmers requested for construction of good educational facilities (school). - Farmers suggested that extension of main canals should be considered in order to expand more irrigation area. - Farmers suggested that conservation plan in the catchment area and protection of canals from flood should be included in the Project. - Farmers requested that the Project should be implemented as soon as possible. 	
<p>Others</p>	<ol style="list-style-type: none"> (1) The study team confirmed about the following items with farmers. <ol style="list-style-type: none"> a) All irrigation facilities constructed by the Project should be operated and maintained by the farmers themselves. b) Farmers should organise WUG for O&M of irrigation facilities. c) The lands required for construction of irrigation facilities should be provided by the farmers without compensation. d) Farmers should participate to the construction works of the Project without labour charge. (2) The study team explained to the farmers that the Project covers only the construction of irrigation facilities and those related structures and the following items will be excluded from the plan; i.e. i) social facilities including piped water supply, wells, schools, clinic, etc., ii) supply of farm machineries and vehicles, iii) supply of credit's capital, and iv) hydraulic power generation. (3) The study team explained to the farmers and related government agencies that land allocation should be conducted by the Tanzanian side. 				