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INTEGRATED RURAL RESOURCE MANAGEMENT FOR SMALLHOLDER FARMERS IN APAC DISTRICT UGANDA







PLANNING WORKSHOP
NGETTA AGRICULTURAL RESEARCH AND DEVELOPMENT CENTRE
Ngetta, Uganda 19th – 21st October 2004

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Table 1. List of acronyms and abbreviations

ADAN	Apac District Agricultural Network
AEZ	Agro-Ecological Zone
AO	Agricultural Officer
ARDC	Agricultural Research and Development Centre
AT(U)	Appropriate Technology Uganda
CBO	Community Based Organisation
CM	Centre Manager
CPAR	Canadian Physician for Aid and Relief
DAO	District Agricultural Officer
DEC	District Extension Co-ordinator
DEO	District Environment Officer
DETREC	Development Training and Research Centre
DFI	District Farm Institute
DFID	Department for International Development
DFO	District Forest Officer
EU	European Union
FG	Farmer Group
FS	Farming System
IRRM	Integrated Rural Resource Management
LA	Livelihood Analysis
LOFP	Lango Organic Farming Project
M & E	Monitoring and Evaluation
NAADS	National Agricultural Advisory Services
NARI	Namulonge Agricultural Research Institute
NARO	National Agricultural Research Organization
NARS	National Agricultural Research System
NUSAF	Northern Uganda Social Action Fund
RI	Research Institute
RIDF	Rural Initiative for Development Foundation
SAARI	Serere Agricultural and Animal Research Institute
SH	Stakeholders
UOSPA	Uganda Oil Seed Producers Association
VEDCO	Volunteer Efforts for Development Concerns
WS	Workshop
ZARDI	Zonal Agricultural Research and Development Institute
ZSC	Zonal Steering Committee

Acknowledgement:
The course organisers and facilitators are grateful to the participants of this planning workshop for their active involvement in the discussions during the entire workshop. Special thanks go to members of Nimaro Integrated farmers group in Aber sub county, Acwec Omio farmers' group in Loro sub-county and Agege farmers' group in Bala sub county. The participation of the district production department officials is highly appreciated. Thanks to NGOs like UOSPA, FOODNET, LANGO ORGANIC, RIDF and ADAN for their efforts towards improving the livelihoods of the rural poor in Apac district. This workshop was supported financially by the European Union (EU) to which we express our deep appreciation.

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The workshop was facilitated by: Dr. Odongo Benson (NAARI), Ms.Victoria Namuleme (Mukono ARDC), Ms. Graceline Akongo (Ngetta ARDC) and Mr. Y. Obong (Ngetta ARDC).

Cover page: a) participants on a field visit to Nimaro Integrated adaptive trial plots
b) Participants involved in group work
c) Workshop participants

Executive summary

Agriculture contributes approximately 80% of the national GDP. Overall, it employs 95% of the rural population directly or indirectly, the majority of whom are women (GoU, 2000). In the Lango farming system, agriculture is an important source of livelihood. The two districts of Lira and Apac serve as the major food baskets for the whole of northern region.

However, management of resources among the rural farmers is still a big challenge. This is partly due to the fact that past attempts to solve production related problems were concentrated on the supply side; development experts decided what is best for the rural poor and generally assumed that farmers were ignorant. This liner model of technology generation and transfer to farmers did not result in the impacts envisioned. On the contrary, lack of participation of the end-user/clients at various points in the research and development process limited their ability to be proactive in seeking information and stepping up innovation in their own environments. As a result, poverty and food insecurity still characterize a majority of households in the zone.

The new NARS programme is placing emphasis on farmer-demand research service delivery with farmers being given decision-making power. It uses participatory action learning process to facilitate farmer groups' institutional development, encompassing community visioning and planning, strengthening group organizational dynamics, agro enterprise selection and skill building for farmers. Participatory action research (PAR) is emphatic on the need to include farmers and their aspirations, interest and priorities, improving their engagement with development processes. As a result partners are being challenged by the need to facilitate the communities through farmer groups to develop their vision and action plans and improved competence of farmers to discuss and prioritize their enterprises towards the realization of their objectives.

In line with the above, the ARDC seeks to help farmers in solving their problems by guiding them in rural resource management. It is forming and strengthening a coalition of research and development partners to enable farmers better own development processes.

As a result, the ARDC convened an IRRM workshop for the three farmer groups and service providers from the district of Apac whose overall objective was to contribute to better livelihoods through enhancing efficiency and effectiveness in resource use by farmers. The specific objectives were:

- To learn resource management practices used by the three farmer groups;
- Get farmers' views on what they would like their production system to look like in 5 -10 years' time;
- Explore with farmers what they consider necessary to achieve their vision and how they would like research and other service providers to help them work towards achieving their vision and;
- Forge linkages and networking among development partners to support farmers to reach their future vision.

To achieve the above objectives, the farmer groups were led through a process of participatory visioning. A team of facilitators applied the appreciative inquiry process, to develop desired vision for social change and practices that orient farmers to market while maintaining the natural resource base. Participants' fears and expectations were also very instrumental in guiding the workshop.

From the workshop, the following outputs were achieved:

- Current production management status obtained;
- Future vision spelt out;
- Strategies to achieve desired change identified;
- Development actors identified and their roles spelt out and;
- An interim committee instituted comprising at least a representative from each stakeholder to oversee, coordinate and guide farmers during the implementation stage.

Based on the output from visioning, innovation processes will be undertaken to enable farmers meet their targets.

INTRODUCTION

Agriculture is predominantly characterized by low productivity (GoU, 2000). Though less is realized, it remains a substantial part of most developing countries' economies. It has a crucial role and potential to play in promoting pro-poor economic growth, better livelihood, and sustainability (World Bank, 2000). In Uganda, agriculture contributes approximately 80% of the GDP. Overall, it employs 95% of the rural population directly or indirectly, the majority of whom are women (GoU, 2000). In the Lango farming system, agriculture is an important source of livelihood (FS & LA survey report, unpublished). The two districts of Lira and Apac serve as the major food baskets for the whole of northern region. However, management of resources among the rural farmers is still a big challenge.

The problem

Past attempts to solve production related problems were concentrated on supply side; development experts decided what is best for the rural poor and generally assumed that they are ignorant. This liner model of technology generation and transfer to farmers did not result in the impacts envisioned. On the contrary, lack of participation of the end-user/clients at various points in the research and development process limited farmer's ability to be proactive in seeking information and stepping up farmer's innovation in their own environments. Needless to say, very little attempt if any has been made to involve farmers in problem solving as well as to integrate their practice into research (DFID, 2002). Nevertheless, farmers are not problems to be fixed, but rather they are capable of imaging, embracing and building positive futures. As a result, poverty and food insecurity still characterize majority of households in the zone even amidst improved technologies in some cases.

Justification

The new NARS programme is reversing the supply-driven orientation by placing emphasis on farmer-demand research service delivery with farmers being given decision-making power. It uses participatory action learning process to facilitate farmer groups' institutional development, encompassing community visioning and planning, strengthening group organizational dynamics, agro enterprise selection and skill building for farmers. Participatory action research (PAR) is emphatic on the need to include farmers and their aspirations, interest and priorities, improving their

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engagement with development processes. Partners are being challenged by the need to facilitate the communities through farmer groups to develop their vision and action plans and improved competence of farmers to discuss and prioritize their enterprises towards the realization of their objectives. The idea is to build a strong sense of ownership of the processes for sustainability reasons and reducing dependency and culture of receiving. Farmers can facilitate their own development, they have the potential to think and act on constraints that affect their own development and opportunities.

In line with the above, the ARDC seeks to help farmers in solving their problems by guiding them in rural resource management. It is forming and strengthening a coalition of research and development partners to enable farmers better own the development process. Researchers believe that farmers have a lot to offer and only need to be advised.

Objectives

The overall objective was to contribute to better livelihoods through enhancing efficiency and effectiveness in resource use by farmers. The specific objectives were:

- To learn resource management practices used by the three farmer groups.
- Get farmers' views of what they would like their production system to look like in 5 -10 years' time.
- Explore with farmers what they consider necessary to achieve their vision and how they would like research and other service providers to help them work towards achieving their vision.
- Forge linkages and networking among development partners to support farmers to innovate production systems that they need to reach their future vision.

Methodology

To achieve the above objectives, farmer group visioning workshop was held at the ARDC. Three farmer groups from Apac district participated and were led through a process of participatory visioning. A team of facilitators applied the appreciative inquiry process, to develop desired vision for social change and practices that orient farmers to market while maintaining the natural resource base. Five basic steps were

used namely; i) facilitators encouraged the farmer groups to think about the desired future state, ii) participants were asked to reflect on or map the current situation of their production practices, iii) come up with the desired future position or vision, iv) outline what needs to be done to reach the vision, v) identify actors that need to be involved and their respective roles. These steps were analogous with the Four Ds' model used by proponents of appreciative inquiry. The four Ds are: Discover, Dream, Design and Deliver (Cooperider and Whitney, 2002).

Other partners i.e. local leaders, NGOs, District agriculturalists and service providers formed one group and were asked to map their current challenges and future desired linkages in order to help research understand and guide farmers into achieving their vision. An interim committee was instituted comprising at least a representative from each stakeholder to oversee, coordinate and guide farmers during the implementation stage. The committee was charged with the responsibility of reminding the groups about achieving their vision. Based on the output from visioning, innovation processes would be undertaken to enable farmers meet their targets.

Outputs

- Current production management status obtained
- Future vision spelt out
- Strategies to achieve desired change identified.
- Actors and their roles identified
- Action plan developed

WORKSHOP PROCESSE

Introduction of participants

This exercise was done by Dr. B. Odongo. Introduction of the participants was conducted in a light and fun-like fashion, whereby people paired up, given 5 minutes to know each other and later each pair introduced their 'new' friend to the house.

Workshop objectives

Ms Graceline Akongo then explained the objectives of the workshop, which included the overall and specific ones. Following the explanation, she added that farmers were already doing something for their livelihood. So this workshop was another endeavour to enable the farmers to identify, assess and plan the utilization of their resources as a strategy to overcome poverty within the next 5-10 years.

Expectations and fears

In order to shape direction of the workshop as well as to ensure active participation of all, participants were given two cards of different colours for them to indicate their workshop expectations and fears. (Blue coloured cards- for expectations and green for fears).The ideas on these cards were read out by the facilitator and pinned on the board throughout the entire workshop. The exercise was facilitated by Ms. Victoria Namuleme.

Expectations

English version	Lango Version
• Active participation from farmers	• Tic kara acel
• Good ideas for future commercial agriculture	• Tam aber me pur akello lim icao
• Ideas to sell our farm produce profitably	• Tam me nwongo cuk pi jami apura
• Meeting new friends to help fight poverty	• Rwate kede owote na me lweny ijwiko can
• Ideas to improve farming (maize, sunflower)	• Kony me miya pur aber
• Improvement of our farming practices	• Mede adiro me pur wa
• Service providers to respond to farmer' desires	• Okony opur bino cobo peko ducu
• Gain knowledge to enable me buy a vehicle one day	• Tam bino konya wilo otoka ikare me anyim
• Gaining new knowledge from facilitators	• Nwongo ngec anyen ibot opwonye
• Ideas on post harvest handling	• Tam anyen me gwoko cem
• Getting new farming tools	• Konye kede jami me pur, bala kweyi
• Improving prices of farm produce	• Wel jami poto bino mede
• Service providers to develop practical solutions to farmers' problems	• Odiro me pur bino cobo peko opur
• Ideas to promote resource management	• Tam abeco me konyo jami amio pur bedo aber

• Encouragement to double production	• Pol ajami ame okwanyo ipoto bino mede
• Understand the struggle between the ARDC and farmers to improve agriculture	• Tute pa ARDC kede opur
• Farmers to identify the desired change	• Opur bino ngeyo alokaloka ame amite me pur
• Getting fruit tree seedlings	• Nwongo koti ayen anyige (dodo, aeme)
• Gain knowledge to grow enough rice for sale to pay schools fees and build a new house	• Ngec me puro ocere me acata me culu otino kwan kede gero oot

Fears

English version	**Lango Version**
• Fear of no market after improved cultivation	• Lworo ni cuk me cato jami abedo ape
• No fear	• Lworo moro pe tye
• Go with nothing good/ new	• Pe adok kede ginoro aber
• No transport refund	• Pe adwoka cente me wanga yoo
• Most of things produced will be eaten up by birds and animals	• Winyi kede leyi bino balo jami ame apuro ducu
• Leaving before workshop closure	• Jo mogo bino lwii cono
• Lack of capital will not allow me to accomplish my desired plans	• Pe ko me cente bino genga icobo mitina
• The workshop may not give adequate ideas to help improve rice production	• Cokere nip e amiya ngec aber me puro ocere
• The resolutions made may not favour the rural poor farmer	• Tam ame aya ikan pe akonyo opur ame obedo ocan
• Finish late	• Atum late
• Translation from English to Luo may not be good	• Loko leb
• If NARO doesn't encourage us, we can easily give up	• Ka NARO pe ocuku cwiny wa opoto oko
• Our efforts may be inadequate to carry us forward	• Teko wa romo bedo anok te pe miyo cobo tici kakare
• Inadequate storage `facilities for improved production	• Dero me gwoko cem romo bedo pe
• Poor market for rice seeds	• Cuk me cato koti ocere pe
•	• Alokaloka me ping kelo bale adongo akoti
• Weather spoils our efforts	• Cawa idiyo wa oko
• Women would not contribute fully in the workshop	• Mon bino lworo kop ikan ame joo pol iyee

Participants were requested to keep tracking their points if the same will not have been addressed by the time workshop ended. If this happened then such points would be subject to redress in future workshops. Some of the fears that were written down showed that that some participants had not grasped the objectives of the workshop well. Many of the people thought that they would be taught on how to produce and sell their produce. The discussion had to be redirected on these important issues before progress could be made on the time table. Points of explanation came from some of the participants themselves who had understood the concept. Some of the explanations were:

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- People lacked knowledge for proper utilization of the available resources
- Poverty reduces our capability to do things
- Participatory approach, which involved sharing of ideas, was important to help in addressing the problems. New ideas could be acquired and bad ones abandoned in the process
- It was important to know what a workshop was: in the literal sense, a workshop is a place where everybody is involved in doing some work, which collectively would result into a product. The same idea was applicable here although the tools at hand were not material things, but ideas
- Although the farmers expected to be taught and provided with solutions to their problems by the facilitators, it was stressed that this was not the usual class type of workshop they expected. Instead, every one's contributions and opinions were critical, and valuable, as everybody had something to learn from the other
- The apparent slow or no development in some agricultural sectors is as a result of wrong visioning, thus the reason why the workshop was being held.

Workshop rules and regulations

Participants were requested to develop rules and regulations to be followed during the course of the workshop. The exercise was facilitated by the Centre Manager of Ngetta ARDC. Members agreed to:

- Keep the classroom clean
- Avoid sleeping during sessions
- Remain sober and not get drunk
- Maintain self respect
- Avoid smoking during sessions
- Respect each others' views
- Avoid unnecessary repetition of ideas
- Fully attend and participate to the end
- Be orderly by raising their hands during discussion times
- Apportion roles (time keeper and welfare officer)

Time keeper was selected as Mr. Joel Obong and Welfare officer, Mrs Loy Obong

Centre Manager's speech

The Centre Manager welcomed all the participants who came to attend the workshop. He was, however unhappy that the workshop started late. This happened because we had to wait for the arrival of Acwec Omio farmer group from Loro sub-county. The Centre Manager then went on to recognise some important persons at the workshop. These were:

- Mr. Edule, M.- Secretary for Production, Apac District
- Mr. Agong, R- Member, Ngetta ARDC Zonal Steering Committee
- Mr. Atepo, J- Representative, Rural Initiative Development Foundation
- Dr. Odongo, B- Scientist, Namulonge Agricultural and Animal Production Research Institute (Workshop Facilitator).
- Ms. Victoria Namuleme- Information Officer, Mukono ARDC (Workshop Facilitator).

The CM then requested the members to choose an appropriate language that could be used during the workshop. Participants agreed on the Luo language. He stressed that the aims of the workshop were:

- Get to know the farmers, the problems they face, their resources and the agricultural enterprises they were interested in.
- Conduct visioning with the farmers to know what developments they would want to achieve 5-10 years from now.

The CM was happy to note that a similar workshop organised for the Iguli and Wiodyek farmer groups in Lira, was a success. Some important lessons learnt from that earlier workshop would be helpful in the current exercise.

He also noted that the Uganda government was pursuing a deliberate policy to eradicate poverty among the resource poor farmers, who constitute a majority of Ugandans. He said that this was the major reason why Ngetta ARDC was put in place so that the people in the Mid -Northern sub-region would easily access improved agricultural technologies. He wished participants a happy stay and fruitful deliberations during the workshop. He then invited the Guest of Honour to deliver a speech and open the workshop.

Guest of honour's opening remarks

The guest of honour, Hon. Michael Edule is the Secretary for Production in Apac district started by thanking God for the safe arrival of all the people who had come for the workshop. He gave special thanks to the organizers, the participants and especially the CM for having honoured him to be the official to open the workshop. He introduced himself as a Bala councillor and a representative at the Apac district Local Council. He added that the workshop has come at the right time, because it's aimed at solving the farmers' current problems. Most importantly was the problem of poverty, which most of the government programs was endeavouring to eliminate. He prompted to ask why people are still poor despite many years of experience in agriculture. He gave his view that in the past, farmers used to request for loans, and other inputs, which they were given, but little impact was shown on the ground.

He attributed this problem of backwardness to lack of relevant knowledge and information, and said that this workshop was to diagnose some of the problems, to enable us effectively plan for and use our rural resources for development. He highlighted some of the other problems which hinder development in agriculture as:

- Some cultural beliefs which are bent on traditional practices
- Introduction of certain enterprises which farmers can not sustain, such as, growing of *neem* trees and *moringa*
- Also in the past the government instructed people on what to do, without first getting the opinion of the farmers. This approach created some resistance among the people who were supposed to benefit from the government interventions
- The most important resources in agriculture are, firstly, the persons themselves then the land. Whenever people say agriculture has improved, in most cases they mean that the land being cultivated has increased. It was, however, noted that land size was becoming smaller relative to the population. This means that one must target at what he produces for the market



Fig. 1. Mr. Edule Michael making the opening remarks

He also advised farmers to look at farming as a means of solving food insecurity while also generating adequate income for themselves. Planting of trees was also highlighted as a very important activity. He finally thanked, on behalf of the Apac local government, the stakeholders who had come for the workshop and thereafter officially opened the workshop.

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Presentation of current IRRM practices

Participants were divided into four groups and these were:

- Agege United farmer group, Bala
- Nimaro Integrated farmer group, Aber sub-county
- Acwec Omio Women group, Loro sub-county
- Service providers

The facilitator for this session was Mr. Y. Obong. The assignments of the farmer groups were to map their current resource management practices. Service providers were asked to show graphically how the current institutional interactions operate to support small holder agriculture, and how they relate to each other. Each group then presented their work, which were discussed in the plenary.

Agege United F. G

Agege farmer group is located in Bala Sub County. The area is occupied with swamp which makes it ideal for rice and tomato farming. Their major cash crop is rice supplemented with tomato. They also rear cattle and goats but on individual basis. The area has seasonal community road networks which sometimes become impassable. They are located near Agege trading centre which also provide market for their farm produce. Much as they are rice growers, they still lack rice processing plants in the area and as a result, most of the rice is sold unprocessed at farm gate price. Due to lack of a central store for the group, farm produce are normally stored at individual member store as it awaits selling.

Nimaro Integrated F.G

The farmer group is located in Aber Sub County along Gulu Kampala road. It is one of the fastest growing trading centres in the district. It is situated on a highway which serves Gulu – Kampala - Lira route. The group is engaged in a number of enterprises which ranges from G/nuts, maize, sunflower, fruits, to chicken and fish. Most of the farm produce sold here include; fruits of all types, legumes and cereal crops, the bulk

of which is handled by petty traders. The area is also served by a number of social service centres which is accessible to all the populace. It has tarmac road and numerous seasonal community roads which serves the farms. Much of the farm produce are stored for a short period then sold off. Since they are situated on the highway, produce dealers from Lira and Kampala readily provide the market.

Acwec Omio Women's group

This farmer group is located in Loro Sub County. Both catholic and protestant churches are within. A primary school (Amido) exists in the area. Health facilities are not nearby. The nearest health centre is located at Alidi, which is 5 kms away. The area has seasonal community road networks which are non-motorable. There are indications of a produce store which appears to be individually owned but the group has borrowed a room at the project headquarters which is often used. However this is small and can hold only a few bags of rice (about 30) leaving the rest to be stored by group members at their homesteads. The group manages some animals such as cattle, goats, turkeys and chickens out of the proceeds from farming activities. Another important crop grown out side the project area is oranges.

CURRENT RESOURSE MAPS DRAWN BY GROUPS

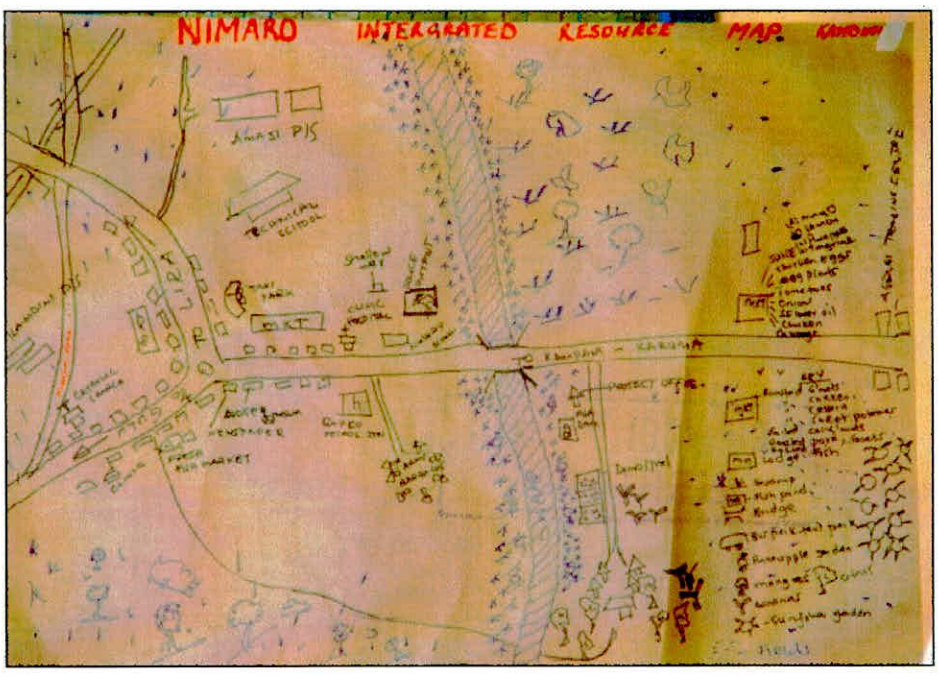

Fig. 2. Map by Nimaro Integrated farmer group showing the current situation of Aber S/c

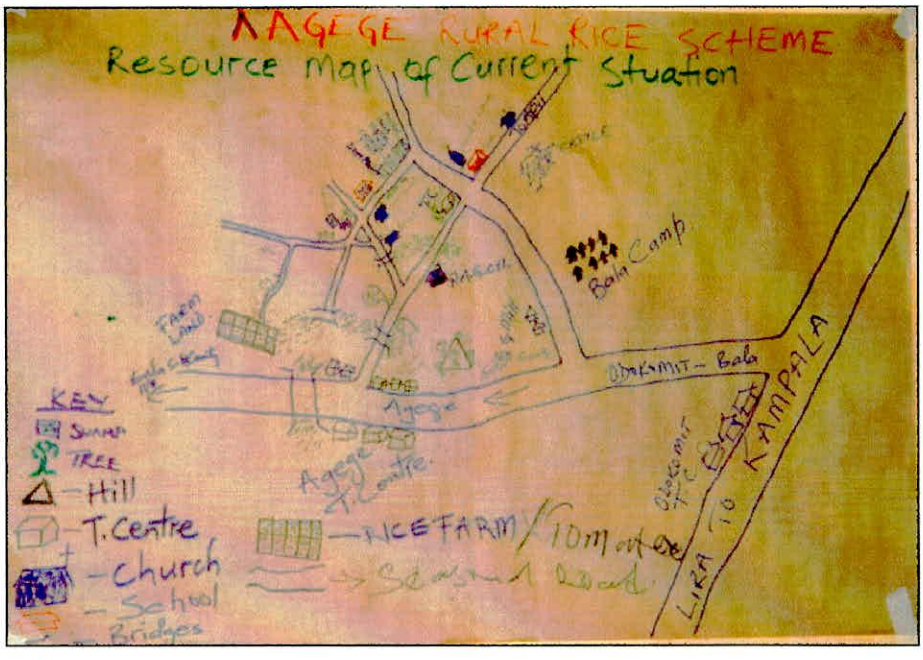

Fig. 3. Map by Agege United rural farmers showing current situation of Bala S/c

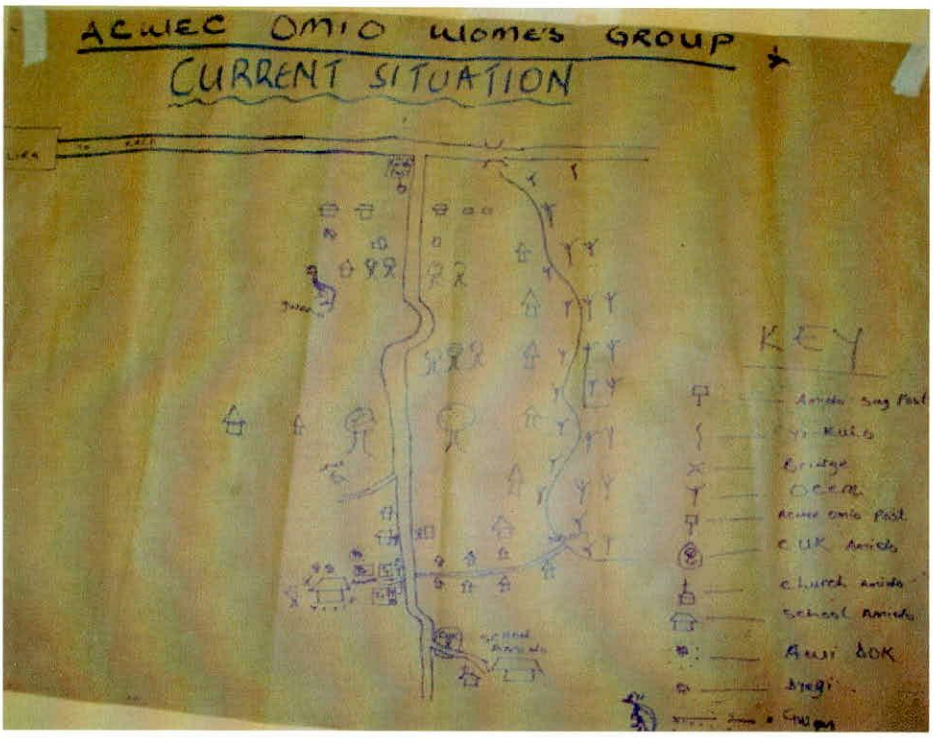

Fig. 4. Map by Acwec Omio Women's group showing the current situation of Loro S/c

Key service providers and their roles in supporting small holder farmers:

- CPAR- training, technology development, dissemination and input supply
- RIDF- Input supply, research, training, market linkage and project writing
- NUSAF- Infrastructural improvement, technology development
- ASDI- Training, information and input supply
- Action Aid- Support to other CBOs
- ADFA- Training and input supply
- UOSPA- Training, input supply, seed supply, seed multiplication and networking
- NARO- Training, input supply to uptake pathways, seed multiplication, research, networking, project writing, monitoring and evaluation and market
- Extension support- Training, adaptive trials, input supply, monitoring technological adoptions, planning and reporting
- Lango Organic- Training, seed multiplication, input supply

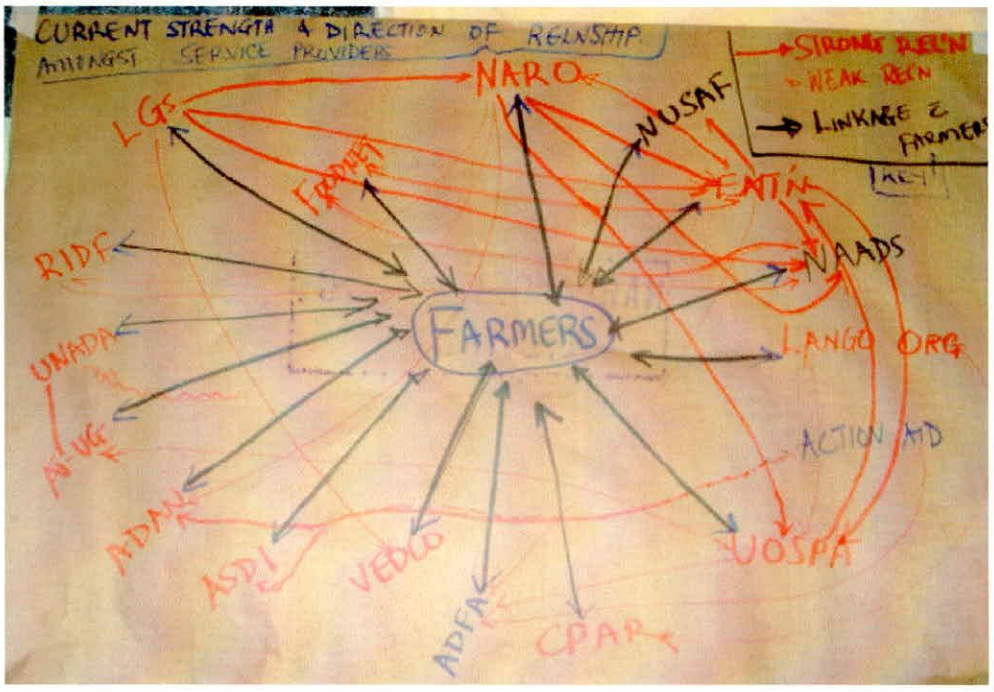

Fig. 5. Map by service providers in Apac showing the current institutional linkages

Critical issues for Nimaro Integrated farmers

- Poultry management
- Fish and fishpond management and processing
- Tree nursery management
- Beehives management and processing
- Improved and appropriate technologies
- Market and marketing
- Post harvest
- Goats

Critical issues for Agege United farmers

- Market
- Market dues and taxes
- Inputs
- Roads
- Processing facilities
- Bird damage on rice
- Water

- Store
- Land
- Deforestation
- Health centre

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Critical issues for Acwec Omio farmers

- Information on farming
- Farm implements and inputs
- Improved seeds
- Markets
- Processing
- Bird damage
- Transport
- Drought
- Pest and diseases
- Land
- Store
- Insecurity
- Roads
- Health centre

Critical issues for service providers

- Very weak collaboration between service providers
- Farmers should demand for services (demand driven)
- Research should avail improved technologies to various pathways

Field Trip to Nimaro Integrated farmers' adaptive trial plots

Participants were taken for a filed trip to Nimaro integrated trial plots. Various rice varieties were being grown, and these were, Naric 1, 11 and 111, Superica and Abilony. Farmers noted that the rice had suffered from weeds, which they attributed to delayed weeding due to drought. Fertility variation was also detected among the rice plots. Other agricultural activities were on maize, beans, ground nuts, organic cotton and pineapples. The fish pond probably needed greater care than it was getting

at the time. The group noted that they lacked technical advice, as there was no fisheries officer for the sub-county.

Service providers' remarks were that there appeared to be limited co-ordination or co-operation among the group members. Attitudinal problems were also apparent because while the demonstration fields had crops well spaced and in line, the neighbouring farmers' own fields were planted using the old methods. Fields also needed to be labelled to enable any person who could read and write to acquire the knowledge by themselves. Poor field maintenance was an indication of lack of team work, despite the existence of the group. However, the project site was good because it was near the main road.



Fig 6: Serenut 3 field (on-station trial)



Fig. 7: Pineapple field (on-station trial)

Field visit at the ARDC's farm activities: Farmers' perspective

- Farmers appreciated the well pruned and maintained orchards.
- Well maintained farm in general. Good looking fields of cassava. Simsim was planted in rows and not broadcasted. Goats were looking healthy, well maintained and in good shelter, which most farmers do not provide.
- Also lessons were learnt from well maintained mango nursery, pineapple demo plots and sweet potatoes. It was clear that management was an important factor for the realization of the agricultural enterprises.

Other issues which arose from the field visits:

- It was suggested that farmers needed to adopt the technologies for their own use instead of leaving the knowledge in the demonstration fields to be shown to visitors and agricultural staff only. Moreover, it would be a good idea to share the information with neighbours
- More than 3 seeds were planted per hole especially for maize, so that effects of competition made the plants to look thin and unhealthy
- At the farms, the orange trees looked healthy when compared with the traditional methods where the tree is left to grow wild, whereupon many fruits are lost and quality of the fruits decline
- It was noted that the Lango sub-region had plenty of sunshine which favoured growing of fruits. However, most of the activities are mainly done in small and isolated areas, a situation which cannot support a factory
- Pineapples can be trimmed, and mulched to improve yield and quality.

Desired future vision for IRRM practices and institutional linkages

Participants were again requested to return to their groups. Farmers were to draw maps showing how they would want their areas to looks like in about 5-10 years, while service providers were to draw a map showing how institutional linkages should look like in future (5-10 years).

Nimaro Integrated farmer group

In their future vision, Nimaro Integrated farmers indicated that in 5-10 year's time Kamdini is destined to become a big town/ industrial area. Commercial buildings, market areas, technical schools, nursery schools, Taxi Park, washing bay and play grounds will be constructed in the area. Lodges and a community/ resource centre will be built in the town to serve people from Apac and Gulu. Tree nurseries will be put in place for environmental concerns and water harvesting techniques will be availed to maintain them so as to overcome the erratic rain water.

A fish dam will also be constructed to produce fish fries for an increased number of farmers who would be engaged in fish farming. Banana demonstration plots will be

put in place and big commercial plantations planted. Poultry keeping will also increase in the area using better methods. Bee keeping will be another area in which the farmers hope to venture into. The swamp will be fully utilized for increased and improved commercial rice cultivation. A big store for keeping the produce will be built. Other infrastructure to be constructed include bore holes, tarmac roads, petrol stations, garages, religious centres and an air field. Key services would be provided by NAADS, NARO, ADFA, RIDF, Local government, VEDCO, Foodnet and extension workers.

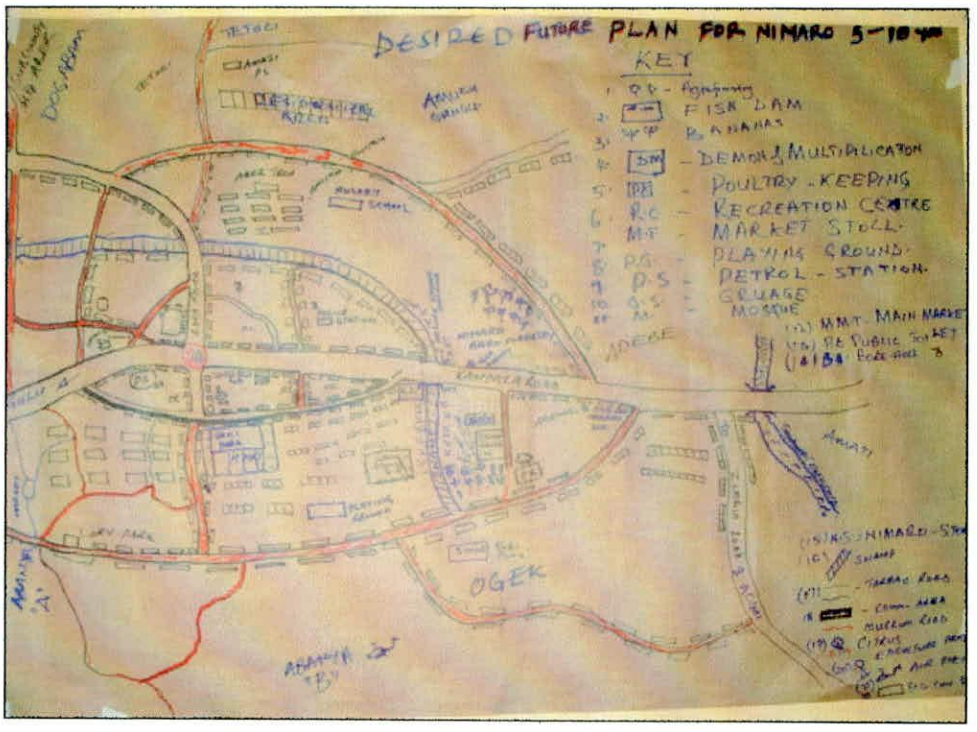

Fig. 8. Desired future vision for Nimaro integrated farmers

Agege United farmer group

In five to ten years' time, Agege farmers would like to have processing machines for rice, maize and other crops. This is because they expect increased production of farm produce by that time. They also hope to build a store in which to keep this produce. There will also be improved animal rearing and the farmers hope to engage more in horticultural crops for commercial purposes. A dispensary and church will also be

built in the area and an office for the group will also be put in place. The murram roads would be worked upon and if possible tarmaced. There will also be commercial growing of sunflower and rearing of improved goats. Demonstration plots will also be in existence to help farmers expand on their knowledge.

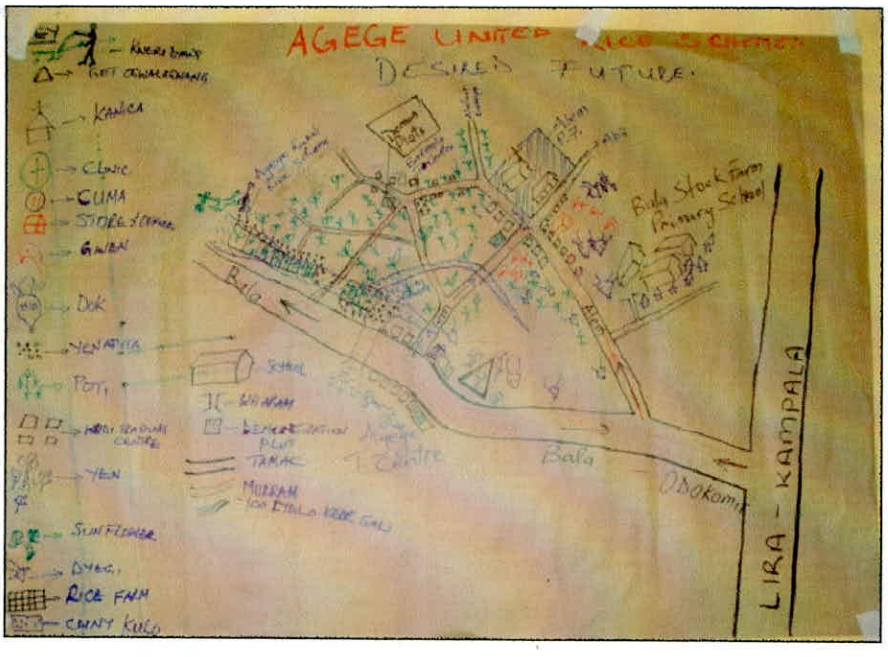

Fig. 9. Desired future vision for Agege United rice farmers

Acwec Omio women's group

They desire in future to have oxen to help with cultivation. Kraals will be fenced for safety of the animals. Sign post to the demonstration sites will be fixed. Electricity line will be extended to the area. Roads will be widened, cleared and appropriate bridges fixed to improve on motorability. A Police post will be in place for security purposes. A healthy centre and hotel will also be constructed in the area.

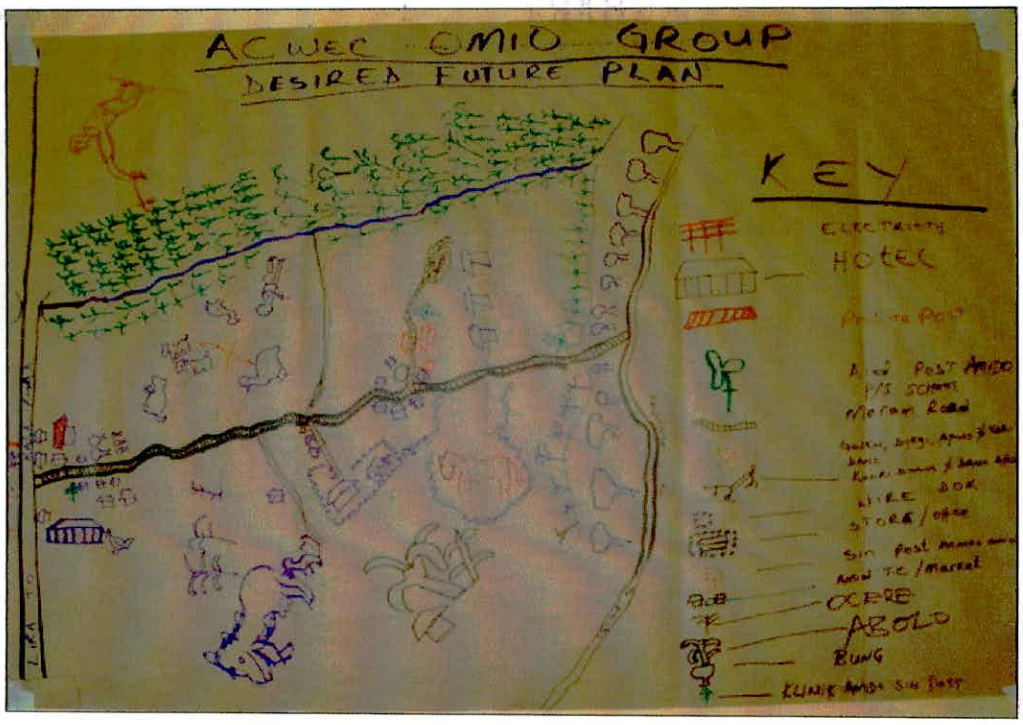

Fig. 10. Desired future for Acwec Omio women's group

Service providers

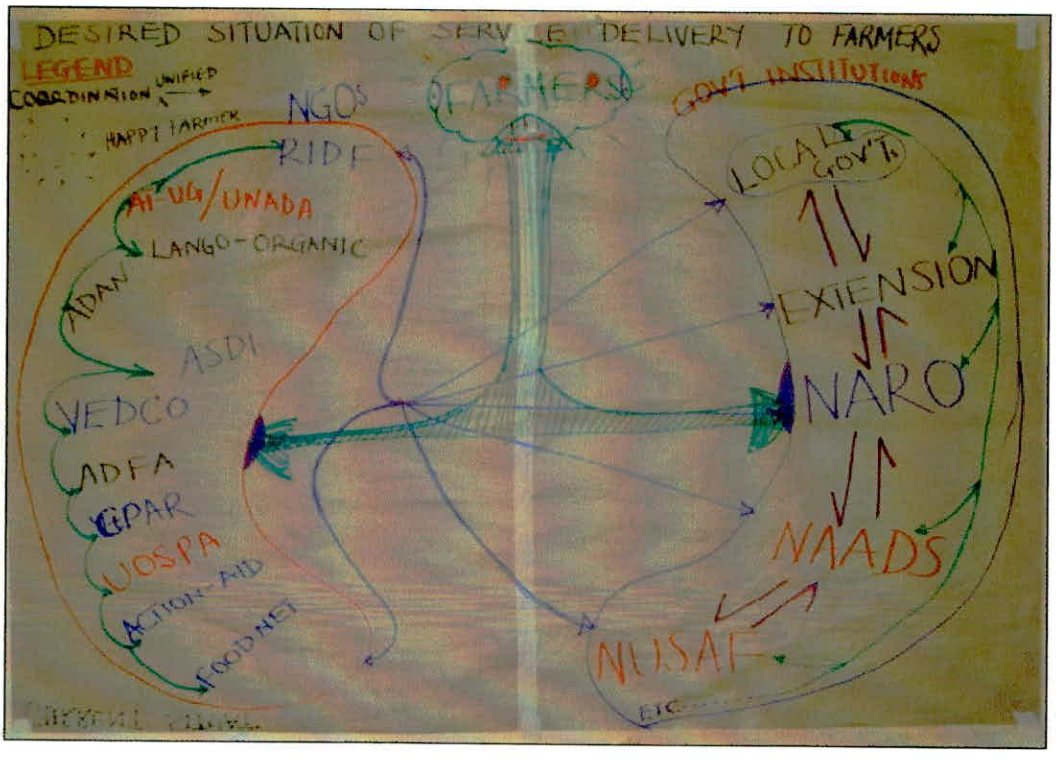

Fig. 11. Desired future institutional linkages to support smallholder farmers in Apac district

The shape of the structure is "lung" shaped to support life of the farmers. The whole idea is to allow a coordinated flow of support resources to farmers. However, the farmers should demand for the services in order to initiate reaction from the service providers. They will provide all the relevant resources but its up to the farmers to put in more efforts during implementation. The structure also indicates that each service provider has a role to play but should work in partnership with others.

Priority elements for IRRM to reach desired vision

Farmers were requested to identify six key elements and what support will be necessary to carry them out if they are to achieve their visions. Service providers were also requested to identify key actions that will be required to support smallholder farmers achieve their vision.

Farmers

- Research and other service providers should avail improved and appropriate technologies timely i.e. seeds, breeds of goats and chicken, fish fries
- Capacity building. Training farmers in production, post harvest handling, marketing, budgeting and planning, record keeping
- Access to market and market information
- Reforestation and agro-forestry. Introduction of better fruit trees
- Transport and communication. Improvement of roads, access to transport and communication facilities
- Water harvesting technologies
- Animal traction
- Labour saving technologies

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Service providers

- New technologies developed and availed to farmers
- Farmers should demand for technology and advisory services
- Need for joint farmer group development and training
- Extension workers to connect farmers groups to NUSAF

- Assist in proposal writing
- Extension workers/ NARO to facilitate farmer exchange visits and field days for knowledge exchange
- Joint on farm demos set up by all stakeholders
- NGOs to train extension link farmers (Lead farmers) to pass on information to others
- Dissemination of processing technologies to farmers by AT (U), UOSPA and NAADS.
- Strengthen market linkages by all stakeholders
- Physical infrastructure to be handled by L.Gs, CPAR and NUSAF
- Farmers need to change their attitudes towards technology adoption
- Each stakeholder to play his/her part well
- service providers to continuously monitor and evaluate farmers' progress

CONSOLIDATED ACTIVITY PLAN FOR IRRM IN APAC DISTRICT

Key elements	Why	With whom	How	Where	When
• New technologies developed and availed to farmers I.e. seeds, breeds of goats and chicken, fish fries and labour saving technologies	• To increase access to improved agricultural technology • Increase crop and livestock production • Improve income and food security	• NARO • NAADS • UOSPA • Extension • Lango Organic	• Construction of big dams fish fry centre • Provide fish farming related information • Provision of, layers and turkey • Provide improved breeds of goats • Avail labour saving technologies	• At the ARDC • On-farm site	Nov 2004 to 2005
• Capacity building. Training farmers in production, post harvest handling, marketing, budgeting and planning, record keeping, monitoring and evaluation	• Increase crop and animal production • Empower farmers • Gain knowledge and skills in farming • Improve methods of production, handling harvest, marketing, etc	• NARO • NAADS • RIDF • UOSPA • Lango Organic • Extension • Local governme nt	• Establishing trials, demonstrati on and seed multiplicatio n • Training on record keeping, group dynamic, savings and loan management • Exchange field visits and exposure trips to trade show • Access to farmer bulletins i.e. newsletters and radio programmes	• At the ARDC • With farmers • Any other venue appropriate	Nov 2004 to 2005
• Access to	• To sell at	• NARO	• Train in post	• Appropriate	Nov

market and market information	profitable prices • Avoid exploitation by middlemen • To improve farm income	• NAADS • Foodnet • UOSPA • Extension • Local government	harvest handling • Training in marketing • Provide market information • Provide processing facilities	venue	2004 to 2005
• Reforestation & agro-forestry. Introduction of better fruit trees	• To rehabilitate and protect environment • sustainable use of natural resources • to increase income and employment • to increase and maintain soil fertility • To control soil erosion	• NARO • CPAR • ActionAid • Extension • Local government	• Rural technology for fuel saving • Training and sensitisation on environment • Introduce new and improved fruit tres	On-farm	Nov 2004 to 2005
• Transport and communication. Improvement of roads, access to transport and communication facilities	• To ease communication • To facilitate transportation of farm products • To reduce transport costs	• NARO • NUSAF • Local government	• Opening and rehabilitation of small community roads • Access or acquire electronic communication facility • Motor bike for monitoring and supervision	• Target community	Nov 2004 to 2005
• Water harvesting technologies	• To promote constant production during dry season	• NARO	• Avail rain water harvesting technologies • Train on	• On-farm	Nov 2004 to 2005

	• To have constant supply of water		water harvesting techniques		
• Labour saving technologies	• To ease work load • To process our local products	• NARO • NAADS • NUSAF • UOSPA • VEDCO • Extension • Local governme nt	• Avail Ox-implement, ram press manual simsim and groundnut grinder, manual maize grinder	• With group members	Nov 2004 to 2005

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Formation of Integrated Rural Resources Management Committee

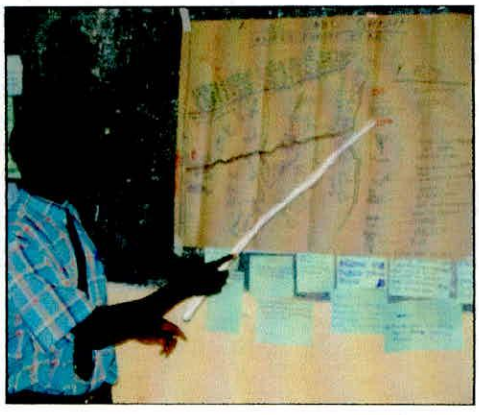
In order to implement the activity plan developed, the participants formed a committee comprising of at least a representative from each stakeholder to over see, coordinate and guide the farmers during the implementation stage and will also remind the groups about achieving their desired vision. A team of 15 members was selected and these were:

1. Richard Otim	Acwec Omio farmer
2. Eddy Okello	Acwec Omio farmer
3. John Odur	Acwec Omio farmer
4. D. D Alele	Extension agent (Loro)
5. Lois Obongo	Nimaro farmer
6. Christopher Opunyu	Nimaro farmer
7. Abraham Okura	Nimaro farmer
8. Silvesto Oyengo- Ayo	Extension agent Aber
9. Joseph Angelo	Agege farmer
10. Catherine Olum	Agege farmer
11. Morris Ocen	Agege farmer
12. Sam Ogwang	Extension agent (Bala)
13. Okwir Lay Laban	NGO representative
14. Michael Edule	L.G representative
15. Y. Y. Obongo	Ngetta ARDC staff



Fig. 12. Members of the IRRM interim committee for Apac district

Activity photographs







Workshop evaluation

Participants were given 3 sets of cards to evaluate the workshop, blue for what went well, pink for what didn't go well and green for suggesting areas of improvement.

What went well	What didn't go well	Areas for improvement
Good organization, facilitation and management skills	Time mismanagement	
Methods used in understanding our current farming situation and how to achieve desired future change	Late notice about the workshop	Other service providers should also come on board
Active participation and full attendance	Little time	Early dissemination of new technologies
House keeping	Load shading	Recall workshop to exhaust what was left undone
The workshop was interesting	No laundry services	Time for meals need to be followed
Visit to on-station activities	Mosquito	Early notice about workshops
How to utilize limited resources effectively	Short time to implementation	Continuous interaction among the three groups
How to reduce poverty in the next 5-10 yrs	Everything went well	Interim committee should meet the expectations
Sharing experience and ideas about farming	Shortage of water	Include other tree nursery
Commitment by service providers to support farming	Translating English to Luo	Frequent visits to farmers' field
No conflicts	No first aid facility	
Workshop ended well		

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Closing remarks

The Centre Manager Ngetta ARDC, Dr. Maiteki George thanked all the participants for their active participation during the entire workshop and for persevering to the end. This was not a training workshop but sharing of ideas concerning improvement of our livelihood. I hope the ideas that have been developed in this workshop are developmental. The committee members who have been elected will help in steering the activities. Each of the members has a role to play in this process.

He thanked the facilitators i.e G. Akongo, B. Odongo, Y Obongo and V. Namuleme for the work well done. He said that Nimaro farmers group has showed a good example by demanding for services from the ARDC. He then called upon Mr. Agong Raymond, a member of the ARDC Zonal Steering Committee to close the workshop.

Mr. Agong Raymond

He thanked the Centre Manager, the ARDC staff and extension workers for the work they are conducting towards improving farmer's livelihoods. He thanked the participants especially the farmers for fully participating in all the workshop sessions. He said that agriculture is almost like religion as it has to be repeated all the time. For farmers, their offices are cultivation and one is able to retrench him/her self. Development of a society starts with growth of every family. People need to plan to grow beyond buying the radio and sleeping in grass thatched houses. He however pointed out that there is need for collaboration among the various institutions if the work plan drawn in this workshop is to become a success. He then wished participants a safe journey back home and urged them to try to work hard to make a difference. He officially closed the workshop.

Exercise, activities and materials

Exercise	Activities	Materials
Registration of participants	Participants register at the hall entrance	Registration form Pens
Welcome remarks	Given by Centre Manager Ngetta ARDC	
Introductions	Participants were asked to find a person not well known to him/her, spend five minutes getting to know each other. After which each pair was requested to introduce each other to the plenary	
Presentation of fears and expectations	All participants were provided with two cards of different colours to write their fears and expectations. The cards were read loud by the facilitator and attached on the board during the entire workshop	Makers Masking tape cards
Presentation of workshop objectives		Makers Flip charts
Workshop rules	After introduction and formal opening of the workshop, participants decided upon a number of rules and regulations were to be followed during the workshop. These were suggested by raising hands and pinned on the wall throughout the workshop	Makers Flip charts Masking tape
Reflection on/mapping the current management practices of production resources by farmer groups	Each farmer group sketched a map of their place showing the current status of the natural resources and how they are used/managed	Masking tape Makers Flip chart cards
Mapping current institutional interactions in support of smallholder farmers	Service providers formed a group and were asked to show graphically how current institutional interactions in support of smallholder agriculture relate to each other and to the smallholder. The group began by identifying all the organizations and institutions that exist in their area. The graph expressed the purpose of the institution as well as the strength and direction of relationships identified	Masking tape Makers Flip chart cards
Desired change / farmers' future vision and actors that need to be involved	Farmers returned to their groups by sub-county. Each group then drew a map to show how they would like their place to look like in five-ten years time. Farmers were to ensure that this will get them out of poverty.	Masking tape Makers Flip chart cards
Service providers' future institutional interactions	Service providers were asked again to show graphically how institutional linkages should look like in the future	Masking tape Makers Flip chart cards
Farmers develop action plan	After formulating a common vision from their maps, farmers decided on the key (six maximum) actions that will be needed and what support will be necessary to carry	Masking tape Makers Flip chart cards

	them out if they are to achieve their visions.	
Service providers develop action plan	After formulating a common vision from their graphs, service providers chose key (six maximum) actions that will be needed to support smallholder groups achieve their future visions	Masking tape Makers Flip chart cards
Designing action matrix and consolidation of proposed action plan	From the six requirements, participants identified: why, with whom, how, when, where requirements can be met. Questions leading to actions were placed across the top of the matrix.	
Formation of interim committee	Participants were then required to nominate at least one candidate from each group to form the interim committee	Flip chart Makers
Review expectations		cards
Workshop evaluation	Participants were given 3 sets of cars with different colours. On the blue cards they wrote what they think went well, pink for what didn't go well and green for any suggestions for improvement	Papers Pens Cards
Closure		

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Workshop programme

TIME	ACTIVITY
DAY ONE	
08:30 – 08:50 am	Registration of participants
08:50 – 09:20 am	Welcome remark and self introduction
09:20 – 09:25 am	Presentation of workshop objectives
09:25 – 09:45 am	Presentation of fears and expectations
09:45 – 09:50 am	Workshop rules
09:50 – 10:00 am	Opening remarks
10:00 – 10:20 am	**BREAK**
10:20 – 11:20 am	-Reflection on/mapping the current management practices of production resources by farmer groups -Mapping current institutional interactions in support of smallholder farmers
11:20 – 01:30 pm	Presentations & identification of critical issues
01:30 – 02:00 pm	**LUNCH**
02:00 – 02:50 pm	-Desired change / farmers' future vision and actors that need to be involved -Service providers' future institutional interactions
03:00 – 04:20 pm	Presentations & identification of critical issues
04:20 – 05:00 pm	Consolidating visions by identifying 6 key elements
05:00 -	**EVENING TEA**
DAY TWO	
08:30 – 09:00 am	Registration of participants
09:00 – 10:00 am	Recap from day one
10:00 – 10:30 am	**BREAK**
10:30 – 01:30 pm	Developing action plan
01:30 – 02:00 pm	**LUNCH**
02:00 – 03:00 pm	Presentation of proposed action plan
03:00 – 05:00 pm	Field trip
05:00 -	**EVENING TEA**
DAY THREE	
08:00 – 08:30 am	Registration of participants
09:00 – 09:30 am	Review and discussions on critical findings from the field
09:30 – 11:00 am	Designing action matrix
11:00 – 11:15 am	**BREAK**
11:15 – 12:30 am	Presentation and consolidation of action matrix
12:30 – 01:00 pm	Formation of interim committee
01:00 – 01:30 pm	Review expectations
01:30 – 01:45 pm	Workshop evaluation
01:45 – 02:30 pm	Closure
02:30 pm -	**LUNCH AND DEPARTURE**

List of participants for the Integrated Rural Resource Management

No.	Name	Sex	Occupation	Address
1.	Adiyo Richard	M	Farmer	Agege, Apac
2.	Agong Ray	M	Extension Supervisor	UOSPA, Lira
3.	Akon Rojilina	M	Farmer	Acwec Omio, Apac
4.	Akongo Graceline	F	Socio-economist	Ngetta ARDC, Lira
5.	Akwero joyce	F	Farmer	Nimaro, Apac
6.	Alum Catherine	F	Farmer	Agege, Apac
7.	Alweny Ruth Mary	F	Farmer	Nimaro, Apac
8.	Amenyodul Charles	M	Farmer	Nimaro, Apac
9.	Angela Joseph	M	C/man FG	Agege, Apac
10.	Atepo	M	Prog. Coord.	RIDF, Lira
11.	Alex Atono	M	Farmer	Acwec Omio, Apac
12.	Apunyo Paska	M	Farmer	Nimaro, Apac
13.	Apunyo Christoper	M	C/man FG	Nimaro, Apac
14.	Bua Lawrance	M	Farmer	Acwec Omio, Apac
15.	Edonga Patrick	M	Farmer	Nimaro, Apac
16.	Edule Micheal	M	C/person Prod.	Apac
17.	Elok Nixon	M	Farmer	Agege, Apac
18.	Ekol Richard	M	Farmer	Acwec Omio, Apac
19.	Ekuny Levi	M	Farmer	Acwec Omio, Apac
20.	Ewany Grace	F	Farmer	Nimaro, Apac
21.	Obong Joel Achila	M	Farmer	Acwec Omio, Apac
22.	Obong Loy	F	Farmer	Acwec Omio, Apac
23.	Obong Yuventino	M	Research Officer	Ngetta ARDC, Lira
24.	Ocen Moris	M	Farmer	Agege, Apac
25.	Odong Bension	M	Research Officer	NAARI, Kampala
26.	Odongo Milton	M	Farmer	Agege, Apac
27.	Odul John	M	Farmer	Acwec Omio, Apac
28.	Ogang Jasper	M	Farmer	Agege, Apac
29.	Ogwang Alfred	M	Farmer	Acwec Omio, Apac
30.	Ogwang Yovan	M	DAO	Apac
31.	Ogwang Tero	M	Farmer	Acwec Omio, Apac
32.	Ojok Francis	M	Agricultural Officer	Inomo, Apac
33.	Okello Eddy	F	Farmer	Acwec Omio, Apac
34.	Okello Horace	M	Research Technician	Ngetta ARDC, Lira
35.	Okello Patrick	M	Farmer	Acwec Omio, Apac
36.	Okeng Yeko	M	Farmer	Acwec Omio, Apac
37.	Okot Eunice	F	Farmer	Nimaro, Apac
38.	Okori Silvesto	M	Farmer	Nimaro, Apac
39.	Okullu John	M	Farmer	Agege, Apac
40.	Okura Abraham	M	Secretary FG	Nimaro, Apac
41.	Okwir Laban	M	Extension Worker	Lango Oganic, Lira
42.	Olwa Enectina	F	Farmer	Nimaro, Apac
43.	Omara Alice	F	Farmer	Acwec Omio, Apac
44.	Onganga Sam	M	Farmer	Acwec Omio, Apac
45.	Opio Cirino	M	Research Technician	Ngetta ARDC, Lira

46.	Opio Samule	M	Farmer	Acwec Omio, Apac
47.	Opio Wilbert	M	Farmer	Nimaro, Apac
48.	Opito Remijo	M	Farmer	Nimaro, Apac
49.	Oremo Moses	M	Asst. DAO	Lira
50.	Otim Kuranimo	M	Farmer	Acwec Omio, Apac
51.	Otim Richard	M	Farmer	Acwec Omio, Apac
52.	Oyengo Celestino	M	Farmer	Nimaro, Apac
53.	Maiteki George	M	Centre Manager	Ngetta ARDC, Lira
54.	Namuleme Victoria	F	Information Officer	Mukono ARDC
55.	Taiwo Benson	M	Coord.	Foodnet, Lira
56.	Welo Quinto	M	Farmer	Nimaro, Apac
57.	Yekini Chris	M	Farmer	Nimaro, Apac