

PART II: THE DEVELOPMENT PROJECTS

The central concern of the Workshop was pastoralism and the kinds of development that seemed to work in a pastoral environment. For that reason it was initially called NOMAD WORKSHOP and later changed to the HERDERS' WORKSHOP. In the end, the projects that participated represented a very wide range of economic activities. Some, like Jelib Marka were totally non-pastoral (although related to pastoral groups); others, like Keur Boumy, possessed small numbers of livestock in project-related activities, but had as a sector of their population, Fulani and Toucouleur sedentary herders using traditional approaches. The most nomadic cases were the Wodaabe and the Maasai. Nevertheless, the central theme to which the participants returned again and again was how the economic innovations that each project was experimenting with related to the work of mobile livestock herders, be they transhumant or fully nomadic.

We began our discussion of development with the projects of the herders. The presentations proceeded from the most nomadic livestock breeders (who are exclusively engaged in animal husbandry) to the most sedentary communities (who have complex multi-ethnic, integrated projects). The text will again include excerpts from grantee presentations, as a way of presenting the projects themselves.

Pastoral Development: The Albalbal Project

Maasai are steeped in pastoral life. Their economy was not deeply disrupted by the droughts, as was the case with the Sahelian participants in the Workshop. As a result, the type of development in which they are engaged is geared toward improving their livestock breeding activities, not toward fundamental diversification of their economy. It is a very conservative approach to development.

The Albalbal Presentation: Tepiliti Saitoti

...The project was started a year and six months ago (last April, although we are six months behind time.) The project provides water for the people and their animals in the village of Albalbal. Strange as it sounds, most of the sides of the mountains facing the sands are often barren. Our mountain is the same; so we hardly have water on this side of the mountain. All the water of the mountains has gone toward Lake Manyara. There is good grazing for goats as you have seen, but there is no water. Yet, we still have been fortunate that we have this one stream and a few small ones. We debated between these three streams, and finally decided that Ndodo could help us; Ndodo was the place that would provide us with enough water. It was not easy to build the water facility. First, we had to convince the village that it was possible. That was not at all easy. After winning their trust, we had to make them aware that we were serious about what we were trying to do. We let them know that it would not only involve voluntary work, it would also involve their own cattle. The Maasai found it very difficult to part with their cattle. Yet we decided to do it and they accepted. Our intention was to rehabilitate an old pipe which was built ten years ago.

It was built by the Ngorongoro Conservation Area with the help of an archaeologist by the name of Professor Hay. The professor was at the time attached to the archaeological digging of Mary Leakey of the Olduvai Gorge. The archaeological project at Olduvai gorge had been helping with our water supplies, because the herders' cattle were interfering with the archaeologist's digging. So to resolve this problem, we had to find another water source. So this was how Ndodo was built.

Within a period of three years, we had water brought down. We had water for a period of three years, and then the pipe broke down. Unfortunately, it failed and we had to start all over again. When I came back from America in 1975, I found it broke again; there was no water and the pipes were lying down rusted.

That's when I took the initiative to apply for funds from the African Development Foundation. Through Joe Kuria, who works with ADF, he is really the one who told me about the Foundation. I applied to ADF, and after a long process of coming several times to see the place, that is when they consented.

Since the Maasai find it difficult to part with their cattle, I and Tonge found it necessary to start contributing our own cattle. Tonge contributed one, and I [Saitoti] contributed a pregnant cow, just to show the people that we were so interested in the project, and prepared to part with our best cattle.

Then we started to find a place for the actual project site. The place where we started the project was a very dense forest, as you can see, and it was very difficult to make a road, but we did it, because it was what we had to do. So we cut through the forest until we hit the source of water.

One of our difficulties was that we had between sixty and a hundred people, and we had to work everyday, and they ate a cow a day. That was one of our expenses for the project.

As you saw, the high area is very steep and it was difficult to get the water up. Finally, we hit the water source. We decided that the gentlemen who took part in clearing the forest ... we needed to relieve them. The reason that we had to remove them quickly was because we couldn't feed them anymore. We had slaughtered 15 head of cattle, so we were afraid that by the time we completed the digging, there would be no cattle to drink the water. That was when we decided that the Maasai found it difficult to dig the ground. We found Maasai people who would help clear the forest, but not to dig the ground. We found other people to do the digging. We also thought it was cheap to hire labor and pay them through the sale of the cows, because by selling one cow, we could hire twenty people. We found those people at Ngoto, the place you saw coming to Ndutu. So although we were selling cattle as frequently as we could, we were behind in paying these people. That is when I went to call on the Conservationist to give us some help.

Mr. Kanjaru, through his connections, was able to give us 400,000 Tanzania shillings. When the Maasai were unable to pay the people we hired, we got the money from Mr. Kanjaru. We were at that point almost finished.

Most of the work has been done, but there is still a lot to be done. We need two or three months to finish the project completely. We want to separate the water project from the cattle dip, so that the cattle do not get crowded in one area.

So that is more or less the Project.

Diversified Development: The Dakoro Herders' Cooperative

The Wodaabe participants came from communities that were hard hit by the drought, and they lost virtually all of their livestock in the process. Their situation is instructive, because it is the case of a very conservative pastoral community whose traditional survival strategies have failed; they have adopted some remarkably progressive approaches to making pastoralism viable. Unlike the Maasai of Albalbal, they have had to expand their herding economy somewhat by linking it to a variety of other economic activities which are compatible with pastoralism.

Comment, Macao bii Gao, Dakoro Herders' Cooperative, Niger:

...We had no assurance that we would actually have a project; we only came back on the promise and the hope that there was a possibility to have a project. For this we walked four months from Nigeria to Niger. We went back home and just sat down in our traditional region, waiting to hear what was going to happen ... We actually had to wait for two years before we got the project, and during this time some of our community got discouraged, went off on their own, and went back to moving around with whatever was left of the animals.

Now we have camels, sheep, goats, and donkeys; the children are able to drink milk again. We have been able to set up a dry goods store and a stock room, and we have grain that we keep there. The grain has attracted a lot of attention from other communities, and so many people come to get grain from us, that sometimes we don't even know who the people are and what families they come from.

From my point of view, the project is a success. We were able to get the things that we know how to take care of and organize. We were able to get the camels, the sheep, the donkeys, and the grain, and as Wodaabe, we feel we are experts in this area; we feel that all the families benefited. The only thing we did have problems with are the things which the Wodaabe were not as familiar with. The boutique (dry goods store) has been a greater advantage to us, and we have been listing some of the advantages. One of the most important things is that the boutique allowed us to work. Before, we had to all be there working at the well and then choose some other time to travel and go buy tea and sugar, which are the principal things that we have to travel for. Now, because the boutique is right there in our community, we have more time for the other more important work with the animals, because we have stocked the tea and the sugar right there where we live.

The boutique helped us in many important ways, and one of the most important things was in stocking our basic needs. Especially if you don't have a camel, and you don't have a donkey, it takes a great deal of your time to be able to stock the important things that you need, especially the millet which is crucial; it allows time for us to do our other work, especially at the well. Before, it could take five days just for us to go to get the principal goods that we need and to come back to the village.

We are now stopping the presentation in order to let you ask questions...

Question, Saitoti, Albalbal Project, Tanzania:

How many people are there in your community?

Answer, Macao bii Gao, Dakoro Herders' Cooperative, Niger:

The beneficiary population is much bigger than was listed in the original project. And that theoretically the list of people who are supposed to be in the project is a list of 74 families. But, to tell the truth, the population is much bigger than that. All the families who live in the region of our community are benefiting from the project, but I am not going to tell the number of people. I am not going to write it down either.

The preceding text indicates that the grantees view their project as an unqualified success. Wodaabe of the Dakoro Herders' Project state that important needs were met. It is evident that decision-making is localized, and that participants feel that they are the authors of project goals and the agents of project execution. Macao states, "The only thing we did have problems with were the things which Wodaabe were not familiar with."

This refers to activities such as the management of the dry goods store, which required new skills for which their pastoral economy had not prepared them. Literacy and the keeping of inventory were also new activities that had to be learned. Another challenge that they had to deal with was the equitable distribution of new resources.

Voluntary participation in project-related tasks was used as a criterion for the distribution of some of the project benefits.

Question, Tanzanian Government Official:

We heard that they got the animals for the project, but where did they come from? When they came back from Nigeria to Niger, they did not have animals. How were the animals distributed to these people when the project was started? What criteria did they use to distribute so that there was no unfairness in distributing the animals?

Answer, Macao bii Gao, Dakoro Herders' Cooperative, Niger:

The way that we chose families was determined by the number of animals that we had. The list included families that were active [in the project] and families that were inactive. We had 850 ruminants which we distributed among everyone -- goats and sheep. So, the active families got seventeen animals each, and the non-active families got ten each. So, in this way, those who were more active obviously had more animals, but everybody in the community got something.



Macao bii Gao talks of the Dakoro Herders project. Mr. Baba Koita (left) translates from Fulfulde to French, and Dr. Wendy Wilson from French to English.

The observation of the Tanzanian Government Official (quoted above) inspired another round of questioning. As the first project presentation of the Workshop, the recounting of this firsthand experience from Dakoro stimulated much discussion. Macao bii Gao, the Project Leader, had just recently become functionally literate, and was a major advocate of the adult literacy program in the project.

When Wendy Wilson and Sandra Robinson, Director of Programs and Field Operations for ADF, visited the project site in January 1990, it was impressive to see how the grantees had expanded the adult literacy program in response to demand from project participants. Instead of studying one language (in this case Fulfulde, the language of the Wodaabe), project members chose to study two languages. They added Hausa, which is the predominant language of trade and of farmers in that region. The decision was made locally, and they made local arrangements to secure textbooks in Hausa to use for their classes. The project has, in fact, so commanded public interest, that it has become a frame of reference for ethnic integration in the rural sector. Since the beginning of its implementation, there are now a few Tamachek and Hausa-speaking families that have voluntarily moved into the community and have participated in project activities.

Over and above the questions about equity, literacy, language and ethnicity, the discussion touched upon other issues of development which were a source of concern to the participants. Of these, the questions of equity in the distribution of newly acquired resources turned out to be a recurrent theme. They also expressed concern about the management of funds and about the integration of new groups into the community. Below is an example of questions asked of Macao, this time from a Somali project leader who, although not a nomad himself, works with herders often in the course of project implementation.

Question, Siraji Abdillahi Osman, Himilo Project, Somalia:

You started with one group in the project. After it became successful, others came to join you. How are they now part of your project? If they are at all, have they benefited from it?

Answer, Macao bii Gao, Dakoro Herders' Project, Niger:

It wasn't hard to integrate the people, because after all, they were really our relatives and members of the community. It's only that they were a little suspicious. It was when the project had success, that they all wanted to join it. So, we gave the animals out according to merit, and there was no embarrassment or anything, because they all knew each other in the traditional way.

Question, Siraji Abdillahi Osman, Himilo Project, Somalia:

Whenever they have finances for the community, who manages these funds? Is it the community itself, or are the funds given straight to the community members, like for the purchase of animals?

Answer, Macao bii Gao, Dakoro Herders' Cooperative, Niger:

Especially for the purchase of animals for the project, what we did was that representatives of all 74 families went to the market. They all watched and selected the animals together and talked about it. The three people who were

administrators of the project did the actual action of purchasing the animals, under the observation and supervision of the 74 family representatives.

The Herders' Cooperative of Niamey

The leader of the Herders' Cooperative of Niamey, Bazo Abahi, had the good fortune of visiting the Dakoro Project that was discussed above. Through this visit, he was able to gain ideas of possibilities for his own community. When he returned to discuss options, the herders of his cooperative designed their own project. This project helped them diversify an economy that was once based exclusively on livestock. The rehabilitation program which they embarked upon has been discussed at length in the section on the drought. This project was discussed in the preceding section because of its component of jewelry production. Here we mention some additional activities which they included in their project. During his presentation, Bazo Abahi stated:

...We were also able to get a literacy program with a teacher, and a grain mill for millet. In terms of the animals, we were able to get 500 goats, 500 sheep, and four donkeys to help us with transport. This is how we started to rebuild our herds. Within the larger family, each household got four animals.

There is one young man who runs the grain mill who is my younger brother. The way it works is that two kilos are sold for thirty FCFA,* and the income that we get from this we use to pay for the operating costs of the grain mill. When we have surpluses, we also do some re-investing in our other activities like the animals...

The Mini Mini Project

Mini Mini, located in the Tahoua region of Niger, was presented earlier under the section on the drought. In this section, the Project Leader discusses the creation of the project and the goals that the community established for itself.

Comment, Ahmoudou Mohamedoun:

...Why was there such a project as Mini Mini? As I see it so far, no other project presented here is really like Mini Mini. That's because this project does not associate pastoralism with any other activity. To respond to the question that I posed myself, why Mini Mini? You know, for some years now we have been experiencing the drought. The drought has become a normal situation, and we live with the drought on an everyday basis. This project was designed because of the drought and to come up with new strategies to deal with the drought in Niger...

In the early stages of their development, the community tried to farm, but they quickly realized that they lacked the necessary skills and dietary habits; they returned to herding.

...When the rainy season came, I then went to these groups and asked them, "What should we do now, because when you have to depend on people to give you food, you lose your honor?" So I asked what we can do so we won't have to depend on people for our sustenance? After discussions we agreed that the

*260 FCFA = US\$1.00

basic resources we had were the people and the land. Therefore, you engage in pastoralism, or you are a farmer. At the time of this meeting, the rainy season was already over, so we could not engage in any rainy season activities, and had to go right into dry season farming. We did “do” our gardens, but we had a lot of problems, because there are a lot of diseases and parasites on the plants, and we didn’t have very much success with our plants. In 1986-88, the group met again and decided to make a new effort and engage in rainy season agriculture.

Among some members of the group, there were people who did get a harvest with a surplus of grain that lasted them for one month or, in some cases, as long as six months.

We noticed two things. In spite of this harvest, we were not specialists, and we weren’t really doing it as it should be done. Secondly, for the meals we knew how to prepare, we needed milk. We then proceeded to have extensive meetings, that lasted for three months. At the end of these meetings, we decided to go back to herding and see if we could improve it in some way. And after meeting with them, I informed the authorities of our decision, and asked that they help with our group.

So it was this time, that we actually sat down and designed the project. The authorities approved the project and gave their support. Once the government authorities put their signatures and approval on the documents, I went on to Niamey in search of donors, whether government or private organizations. At this time, I encountered N’Gade Amadou, who then talked to me about the ADF strategy and way of financing.

I left the (application) document with N’Gade. That year the project was approved. Now the project has been financed, but we haven’t really gotten into the project yet...

The community had well-defined objectives which the project leaders raised in various parts of their presentation. The objectives were to: 1) rebuild the herds; 2) improve herding techniques; 3) sedentarize one part of the community while letting another part nomadize; 4) build development on a foundation of indigenous knowledge; 5) maintain an experimental approach, and try out new methods, and adopt what works and reject what does not.

Comment, Ahmoudou Mohamedoun

...Now I am going to explain to you what is new and different. The first thing we want to do is thoroughly exploit and explore the empirical knowledge, that is to say, the traditional knowledge that we have inherited from our parents and grandparents.

Within the zones that we live, there are sub-zones where there are no available water points. So one of the first things we want to do is to regroup the herds out of these zones and regroup where there are available water sources. The other part of the community will be mobile and responsible for going to those other further areas.

What we have decided to do in order to lower the mobility, we have reserved July-October as the only period when we are mobile and move up North. The other times we are sedentary. We also supplement the fodder for the animals

by using cotton seed and millet husk. We also have both pharmaceuticals for the people and veterinary products for the animals. We have tried to establish a closer relationship with the local veterinarian.

What this project is really about is a sort of research. We really cannot say that the activity we are [engaged] in is going to work, but we continue to search for new solutions.

At any rate, we are optimistic, and we think we are going to have good results. One of the reasons for this is because everything we are doing and need to work with, we have access to. We also know how to manage what we have access to.

This project is unusual in that the project leaders explain with such clarity the ecological factors and constraints in pastoral development. They weigh the “pros and cons” of sedentarizing and choose partial sedentarization for reasons that are well articulated. To quote from Mini Mini:

This is going to be a pastoralism based on necessity. We can no longer afford the luxury of surplus animals. We are going to be very efficient about it. When it is necessary to de-stock, we will simply de-stock. When it is necessary to reconstitute the herds, we will not hesitate to do so.

We are making some new decisions about the way we reconstitute our herds. That is, we are no longer worried about keeping sterile cows, and the cows that are difficult to train, we will sell them. Cows that gave birth four or five times, we will sell them instead of keeping them. The old cows, we will try to sell or use them in another capacity. We will also sell the cows that do not give milk. This is really something new for us. It is not our traditional way. Because in the old days we were very attached to the cows, even if they were old and sterile.

The project is made up of 115 families ... 150 people. So why sedentarization? I agree with the Malian presentation, there are many disadvantages if there is not this sedentarization. As an example of what one loses in mobility, you cannot have a school for nomads. In my group, almost all the children are literate in Arabic, and almost all know the Koran. However, there is not one child who is literate in French or English. This is one reason that settlement is so important because the community can get access to French and English instruction, and social services such as treatment.

So the animals that we will be getting through this project are 100 cattle and 200 sheep. I think the project is going to have a big impact because of the honor the participants will regain with their herds. *Honor for a herder ... the herd is the honor of the pastoralist.*

New Beginnings: The Agro-Nord Project

The project to which Ahmoudou Mohamedoun referred earlier in the text is the Agro-Nord Project, directed by Mme. Hawoy Baby. This project is located in the northeastern area of Mali, in the Timbuktu region. It is unique for several reasons, not the least being that it is led by the dynamic Mme. Baby, and the fact that it is comprised of almost 80% nomadic families, most of whom have decided that they must attempt to lessen their nomadism, and who have committed themselves to learning how



Workshop Participant Siraji Osman, Director of the Himilo Project, describes examples of gum resin.

Comment, Mme. Hawoy Baby:

I will start by presenting Agro-Nord to you. What is Agro-Nord? It's an Association of Malians, which is 80% Nomads, and within this community of Nomads there are Tuaregs and even Songhai who are herders. The main thing that Agro-Nord has as its objective is food self-sufficiency among all of its members, and the execution of development projects, such as livestock production, agriculture, aqua-culture, reforestation, and tourism. The action of Agro-Nord is firmly placed in the context of the development strategy of the Government of Mali.

I would like to explain to you now in what context Agro-Nord was created. It was created at Gossi. Gossi is a small market, before 1984-85, it existed as a cattle market. It was only open Saturday's, Sunday's and Monday's. So, herders came there to sell their animals, and entrepreneurs came from Gao, Mopti, Timbuktu, Niger, Burkina Faso, and even Algeria, to buy animals. So many animals were there that people came from all over. This was the image of Gossi before the years of 1984-85. Gossi is situated in front of a very large year-round pond or lake. About 26 kilometers from the town, this lake is fed by underwater sources. As I said earlier, Gossi is 150 kilometers from Gao and 1,080 kilometers from Bamako, the Capital of Mali, and 70 kilometers from the border of Burkina Faso, and 350 kilometers from Timbuktu, on which it depends administratively.

Mme. Hawoy Baby then commanded the attention of everyone present as she gave a poignant account of her community's experience during the drought of 1984-1985, and how this drought galvanized people into forming a voluntary self-help association.

Mme. Hawoy Baby, continued:

...Some camps were created around the cities. For example: Gossi. At Gossi there was the Norwegian Church that had an NGO (non-governmental organization) that made free distributions. The nomad population that was disadvantaged came to settle there around the town. It was something horrible to see! We had to do something to bring these people back to their own dignity. It was at this precise moment that in the spirit of certain nomads such as Mohammed Houmeydata, and many others who did not have the chance to come here today, we decided to create something to help them. We said to ourselves, in unity there is strength, and we made the decision to create the Agro-Nord Association, which aims to obtain food self-sufficiency as a means of development, especially through projects of development.

So this association, which was a voluntary organization, included anyone who was interested in joining. We did a whole campaign of "sensibilization" and orientation of the population, especially to the leaders of the various fractions who would be able to disseminate the information. These leaders, who would spend a whole day next to the Norwegian NGO in order to get food to eat for that day. So, we decided to create Agro-Nord and went to complete all the formalities. We did a general assembly of everyone, of all the volunteers. We set up a board of advisors, a management committee, and submitted our papers to the Government for formalization.

We decided then to start our experiment at Gossi and from that moment, the battle started in terms of the administrative authorities. They were the first ones whom we approached in order to request any significant assistance. We said, "We are Malians; we have suffered a terrible experience, and we stick to our right to be assisted."

From that moment, we decided to create our cooperative, which has five components: an agricultural component to ensure our eventual food self-sufficiency; a livestock management component, because the majority was herders and needed milk. They had to have animals because that is their life. There was a reforestation component, because we have to fight the desert and replant the trees, and there is a component for fish culture. We don't have the habit of eating fish, but we must introduce it into our daily diets. We will learn how to eat it. We should also point out that our zone is a tourism zone, we have elephants there, and we have wild animals there who have been able somehow to resist the drought and did not die. The Government had installed a couple of water points, so why couldn't we also exploit this side of things?

We constructed our offices with our own human labor. We built a dike of 1,800 meters with our own hands. We dug canals of 1,400 meters with our own hands. And we built a primary canal which would bring the water from the lake to our own gardening perimeter. At the moment of project execution, since we are not technicians, we found out that our soil was nothing but sand. When we put water on the soil, it just disappeared.

But in spite of this, we kept fighting. That first year of 1986-87, we were able to have seven tons of potatoes, and in this way we saw that *we could succeed*. We heard that there was an American foundation that was directed by women. And we said we would send our dossier there. Well, our cry was heard. We said we needed a tractor, and we got it. We needed a truck to move the people from our village, some 30 kilometers, to where they work; and this was a good thing that happened -- the Foundation heard our request!

Some of the difficulties that we experienced were of a financial nature or of an organizational nature. It is not easy to bring people who are used to doing livestock production into agriculture activities; they had to be trained. We had asked some donor partners to help us with some training seminars in our own language. This was to explain to the Agro-Nord members how they should use fertilizers, manage irrigation canals, and how to use the seeds. We also started some management training, and it was such a big success that the newspapers started talking about it. In spite of everything, there are still other challenges for us. When we brought together a community of 40 families, this meant there were 40 families with an average of 15 people each. You need a lot of means in order to do this ... You have to find medicine in order to sustain their health. You have to find schools to educate the children, to have a literacy program. You have to set up care for the children, and find potable water.

We have worked with the Government, which occasionally has been able to give us qualified personnel. We have an agronomist that works with us occasionally, but this is still a problem to be solved. We need people of nomadic origin who understand the context of the development that we want to have, because these people understand better what we have to face. Not

everybody wants to serve in such a brutal region, so we ourselves have to train our own agents. These were the challenges that we faced...

The presentation by Agro-Nord touched everyone as Mme. Hawoy Baby told us about the successes and problems, the challenges and triumphs that the Agro-Nord members faced. Her description of the peoples' determination to adjust their ways of life, to learn new ways of doing things, and to work towards creating their own leadership and technical capacities stimulated much discussion. In particular, this very succinct narrative of a natural catastrophe, which caused nomads to turn to a sedentary way of life, caused much reflection. The participants from East Africa who came from areas that had not been so hard hit by drought, such as the Maasai and the Somali, were almost speechless to hear once again of the dire situations faced by nomads in the West. It was almost incomprehensible for the Maasai, for example, that nomads would voluntarily turn to a sedentary way of life. No publicity campaign could have communicated the message of environmental protection and ecological awareness as strongly as the presentation from Agro-Nord.

The discussion so far centered on pastoral nomadic societies whose economies were disrupted by the drought. Minimally, they have tried to make improvements in their livestock breeding programs. Beyond that, they have diversified their economic activities to include new modes of production that complement livestock herding. In all cases, they view herding as the economic core of their lives. Other communities represented at the Workshop have, over time, become more fully sedentary and have considerably reduced the pastoral-nomadic component.

There is a great deal of pragmatism in the manner in which these nomadic societies have combined the wide range of economic activities they have adopted and the many social services they have developed. In a larger sense, however, these communities, too, have not completely rejected pastoral values and the pastoral outlook.

A Mixed Farming Project: Keur Boumy

Keur Boumy is a village in western Senegal made up of Wolof, Fulani, and Toucouleur (a Fulani, or Fulfulde speaking group) families. In this respect, they most closely resemble another community which will be discussed later, Dialambere village in southwestern Senegal. Unlike those who represented Dialambere, however, the community representatives were brothers and of the Wolof ethnic group. Leadership appears to be organized differently there. It is likely that this difference is an expression of precedence of migration in the settlement of the village. Fulani and Toucouleur families retain some degree of cultural specificity, and keep cattle herds. Nevertheless, the people of Keur Boumy, according to the two project leaders, "view themselves as agriculturalists first."

Although there was some measure of economic diversification in almost all of the communities represented at the Workshop, it was the projects of Keur Boumy and Dialambere that had gone furthest in the direction of integrated development. Both are multi-ethnic, sedentary older villages; both have a part of the community which transhumes seasonally with the cattle, while another part remains sedentary, engaged in year-round agricultural pursuits. Both have village leaders who went away to the city for school and returned to assist in village development, and have introduced a level of sophistication which is quite remarkable.

The two communities do differ in cultural identity: Dialambere is located in a traditionally Fulani region where most, if not all, villages share a tradition of cattle-raising. Keur Boumy is located further north in an area where Fulani herders are integrated into a predominantly Wolof zone. The following is an excerpt from the Keur Boumy presentation.

Comment, Moussa Ndiaye, Director, Keur Boumy Project, Senegal:

...We started the project because of the drought. With the drought, we had a problem of emigration -- people were leaving our community. We had a problem with food, because the harvest no longer was sufficient to feed our families. Thus, we had to find other ways of making money or living in our communities. Since we are first agriculturalists, we thought we would try an agricultural project and do gardening. We prepared a proposal for a gardening project and took it to different donor agencies like ADF.

We had a positive response from ADF. When we wanted to start the project, when we wanted to implement it, it became evident that there would be too many technical difficulties. First, there was a problem of training, because our people are farmers and herders and they don't know gardening very well. Then, there was a problem of garden products -- they are perishable, so you need a way to store them. Finally, there was a problem with the cost. To have a gardening project, you must have plenty of water. As you know, in Louga, it is an area that is very dry like the Sahel, and in order to get water, you have to go down many meters -- 20, 30, 40 meters. So, after all of these difficulties we met, we requested from ADF that instead of having a gardening project, that we have a cattle-fattening project, and ADF was in agreement with that. That's how we received financial assistance from ADF.

We just began our activities this spring in May and June. Since we got funding, we have built a stable for our animals. We bought our animals, both cows and sheep. We have even got to the point where we have re-sold our animals. With the money we have earned, we have begun to start some social service actions in our community, such as right now with the hunger season, we have been able to distribute millet to our families. We are now awaiting the second part of our funds so that we can continue our activities. That's the end of our presentation; we wanted to be brief and so we welcome questions...

The participants listened to Moussa Ndiaye with undivided attention. The issue that was of greatest concern to them was the business of buying and selling animals. Was it profitable? How does it work in a communal context in which this profit-oriented activity occurs? In other words, does everyone in the community share the profits, or do some profit more than others?

Question, The Wodaabe Project's Representative of Niger:

How long did you keep the cows and how much do you sell them for?

Response, Moussa Ndiaye, Project Leader, Keur Boumy, Senegal:

We buy adult cattle and all we are trying to do is fatten them; we keep them for four, five, or six months -- we buy mature animals. For the selling of the animals, it is variable. It depends upon the animal and the buyer and

the negotiations. Sometimes we buy cows around 50,000 FCFA, and sell them as high as 75,000 FCFA; however, it depends upon the conditions.

Question, N’Gadd Amadou, Former ADF Country Liaison Officer, Niger:

I would like to know about the market and how difficult it is to sell the animals; how they manage to sell them, if there are other people that are trying to sell them, too, at the same time; and how they deal with the market?

Response, Moussa Ndiaye, Project Leader, Keur Boumy, Senegal:

Yes, we do have a problem with the market, that’s one of our most serious considerations, and when to sell our animals is also very important. Of course, most of our animals are sold to the people who live in the cities, because there is not a very big demand in rural areas. We mostly try to sell during the religious holidays when the demand is greatest, such as Tabaski. Because we have buyers that come to our village to buy, we have not found a problem so far. We have plenty of people to come to our village to buy, and we are not in a hurry to sell.

Comment, N’Gadd Amadou, Former ADF Country Liaison Officer, Niger:

We know what animal husbandry is, we are all involved in it -- but what is interesting is the prices. Everyone knows that it costs money to buy the food, the veterinary products, and to pay for the transportation of the animals. What I want to know is whether the amount of money that you earn by selling the animals covers your costs? Also, do you make enough money to have a revolving fund to re-purchase animals when you sell the others?

Response, Moussa Ndiaye, Project Leader, Keur Boumy, Senegal:

It is true that, at the beginning, we had many illusions. We thought it would be very easy to buy the cows, fatten them and make money. We did not think that there would be very many problems, but after a while we realized from experience that the profit is not as great as we thought that it would be. We have managed to work out a system so that during the rainy season when the grass is high, during the months of August and September, we take them out to graze in the pastures.

We take them out all day and in the evening they receive just a supplement -it’s not a lot of food we need to give them in the evening. Another thing that we do during the rainy season, is that we are very conscious of stocking-up for the dry season. We have the peanut leaves, the leftovers from the peanut plants, and we get hay from the fields and put it aside for the dry season. We try to get as much food as we can during the rainy season.

Question, Siraji Abdullahi Osman, Himilo Project, Somalia:

It is a community project intended to benefit everyone. How does the project benefit everyone in the community?

Response, Moussa Ndiaye, Keur Boumy Project, Senegal:

The first social action that we carried out with the profit we got from the project was grain distribution. We bought millet and distributed it among the members of our village according to the number of persons within households. Everyone received some benefit from the project. We did not distribute all of the profit from the project, but we decided that, because this is the hunger season, there is a real need in our community; this would be a good way to have a first action to help our village; that this would be a good way to start.

The questions of the pastoral nomads, however, were not directed toward the buying and selling of livestock, but rather toward the health and welfare of the cattle.

Question, Maasai Elder from Albalbal Project, Tanzania:

Cattle die of many diseases. How do you protect the animals from disease? You cannot just fatten a cow without knowing how to protect it, because it would die of disease.

The question was thoroughly modern and, as it turned out, disturbingly modern, because the Maasai Elder felt that the project leaders of Keur Boumy did not have any ideas of their own about how to protect the health of animals. The Keur Boumy presenters had simply said that when their animals got sick, they took them to the veterinarian; thus professing the same kind of passivity that exists in the modern world when people leave the responsibility for their own health to the specialist.

Response, Moussa Ndiaye, Project Leader, Keur Boumy Project, Senegal:

We do not have a particular person who provides veterinary services in the project. There is a local veterinarian in Adisama, and we do go to him for help. In an informal manner, when we need help, we go on a regular basis to the veterinarian, and we pay their cost to come to the village. We cover costs of supplies. They visit our cattle and animals to make sure that they are taken care of.

The ticks that you talk about here; they do also exist in Senegal, but we make sure that the cows we buy for our fattening operation are very healthy cows; and that they don't have ticks or parasitic infections. The other question you asked, what we do to protect our animals, we have already answered that one: we bring in a local veterinarian.

One apparent shortcoming of the Keur Boumy Project is that it did not seem to have a sufficiently developed farming component that would support the cattle-fattening enterprise by furnishing fodder for the animals. The issue was raised by a Somali participant.

Question, Abdi Elmi, Daryeel Project, Somalia:

Previously, you said you wanted to start a gardening project; you changed it to a cattle-fattening project. Now you are saying that during the hunger season, you buy millet and sell it to your members. Is it possible that in your environment that you could supplement the cattle-fattening with a food production sub-project?



The cattle dip of Albalbal, where conference participants met the Albalbal community.

Response, Moussa Ndiaye, Project Leader, Keur Boumy, Senegal:

In our particular area, the water problem is an ever present problem. It has not gone away since we started the project. One of the primary difficulties with gardening in our area is that the costs of production are much higher than what one can sell; and to really have an adequate supply of water to have more agriculture, it would require ... a deep water well, which is something very expensive -- which our small village cannot afford.

The hungry season is something that we have lived with for many years in our zone. There are always a few months during the year when one must go and buy grain to supplement what one has produced. We think it is common to other countries in the area, and we are trying to do the best we can to supplement [our food]. We do grow some crops.

Question, Siraji Abdillahi Osman, Himilo Project, Somalia:

I would like to ask two questions. Prior to the project, people were carrying on their lives on an individual basis, this project brought them together. How is the benefit being felt? What is the benefit of coming together and working together instead of struggling individually? In the old tradition, before modern medicine came, how did you protect your animals?

Response, Moussa Ndiaye, Keur Boumy Project, Senegal:

To respond to the first question, the three ethnic groups used to make small projects by themselves -- maybe they would sell items; do a little animal husbandry themselves; but now that this project is bringing everyone together, we have found that it is possible to benefit in a community in a greater way. The second important aspect is that when everyone works together, everyone benefits -- it's not just one side or one family that benefits; it's everyone. It makes us feel more secure when everyone benefits.

For traditional medicine and treatment of our animals -- it is very different depending on the ethnic groups, the Wolof, the Fulani -- everyone has a different plant that they find near their village that they give to the animals when they have a particular disease or sickness. They also practice scarification of animals to make them get better. It's a very dispersed knowledge -- it wasn't something commonly held and commonly understood that one plant does one thing. People have their specific treatments.

The pastoral nomads also raised questions that have important implications for the Workshop as a whole, because they concerned the relationship between nomads who are devoted to livestock and the sedentary farmers for whom livestock is of secondary, if any, importance.

Comment, Gabriel Tonge, Albalbal Project, Tanzania:

I can see it is sort of a new thing to you to be herders. We are gathered here to talk of the contemporary methods, but also the way we take care of our herds since way back in the time of our forefathers. The first group of people [the Wodaabe] who spoke here today are very much like ourselves. This kind of cultural element was complete in their group; but these people

[Keur Boumy] talk as if their herding just started yesterday. It's a new thing to them. I'm confused and I would like to hear of their past.

Response, Moussa Ndiaye, Keur Boumy, Senegal:

In our tradition, yes, we are primarily agriculturalists. But, in our zone where we live, there's always been an integrate agriculture -- agriculture with animals -- because the animals provide fertilizer for our fields, meats, and milk. It's something that is very common to have some animals, everyone has always had some animals. What has happened is that with the drought situation, we have found ourselves with agriculture as much less important, and we are trying to find alternative ways of living. We are really not doing animal raising -- we are doing animal-fattening, and it is a very modern kind of thing that we are doing. One other point is that two of the groups in our village, the Fulani and the Toucouleur, have a long tradition of animals in their community. Although our basic tradition is agriculture, we have moved into herding, because of what the environment dictates.

Comment, Dr. Asmarom Legesse, Advisory Committee:

I pursued the matter that was raised by Gabriel (Tonge) toward the end of the meeting, and asked him why specifically did he think that Moussa's group was not as well informed about cattle as they should be? He said that the key thing that triggered that thought was the fact that they did not seem to know much about cattle diseases, and how nomads protect themselves from such diseases, and how they treat them. In his tradition, there is a great deal of information concerning such matters, and he felt that this is characteristic of nomadic or herding populations.

The second issue he raised is that the numbers of animals involved in the cattle-fattening project were so small that, in his view, this did not look like a society of herders, but people who are "dabbling" in livestock breeding. When asked specifically if Maasai ever do fatten their animals as part of their traditional system, he said that they buy cattle, but "we don't buy adult cattle, we buy them very young and fatten them, but not necessarily for the market." He insisted that no one animal or group of animals are specifically selected for fattening, but that they try to get the best pasture for all of their animals; and some of them would become exceptionally fat. I then asked him what, in Macao's report, was so familiar to him that lead him to believe that the Wodaabe are more like Maasai than the other group; and he said "everything" about them, they seem to have many animals and to care about them.

Integrated Development: The Dialambere Project of Senegal

Dialambere was the most complex and most advanced development project represented in the Workshop. It is a multi-ethnic community located in the Casamance region of Senegal. The project was organized by a youth association. Its primary purpose was to initiate a comprehensive development program that would limit the exodus of young people to cities and that would also respond to the problem of unemployment of youth in the community.

Baba Koita and his colleagues, Koumba Dickel Pame (Mrs. Koita) and Djidjere Baldé, recounted the evolution and functions of the project:

.. In 1974, the youth of the village got together and started to discuss their difficulties. Three ideas came out of this meeting. One of them was that we wanted to do everything we could to keep the youth in our home community. The second was we must find productive ways of generating income, like gardening, animal husbandry ... The third fundamental idea was also to solidify the community, so that people wouldn't leave it; that through project activities, we would have a stronger community.

In 1984, we were able to convince the people of the village that this was a good thing to do, and all of the youth in the village came together in this group to work. We were all convinced that this was something they should all be involved in. So in 1985, we got our official recognition from the Government of Senegal for the Youth Association of Dialambere. The official recognition from the Government is very important because we cannot receive any funds from outside of our country without having this recognition. This was a big important step for us.

In 1986, we made contact with ADF and they are the reason why we are here today. We will now have three short presentations. The first, will be by Djidjere Baldé who will discuss animal husbandry in our region and how we practice it; the second will be by Mrs. Koita, who will discuss the social actions that we have undertaken in our village and how our community and animal husbandry relates and the third presentation will be by me (Baba Koita); and I will discuss the economic situation and what we look forward to doing in the future...

Djidjere Baldé, who is Fulani and hence of pastoral background, spoke of activities centered around cattle husbandry. He, more than the other two representatives, stressed the importance of livestock in the integrated project. In some respects, he went further than his nomadic kinsmen, the Wodaabe, in making the case for the centrality of cattle in their world view and their system of values.

Djidjere Baldé, Dialambere Project, Senegal:

... The people have settled in the low-lying areas of this region (Casamance) which is far from the road. They are near to where the water collects. This is where they have all their fields and this is where they raise their animals. This explains why the Peulh* (term in Senegal for the Fulani) in this area are sedentary; they have enough room in this area for their agriculture and to graze their animals ... It is surprising that we can be sedentary to other people that come from Niger or Burkina Faso who are nomadic; how can we stay in one place and be sedentary?

**Peulh is the French equivalent term for the Fulani ethnic group. The singular in the Fulfulde (term used east of Mali), or Pulaar language, (term used from Mali to Atlantic coast) for a Fulani person is 'pullo: " plural is "Fulbe. " There are many different kinds of Fulani communities in west Africa, ranging from the most nomadic Bororo and Wodaabe groups, who live throughout the Sahel and savannah regions; the Fulani sedentary, mixed farming communities of Guinea and elsewhere, and the Toucouleur mixed farmers of Senegal and Mauritania.*

I will do a very brief summary of animal husbandry in the Casamance. Those who practice animal husbandry are known for moving about. We settle down only to associate our animal husbandry with agriculture. Even though we practice agriculture, the animals are very, very important to us. They are a very important part of our life in our community. So we have a sedentary type of cattle-raising. We also have our difficulties. We have two seasons, the dry season and the rainy season. There are two different climatic periods when the ecological situation changes, and so the pastoralism changes. Of course, during the rainy season it is easy to raise our animals, because there is plenty of grass, plenty for the animals to eat during this period. One of the major problems for us is that there is cultivated land everywhere where we herd our cattle, so there is a problem there. So during the rainy season, we must stake them down (in the evenings) so that they cannot move about freely.

In the group's presentation of local veterinary practices, magic and ritualized cattle medicinal baths were brought up. The concept of magic as a strategy for cattle protection against both thieves and infertility, and the idea of ritualized veterinary practices were not strange to any of the participants. For this reason, no time was spent in the definition of magic, ritual or prayer, or whether magic existed as a true science, but rather on its application and how it is used in the community to achieve particular ends. The discussion swiftly went into what the characteristics and modalities were of the practice. The following presentation was enlightening:

Djidjere Baldd, Dialambere, Senegal:

...We, too, have wild animals like here in Tanzania that attack our animals, hyenas, etc. We also have thieves; thieving is a problem. It is the head of the herders that must protect the herd. So again, he uses his traditional knowledge to protect the herd. So all around the herd he will recite a few verses, sing a few songs to protect the herd. An example:

I ask for pasture, I have a lot. I leave and I am coming back peacefully; let God watch over and protect my animals against the bad works. If these bad mouths open up; bad feelings, if they open, they will never close; if they close, that they don't open again.

All of our animals are sheep, goats and cows and must stay in one place, so that they don't get into the fields. This is to avoid the conflicts between herders and agriculturalists, which is a problem. The women in the morning take out the sheep and the goats; they are responsible for the small animals ... for taking them out into the forest and undistributed areas and staking them down. The cattle are taken out to the forest by a herder. So the maintenance of the area where the animals are is covered by the men. Where the animals stay near the village, that is taken care of by the men. They must clean the area of all the dirt where we put the animals at night near the village, because during the rainy season, as you know, the rains cause many illnesses. We must clean the area or move the animals every night so that they will have a clean area to spend the night. And also we produce the ropes to stake down the animals.

Also, we must care for the animals, make sure they are properly cared for so that they don't get sick, because there are a lot of parasites during the rainy season. There are many parasites where we live, there are ticks, and there is a bad fly that also gives parasites to our animals. There are also other types of parasites that attack our animals, but those are the two most dangerous for our animals.

During the dry season, it is completely changed. One of our biggest problems are forest fires, because the grass is so dry during this period. So after the rainy season, we just let the animals go, and they are free to wander where the fields once were, and to find whatever kind of food they need and they will go more and more kilometers away from the village. During the dry season, it is a very difficult period. That is when we lose most of our animals. They don't get enough food; the water is usually insufficient; they lose weight; and they do die during this period. It is during this period that we have the highest mortality rate of our animals.

We have traditional ways of doing animal husbandry. There are traditional methods and knowledge of curing the animals, and of taking care of them. But if our animals do not get better with the traditional methods, then we go look for the veterinarian. We have the Ndama Race in our area, it is a shorter cow that resists very well against the diseases in our area (trypanosomiasis). To protect the animals in the evenings, when the herd is all together, we will light small fires of certain kinds of tree branches around our herd. The smoke drives away the flies that cause some of the parasites in the animals. This is one of our traditional methods to care for the animals. We clean the area to protect the animals.

We also have a special celebration for our animals. This is a celebration called Mundio. This is a celebration to honor our cattle. The photographs displayed here show the preparation for the celebration. The head of the herders gathers many plant materials. Among them are roots, trunks of trees and also leaves that are pounded together to make fodder that is served to the animals for this celebration. You have to have innocent beings at this festival -- so there is a parallel between the cleaning of the cattle and having the children around who are innocent and clean. The children, the women and the men do different kinds of work. The celebration is very, very far from the village in the forest.

What we do to prepare the celebration is this: out in the forest some of the members of the village will dig holes where they put the mixture that they have prepared the evening before, and they also put water in it. Very far from the village, we have a big race with all of the animals, and the animals are sort of chased in the direction of where you find these mixtures of water and pounded up materials. It is a very big honor for the first cow to arrive at the field and drink from the mixture. The head of the herders will actually sing songs of praise for the animals during this period. I have some of these verses that I would like to briefly tell you. This allows the Peulh to have many, many, many cattle, because a Peulh never has enough cattle, like Americans never have enough dollars.

One of the most important parts of the celebration is it allows the cows to produce more milk. It protects them from parasites. It is also a favorable period for breeding new cattle to increase the number of the herd. That is the usefulness of the celebration.

So this is a general description, a summary, of how we raise our animals in Dialambere. Now you ask, how do we manage the animals? The herd is made up of animals that are owned by different people, even if they are from different families. However, there is only one leader of the herd, one person responsible for the herd. This person is responsible for all the protection of the animals, making them get better, It is the “Mundaje” who is the person responsible for all of these functions.

The women are not forgotten in this. In the morning, the milk that we gather from our animals is for the women and only for the women. The women will go and milk the animals. This is their work. They are the ones who manage the distribution of the milk. In the evening, it is the children that go and milk the cows and they are the ones responsible. The children can sell it, they can use it themselves, or they can give it to their friends. If they sell the milk, they can only use it to buy more rope to tie down the animals. So that is the summary of how we manage our animals.

I would like to add a more precise comment about the Mundio because it is a big race. It is important that all the animals arrive at the preparation we have made for them. If a bull is the first one to arrive at the preparation, then it is a bad sign, we will kill the animal. If it is a cow, then it is a good sign, and that means that we will have a good season and we are happy.

The second member of the Dialambere team was Koumba Dickel Pame (Madame Baba Koita). She covered the social and medical service component of the integrated project as well as the complex array of economic activities that comprise their remarkable enterprise. Her discussion represented a thoroughly modern outlook. It was pragmatic, matter-of-fact and devoid of the “mysticism” which Baldé proudly proclaimed as his tradition.

Comment, Koumba Dickel Pame, Dialambere Project, Senegal:

...Before ADF, the people in the village had built a health hut. This was before we got any money from ADF. With the finance we received from ADF, we were able to equip the health facility. There are three huts, three different rooms, and three different functions in this facility: 1) a midwifery run by a woman who takes care of all of the birthing in the village, and makes sure the women have healthy babies; 2) a pharmacy run by a man who sells our medicine for prevention of different maladies like malaria; and 3) the health hut that gives first aid (bandages if you're cut). We also provide tetanus shots.

Basically, we have kept records since 1985, when we started our health hut, of the kinds of actions that we take. We provide anti-malaria medicine (chloroquine); first aid; we weigh our babies on a regular basis; and we



Workshop participants admire the jewelry of Maasai women.

record the births so we have a record of the children and adults in our village when they visit the health hut for various sicknesses over the past four years.

We also have a child care center for the rainy season and this is during the months of June-September. Primarily to allow the women to be freed up to go and work in their fields and not worry about their children.

The women manage the millet machine, they are the ones who gave these figures. We will now give you a brief explanation of the management of all of these components and then we will open up for questions...

Comment, Baba Koita, Dialambere Project, Senegal:

I will give you a brief idea of some of the economic activities that we have undertaken so that we can discuss them later on. One of the things we have done: we have a seven-hectare, fenced-in enclosure, and we have over 4,000 fruit trees. Among them are mandarin, orange, cashew, lemon, banana, mango, papaya, and pineapple. We also have vegetable gardens in over four hectares of this area. In our gardens we have tomato, jackto, cabbage, onion, eesop, okra, and many more vegetables of this type. We sell these vegetables not only in our local area, but in other departments; and we also have a cattle-fattening project and a sheep-fattening project...

I would like to emphasize that we have animal husbandry and agriculture together, it works very well together; they are complimentary. Not only is the Casamance peasant a pastoralist, he is also an agriculturalist at the same time. Because we are pastoralists, we can use the manure from the animals to help in our gardens and fields. So, at the end of the rainy season, we put our animals out into the same fields. That is where the manure will go, and it will help revitalize our fields. Also, the herding is related to the forest. There is an interdependence there, because during the dry season the cows go out into the forest. The forest provides fodder for the animals during this period. So it is not rare to see pastoralists burning part of the land so that they can get new grass for the animals to graze on, so that the grass will come out a little earlier.

We have cereal storage areas for millet and rice for the hungry season. We have a new project that we have started, which is a bio-gas project, which burns the manure from the cows from our cattle-fattening project.

In our opinion, the best self-sufficient model for our area of the Sahel is a mixture of agriculture and animal husbandry, and when the rains come again, this will provide us with the best formula to have a strong community. We are now ready for questions...

One of the most interesting exchanges between the Dialambere representatives and the pastoral nomads in the Workshop occurred when a Maasai elder posed the following question about cattle theft:

Question, Maasai Elder, Albalbal Project, Tanzania:

Now that you have a very good and integrated project, what do you do about the thieves of cattle?

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Question, Maasai Elder, Albalbal Project, Tanzania:

Now that you have a very good and integrated project, what do you do about the thieves of cattle?

Response, Djidjere Baldd, Dialambere Project, Senegal:

We use two methods to protect the animals that are part of our cattle-fattening operation. One method is that we mark our animals, so that if anyone takes them, we can tell it's ours. Secondly, we have a guardian with our animals 24 hours, night and day. The committee assures that there is always a guardian.

Independently of these methods, we have another method of protection for our herds and it is mystical; it is supernatural. With the kind of protection that we have, if someone who is a thief comes and tries to take the animal, the animal will refuse to go. He will sit down and he will not go away with the thief, and you cannot drag a 50-kilo animal away. Fortunately, this kind of protection that we practice we cannot teach you here now; it's just not possible, but this is what we do.

Question, Maasai Elder, Albalbal Project, Tanzania:

Do all of you have the knowledge that keeps the cow from following the thief or do certain individuals have that power?

Response, Djidjere Baldd, Dialambere Project, Senegal:

This knowledge is very jealously guarded and is expensive to acquire. It is only shared among the family.

Another pastoralist, a Wodaabe from Niger, pursued this matter further. He was raising an esoteric question that seemed to be aimed at checking out Baldé's depth of knowledge about the Fulani traditions which he so eloquently and enthusiastically espoused.

Question, Macao bii Gao, Dakoro Herders' Cooperative, Niger:

Since you have supernatural power to protect your animals against the thieves, I am also aware that the thieves have supernatural power that allows them to steal animals. I am wondering what happens when these powers meet?

Baldé's response is an elaborate account of the various forms of knowledge that they use to track down the thief. Some of it is social knowledge having to do with lineages, families, and individuals, and some of it is local ecological knowledge possessed by the community which the thief, an outsider, would not possess. He concluded his impressive account with this statement.

Response, Djidjere Baldd, Dialambere Project, Senegal:

There is a very dynamic relationship between the knowledge that the herders have, the knowledge that the animal has, and the relationship of both to the forest. This interaction is something very difficult for the thief to penetrate into. Underlying all this is the notion that the forest itself has its own herders. Some of these spirits are actually herders themselves.

The Dialambere representatives -- Baba Koita, Koumba, and Baldé -- concluded their presentation with comments on the photographic display which they had prepared for the benefit of their audience. The impact of the presentation as a whole on the

Workshop participants was significant. Although not all of the participants envisioned this degree of sedentarism or involvement in agriculture as part of their own aspirations, all were impressed by the level of organization, motivation, and sophistication of the Dialambere group and of the project they described.

Comment, Moussa Ndiaye, Keur Boumy Project, Senegal:

I am very interested in what was said today, because it appears that the project is an integrated project. Some of the other projects that we have seen are just animal or cattle-fattening, or weaving, but they are not integrated. This project really enters into all of the aspects of this community's life, and I think that it is very interesting how they have managed to provide both social services and economic possibilities for their people. I think that we should all be trying to arrive at this kind of stage where we have integrated projects and are not just worried about the economics -- but also the social services that are provided. We are all trying to get into a more integrated approach in our development.

This very positive comment on the project came from the leader of a mixed farming project who had himself grappled with similar issues in his own work. It is worth noting that the pastoralists posed questions only regarding the livestock component of the integrated project. Through Baldé's presentation they, nevertheless, were able to feel some affinity for some aspects of the project's activities and the community implementing the project. It remains to be seen in what specific ways the Dialambere story might influence the range of choices they will consider in the future, ways in which the integrated project might serve as a model which will raise their level of aspiration. That can only be established by observing these communities in later stages.



Advisory Committee member Dr. Asmarom Legesse (second from left) chats with grantees.