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# Managing Resources with PRA Partnerships: A Case Study of Lesoma, Botswana

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Richard Ford  
Clark University

Francis Lelo  
Egerton University

Chandida Monyadzwe  
Department of Wildlife and National Parks

Richard Kashwecka  
Forum on Sustainable Agriculture

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Chandida Monyadzwe  
Department of Wildlife and National Parks

Richard Kashweeka  
Forum on Sustainable Agriculture

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Finally, we wish to include the larger PRA network from Madagascar, Uganda, The Gambia, Tanzania, Nepal, India, The Philippines and many more for the continued dialogue and exchange of experiences in using village resources more effectively. PRA has grown considerably in the past five years because of the commitment and creativity of this extended family. This case study forms part of the continuing dialogue.

Richard Ford  
Clark University

Francis Lelo  
Egerton University

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**Figure 1. Location Map**



# I. Introduction

Lesoma is a small village in Chobe District, in the north of Botswana. It is a community of ironies and untapped potentials.

Though small -- less than 300 people -- it has an enviable infrastructure including a primary school, clinic (with a full time nurse), borehole and storage tank, standpipes, a poultry business housing several hundred chickens, a bakery, and brick-making facilities. There is also a gravel quarry at the edge of the village though it employs only a handful of people from the community. Though close to rich resources of water, wildlife, forests, national parks, and wage employment, Lesoma is a poor community. Though blessed with a potential abundance of water from a nearby river, very little is available for horticulture or agro-forestry. Though close to grazing land, very few people own cattle. Though well supported by drought relief projects such as government subsidized road construction and government grants for small business, it is a community which has made few self starts.

The community has many problems. Most severe is persistent encroachment by large game. There is also difficult land access as the village is wedged between the Zimbabwe border to the east

and the Kasane Forest Reserve to the north, west, and south. Poachers from several countries also visit the area as it lies astride a major wildlife migration route between Zambia, Zimbabwe, and Botswana and is only a few kms from the well-known Chobe National Park. Other problems include male out-migration for wage employment; ethnic diversity which sometimes leads to tension, especially between newer migrants and older residents; and fragmented community institutions. Figure 11 suggests the full range of problems that Lesoma's residents have identified.

This case study describes how a team of officers from Botswana's Department of Wildlife and National Parks (DWNP), other ministries, and NGOs (Non-governmental Organisations) carried out a PRA (Participatory Rural Appraisal) in Lesoma during June, 1993. The goal of the PRA was to acquaint workshop participants with a methodology to open negotiations between park officers and communities such as Lesoma. The negotiations have led to shared action plans that support both conservation and development. The goals of the plans are to offer village residents hope of sustainable livelihoods while protecting both flora and fauna in the Kasane Forest Reserve and Chobe National Park.

## II. Background

Lesoma exists because a year-round spring has run continuously for as long as the oldest residents can remember. Legends suggest the spring may have served people, wildlife, and livestock for centuries. It is probable that hunters and gatherers -- the ancestors of the present Basarwa people in the area -- have used the spring for two thousand years. Pastoral peoples have lived in the area for at least a thousand years. Agriculture has come late in the life of Lesoma as rainfall is variable, soils marginal, and markets distant.

The village lies a few kms south of one of the few places in the world where four nations converge. To the east is Zimbabwe's Matetse Hunting Reserve -- Lesoma actually borders the reserve boundary for about 3 kms. A few kms north is Zambia at the confluence of the Chobe and Zambezi Rivers. North and slightly west is Namibia's Caprivi Strip -- the 19th century vestige of colonial negotiations in which Germany bargained for a slice of Africa to connect German Southwest Africa with the Zambezi and therefore German East Africa.

The area surrounding Lesoma within Botswana is protected forest reserve. Perhaps another irony

of the small village is its contradiction in land status. The Forest Department claims Lesoma lies entirely inside the Kasane Forest and exists only with the Department's good will and generosity. Yet the Ministry of Local Government, Lands and Housing assumes the land to be available for private holdings and has begun issuing lease titles to villagers and other citizens who can demonstrate proof of long standing occupancy or who can pay.

Lesoma's recent history is traceable for little more than a century. In the 1860s or 1870s, one of Khama III's chief hunters, Maruza, led the Khama on an expedition that passed by Lesoma. Khama III was perhaps the strongest of a long line of traditional chiefs and the grandfather of Botswana's first President, Sir Seretse Khama. Rich in game, Lesoma looked inviting. Khama granted Maruza the land to look after for future hunts.

Maruza gladly accepted and moved his family within a few years. He served as the first chief of an intermittently settled or sometimes shifting community. Maruza's granddaughter -- Kesetse - - still lives in Lesoma and provided much of the detail of her grandfather's adventures. Maruza

died at the turn of the century and was succeeded by several headmen, including Samkoena, Lesoma, Fanamanja (Nanjwa), Lesoma II, Kelesitse Samati, and eventually, Amos Mkhleswa who is the current headman of Lesoma's 250 people. The Time Line (Figure 6) offers details. Mkhleswa is the first headman who is not Basarwa, representing a shift in community leadership.

This shift in leadership suggests that Lesoma, like many villages in Botswana, is not homogeneous. The current population represents generations of migration and interaction. Maruza's first settlers were Basarwa. Hunting, herding, and gathering still account for a major share of income for many of Lesoma's households; the Basarwa continue to be the largest group in Lesoma. While hunting and gathering are slowly disappearing as primary sources of livelihood, the people are reluctant to embrace fully the agricultural and wage economy of the new Botswana.

For example, the PRA team talked with one Basarwa family in which an elderly male heads the household. His livelihood comes from marginal farming and hunting that is sometimes legal. His wife brews beer from wild berries collected in the forest, sorghum, and mealies (maize). Two sons work nearby, though they no longer live at home. One is a labourer for a road construction company; the second works on a large irrigated farm 20 km away. While most of the household ekes out a meager existence in the compound, one grandson has completed secondary school and is enrolled in an auto mechanics course at the polytechnic in Gaborone.

A second important group are Lesoma's Ndebele from Zimbabwe. For example, Mkhleswa,

the village headman, is Ndebele. While there have been Ndebele in the area for many years, their arrival in significant numbers in Lesoma was only about 25 years ago. There are also remnants of groups who have trekked south from Zambia such as the Mandakwe and Barotse. From the Caprivi strip come the Balozi; and from farther south in Botswana -- in the general area of Francistown -- come groups such as the Kalanga.

Indeed, the most commonly spoken language in the village beyond Setswana is Lozi. Because there is great similarity among all the languages, formal communication is not an issue. However, lest one assume that ethnic identity is unimportant, one quickly becomes aware of the many groups, their use of language and customs to preserve their identities, and even separate cemeteries for each community to honor its departed.

Agriculture first appeared in the Lesoma area in the early 1900s. A combination of immigrants from Zambia and Zimbabwe and a Portuguese farmer seem to have used the land for crop production for a decade or so. By the time of World War II, these people had moved away and the Portuguese had either left or died.

Farming began again in the late 1960s with the arrival of the Dube family, led by the father of current Lesoma resident, Titus Dube. The elder Dube ploughed fields near the spring and planted sorghum, maize, melons, and beans. In those days, people of Lesoma who practiced agriculture tended to live on or near their fields, as was the tradition of the Ndebele and the Kalanga. In doing so, they discouraged wildlife from bothering their crops, especially during the months immediately before harvest.

In the 1960s, a few seasons of good rainfall and then good rains again in the early 1970s attracted others and Lesoma began to grow. But the spurt was short lived. The civil war in neighboring Zimbabwe -- then Rhodesia -- spilled across the border in the mid and late 1970s. Rhodesian patrols sometimes swept through the area and Zimbabwe freedom fighters often sought shelter and food in the village and nearby forests. Pressure from the war forced some residents to abandon their fields and flee the village. Those who remained left their fields and moved into the village center where they built houses. They felt safer living together, venturing to their fields only for essential ploughing, planting, weeding, and harvesting. Crops were not properly guarded against wildlife, resulting in further declines in food production. Separation of the homesteads from the agricultural fields -- a direct result of the Zimbabwe civil war -- has contributed to declines in agricultural production.

An even greater shock came one night in 1977 when a raid and counter raid brought a Rhodesian patrol to a hill slope one km from Lesoma's center. Three Landrovers from the Botswana Defense Force came to investigate. Rhodesian troops attacked the BDF, killing 15 and wounding others. Botswana was outraged but unable to retaliate at this incursion. The impact on Lesoma was to drive people away one more time.

When peace came to Zimbabwe in 1980, farmers started to return to Lesoma. There has been a steady climb in population ever since,

mostly as a result of in-migration. Figure 8 indicates how the villagers see population changes during the last decade. This rise gives every indication of continuing as the headman currently has over 1,000 applications for new plots and building permits in Lesoma. For a village of 250 people, applications from 1000 new land seekers is a major event.

Yet the new peace has not brought prosperity. Intermittent drought in the mid-80s has depressed farm production. During years with good rains, elephants and buffalo have helped themselves to the crops. People have not returned to live on their fields and, instead, stay in the core village area as noted on the sketch map in Figure 2. The large game animals have been left mostly undisturbed to ravage the farmers' crops. Ethnic differences have heightened during these years as newcomers arrive and compete for leadership roles. For example, the current Chairlady of the Village Development Committee (VDC) has lived in Lesoma for only one year. The problem of land access continues, destined to become more severe as the population rises and the land area remains the same.

In the context of these problems and resource access conflicts, DWNP determined that a PRA assessment would be a good step. The goal of the PRA was to develop a data base that the community could use to rank its problems in order of severity, consider options available to solve its most intense problems, and to develop partnerships with external agencies that might assist in solving these problems.

# III. About PRA

Participatory Rural Appraisal (PRA) uses a very old concept -- community participation -- in a structured and flexible way. It builds on the premise that participation among local community groups is an effective way to stimulate both conservation and development. PRA first appeared in a formal way in Kenya in the late 1980s, building on techniques from an earlier research methodology known as Rapid Rural Appraisal.<sup>1</sup>

Since the first PRA was carried out in 1988, much has been learned about the process. It is now in use in many African nations including The Gambia, Senegal, Mali, Madagascar, Botswana, Kenya, Tanzania, Uganda, and Somalia. In India, there are literally hundreds of organisations including both government and non-governmental units using PRA. Other Asian users include The

Philippines, Sri Lanka, Nepal, and Indonesia.

PRA works as an entry point for conservation and development in very particular ways because:

**PRA Creates Ownership:** The concept of integrating conservation and development expects people to make significant changes in behavior in ways that are consistent with their own priorities and goals. Many of these needs in a community such as Lesoma -- working more closely together, strengthened community institutions, increased utilisation of sustainable forest products, to name but a few -- have evolved over many generations.

Individualistic behaviors may have been appropriate responses when population was

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<sup>1</sup>The literature on PRA is extensive. See *RRA Notes* published by the International Institute for Environment and Development. For more detail, consult: Elizabeth Oduor-Noah, R. Ford, F. Lelo, I. Asamba, and L. Wichhart, "Implementing PRA," published jointly by Clark University's Program for International Development, Egerton University, and the National Environment Secretariat (April, 1992); R. B. Ford and F. Lelo, "Evaluating Participatory Rural Appraisal: Listening to Village Leaders in Kakuyuni Location," in *Forest, Trees, and People*, January, 1991; R. B. Ford, B. Thomas-Slayter, and C. Kabutha, *Participatory Rural Appraisal Handbook*, May, 1989, a field manual for using PRA, World Resources Institute; R. B. Ford, Barbara Thomas-Slayter, and Wanjiku Mwangi, "An Introduction to Participatory Rural Appraisal for Rural Resources Management," Program for International Development and National Environment Secretariat, 1989.

small and land available and abundant. Present circumstances of rising population, new resource challenges, and new aspirations for increased livelihoods require new responses. Households need to join together; land and resource users must have a role in defining the problems; residents need to feel ownership of the solutions, including new technologies and amended land management practices. For solutions to be sustainable, village plans must evolve that local people have proposed in response to problems that they perceive as severe;

**PRA Builds Partnerships:** The PRA approach structures data gathering, problem ranking, and prioritizing of solutions into systems that lead to community solidarity. Community accord enables village institutions to meet on equal ground for discussions with other partners in the conservation-development enterprise;

**PRA Provides an Arena for Negotiations:** The PRA team found people in Lesoma dispirited, disappointed, frustrated, and perhaps indifferent in their attitudes toward donors, government agents, researchers, NGOs, and concepts of environmental conservation. Their attitude was one of acting alone rather than joining together as a community. PRA is based on the premise that problems of conservation and development are larger than individual households or clusters of households can manage and, instead, require collaboration among entire communities. Such collab-

oration requires negotiations between and among resource users as well as with resource protectors such as the DWNP. This concept of negotiation is fundamental to sustainable development management.

A PRA exercise consists of eight steps.

1. Site selection, based on priority of village to take action;
2. Preliminary visits and community orientation;
3. Data Collection
  - a. Spatial Data
  - b. Temporal Data
  - c. Social-Institutional Data
  - d. Technical Data
4. Data Synthesis and Analysis
5. Ranking Problems
6. Ranking Opportunities
7. Adopting a Community Action Plan
8. Implementation

Full details of conducting PRA exercises are provided in handbooks and case studies listed at the end of this case study. Additional information can be obtained through contact with sponsoring institutions, also listed at the end of this study.

## IV. Data Gathering

The PRA team organised a two week data collection and analysis exercise with the people of Lesoma, to begin in the third week of June, 1993. The preparatory arrangements included meetings with the District Commissioner, councillors, extension and technical officers assigned to the area, and contact with NGOs working in Chobe District. Discussions also included the village headman, Amos Mkheswa, as well as leaders of the Village Development Committee, women's groups, and others in the village.

The leaders agreed to a launching ceremony for the PRA, to be held on Wednesday afternoon, 16 June. The afternoon was selected so that village women could come -- they did their household chores in the morning -- as well as some of the drought relief work groups that worked on brick making and road construction projects in the morning. The District Commissioner was invited along with the appropriate extension officers.

The turnout was on the low side with perhaps 60 to 70 people present, of which about 1/3 were extension staff, PRA team, and NGO officers and about 2/3 village residents. Perhaps the biggest surprise was that the initial village response to the

PRA launching was insistence on the part of several villagers that they be paid to come to the data collection exercises.

This was the first time in the memory of the PRA organisers (Lelo from Egerton University and Ford from Clark University) that such a request had been made. As the team learned later, payment of village residents for attendance at planning meetings has become a routine Botswana government policy for group meetings such as the Village Development Committee. We assumed that the request had less to do with the villager's view of PRA and more to do with the growing assumption that village improvement was the responsibility of the government, not the people. The implication of this assumption was that if the village of Lesoma was to improve its activities in conservation and development, it was the government's problem and responsibility, not the people's. We knew from the beginning that the Lesoma PRA would be a challenge.

PRA team members explained that PRA was different and that its goal was for the community to develop its own plan, not the governments.' The PRA team leader explained that if the people

received money to make a plan, then the government would own the plan. On the other hand, if the plan was to be something that the people would own, the burden was on village leaders and residents to create a community action plan, independent of government wages.

The launching closed on a moderately positive note though it must be stressed that the mood was far from enthusiastic. The atmosphere was cautious expectation and a bit of curiosity as to how this business of the PRA would proceed. It is important to add that the PRA team distributed copies of the "Introduction to PRA for Rural Resources Management" that had been translated into Setswana, the national language of Botswana. There is no question that this distribution helped begin building levels of trust and communication between the PRA team and the people.

### **Sketch map**

The first formal data gathering exercise was a sketch map. Because there was still time in the afternoon after the launching ceremony, we divided those present (about 40 villagers) into three groups, sub-divided by three zones within the village. Each group picked a shady place with good sandy soil conducive to drawing maps and began to talk about the village layout. Groups began drawing in the sand, initially with sticks and eventually adding pieces of paper, stones, twigs, medicine bottles, and odd bits of glass and tin to represent different facilities of the village.

The mapping exercise, like the launching ceremony, started slowly. People were reluctant to express themselves and hesitant to commit things to the map. However, within ten to fifteen

minutes, two of the three groups caught on to the idea and began to draw vigorously. Discussions and even a few disputes erupted about which things were where. Much rubbing out and starting over followed. Within an hour, the two active groups had a good representation of Lesoma, including location of the compounds, school, clinic, and farm fields. The third group did not produce a map on the first day and, the following day, started again on the mapping exercise. By the end of the second day, villagers had transferred all three maps to large pieces of paper; later in the week, a small group met and resolved differences on the maps (for example, whether there were five or seven standpipes in the community) and produced a synthesis map that appears as Figure 2.

Several things became clear in the 36 hour period when the maps were produced. These items included:

**Physical Infrastructure:** Lesoma was well endowed with physical infrastructure, almost all of which was provided by the government. The headman's office, police post, school, clinic, piped water system to standpipes in all residential parts of the village, housing for government officers, Village Development Committee (VDC) buildings, and several small businesses were well constructed. Considering that the community was only 250 people, its infrastructure was amazingly comprehensive and well managed;

**Transport:** road improvements were underway so transport and communications seemed to be improving. Most of the transport work was supported by a government-sponsored drought relief project, launched the previous year. However, the discussion surrounding

the map exercise noted that even improved roads did not attract private taxis or vans from Kasane. Lesoma residents wanted cheap transport to shops and places of employment in the area. Villagers felt they were isolated, thereby making marketing, wage employment, schooling, and health services difficult.

For example, on several occasions during the two weeks of the PRA exercise, team members used project vehicles to transport sick residents to the hospital in Kasane;

**Water:** the borehole seems adequate to provide water for the present population. While some complained that pressure was a problem during some parts of the day, it did not seem to be a major hardship. One group who had recently built compounds in the southern part of the settlement noted that they had to walk half a kilometer to the nearest standpipe. Their houses had been constructed after the water system was installed. But this seemed to be only a handful of families and was limited to the new settlement area;

**Population:** map making discussions noted that population was growing, especially from in-migration. This phenomena was clear from the amount of new construction underway in both government as well as private houses. It was also clear that the new houses were of a much higher quality than most of the existing houses. The team learned later that there was a trend for people living in Kasane -- 20 kms away -- to obtain land rights in Lesoma and build "town" houses. This influx of town people who had no roots in Lesoma was a new experience and was creating a new set of tensions in the community;

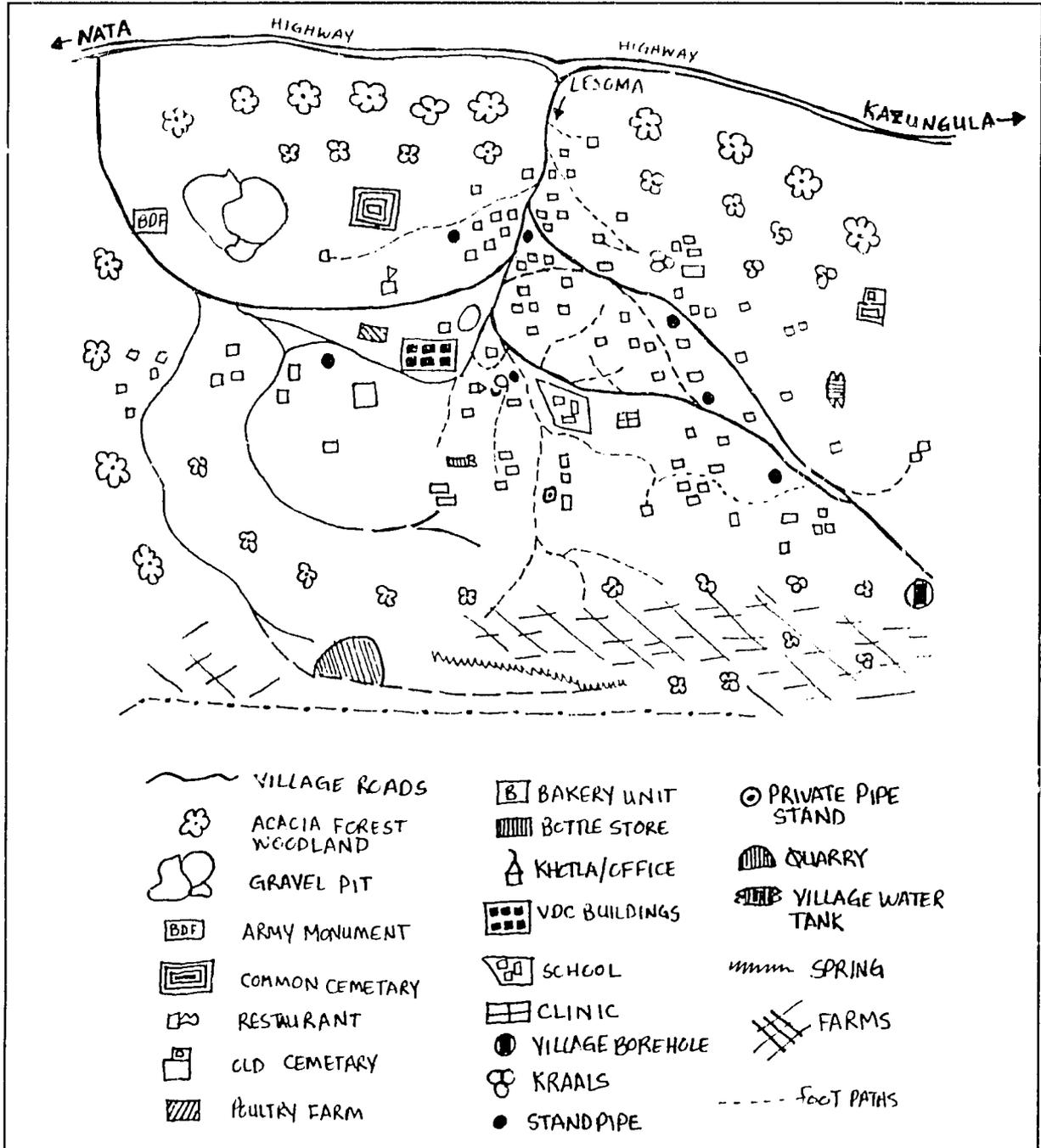
**Employment:** the map exercise showed that employment enterprises have begun, though they seem to be fragile and unprofitable. One example is a brick-making business, run through a grant from the government, that manufactured good quality cement bricks. However, their costs of manufacture were high as were their retail prices. Local government projects buy the bricks, but individuals building houses go to the private sector in Kasane for their bricks. A bakery has also been started through a government grant but it was too early to know if it would be a profitable enterprise. Private businesses included a poultry house with several hundred chickens owned by a Kasane businessman, a bottle store owned by a recent arrival in the village, and a small restaurant run by a local family that seemed to be generally unprofitable.

**Fields Distant from Residential Zone:** the map confirmed what the team already assumed -- the farm plots were a kilometer or more from the houses, creating a text book example of how to invite wildlife to graze in the fields;

**Land Limited:** the village lies within a forest reserve and borders a wildlife hunting reserve, with little opportunity for expansion. Lack of new land opportunities stifles the people. For those whose cultural traditions rely on hunting, gathering, and pastoralism, the tight boundaries impose restrictions that are not part of their past;

**Astride Migration Routes:** Lesoma's origins relate to the spring, noted on the sketch map to the east, close to the Zimbabwe border. The spring has been a magnet for wildlife, especially those on migration. As a result, there are

Figure 2. Lesoma Sketch Map



almost always buffalo and elephant in the area as well as smaller antelope and bush pigs;

**Data Gathering Largely Dependent on Women:** the sketch map exercise underscored the importance of women in the village. Many men are either working elsewhere or indifferent to village activities. Of the 40 or so who drew the maps, probably 2/3 were women.

The map exercise worked well in Lesoma. It identified a great deal of information. It also opened some lines of communication between the PRA team and the villagers. While there was still considerable reservation on the part of several and while one group never did produce their map in a final version, the task started the process of making the data a village project rather than a government exercise. While there were a number of slow exercises waiting for the PRA team, the sketch map at least communicated that the team wanted to listen, sought out the expertise of the community, and was prepared to help the community organise its information into more effective formats for presentation to outside groups.

## **Transect**

The second exercise was the village transect. The PRA team divided the village into three sections. Between 30 and 40 villagers participated, mostly women.

The transect provided opportunity for each team to walk the length and width of the community. One group used a vehicle and drove around the perimeter of the village -- about 8 or 9 kms.

About 3 kms of this journey were along the border with Zimbabwe. It added excitement to encounter a heavily armed BDF patrol, mounted on horseback, looking for poachers. The soldiers wondered why a group of villagers and extension/NGO officers were cruising Lesoma's borders. But a few words settled their curiosity and the transect continued.

At another point, the group found an elephant, perhaps half a kilometer from the spring and not far from the fields. He was happily feasting on some young trees and not bothering the crops. But that may have been a factor of the time of year (June) when there was nothing in the fields to eat. It did reinforce, however, the immediacy of the problem of wildlife encroachment and the difficulty poor farmers faced to deal with the game.

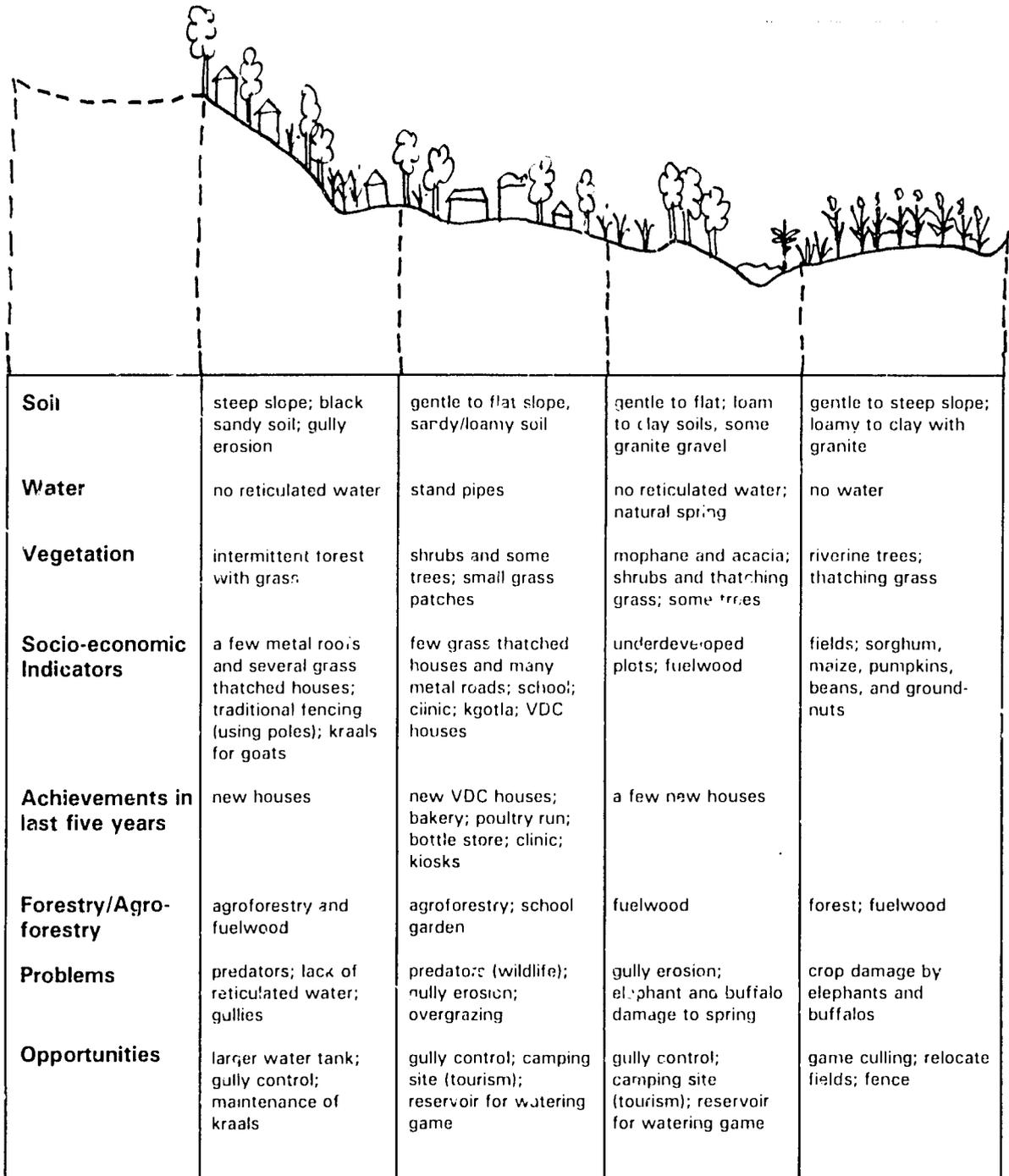
Other highlights of the transect included a better understanding of the water situation in which the residential portion of the community was well supplied while other areas had nothing. Other findings included:

**comparative wealth:** the upper zone tends to have more poor families than the lower zones in and around the village center;

**erosion:** soil erosion is prominent in the upper and intermediate zones, in part from poor road design and partly from poor water and tree management;

**transport:** several people in the village own cars though owners seem to be concentrated in the central zone of the village and are largely newcomers to Lesoma;

Figure 3. Transect



**livestock limited:** few families own livestock or, if they do, tend to keep it on cattle posts elsewhere. This is partly due to limited grazing areas and partly because of predators;

**forest utilisation:** the transect exercise noted that there is minimal use of forest resources other than for fuelwood, building materials, and some nutrients as in the case of beer brewing from forest berries. A preliminary survey indicated that there were many more potentials in forest utilisation and agro-forestry than households currently had called upon;

**wildlife utilisation:** there seemed to be harvesting (both legally and illegally) of small forest animals, to the point that a significant portion of the village's protein sources may come from wildlife. There seemed to be no connection between the village and the larger scale and commercial poaching that was under way in the national park and forest as well as along the wildlife migration routes;

**wage employment:** attempts to stimulate wage employment such as VDC loans or the drought relief program have not been sustainable as many men are away from Lesoma.

The results of the transect reinforced views developed with the sketch map. The community had low productivity and little formal employment. Problems identified in the transect included predators, water, erosion, and overgrazing.

## Seasonal Calendar

The next data exercise was the seasonal calendar. While one of the three data collecting groups

was catching up with their map and transect work, the other two groups prepared the seasonal calendar. A third calendar came through an interview with one elder who had worked for the Department of Wildlife and National Parks and who was now retired and farming in the village. About 25 people participated in the calendar exercise.

In addition to providing guidelines on when different activities took place in Lesoma, the calendar stimulated discussion about what time of year community problems such as birds and pests were at their worst. Or were there other problems -- such as young men drinking -- that were problems all year long?

Findings growing from the calendar exercise included:

**drinking:** alcohol was an issue in the calendar exercise whereas it was only lightly mentioned during the mapping and transect. The information reinforced the need for triangulation in PRA data collection as it was clear that all issues would not necessarily emerge with just one exercise. One needs maps and transects and many other collecting techniques so that one exercise can confirm or clarify information coming from another source. The more we learned about the problem of drinking, the more complicated it became.

Beer brewing is a good source of income for Lesoma's women and an efficient utilisation of forest products, using wild berries to brew the beer. Yet it has a devastating social effect on men, especially the younger men who seem to have no formal wage employment and little opportunity for agricultural production. As an alternative, some young people drink through-

AGRICULTURAL AND LIVESTOCK SEASONAL CALENDAR  
LESOMA VILLAGE, CHOBE DISTRICT

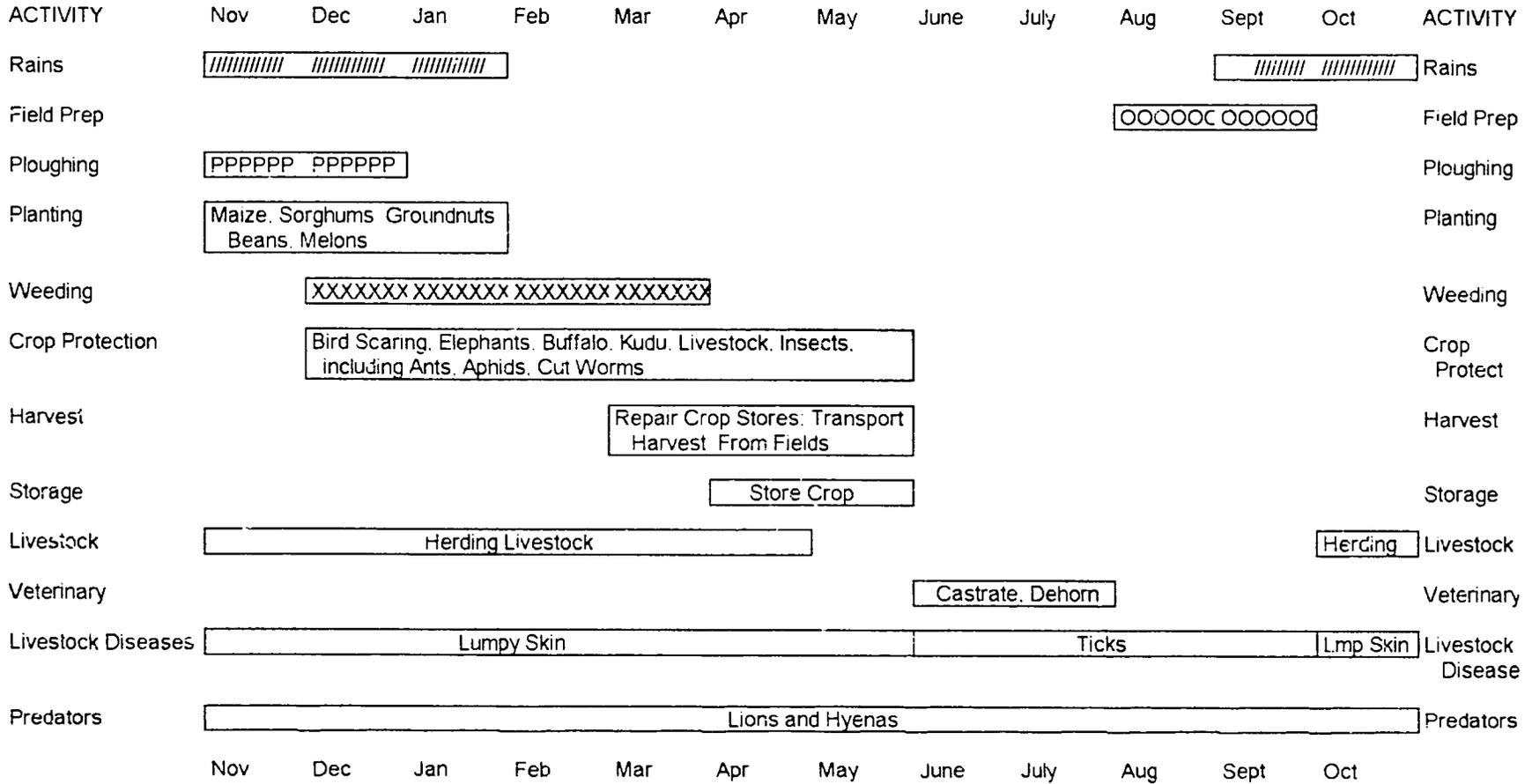


Figure 4. Seasonal Calendar

(page 2)

MISCELLANEOUS ACTIVITIES, SEASONAL CALENDAR  
LESOMA VILLAGE, CHOBE DISTRICT

ACTIVITY	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	ACTIVITY
Hunting	Porcupine, Spring Hares, Tortoise, Birds					Citizen License Holders					Kudu, Impala		Hunting
Grass Cutting											On Roads: in Valley		Grass Cut
Veld Foods	Relishes: Delele and Rotwe				Mokolwane, Marula, Motsentsela, Mongongo, Grewia								Veld Food
Household Maintenance											Building, Repairing, and Thatching		House Maintain
Diseases	Malaria and Flu												Diseases
Alcohol	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	Alcohol
Food Available						FFFFFF							Food
	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	
PROBLEMS													
1. Drinking	All Year Long												
2. Unable Work Together	All Year Long												
3. Rainfall (rainfall/wildlife tie for #3)								Very Dry					
3. Wildlife Crop Dmage					Especially Severe								
4. Insects/Quelea	During Growing Season					Especially Severe							

**Figure 5. Lesoma Historical Narrative**

*In the 1870s, Khama III left Serowe on a hunting expedition to the north of the country. Maruza, his chief tracker from Sowa in the Nata area joined him. After a long journey, the expedition passed through Lesoma to Kazungula where they made camp. When returning, Khama decided to make Lesoma a permanent hunting ground. He asked Maruza to take charge of the area.*

*By virtue of his appointment, Maruza became the headman over all groups living there. It is claimed that Mandakwe people, from today's Zambia were living there, working for white farmers of Portuguese origin. This seems to have been in the early 1900s. It is further claimed that the Mandakwe, resenting Maruza's rule, decided to migrate to Impalila Island, then in the Caprivi Strip.*

*A few years later, probably in the 1920s, Maruza, due to old age, appointed his nephew, Samkoena, to rule. Samkoena did not rule for long, as he was attacked and killed by a lion. His brother, Lesoma, succeeded him and ruled from 1927 to 1955. Tseleng Lesoma, son to Lesoma I, took over after his father's death and ruled until 1974 when he died. At that time, the rightful heirs were still*

*young and Kelesitse Samati, brother-in-law to Lesoma II, became headman. He ruled until 1986.*

*By the 1980s, new legislation concerning capabilities of chieftainships required literacy of headmen. Samati was made deputy headman and Amos Mkheswa, an Ndebele by origin, was appointed headman in 1986.*

*Lesoma, though small and hidden, has witnessed considerable interaction and many ethnic migrations of some of the major groups of the region. Notable among these are the Basarwa (San), Ndebele, Nanjwa, Lozi, and Basubia. Migrations included an Herero group in the early 1930s, and the Tongas in the late 1930s. The Baherero left for Tsienyane, and the Tongas to Kachikau. The Dube clan left Zimbabwe in 1959 and settled at Pandamatenga. Ten years later (1969) they settled at Lesoma. Being a literate group, they have had much influence in the settlement.*

*The village was one of the highly affected areas during the Rhodesia War in the 1970s. The tragic event was the killing of 15 BDF soldiers in 1977 by Rhodesian forces.*

out the day. It was not clear whether this was a large or small number, but it was mentioned several times in the discussions so it can be assumed that it is a visible concern for the community;

**wildlife devastation:** crop destruction by wildlife came up again in the seasonal calendar. First hand evidence observed during the transect; repeated mention during the seasonal calendar; and later commentary during ranking exercises underscored the severity of wildlife encroachments as a major concern for the

community. Some even said that they have had no crop for the last five years because of wildlife encroachments into their fields;

**rainfall:** variable rainfall resurfaced as a problem. The nature of the water problem was becoming clear to the PRA team. The borehole seemed to work well and provided a steady source of water for those in the village center. Outside of the village center there was very little water and the spring was mostly unusable due to wildlife devastation.

**Figure 6. Time Line, Lesoma Village, Chobe District**

1870s	Maruza named chief
1920s	Maruza handed over leadership to his nephew, Samkoena
1927	Samkoena died from a lion attack; leadership was passed to his brother, Lesoma. This was the formal naming of the area.
1927 - 1955	Lesoma I ruled.
1955 - 1974	Lesoma II
1969 - 1974	Dube family clears fields; population expands from 8 families.
1974 - 1986	Kelesitse Samati
Mid 1970s	War in Zimbabwe (then Rhodesia) forced the village to move from their fields into a cluster village
1977	Fifteen Botswana soldiers ambushed and killed at Lesoma by Rhodesian army.
1986	Amos Mkheswa is appointed headman.

For example, one group visited the spring and was impressed with the extent of the trampling from elephant and buffalo. Because the animals spent so much time at the spring, the smell of manure was reminiscent of a stable or cow barn. It was clear that villagers would not be able to retrieve much water from the spring.

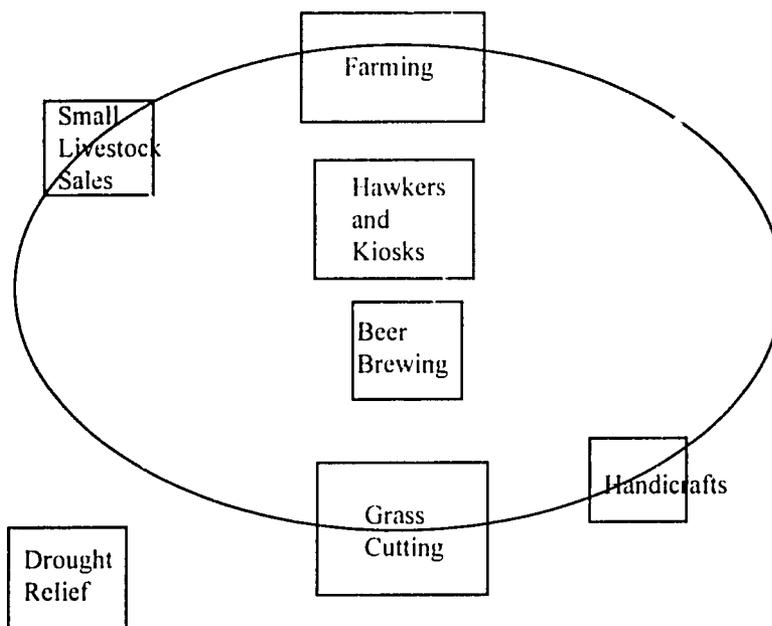
### **Time Line**

The PRA team collected comprehensive information about the history of Lesoma. This effort was based on the growing awareness of the importance of discrepancies in wealth and class in

Lesoma. Poverty seemed to fall along lines of length of residence. The long term residents, traditionally relying on hunting and gathering, were losing out to newcomers who had better access to cash income, formal education, job skills, and even capacities for political action.

One member of the PRA team spent five days working on the history and time line. He met with elders (one being the granddaughter of the founding headman) and other long term residents. He also gathered information from other knowledgeable people in the area as a means to check and verify what he learned from the community.

**Figure 7. Livelihoods Diagram**



Lessons coming from the historical investigation uncovered for the first time the intensity of the ethnic varieties in the community and ways in which these divisions influenced village action. During the seasonal calendar exercise, one of the problems identified was inability of the community to work together. This came through clearly in the historical assessment, especially in terms of splits between old line residents and newcomers.

### **Livelihood Mapping**

Another perspective on Lesoma is the people's understanding of their sources of livelihood. Two different groups, totalling about 25 residents, used

different size boxes to indicate large, medium, and small sources of livelihood for the community.

Figure 7 indicates the limits of the village. The diagram notes that livelihood sources such as drought relief come entirely from outside the village while beer brewing or kiosks are totally inside.

The livelihood chart notes that the groups define the principal sources of income for Lesoma as farming, hawkers/kiosks, and grass cutting (for thatch and occasional forage). Other items are considered of secondary importance. However, there were virtually no men present for this exercise so wage remittances, which surely con-

stitute an important livelihood for the village, are missing. The PRA team determined that this exercise did not provide fully useable information.

## Trends

Time was running short for the trend analysis, in part because the seasonal calendar, sketch map, and transect took a great deal of time and yielded good information. But it was also clear that the novelty of the data gathering was wearing off. At first, the PRA team overcame the community's demand for wages by showing how data gathering would yield interesting results. But we could not maintain persistent interest and involvement of women for all of the subsequent sessions. Our discussions indicated that many still felt futility at developing an action plan as many noted there would be no interest from external sources to build partnerships. Even so, we had cultivated a loyal core of about 20 women, most of whom came from among long term family residents. While their choice of topics to consider for trends was limited, it was indeed revealing. Normally, in assessing trends, community groups will pick 8 or 10 themes to analyse. Often selected are wage income, education, literacy, health, deforestation, soil erosion, livestock diseases, food prices, education, or rainfall.

In the case of Lesoma, groups selected only three themes -- harvests, population, and grass cutting. Reading between the lines, there is much to learn about Lesoma from these choices. Grass cutting has become an excellent source of off-farm income for women. The chart notes that less grass has been available since the late 1980s -- a trend that the women lament. A similar trend is apparent for crop harvests, also a theme that affects women.

And the village groups noted the increase of population, largely from Kasane migrations, as opposed to natural increase. Lesoma's women are indeed concerned about these trends.

## Institutions

The sessions to gather data on institutions yielded more interest than the trend lines. There is no quick or simple explanation other than it may have been the day of the week or the cycle of household duties carried out that particular time. The discussions on village institutions took two forms.

The first was to make a list of all institutions in the community and comment on their history, leadership, management capacity, achievements, and institutional needs. A sample of responses for two groups (Village Development Committee and Lesoma Clinic) appear as Figure 9. Full statements are available from the authors for all 15 of Lesoma's village institutions.

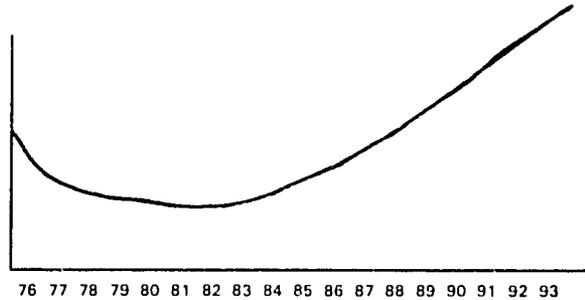
The total list of institutions included:

- 4 B (Primary School Youth Clubs)
- Boy Scouts
- Crime Prevention Committee
- Farmers' Committee
- Kgotla
- Land Board
- Lesoma Clinic
- Non-formal Education
- Omang (identify cards)
- PTA (Parent Teacher Association)
- S and CD (Social and Community Development)
- St. John's Church
- VDC (Village Development Committee)
- Veterinary Department
- Wildlife Committee

**Figure 8. Trend Lines**

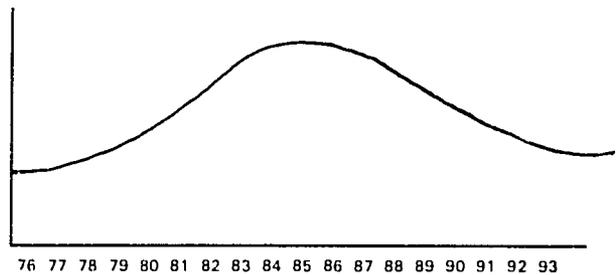
**Population**

1977-79 Decline due to Zimbabwe Civil War  
 1981 Poulation rise due to in-migration of newcomers, mostly from Kasane and Kazungula



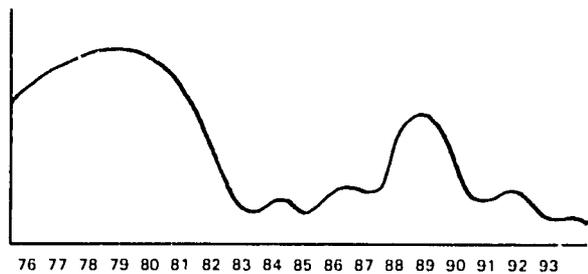
**Grass Cutting**

1985-88 Enough grass as rains good  
 1989-90 Less grass due to less rain-fall and animal distribution; some grass cut at area 256 as supplement



**Crop Harvest**

1978 Good rains, no wild animal problem  
 1979 Bad rains  
 1980 Less rain again  
 1981-82 Moved to new site: drought  
 1983 Some rain  
 1984-85 Slightly improving rain  
 1986 Continued improvement in rain  
 1987 Drought  
 1988 Very good rains  
 1989 Border fence collapse causing animal problems  
 1990-93 Increasing problems of elephants and buffalo



Botswana PRA Training  
June, 1993

Lesoma Village, Chobe District, Botswana

INSTITUTIONAL INFORMATION INVENTORY

Institution: Village Development Committee (VDC)

History and Objectives	Leadership and Management	Management Capacity	Achievements	Institutional Needs
<p>Started in 1973; responsible for initiating community development;</p> <p>The first chairman was Mr. Kayoka who served for two years during the time of tension along the Zimbabwe border; the second chairperson was Mrs. Dube who served for a short period of time and then resigned due to personal reasons;</p>	<p>Consists of knowledgeable people from the village;</p> <p>The elections are held at the Kgotla for two year terms; outgoing members and office bearers can stand for re-election;</p> <p>Current officers include:</p> <p>Chairman Vice Chairman Treasurer Secretary Vice Secretary Three additional members</p> <p>Committee members are elected on the basis of their interest and overall participation in village development;</p>	<p>At present, members are paid for a required number of meetings each year; each member receives P12.00 per meeting, the Chairperson P16.00;</p> <p>All members are semi-literate and most live in Kasane;</p> <p>Although most of the VDC projects have been achieved, poor attitudes prevail toward unbudgeted meetings;</p> <p>The VDC has good linkages with almost all the other institutions in the village and plays a central role in village affairs and development;</p>	<p>School; Clinic; Village administrative office; VDC houses for extension workers; Water distribution system;</p> <p>Committee earns money through activities such as renting out the VDC houses;</p> <p>At present, the accrued budget is about P2,000.00;</p>	<p>Need funds to carry out village development;</p> <p>Training of members so as to understand function and importance of the VDC;</p> <p>Informed training on how to carry out mini-projects that can generate more income;</p>

Figure 9. Institutional Information Inventory

Botswana PRA Training  
June, 1993

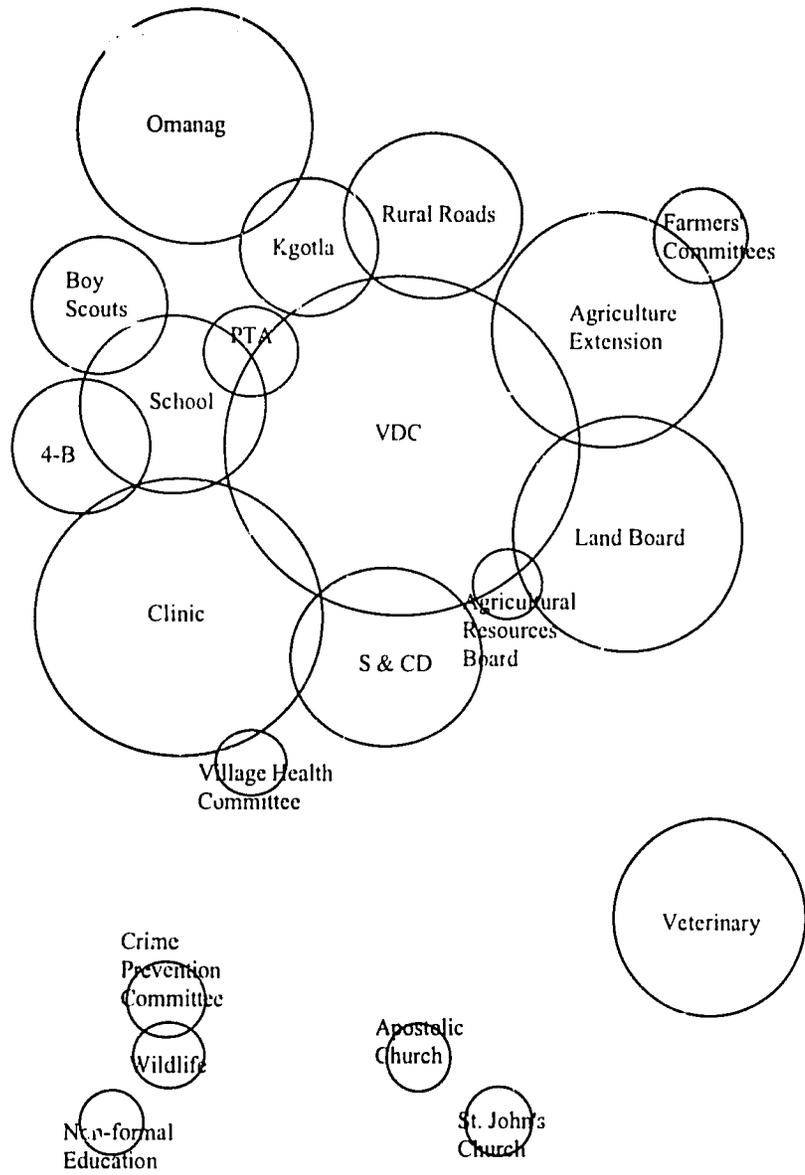
Lesoma Village, Chobe District, Botswana

INSTITUTIONAL INFORMATION INVENTORY

Institution: Lesoma Clinic

History and Objectives	Leadership and Management	Management Capacity	Achievements	Institutional Needs
<p>Established in 1983 with a visiting nurse; a FWE was also based at Lesoma at that time but has since resigned;</p> <p>First enrolled nurse posted in 1988 and assisted by a family welfare educator;</p> <p>Structure built of cement and brick with zinc roof;</p> <p><u>Objectives</u></p> <p>to render health and medical services;</p> <p>to give advice to community on personal hygiene and cleanliness;</p>	<p>The Enrolled Nurse oversees the clinic, assisted by the General Duty Assistant and the TSP;</p> <p>The Nurse renders services such as:</p> <p>.. weighing children and giving out rations;</p> <p>.. general consultation of patients;</p> <p>.. giving advice on personal hygiene to expectant mothers;</p> <p>.. administering injections and prescriptions to patients;</p>	<p>Fair record keeping;</p> <p>Doctor visits once a month from Kasane;</p> <p>Midwife visits twice a month;</p> <p>Eye clinic visits twice a month;</p> <p>Psychiatry team visits once a month;</p> <p>Special Services Unit visits twice a month for help to retarded and mentally ill;</p>	<p>Underweight children utilizing feeding scheme and only 2 severe cases of malnutrition in village;</p> <p>TB patients come for treatment;</p> <p>Though family planning is underutilized, young people are beginning to participate;</p> <p>Baby clinic for children under 5 well used;</p> <p>Antenatal and postnatal clinics well attended;</p> <p>Child mortality rate low and no reported AIDS cases;</p>	<p>Communication, such as a telephone or radio communication system;</p> <p>Transport to take patients to Kasane;</p> <p>Need to replace FWE to make home visits;</p> <p>Village Health Committee not functioning as it should so village not guiding clinic to meet local needs</p>

Figure 10. Institutional Relationships



The second portion of the institutional exercise yielded very helpful information. It reinforced some of the earlier feelings and impressions that were beginning to emerge.

Three groups were asked to rank Lesoma's institutions in order of most to least important. The PRA team cut paper into circles of varying sizes, from large to small. The assignment was to write the names of village institutions on the circles, with the most important on large circles and the least important on small ones. Then village residents arranged the circles in relationship to how groups cooperated in Lesoma

The result is revealing as it shows the VDC to be central to the community's well-being. Important satellites to the VDC included the Land Board, Agricultural Extension, the clinic, the school, and indirectly through the semi-important Kgotla, the Omang. Several small groups located at the bottom of the chart show how they are of small importance and isolated from the main community.

Perhaps the most interesting was the displacement of the Kgotla by the VDC as the most important village group. Before the government-initiated VDC, the Kgotla or public meeting was the principal governing body for the village. That the Kgotla has slipped in importance suggests how the community presently values institutions. Several members of the VDC do not live in the community

suggesting even more the degree to which Lesoma looks to the outside for development assistance rather than to internal groups and associations.

If the PRA in Lesoma is to have longer term and sustainable impact in solving problems, it will be mandatory for the village to place responsibility on internal institutions. This can be done in one of three ways:

- restore responsibility to internal groups already established, such as the Kgotla;
- make groups now external to the community such as the VDC more internally accountable;
- create new community units that will be accountable to the community and be responsible for initiating PRA actions.

Short of regaining the institutional base within Lesoma and building a stronger sense of ownership and identity, it would appear that Lesoma will continue as a moderately passive and indifferent community with little likelihood of its learning how to solve its own problems.

Following the data collection, the PRA team spent a day away from the village. The purpose was to compile all of the data in a structured and organised format, yet without any ranking or setting of priorities.

# V. Data Analysis

The first step was to complete sketches and diagrams for data already collected. This involved putting the sketch map, transect, and other PRA information on large pieces (one square meter) of sturdy paper. These were displayed for the community to examine.

The second step was to prepare a chart, on large paper and in Setswana, of all Lesoma's problems, causes, coping strategies, and possible solutions to resolve these problems. In some cases, the solutions came from the community data gathering. In other cases, PRA team members knowledgeable in specific sectors inserted suggestions of their own. The final product appears as Figure 11. The purpose of this chart was to return to the community the record of what they had provided, but organised in a systematic way to elicit discussion about the accuracy of the information as well as begin ranking problems and opportunities. The ranking is essential to develop a plan of action that much of the community will endorse and act upon.

The listing of problems and opportunities is the result of the data analysis. Some suggested that it

would be good to include community leaders in this portion of the process. Had the Lesoma PRA not included a large training element for the Department of Wildlife and National Parks, it would have been possible. Given that the group was under some time pressure, it was more convenient to do the organising independently of the community, especially since it involved no weighting or ranking of information.

Once the charts were completed, the team was ready to go back to Lesoma for the ranking sessions. The chart of Problems and Opportunities appears as Figure 11. However, one new development is worthy of comment -- use of village video -- as described on page 32.

Figure 11 identifies 18 problems that the PRA exercises found in Lesoma. All cannot be dealt with equally, nor are they even similar types of problems. Therefore, it is necessary to find ways for the community to consider which of these dilemmas is most severe and which demand the most urgent and immediate attention.

Lesoma Village Problems and Opportunities  
Botswana PRA Training Workshop  
June, 1993  
Lesoma Village, Chobe District, Botswana

<b>Problems</b>	<b>Causes</b>	<b>Present Coping Strategies</b>	<b>New Opportunities</b>
Poor Crop Yields	<ul style="list-style-type: none"> <li>.. low rainfall</li> <li>.. crop damage from wildlife</li> <li>.. pests</li> </ul>	<ul style="list-style-type: none"> <li>.. taking advantage of early rains</li> <li>.. seeking assistance from wildlife officials</li> <li>.. scaring animals such as beating drums</li> <li>.. early harvesting</li> <li>.. applying pesticides</li> </ul>	<ul style="list-style-type: none"> <li>.. planting drought resistant crops</li> <li>.. plant short season variety crops</li> <li>.. fencing of fields (electric where possible)</li> <li>.. agro-forestry in compounds</li> </ul>
Weak Institutions	<ul style="list-style-type: none"> <li>.. ineffective village extension teams</li> <li>.. poor institutional coordination</li> <li>.. lack of incentives for community members</li> <li>.. lack of understanding roles of institutions on part of members</li> </ul>	<ul style="list-style-type: none"> <li>.. continuing efforts to convene meetings and get institutions to function</li> <li>.. electing villagers to various committees</li> </ul>	<ul style="list-style-type: none"> <li>.. organize village extension teams with workshops</li> <li>.. organize VDC workshops</li> <li>.. training workshops for farmer committees</li> <li>.. provide incentives for institutional members</li> <li>.. post extension workers to the village</li> </ul>
Soil Erosion	<ul style="list-style-type: none"> <li>.. steep slopes</li> <li>.. overgrazing</li> <li>.. deforestation</li> <li>.. heavy rains</li> </ul>	<ul style="list-style-type: none"> <li>.. avoid allocation of heavily eroded areas</li> </ul>	<ul style="list-style-type: none"> <li>.. gully reclamation</li> <li>.. tree planting</li> <li>.. reduce livestock numbers</li> <li>.. move livestock to other grazing areas</li> <li>.. avoid tree cutting in the village</li> <li>.. redirect road drainage system</li> </ul>

Figure 11. Lesoma Village Problems and Opportunities

<b>Problems</b>	<b>Causes</b>	<b>Present Coping Strategies</b>	<b>New Opportunities</b>
<b>Crime</b>	<ul style="list-style-type: none"> <li>.. influx of people from different areas</li> <li>.. proximity to border</li> <li>.. proximity to rich wildlife resources</li> <li>.. lack of employment opportunities</li> <li>.. poaching</li> </ul>	<ul style="list-style-type: none"> <li>.. recent introduction of crime prevention committee</li> <li>.. active involvement of Omang officials</li> <li>.. responsible committee members responsible in crime watch</li> </ul>	<ul style="list-style-type: none"> <li>.. strengthen crime prevention committee</li> </ul>
<b>Poor Sanitation</b>	<ul style="list-style-type: none"> <li>.. few pit latrines</li> <li>.. littering</li> <li>.. high population growth</li> <li>.. lack of education in sanitation</li> </ul>	<ul style="list-style-type: none"> <li>.. drought relief anti-liter project</li> <li>.. some toilets appearing</li> <li>.. use bushes</li> </ul>	<ul style="list-style-type: none"> <li>.. strengthen village health committee</li> <li>.. organise workshops for villagers</li> <li>.. construct public toilets</li> <li>.. organize regular village or ward sanitation campaigns</li> </ul>
<b>Poor Transport</b>	<ul style="list-style-type: none"> <li>.. poor roads</li> <li>.. low traffic volume</li> <li>.. isolated settlement</li> </ul>	<ul style="list-style-type: none"> <li>.. hitch-hiking</li> <li>.. rely on government vehicles</li> <li>.. rely on few private vehicles for emergencies such as health needs</li> </ul>	<ul style="list-style-type: none"> <li>.. construct all weather roads</li> <li>.. introduce public transport</li> <li>.. provide public, eg clinic or kgotla with own transport</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>.. small storage tank and few stand pipes</li> </ul>	<ul style="list-style-type: none"> <li>.. expand storage and distribution</li> </ul>	<ul style="list-style-type: none"> <li>.. underground water catchment and rooftop catchment</li> </ul>
<b>Population Growth</b>	<ul style="list-style-type: none"> <li>.. in-migration</li> <li>.. little family planning</li> </ul>	<ul style="list-style-type: none"> <li>.. increase family planning</li> </ul>	<ul style="list-style-type: none"> <li>.. programs in family planning and village-wide development action</li> </ul>

<b>Problems</b>	<b>Causes</b>	<b>Present Coping Strategies</b>	<b>New Opportunities</b>
Unemployment	.. little economic activity in community	.. drought relief .. remittances	.. multipurpose coop stores .. ecotourism .. agroforestry .. labor intensive public works .. small scale industries such as vegetable gardens, poultry, honey, handcrafts
Drinking	.. idleness		.. income generation action .. strengthening churches
Lack of Cooperation	.. divisive ethnic groups .. weak institutions	.. rely on extended families	.. elect ward leaders .. build on base of extended families
Wildlife Menace	.. increase in game numbers .. settlement and residential patterns	.. scaring animals with guns and noise makers .. discussions about fencing	.. reopen hunting .. electric fencing .. village patrols .. comprehensive wildlife management plan .. live at fields during growing season
Poverty	.. old age .. unemployment .. idleness .. alcohol .. limited land access	.. extended family help .. program for destitutes .. drought relief	.. income generating activities .. active organizing and work at ward level
Overgrazing	.. insufficient land .. keeping animals close to village because of predators	.. labor intensive herding	.. access to forest for grazing, with zones and rotation established and enforced

<b>Problems</b>	<b>Causes</b>	<b>Present Coping Strategies</b>	<b>Opportunities</b>
Lack of Communication	.. poor equipment	.. use of private facilities	.. obtain equipment
Land Use Conflicts	.. lack of land due to location within a forest reserve	.. fence fields .. transfer livestock to borehole #3	.. organize part of forest reserve .. zoning and zoning management such as herding, drift fences, culling, creating cattle posts .. village development plan
Illiteracy	.. adults had little chance to go to school	.. adult education	.. new programs in reading and writing
Diseases	.. mosquitos .. poor health	.. household spraying and family hygiene	.. improved community health .. mosquito nets .. remove stagnant water .. burn animal dung to keep mosquitos away .. expanded health facilities at clinic

### Video Shows of Lesoma PRA Exercises

*Community interest and energy for the PRA had been sagging, from about the fourth day. While a loyal core of women was deeply involved, their number had shrunk to 20.*

*On the 7th day, while the data analysis was underway, the two PRA trainers spent an evening in the village showing an hour and a half video. It was based on scenes taken in Lesoma over the previous week, including the sketch map, transect, discussions, and household interviews. It included perhaps 100 people from the village in different scenes, doing different things.*

*For the evening show, about 40 showed up to "see themselves in action." Comment and response about the video was energetic.*

*The next morning, when the full PRA team returned for the next session, several villag-*

*ers asked if the video could be shown again. We returned that night. For this presentation, over 300 (we counted as people watched the film) were present. The event of 300 people coming in a community of 250 suggests the strength of the many PRA techniques for community mobilization. As the video continued, there were many comments and anecdotes flowing from the audience, many of which elicited great laughter and counter-comment. It was clear that the video was a great social event for the village.*

*The following day, for the continued ranking exercises, at least 80 adults were present. This represented about 2/3 of the adult population of Lesoma and indicated that the video had accentuated and dramatized the topic of PRA.*

# VI. Ranking Problems

*The PRA Handbook*<sup>2</sup> describes several ranking techniques, including voting, pair wise ranking, and other means to get community consensus on priorities. Lesoma and the PRA team decided that pair wise ranking would be the best means for the village. Through a series of discussions, presentations, and votes on paired choices, the PRA team led a reinvigorated community -- about 60 people were present or half of the adult population -- through the ranking exercises.

The high priority topics which the community selected were wildlife encroachment and agricultural production (the two were linked together), land access, health, and water, in that order. There was considerable discussion over whether alcohol was a problem, with a decision that it was not a

“problem” but a “situation” that could be dealt with through existing community channels.

There was also extended commentary as to whether one of the major problems was the capacity of Lesoma’s community institutions. The group decided that the institutions would become stronger as a result of implementing solutions to other problems. So institutional problems did not make the final list of priority needs.

The discussion was extended and vigorous. It went on longer than some people wanted and there were times when the discussion was not always pointed toward the topics at hand. Overall it was felt that this had been a positive and important task. The PRA momentum was beginning to spread.

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<sup>2</sup>See *PRA Handbook* sections on Ranking; *ibid*.

## VII. Ranking Opportunities

Once the high priority problems were identified, a more detailed and intense series of discussions ensued. The PRA team made new charts -- in Setswana -- designed to link all priority problems to clusters of possible solutions. To construct these charts, the team referred to the data presented in Figure 11, Problems and Opportunities. Options for the four problem areas were reconsidered and detailed technical considerations discussed. New thoughts were added on possible solutions that the community might wish to consider.

At this point, in a normal PRA, technical specialists would be called upon to review the technical soundness and practicality of the proposed options. However, because the Lesoma example was a training exercise, we determined to hold off with technical assessments until after the plan and the initial priority solutions were selected. For those using this case study as a guideline to carry out additional PRAs, bear in mind the fundamental need for technical analysis of the possible options.

As time was pressing on the group, we determined to rank as many of the opportunities as time

permitted, starting with the highest priority (wildlife encroachment/agricultural production) and working down the list. Several methods of ranking were considered, including the Options Assessment Chart that appears in the PRA Handbook, relying on the criteria of sustainability, productivity, stability, and equitability to measure desirability of different solutions.

The PRA team and the community felt that they should stay with the pair wise ranking. It had worked well to develop the list of priority problems; the people felt familiar with it; the PRA team was comfortable with the linked system of ranking; and we were confident we could cover several topics using the already familiar technique.

When the PRA team arrived in the village, equipped with the ranking charts and related diagrams, it became clear that this would be a productive session. By the time the ranking began, there were close to 60 people present, including many men. The drought relief projects for brick making and road construction had agreed to suspend work while the men attended the ranking sessions. The loyal core of women had brought more of their

friends. And the professionals from the village including the school headmistress, nurse, village policeman, and village court representatives were all present.

The discussions for wildlife management, as noted in Figure 12, considered options of opening up wildlife hunting, an electric fence, village-based wildlife patrols, and improved wildlife management (such as DWNP culling animals and providing improved support services for wildlife management). Discussion revealed that at least two village residents owned fire arms that could be used for hunting; that the people were prepared to do some of the work to construct a fence; that

villagers could act as guides for outsiders who might wish to pay a price for a trophy hunting; and young people in the village would volunteer to serve on wildlife patrols.

Similar discussions followed for the ranking of land and health. Time did not permit opportunity to rank the villager's desires on water. However, many felt that the pressure for placing water on the priority list came from a small group that had recently located compounds in a new area of the village not served by the original standpipes. There seemed to be little objection to postponing the ranking exercises for water.

**Figure 12. Ranking Opportunities**

**Priorities for Wildlife Encroachment Solutions**

	Hunting A	Electric Fences B	Village based Wildlife Patrols C	Improved Wildlife Mgt D	Totals
Hunting A		A	A	A	A = 3
Electric Fence B			B	B	B = 2
Village Based Wildlife Patrols C				C	C = 1
Improved Wildlife Mgmt. D					D = 0

Ranking Opportunities (cont)

Priorities for Health Solutions - Malaria

	Use of Animal Dung A	Net B	Remove Stagnant Water C	Use Clinic for Treatment D
Use of Animal Dung A		B	C	D
Net B			B	D
Remove Stagnant Water C				D
Use Clinic for Treatment D				

Totals  
 A = 0  
 B = 2  
 C = 1  
 D = 3

Priorities for Land use Conflict Solutions

	Expanded Land Area A	Land Zoning B	Organize Land Use and Plan C
Expanded Land Area A		A	A
Land Zoning B			C
Organize Land Use and Plan C			

Totals  
 A = 2  
 B = 0  
 C = 1

# VIII. Community Action Plan (CAP)

The final step in the PRA process is to finalise a Community Action Plan (CAP) which spells out the steps for implementing the priority solutions. Because the community placed its highest priority on the wildlife problem, the team created a CAP for only the wildlife menace.

The document is attached as Figure 13. It is based on a partnership between Lesoma, as represented by the VDC, and the PRA follow-up team, to consist of one representative each from: (1) a locally-based NGO (Forum on Sustainable Agriculture), (2) the DWNP, and (3) the NRM project.

The consensus among the PRA training group was that there were a number of concrete steps that both the community and the follow-up team could take to lead to action. These actions are spelled out in column 2 (Figure 13) marked, "Action/Materials." Further, there are clear definitions of who will be responsible for taking action.

But it must be stressed that Lesoma is a community with a tradition, at least in recent years, of asking government to solve their problems and satisfy their needs. The PRA offers a fundamentally different approach, one that will lead to much

greater ownership on the part of community institutions as well as satisfaction when some of the tasks are achieved.

Several questions remain such as whether the VDC is the most appropriate group to take the lead for the community; whether the follow-up team, with the DWNP as the prime liaison to the District Extension Team, is the most effective institutional mechanism; and whether the role of only one NGO is sufficient to respond to the broad range of needs that Lesoma identified in its data gathering, analysis, and ranking.

What is clear is that community leaders and residents expressed resolve and priority for locally-generated action at the final two ranking sessions. The PRA team felt that if momentum could be maintained, at least some of the items of the first priority list could be confronted, and perhaps even resolved.

Further, the team felt that the PRA methodology held sufficient promise, with appropriate adaptation, to meet local cultural, economic, ecological, and political needs, as well as achieve Botswana's rural development goals.

Lesoma Community Action Plan  
Botswana PRA Training Workshop  
June, 1993  
Lesoma Village, Chobe District, Botswana

Priority One: Wildlife Menace

Opportunity	Action/Materials	Who Will Do It	Timing
Hunting	Seek technical and legal information on what is required to make hunting legal, including what hunting or game action may now be legal that community does not know about;	Village Development Committee (VDC), through the office of the District Commissioner to contact Department of Wildlife and National Parks (DWNP) and request advice;	Contact for initial consultation and meeting can take place immediately;
Electric Fence	Determine how much has already been learned about extent and cost of fence;	VDC	This is on-going activity already started in Lesoma though it seems to have slowed down because of lack of funds;
	As needed, contact DWNP through local game warden to get advice on location and cost of fencing;	VDC	
Village-Based Wildlife Patrols	Determine legal status of local community-based patrols;	VDC	Consultation can begin immediately;
	Organize volunteers within community;	Volunteers to come from community and to receive training, as needed;	

Figure 13. Lesoma Community Action Plan

Improved Wildlife Management

Open conversations with DWNP about wildlife and livestock management inside the community and, as possible, a plan for external management to consider options such as new bore hole, diversion fence, culling, and patrols

VDC

Consultation can begin immediately.

Note: This is the first priority problem for Lesoma. The next four (land conflict, human disease, communication and transport, and water) will be incorporated into this CAP by Lesoma-PRA follow-up team.

# IX. Lessons Learned

## **1. PRA stimulated good participation and constructive planning among Lesoma residents**

Lesoma, like many rural communities in Africa, has many problems. Most severe in the minds of the people are encroachments of large game. Discussions and proposals over the last few years have produced no concrete action because the community is not united, sufficient funds are not available, and the community leadership has been unable to solve either of these problems.

The information base which PRA developed for Lesoma in three days of data gathering provides insight into how the community sees its problems as well as how it ranks solutions. For example, the PRA team agreed that the greatest need for Lesoma was to focus explicitly on institutional needs. The ranking sessions in the village suggested that residents wanted to take concrete action first and develop an institutional plan later. The PRA process abides by community priorities and as a result has established the CAP with the wildlife menace as the first priority.

Listening to the community, guiding group discussions, easing conflict between and among elements of the community, and building partnerships between the DWNP and the people have set a new tone in Lesoma. While the two week experience of PRA has not solved any problems, it has forged a new spirit of cooperation and established a concrete plan that can.

At the concluding session in which opportunities for action were identified, 60 village representatives were present from 9:30 am to noon (out of a total adult population of about 125). People stayed home from work and rearranged their household schedules to attend. This percentage and intensity of participation suggests the degree to which PRA has stimulated Lesoma to take action.

## **2. Local adaptations of PRA to Botswana priorities and needs have begun**

PRA is not a universal methodology. It must be adapted to local cultural, ecological, institutional, and economic circumstances. This adaptation

can only be done in the field, through collaboration among those who know the local circumstances and those who are familiar with PRA.

This process has begun in Botswana. In the case of Lesoma, new ways to focus indirectly on institutional needs became a prominent part of the exercise. Modification of the ranking procedure helped to meet particular needs of communication. Use of portable, battery-powered video presentations in the evening established rapport and trust. Presence of DWNP staff in the community to listen to community priorities opened new lines of exchange and learning.

The Lesoma PRA has established several entry points for DWNP, NGOs, and existing extension staff to begin negotiations with community groups concerning contributions that "inside" and "outside" groups can make.

Finally a core staff of DWNP, NGO, and extension staff now have a good exposure to the process and have been able to see, first hand, how PRA works in the field. While those in the training course are not yet expert in PRA, they have learned several PRA techniques.

### **3. Lesoma is prepared to take action and be a partner in the implementation**

The primary purpose of the training course was to acquaint the 23 course participants with PRA. Yet we were also able to develop the first step of Lesoma's CAP, in this case, focussing on the wildlife menace.

Several of the solutions proposed involved community residents volunteering time and re-

sources in support of the plan. One part of the plan is to develop village wildlife patrols which would be organised through community institutions. Another is to begin the process of developing a wildlife management plan. Still another is to consider what contributions community groups can make to fencing.

While the PRA demonstrated that Lesoma was dispirited, it also found that there were many residents who were knowledgeable about their situation and full of ideas about how to deal with the problems. While some of the early PRA exercises in Lesoma suffered because of indifference -- even suspicion -- by the end of the second week, there were cordial, trusting, and productive relationships between the PRA team and the community.

### **4. Technical assistance and external follow-up still required**

PRA has not solved Lesoma's problems. Nor does the PRA process suggest that the community is now ready to solve its own problems. Instead, PRA has opened a window for negotiations and discussions.

Follow-up and sound technical advice are essential. For example, the CAP focusses on possibilities of selected culling and reopening of hunting. Such steps require feasibility assessments and analysis by DWNP. They also require full cooperation with community institutions.

The community also has aspirations that do not relate directly to wildlife, including issues such as land use conflict, health, and employment. The PRA can help to integrate the different sectors and elements of the community's needs into a single

plan in which NGO and government, donors and projects, and several sector-based ministries can respond to issues that the community has identified.

#### **5. PRA action plan delineates levels and nature of these duties**

Figure 13 contains the first portion of what will eventually become a CAP for Lesoma. A small follow-up committee including an NGO, an NRM project member of staff, and a member of the District Extension Team will coordinate the work. That these three have entered into a working alliance with the community, with established steps for each member to take, will be the first test of commitment on the part of both “inside” and “outside” players.

There are two pieces to the follow-up. The first is to complete the CAP. In addition to the plan for wildlife, the village had identified land use, human diseases, water, and transport/communication as their chief priorities. An additional dozen problems were secondary needs. Time during the formal training permitted only one piece of the CAP - wildlife - to be completed. The follow-up team will work with Lesoma to finish the plan.

Second, initiatives with the wildlife problem can begin immediately. Yet Lesoma will require legal, technical, procedural, and policy guidance from the follow-up team to carry out the process. With a road map to guide both team and community, there are now clearly established and jointly determined directions to take, as noted in the CAP.

#### **6. Unique elements in PRA seemed to work effectively in Lesoma**

The PRA team found Lesoma dispirited. Initial meetings were not well attended nor was participation by those who did come energetic. The PRA data gathering techniques worked extremely well, over the course of two weeks, to draw out the group.

The village sketch map was an excellent opener. Several of the Lesoma women joined vigorously in the exercise and felt accomplishment at the conclusion. The transect was a good means for the team to become familiar with Lesoma and for the people to learn about the team. The seasonal calendar worked well as did the interviews with elders to learn of the history of the community. Given the multiplicity of ethnic groups in Lesoma, the historical sections proved to be invaluable in shaping strategies and establishing a working plan.

The team used more farm interviews than are normally conducted in a PRA. The interviews again accentuated the visibility of the team, noted their interest in listening, and stressed that the purpose of the PRA was not to extract data but, instead, to develop a community based action plan.

One of the surprise activities was use of battery powered video. During the course of the data gathering exercises, a 90 minute video tape was developed. On two different evenings, team members used a small battery operated video projector to show the villagers their own PRA. On the first night, about 40 attended which the team thought was quite good. On the second evening -

- repeated by popular demand -- upwards of 300 attended including most of the village's 110 primary school pupils as well as over 100 adults.

The video presentation cemented the concept that PRA was a two way street -- that it listened and fed back, that it helped the community to see itself in a new way, and that the purpose of the exercise was to establish a data base for the community that village institutions could use.

Lesoma's PRA exercise is a first step. The

lessons learned suggest many potential uses in Botswana, though additional adaptation will be necessary. Further, if PRA is to become a sustainable methodology in Botswana, one or more national institutions needs to assume responsibility for training, publication of handbooks and case studies, and field research on new applications of the approach. Finally, additional research is needed to investigate themes not covered in the current PRA literature such as scaling up, dealing with community stratification, monitoring and evaluation, and implementation.

# X. Epilogue

Lesoma's beginning is substantial. Feedback from course participants, local administrative officers, village leaders and residents, and NGO officers suggests that there are many PRA elements that speak directly to local needs.

The wildlife menace offers a good example. The problem is larger than any single group can solve. If the DWNP acts alone, the cost of restricting elephants and buffalo will be enormous and would not be justifiable on economic grounds. On the other hand, if the community acts alone, there is little hope that they could install a fence or other apparatus strong enough to withstand wildlife pressures. Prior to the PRA exercise, there had been little collaboration between any of the involved parties about how, whether, where, and when some form of protection might be adopted.

PRA has brought the groups together. While the Lesoma PRA has not solved wildlife encroachment, it has put a plan in place; brought the principal institutions into communication with one another; set a series of goals that are within reach of the many partners; and created a stage upon which negotiations among equals can be carried out.

PRA has demonstrated that the primary problem of Lesoma is not necessarily wildlife encroachment. Rather, it is a deeply seated cluster of concerns that relate to political isolation, ethnic competition, distrust among new and old elements of the community, skepticism about the ability of external development groups to help, and need for stronger institutional capacities within the village. Resolution of these issues and strengthening of local capacities lies within the grasp of Lesoma.

The PRA experience suggests that the most effective way to strengthen institutions is to focus on problems the people identify, form alliances among interested organizations, and negotiate responses. These solutions require sound economic, technical, social, and ecological data and skills; protracted discussions among all of the interested parties; and need both internal and external resources. PRA, by itself, will solve none of these issues. However, the collaboration and integration of institutions, information, resources, technical experience, and local ownership that PRA creates can lead to both conservation and development. It has worked effectively in other parts of Africa. The opportunity now exists for Botswana as well.

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