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AGRICULTURAL SECTOR ANALYSIS
FOR LESOTHO

Report of the Livestock and Range Management Specialist
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CONCLUSION

The Range Management Area/Grazing Association complex has proven to be a worthwhile vehicle for the sustainable development of natural resources under African peasant herding conditions. It is succeeding in its environmental goals and has the support of the GOL and the local elite. It is also a democratizing force for rural Lesotho. The membership in each RMA is broad and has received substantial immediate economic benefits from preferential grazing rights.

The RMA/GA complex is succeeding in allowing livestock producers to gain a sense of management control and ownership of their resources. But, Lesotho is a country without common-law property ownership rights. There is an urgent need to identify a legal basis for retaining the current usage rights that have been granted to the RMA/GAs. An institutional home for the adjudication process should be identified.

The economic benefits of the RMA/GAs are growing slowly but are not yet sufficient to stimulate a cohesive sense of purpose among the membership. The existence of the four LAPIS-supported RMA/GAs has not resulted in a call for similar development by other producers. The development of RMA/GAs will therefore continue to be top-down development activities needing strong external leadership, government participation and patience.

RMA/GA development could be extended if the expensive technology-dominant model is modified. A reduction in cost per RMA/GA would make it feasible to add three to four over the next five-year period. Lowering costs means transferring more responsibility for implementing development into the hands of the producers themselves. The means to achieve this are to reduce reliance on expatriate technical assistance, curtail overseas degree training, and develop a strong in-country training program. The attainment of self-sustainability could be significantly accelerated by engaging a grassroots-oriented NGO/PVO with experience in African livestock development.

In the future as more RMA/GAs are organized and the present ones mature, a vehicle should be identified for giving the membership a voice at the national level. A nongovernmental producers association with broad appeal and membership potential would help the RMA/GAs progress after the subsidized development phase is over.

USAID should continue to strongly support the development of RMA/GAs in Lesotho. Alternative activities, such as intensive production or marketing, would divert resources away from the priority objective of sustainable natural resources development.

RECOMMENDATIONS

1) USAID should commission a study on adjudication to determine the required skills and their availability in Lesotho, how to consolidate the adjudication process in GOL institutions, and what mechanisms are available to protect property rights, including the applicability of long-term leaseholds under the Land Act.

2) Usage fees of the Grazing Associations should be adjusted in proportion to the size of each household's grazing herd so they are no longer regressive.

3) The vital role of the MOA Range Management Section in RMA and Grazing Association development should be continued through the RMA managers.

4) USAID should reduce its support of the institution building program for the Range Management Section, including participant training.

5) The MOA Livestock Division should accelerate its in-country training program to: a) civil service field workers from all disciplines represented in the Division, and b) members of the Grazing Associations, their executive committees and officers.

6) The Range Management Section should develop and implement a training plan to upgrade existing cadre to take over technical responsibilities from the expatriate staff.

7) Construction of the national training center at Sehlabathebe should go forward as soon as possible. The project should inquire into the possibility of establishing an international training program with a partner school.

8) Training to Grazing Association members should be more participatory and include the herders' own knowledge of the subject matter.

9) USAID should seek the assistance of an international NGO/PVO to help the Range Management Section with its efforts to make the RMA/GAs self-sustaining.

10) In due course, with the addition of three to four more RMA/GAs and increased maturity of the existing ones, USAID should examine the potential for a nongovernmental organization that would give producers a voice at the national level.

11) While the MOA is pressing forward with privatization and the reorganization of the Livestock Products Marketing Service,

USAID should hold off on demands that would increase the economic burden on producers.

12) USAID should refrain from putting resources into the strategy of intensification of animal production to curtail transhumance.

INTRODUCTION

Background

The livestock and range management consultant carried out his portion of the Lesotho agricultural sector analysis for USAID between February 23 and March 20, 1990. The scope of work was limited to certain questions that USAID wished to have clarified before it prepared a Project Identification Document (PID) for a follow-on activity to the Lesotho Agricultural Production and Institutional Support (LAPIS) project that will be phased out during 1990 and 1991. At the outset, the following scope of work was agreed upon by USAID, the contractor's representative and the consultant.

1) Review the relevant literature in Lesotho and interview and work closely with resident livestock and range management specialists.

2) Examine the Range Management Area (RMA) concept that has been developed with USAID financing in Lesotho and:-

a) recommend means to enhance the economic, managerial, social and political viability of the grazing associations and, hence, their sustainability;

b) emphasize techniques for local organization development;

c) examine the role and relationship of the grazing associations to other local entities (e.g., Village Development Councils), traditional authorities, the GOL and USAID, and assess the influence of these relationships upon future RMA development;

d) examine options for developing a mechanism to give RMAs a voice at the national level (eg., a national coordination committee).

3) Examine the potential for USAID investment in the range and livestock subsector through NGOs/PVOs, both local and international that have appropriate experience, including:-

a) the desirability of direct USAID support to the Wool and Mohair Growers' Associations;

b) the potential for linkages between the RMAs and the Wool and Mohair Growers' Associations;

c) the advantages and disadvantages of seeking RMA development through international NGOs/PVOs.

4) Make recommendations on ways to increase private sector marketing of livestock and livestock products, including the prospects for privatization of the Ministry of Agriculture, Cooperatives and Marketing (MOA) Livestock Products Marketing Service (LPMS) and GOL wool shearing sheds.

5) Examine the GOL program to promote intensification of livestock production in the lowlands and make recommendations for improvements and donor investments.

In addition to the interviews and archival review, an overnight field trip was made to the eastern RMAs (nos. 1 & 2). A brief reconnaissance was made of the facilities and pastures in Sehlabathebe RMA and a cattle sale was observed at Ha Moshebi/Ramatseliso's Gate RMA.

Policies of the GOL and MOA Relevant to AID Programming

In range and livestock matters, the articulated policy of the GOL has for a long time been based on a model of overgrazing due to overstocking in the foothills and highland areas, continuous land degradation, and poor primary and livestock productivity. A principal cause of the overstocking is the long-term retention of cattle that have been purchased with remittances from Basotho mine workers in the RSA. As passive investments, these animals earn a real capital gain of 6 - 10% annually, which is highly competitive with other investments in Lesotho. Nevertheless, investment cattle overload the rangeland and pre-empt commercial herding that could be even more profitable.

This application of conventional African rangeland wisdom has been justified by a variety of economic and social analyses undertaken by the LCRD and LAPIS projects. There have been few corresponding ecological or biological studies to bear out the degree of environmental and economic damage. Nevertheless, there is general agreement that some degree of overgrazing has thrust the rangelands into a downward trend. The GOL policy goals are to stop this degradation thereby increasing the productivity of the rangelands and the animals that graze them. The LAPIS Project has begun to monitor range trends and other variables that should be

included in USAID's reporting system.

Basotho herders use common grazing land for their herding practices. Specific areas for summer and village grazing may be assigned by local authorities, but this attribution does not amount to ownership of the property nor permanent rights-of-use. For the most part, USAID-financed projects have avoided blaming Basotho producers of causing a "tragedy of the commons," whether they believe it to be happening or not. This is commendable in that a workable alternative to public ownership could not be achieved over the short life-span of a development project. There would simply be too much resistance by local people to the drastic changes posed by instituting individual property rights. It is unlikely that the GOL could muster the support or willpower to overcome grassroots resistance and vested interests.

In practice, therefore, the GOL's goals are to be sought through a policy of lowering animal numbers while increasing local control over natural resources through newly formed as well as "traditional" community institutions. In management terms this policy is to be achieved by eliminating what has been viewed as "free access" to pastures and substituting communal control over a scientifically determined rotational grazing plan.

The instruments which the GOL has chosen to implement its policy of decreasing animal numbers and increasing local control over resources are:-

- 1) the designation of RMAs and attribution of land use rights to the local communities at RMAs;
- 2) the formation of grazing associations as the basis of a participatory development model;
- 3) the introduction of membership and grazing fees to lower the profitability of maintaining nonproductive animals on the rangeland;
- 4) the introduction or upgrading of culling, breeding, animal health and marketing programs to increase the profitability of maintaining productive animals on the rangeland; and
- 5) the termination of small stock transhumance from the lowlands into the foothills and cattlepost areas.

In addition to the resource-based policies, the MOA and its Division of Livestock Services currently profess a policy which is relentlessly focused on privatization of livestock services with only residual functions retained by government. The proper role of government, one hears said, includes only certain information

services (for producers and consumers), public safety and regulatory functions, research and education. The GOL would not only reduce agency mandates, it would reduce the number of agencies. If successful, the GOL would divest itself of all livestock production activities, the processing and marketing of livestock and livestock products, and basic animal health services. There would no longer be a government abattoir or shearing sheds, the functions of the Livestock Products Marketing Service would be abandoned or turned over to the private sector, and routine animal health interventions would be carried out by trained veterinary workers operating privately.

The MOA has gone about on its own to demonstrate its will to privatize. The basic veterinary services (vaccination, anthelmintic treatment, and so forth) in one trial district (Mafeteng) have been delegated to farmers who have been trained as village veterinary workers. The vaccines and treatments, however, are supplied by GOL livestock assistants and come from government stocks, which the MOA would also like to turn over to the private sector. If this happened, the Veterinary Section of the MOA would retain only the functions of a diagnostic service of last resorts and a regulatory agency to sanction animal health commodities appropriate for conditions in Lesotho.

In March, 1990, the MOA will evaluate the results of the Mafeteng trial. It will determine whether privatization of veterinary services can be extended to other regions. The results should be of interest to USAID as a test of GOL resolve, and USAID may wish to participate in the evaluation. In the longer run, this may be an activity that USAID would want to support as part of the development of more comprehensive and profit-oriented RMAs.

In summary, the range and livestock policy goals of the GOL are, on the one hand, to reverse land degradation and increase the productivity of land and livestock, and, on the other, to increase the efficiency of marketing livestock and livestock products. The policies which the GOL has adopted to promote these objectives are the reduction of animal numbers on the rangeland, the augmentation of local control over pasture resources, and the enhancement of the private sector in commercial livestock functions.

These policies will be implemented through local resource reallocation ("adjudication"), the formation of grazing associations to manage a grazing plan, the imposition of user fees, the organization of livestock culling and marketing programs and other services to increase profitable commercialization, and the elimination of small stock transhumance. The role of the private sector will be enhanced by reducing the mandate of governmental livestock services or turning them over to private agents.

THE RMA CONCEPT AND GRAZING ASSOCIATIONS

The RMAs are mapped zones in the highlands that consist of about 8000 to 52,000 hectares each. The four currently designated RMAs are Sehlabathebe (no. 1), Ha Moshebi/Ramatseliso's Gate (no. 2), Pelaneng (no. 3), and Mokhotlong (no. 4). A fifth area is under consideration. These are the RMAs that have been developed with assistance from USAID. Other donors (Canada, European Development Fund, IBRD) have or will initiate managed range areas with objectives similar to the RMAs.

The characteristics of the RMAs, such as geographic boundaries, number of villages, people, animals, activities, and so forth, are described in numerous project reports and will not be repeated here. The current analysis is concerned not with the routine descriptors, but with specific variables that contribute directly to the maintenance of the RMAs as functional institutions.

If space has been organized into RMAs, then people within the RMAs have been organized into Grazing Associations (GAs). There is one GA for each RMA and its members all come from the associated RMA villages. The membership of each GA elects an executive committee which in turn elects a chairman and other officers. Chieftainships are heavily represented on the executive committee, and the operational mode of the GAs is often viewed as "working closely with the chiefs" to obtain their tacit approval. The GAs are the duly authorized organizations responsible for implementing the grazing plans and for moving its members toward more sales-oriented production, especially of cattle.

Each RMA and its corresponding GA should be viewed as a "non-traditional capital/human resources complex." The RMA/GA complexes have as their function the achievement of the GOL policy goals described above. Whether they will be successful depends on their appreciation of the tasks, their cohesiveness and durability ("sustainability"), and the means at their disposal for undertaking action on behalf of the community. Described below are the major variables that will affect the long-term success of the RMA/GA complexes and some suggestions for increasing the chances of success through GOL and project activities. The analysis is based on results obtained from other experiences in Africa, and, to a lesser extent, from the extensive mountainous herding regions of Asia. What follows is not an evaluation nor a critique of ongoing or past (LCRD & LAPIS) project activities; it is an attempt to stress what this consultant believes to be the most pressing issues for success in the future.

Technical Assistance

The development model which has been introduced to Basotho herders is fundamentally one which is top down. The idea of the RMA/GA complex did not come from the producers, nor did it arise in response to a government call for rural folk to "organize yourselves." All of the advantages are not self-evident. Some will require a long time to materialize, and the economic benefits may not accrue to all participants. Furthermore, the exclusion of a large segment of herders by the adjudication process is not a normal feature of traditional Basotho society. In the past, transhumance from distant villages would have been sanctioned by local authorities; with the advent of RMAs it has been prohibited.

This "from the outside" aspect means that high quality, dedicated technical assistance will be required for a long time. Gains made by other range projects have fallen by the wayside when technical assistance was withdrawn too soon. Some projects, such as the Maasai project in Tanzania, have gone into a spectacular tailspin when outside assistance was terminated. The reason for failure has been insufficient time to redress the prior lack of social agreement for the management actions to be taken and for the authority to take them.

While it is impossible to be precise about the length of time technical assistance will be required, it probably corresponds to the number of years for a new generation of adult people to ascend within the community, hence, 15-20 years is probably the minimum. If the RMA/GA concept is economically and environmentally beneficial - and it appears to be so - the new form of organization and management will come to be regarded as "traditional." In 1990 the oldest RMA/GA complex, Sehlabathebe, is only 6-8 years old and is still regarded by locals as a foreign concept.

Given the need for continuing outside technical assistance, the next question is, who should provide it? Past experience indicates that the effectiveness of technical assistance, in range and other natural resources projects, is mainly a function of site-specific experience; this includes language capability, knowledge of local culture and political organization, familiarity with traditional practices, and empathy with the conditions and problems confronting local producers. These factors that contribute to the acceptability and feasibility of intervention have been as important as technical acumen and economic return.

Where technical assistance has been foreign and lacked experience in the culture, it has been unable to bring about the desired changes, either long or short term. On the other hand, expatriate technical assistance with experience in the local culture has been effective; in this case the major problem is the

cost of maintaining outside advisors.

The present consultancy did not include a manpower inventory. But, interviews with former participant trainees revealed that the skills needed to provide most of the technical inputs for the ongoing work were in place. The most experienced of the RMA managers, for example, even though they are only certificate-level graduates, would be capable of carrying out, under supervision, the critical work now being done by expatriate advisors. If manpower quantity needs to be increased as more RMA/GAs are developed, the Range Section should embark on its own in-country training program to upgrade the existing cadre.

Adjudication

The reallocation of range use rights (with its corresponding exclusion of distantly located users) and the formation of a new administrative unit constitute the process known as adjudication. This amounts to the identification and sanction by the principal chief of each RMA/GA complex. The adjudication process is being managed by the Range Section with the groundwork carried out under the direction of expatriate advisors. If the concept is extended to the development of new RMA/GAs - and there are good reasons to think it should be - an institutional mechanism for adjudication needs to be identified.

The skills needed for the adjudication process come from the range and animal sciences, cartography, the social sciences and jurisprudence. Successful adjudication requires the integration and astute application of these skills and probably represents the most critical challenge for the success of the RMA/GA complexes. In addition, the adjudication process, as it is carried out now, is incomplete because it does not address the social and legal rights of those who have been excluded from their former range areas.

The MOA Range Management Division has a functional Geographic Information System (GIS) that is capable of plotting human, economic and physical features of an area under consideration for adjudication. This endeavor is worthwhile as a support tool for field implementation, first, because it leaves an objective record of conditions, and, second, because it allows a quantitative comparison of variables over time. A GIS is not, however, an end in itself, and the work that is done in the field, and the way it is performed (with a maximum of local participation) is more important than computerized monitoring and record keeping.

A close look needs to be taken on how to proceed with adjudication in the future. The Livestock Division of the MOA does not

have the requisite manpower skills in the social sciences or in the legal realm, nor is there a designated technical unit or department that can implement the adjudication process. As things stand, neither the skills nor the organization is in place to institutionalize rangeland adjudication in Lesotho. The process remains an artifact of the externally funded projects. These manpower and organizational problems should be addressed before USAID funds additional RMA/GA complexes.

Human Organization and Management of the RMA/GA Complexes

The challenges related to organizing the GAs and instituting local management of the RMAs do not end with the adjudication process. The LCRD social scientist reported many recurrent problems through the end of his tenure in 1986, and, since then, LAPIS project reports have noted continuing managerial difficulties. These include the need for the project to provide the motivation and agendas for public meetings (pitsos), difficulties in implementing the grazing plan and penalizing infringements, and an inability to decide on fee assessment and collection.

The social scientist stated that, "In Lesotho, the social and economic conditions for effective local cooperative action in range management are not usually present. Diverse livestock and range management strategies make widespread adoption of a communal management scheme problematic [and] grazing associations lack the social authority to enforce even modest controls (Lawry, 1987)."

Over a period of time the situation has improved in the oldest two RMA/GA complexes, but they are still dependent on the project to provide management leadership. One GA president, when asked what the association most needed to continue, replied, "money." A reasonable interpretation of this comment is that the economic benefits to GA members is insufficient to stimulate a cohesive sense of purpose among its members. The additional funds would serve as a surrogate economic payoff, buying, in a manner of speaking, the cooperation of GA members. External leadership, it would appear, is still required to sustain the functions of the RMA/GA complexes.

Enforcement of grazing rules and penalties for their violation are among the most persistent challenges for the GAs. Herders have mixed feelings about the value of the grazing plan and its technical parameters. People who have been excluded from the RMAs continue to disagree on their loss of rights to traditional grazing land. And the introduction of seasonal cow culling has introduced another opportunity for the violation of rules. (Identified culls must be removed from pasture before the next grazing season. If they are not, the owner is in violation.)

The difficulties of enforcement are not rooted in the management of the grazing plans which, for those who participate, are not onerous, nor in the frequencies of violation, which are decreasing over time. The problem is one of local institutions. As much as possible, enforcement is now seen as an internal matter for the GAs. This is not so difficult when violators are from outside the member villages, but real problems arise when the violators are local and from the same social network as the enforcers.

In practice, and, depending on the case, enforcement - after the initial impoundment of animals by "range riders" - is handled at different levels: by the executive committee of the GAs, their chairman, the chiefs, the police, and, on a few occasions, by the courts. When animals are impounded and monetary penalties imposed, serious disputes arise that strain the cohesiveness of the local community.

Impoundment and fines are police actions that should be carried out by a police agency based outside the community. The retention of policing activities by the GA would be a source of continued tension and divisiveness within the community. In cases where such divisiveness has been resolved (eg., China, Cuba, Tanzania, etc.), it has come about through the ascent of local authoritarianism. While this scenario is unlikely to develop in present-day Lesotho, it is still undesirable for the GAs to continue with their policing activities while the project is pulling in the other direction, trying to build group cohesiveness and goals.

Outside policing works when: 1) the police agency does not have a mandate to manage the resources or issue resource-use permits; 2) its activities are well-known and supported by the community at large; and 3) it is independent of community control on a day-to-day basis. A successful model for outside policing is the USAID-funded Goesselbodi natural resources project in Niger. Favorable institutional relationships should be sought for the RMA/GA complexes in Lesotho.

Unlike the impoundment of animals and imposition of fines, usage fees are not meant to penalize deviations from community norms. They are part and parcel of management and, therefore, the prerogative of the communities and GAs. The GAs have experienced varying degrees of success in the collection of fees, with new RMA/GAs faring better than more established ones.

Depending on the GA, initial membership and/or annual fees are assessed. In theory, the GOL is committed to a policy of nationwide grazing fees, but this is likely to be a long-term goal not easily implemented either inside or outside the RMA/GAs. All of

the GAs are assessing annual fees on a per animal basis. They are effectively charging a grazing fee, but this is separate from the proposed national grazing fee.

The reasons for imposing usage fees are varied and include: 1) vesting producers in the success of the RMA/GAs; 2) covering the recurrent costs of management; 3) producing revenue for local development initiatives; 4) inculcating the community in a commercial ethic by introducing a cash flow activity; and 5) providing an incentive for the removal of unproductive animals from the range by raising the costs of maintenance.

There are two issues regarding the imposition of fees which USAID may wish to address. The first is the legal basis for a national grazing fee. Since the fee is included in the National Livestock Policy Implementation Plan (a GOL policy statement that was required as a conditionality for LAPS Program funding), it is already a priority for USAID. The feasibility study indicated in the implementation plan should be carried out as soon as possible.

The second issue concerns the fairness of the fees. Each of the four RMA/GA complexes has chosen to implement a different fee structure. Only at Ramatseliso's Gate RMA/GAs is the fee assessed on a per animal unit basis. This means that producers pay according to the amount their herds graze. In the other RMA/GAs the fees are either fixed (membership and annual) or are assessed 20 times more on the first 10 animal units than on additional animals. In the latter cases it is the small-scale herders who effectively subsidize the large-scale herders by paying more per animal unit for access to grazing. These fees are regressive.

If the fees are pushed upward - they are already very high at Pelaneng (M50 to join, M10 annual) - the small-scale herders will be pushed out. There is no economic or social justification to favor large-scale herders in Lesotho. In Africa, large-scale herding is not necessarily "progressive herding." Contrary to the situation in the West, where large-scale producers are the most commercially viable, in Africa it is often the large herd owners who are most intent on holding animals as long-term capital investments. Where fees are now unequally applied, they should be reassessed in proportion to the size of each household herd in order to spread the costs over the entire community.

Institutional Relationships

The existing relationships between between the GAs, their executive, the MOA, USAID and other institutions and agents in Lesotho have been beneficial. It is clear that the MOA has played a vital role in range and livestock development and its participa-

tion in the future is unquestionably necessary. The MOA presence within the RMA/GA represents explicit GOL support, which will become even more important as foreign technical assistance is withdrawn. It will become the sole conduit for the introduction of technology.

The past observation of the LCRD social scientist on the status of the RMA managers has proved valid over time. As civil servants from outside the community, the managers are well placed to mediate disputes that arise between members of the local community. In the oldest RMAs the internal relationships between the membership, the executive and the staff have progressively improved.

While the chieftainships may be losing influence over time, their cooperation is necessary now, and they do not have, nor do they appear to want, an overbearing influence on the development of the RMA/GAs. The MOA and the LAPIS project have done a good job in eliciting their cooperation. Range (and other rural development) projects in Africa have suffered when local authorities have been ignored, either through the inclination of project management or when the political arm of the government has stepped in to shield the chiefs from the projects. This has not been the case in Lesotho.

The Village Development Councils (VDCs), like the RMA/GAs, are newly forming agents of participatory development in Lesotho. The question arises whether the VDCs should become the principal vehicle for rangeland development, as the World Bank would like to see them. The Bank, having pursued rural development through government for years, now finds itself criticized for ignoring grassroots efforts. Its current posture is to virtually ignore central government. This is unfair and unrealistic. There are proper roles for government, especially as a catalyst for change and technological innovation. The MOA is the proper institution for this.

While the VDCs may be more bottom-up than the RMA/GAs, they are too small to be effective administrative jurisdictions for grazing management. The RMAs are extensive production models that would be hindered if they were broken into small village-level subunits. The VDCs might be appropriate development organizations in intensively cropped highlands (eg., East Africa, southern Himalayas, etc.), but they are inappropriate for rangeland development in Lesotho. On the other hand, VDCs are not competitive with the GAs in the RMA zones, and they may provide complementary activities for the development of badly needed social services (schools, clinics, etc.).

Training

USAID has sponsored university-level training in range management and livestock for a number of participants at different levels. As a result, key administrative positions in the MOA have been filled. But, this has not made the field work easier for the government to implement; expatriate advisors continue to supervise technical tasks such as baseline range inventories.

Due to the absence of high level technicians in the field, the MOA is expected to request further university training in range science at the B.S. level. While this consultant is not against training (nor education, for that matter), doubts remain whether the field situation would improve if more people were trained. All of the standard arguments apply here: the inability of government to retain well trained people, high recurrent costs, budgets overloaded with personnel expenses, and the accumulation of frustrated technicians without the resources to fulfill their mandate.

There are two specific conditions which tend to argue against further technical training. First, as noted above, returned participant trainees have been given administrative positions within the Range Management Division rather than assignments to supervise the field work. This has made it necessary to retain expatriate technicians at the RMAs.

While this experience may seem typical, it is not inevitable. For example, USAID financed the training of three range technicians (2 B.S., 1 M.S.) for the Republic of Niger. After their return, two were assigned to district ("département") offices and one to the ministerial headquarters. Thereafter, they worked with part-time U.S. technical assistance to train diploma-level technicians in the field work. After four years Niger could undertake its own range inventory across the entire pastoral zone. From time to time during this period, the three university graduates were given the opportunity to pursue specialized non-degree training that was specifically relevant to their work.

Second, in order to increase the sustainability of the RMA/GA complexes, it is time to shift away from the technology-heavy model that has been developed. A stronger grassroots orientation will do more than added technical work to vest the local people in their own development. With less technical contribution expected from government, less expertise will be required within government. This is not a criticism of the institution-building that USAID has financed to date. The program has succeeded, and most of the technical competence is in place. How it can be used more efficiently is now more important than how it can be expanded.

In-country, nonformal training is a different kettle of fish. With a broader audience and less lofty objectives, it can be more cost-effective than participant training and make a greater contribution to general development goals. Two groups can be targeted for training: 1) civil service field workers from all disciplines represented in the Livestock Division (range management, animal production, veterinary medicine) and, 2) members of the GAs and their executive committee and officers. From time to time when short-courses and seminars are held, the two audiences should participate jointly so they learn each other's mandate and objectives.

The training should be on-site, with considerable time devoted to practical hands-on work: in the field for technical subjects, and practice sessions and participatory discussion for administrative, managerial and leadership topics. In most cases the training should be presented, or at least organized, by the MOA rather than the Agricultural College, since it is the MOA that will be implementing programs in the field.

Whenever possible training should be given to the GA members and technicians at their own RMA. It will not be financially feasible, however, to have adequate, year-round facilities at each RMA. The proposed training center at Sehlabathebe RMA should be constructed for use as a national educational resource. While the Sehlabathebe center will be expensive to maintain and operate, it could become self-sustaining if rented out on a part-time basis to an international educational institution. There are several U.S. schools and universities that maintain international campuses for programs in ecology, sustainable development and the social sciences. One or more may be interested in sharing the Sehlabathebe center in a way that would be mutually beneficial. Access to the adjacent Sehlabathebe Park may be an added incentive for the development of an international educational program.

Economic Benefits of the RMA/GAs

Whether the RMA/GAs sustain themselves in the long run depends not only on their managerial capability and their ability to reverse negative environmental trends, but on the economic benefits that directly accrue to the participating households. The initial benefit has been the availability of more pasture for the herds of households retained under the RMA/GA umbrella. With grazing pressure relieved, a rotational grazing plan implemented and some controlled burning and fallow, the potential economic benefits have grown. Animal production has improved, and sale animals from inside the oldest RMAs fetch higher auction prices than those grazed outside.

The measurable benefits notwithstanding, a recent survey at Ramatseliso's Gate RMA indicates that herders are still not clear about the nature of the resulting benefits. Fifty percent do not know the benefits or think there are none.

The LAPIS project has taken active measures to make the RMA/GAs economically productive as well as environmentally sound. It has sponsored cattle markets and breeding to improve the economic return to RMA/GA participation. It would also like to implement herd health and improved fodder production programs to raise the productivity of commercial herds. These efforts should be continued, with more emphasis on the extension and training side and less input on the development of supporting infrastructure.

Economic activities have revolved around the development of infrastructure: fenced special-use pastures, marketing facilities, veterinary clinics, maintenance and storage buildings, and electrical and water supplies. The design, technology and construction have been imported at a cost which the RMA/GAs could never duplicate nor sustain. The added economic activity directly attributable to an RMA/GA amounts to the equivalent of only a single, small family farm in the U.S.: a few hundred animals bred, vaccinated or sold (MOA, 1989). In the RMA/GA, this activity is shared by more than 300 households, making the average economic benefit to each very little.

ROLE OF NONGOVERNMENTAL AND PRIVATE & VOLUNTARY ORGANIZATIONS

The present paper argues that the RMA/GA complex is a highly worthwhile concept for natural resources conservation under extensive grazing conditions in Lesotho. The main limitation to its widespread application is the high cost associated with a top-down, technology-dependent model. However, the need for top-down assistance was necessary at the outset and will remain so until there is a general demand by herders.

Reducing the infrastructure and expatriate technical assistance will lower the costs of expanding the RMA/GA network. It should also be possible to increase the demand by working more closely with all herders on a day-to-day basis, both in the existing RMA/GAs and in newly forming ones. GA management and the executive have had a difficult time convincing members of the benefits and getting them to take over responsibility for running the RMA/GAs. The leadership and cooperative skills of the members need to surface so they become responsible for increasing the membership and managing the grazing plan and other activities.

A few examples may help to explain how more contact can foster the development of local initiative. First, the agenda for a

herders' training session in range management gives the following objective for the short-course: "The major objective of this training is to make herders aware of the interaction between plants and animals, either through grazing or trampling, and the response of grass to these effects. In short the objective is to make herders have more understanding about Range Management."

Even if the range is overcrowded, overgrazed, degraded, and depleted, one may suspect that the herders are aware already of the interaction between plants and animals, etc. They must also have some empirical understanding of range management, even if they do not understand scientific Range Management. Do we need to "make them understand?" This is a tough school, without much empathy.

Throughout the world, herders have their own understanding and concepts of their ecosystem, and, even if they are less than scientific and often wrong, there is no reason to ignore their knowledge and make them feel as if they have to start all over and develop a new logical framework. It is simply asking too much of them, and it is unnecessary.

An interactive short-course given with the following major objective may have had more impact on the participants: "to learn what herders know about plant-animal interactions and to augment their knowledge with scientifically derived principles of range management. In short, the objective is to come to agreement on how the grazing association can meet its goals through improved range management."

Another example that has been used in other regions of Africa is the incorporation of traditional knowledge of animal health ("ethnoveterinary medicine") in appropriate herd health programs. In their own ecosystems, the herders' concepts of disease and disease transmission are often more correct than classical textbook descriptions. Yet the usual veterinary programs ignore this knowledge, to their own peril. Top down herd health programs have had little impact under peasant conditions. The veterinarian who makes the herder feel ignorant sooner or later comes to be seen by the herder as ignorant himself.

The bane in both of the above cases is "expertitis": too much reliance on formal credentials, little tolerance for producers to express innate leadership skills, and no proclivity to make the producers responsible for their own development initiatives.

Leadership building techniques require a sound understanding of both the technology that is being introduced and the motivations and background of the people to whom it is introduced. Even though the development of the RMA/GAs will remain top-down for a

long time, these examples illustrate that much could be done to improve the level of participation by the members themselves.

In order to help the Range Management Section with its efforts to make the RMA/GAs self-sustaining, USAID should seek the assistance of an NGO/PVO. The NGO/PVO must have a proven commitment to grassroots participation through the development of local leadership. It would also need experience in African livestock development, preferably under conditions of communal range management. Any technical assistance that was furnished by an NGO/PVO should also be fluent in Sesotho.

The only local NGO/PVO that works with livestock producers is the Wool and Mohair Growers' Associations. While this association may have an eventual role representing RMA/GA members (see below), it now has a limited mandate to represent an elite stratum of fiber animal producers. It is not the organization to look to for grassroots development. There are several international NGO/PVOs headquartered in the U.S. that have the appropriate skills and experience. USAID should contact them to inquire about the level of assistance they could provide.

MARKETING OF WOOL, MOHAIR AND CATTLE

The Wool and Mohair Growers' Associations are the only nongovernmental organizations in Lesotho representing producers of the grazing livestock industries. They represent private producers but have organizational assistance from the Livestock Department of the MOA. The Associations promote wool and mohair marketing. In conjunction with the Livestock Products Marketing Service (LPMS), a government agency, they determine shearing schedules at the government woolsheds and dispatch the clip to bulking sheds. The charters of the Associations require their members to adopt progressive production techniques and improved breeding for fiber production by Marino sheep and Angora goats.

Members of the Wool and Mohair Growers' Associations come from throughout the country and are heavily represented in the highland areas, where the RMA/GAs have been organized. The Associations' members have larger-than-average herd sizes and their clip tends to sell at higher prices. The Associations hardly represent a populist group: only 5 - 10 percent of all producers belong, but the percentages are higher for those who patronize GOL woolsheds.

About 50 percent of Lesotho's total fiber shearing and marketing is facilitated by the GOL. About 40 percent is done at private woolsheds and the remainder at home. Hunter & Mokitimi (1990) present a detailed breakdown of the various shearing and marketing channels.

After bulking the clip is sent to auction in Durban and East London. The GOL does not take possession of the clip at any time. It nevertheless pays the seller a floor price that has been predetermined by the South Africa Wool Board. If the actual selling price is higher than the floor price, the GOL makes a second payment to the producer. If it is lower, the GOL can recover the loss by requesting a price stabilization payment.

The Wool and Mohair Growers' Associations have been effective lobbying agents for their members and the animal fiber industry at large. The GOL has been responsive in a number of ways: it supports the Associations' secretariat in Maseru; it built, maintains, and staffs a network of shearing sheds; it pays for LPMS to handle a significant part of the sales procedure after shearing at government sheds; and it pays producers for fibers sold at auction in the RSA.

LPMS is responsible not only for facilitating the marketing of animal fibers, it also has a mandate to assist with hides and live animals. It is in the process of being reorganized. LPMS has been removed from the Livestock Division but not yet reassigned in the MOA. Management says it would like to see many functions dropped or taken over by the private sector. These include most responsibilities for the government woolsheds and most direct marketing assistance. LPMS would then become a regulatory agency - the FAO is installing a fiber analysis lab at LPMS headquarters - and a market expediter of last resorts in remote areas. These appear to be appropriate functions that could not be privatized under the present conditions in Lesotho.

Historically, the sale of live animals, especially cattle, has not been a commercial activity for Lesotho's producers. The GOL has not provided much in the way of subsidization, even though animal sales are within the mandate of the LPMS. Farmers have kept cattle for household and farm subsistence purposes, and small stock have been almost exclusively for fiber production since the mid-1800s. Of the commercial cattle transactions that do take place, most go to the RSA where they are slaughtered or held for market speculation. Private sales of single animals probably represent the most prevalent mode of selling. Animals are also commonly disposed of through household slaughter.

Since a strategy of the RMA/GAs is to increase the commercialization of cattle production, the question arises whether cattle producers could be assisted by USAID's intervening through either the Wool and Mohair Growers' Associations or the LPMS.

The Associations could include cattle and become the representatives for all grazing systems. They would have to become

involved in the promotion of live animal sales, which would be a new mandate. If the Associations were not to take on commercial cattle, a cattleman's association would eventually form to promote the goals of elite cattle producers. It seems somewhat early for either option to happen or make sense; the RMA/GAs need to reach a higher level of economic activity and there needs to be more of them. In three years time, with the addition of more RMA/GAs and increasing maturity of the existing ones, USAID should examine the potential for a producers group, either the Wool and Mohair Growers' Associations or a new organization. This would give the GAs a voice at the national level.

While the MOA is pressing forward with privatization and the reorganization of the LPMS, USAID should hold off with any changes that might increase the economic burden on producers. This includes, for the moment, asking the RMA/GAs or any subgroup of their membership to pay for woolsheds, sales publicity or any other subsidized service. Again, this should be re-examined in three years to see what LPMS has become and what new responsibilities the RMA/GAs might be able to cope with.

INTENSIFICATION OF LIVESTOCK PRODUCTION

The GOL would like to intensify livestock production in the lowlands for several reasons. First, lowland animal production is poor compared with highland production, where pastures provide better nutrition and herds are better managed. Unless the lowland system is accelerated through higher input levels, the lowland animal farmer will remain at a disadvantage compared to his highland.

Second, general agricultural policy for the lowlands emphasizes the replacement of subsistence grain farming by high value vegetable and horticultural crops. While this high value crops policy has not gotten very far yet, the intensive production of animals would fit in better with the vision of Lesotho's future model farmer.

Lastly, in the adjudication process for the foothills and mountains, the GOL would like to exclude lowland herds from summer transhumance. Transhumance is seen as an intolerable incursion onto the pastures rightly "belonging" to mountain and valley folk. Presumably, with the adoption of intensive production in the lowlands, transhumance would become unnecessary. This seems to be the politically expedient way to exclude some former users from the RMA/GAs adjacent to the western lowlands.

Intensification solely to stop transhumance is a waste of resources. Transhumant systems are practiced throughout the

developed and developing world and are more productive than many sedentary systems, and with lower input levels than intensive ones. Also, if inputs are going to be subsidized to certain lowland producers who send or take their herds to summer pastures, how can the GOL avoid giving the same benefits to neighboring farmers who do not transhume? Even if it eventually catches on, the intensification policy will take too long to achieve the desired effect for USAID to get involved.

If the adjudication of other RMA/GAs has excluded some former users by decree, then adjudication of RMA/GAs near the lowlands should be able to achieve the same result.

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LAPIS EVALUATION REPORT

ANNEX 05