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FIRST ANNUAL EVALUATION  
OF THE  
RURAL SECTOR GRANT

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## ACKNOWLEDGMENTS

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# PART I - OVERALL REVIEW OF THE RURAL SECTOR GRANT

## SUMMARY ASSESSMENT OF FIRST YEAR ACTIVITIES

### Achievements and Shortfalls

The overall purpose of the Rural Sector Grant is to assist the Government of Botswana in the development and implementation of strategies to provide the rural population with increased access to productive employment opportunities. The common characteristic of all projects financed under the grant is that they either have a direct impact on production and incomes at district level or address broader constraints that must be overcome before production-increasing interventions can be undertaken. Within this broad context, the RSG has three sub-purposes:

1. to improve land use planning and land management in communal areas
2. to increase small scale agricultural production and incomes; and
3. to increase non-farm employment opportunities in rural areas.

Projects financed by the RSG are grouped according to the purpose to which each is related. Each group is discussed separately below.

#### GROUP 1: LAND USE PLANNING AND MANAGEMENT

This category of projects has three stated objectives: 1) to improve the effectiveness of Land Boards, 2) to prepare and implement Land Use Plans for communal areas and 3) to formulate a water development strategy for the arable lands of Eastern Botswana. During Year 1 of the RSG considerable progress occurred in achieving the first and third of these objectives. Under the Land Institutions Development Project (LG 36), four Subordinate Land Board buildings were constructed and Land Board Staff (including newly appointed Land Tenure Officers) were supplied with office, camping, and technical equipment necessary for them to perform their land management tasks.<sup>1/</sup> Also, a team from Cornell University completed a detailed policy-oriented study of how water points are used in Eastern Botswana. The information generated by this survey is directly applicable to policy formulation related to water development in Eastern Botswana.

Several activities that were to have taken place in Year 1 have experienced delays. Under LG 31, two communal area development activities, a communal service center at Lepashe in Central District and an integrated land use plan for Western Ngamiland barely got started in 1980/81. This was due to the late obligation of funds under the RSG and bottlenecks stemming from manpower shortages in the districts. Also, studies to be carried out by the Applied Research Unit of MGLL (LG 31) and the training of Land Board staff (LG 36) were delayed because of difficulties in recruiting a director for the ARU and a training consultant for the Land

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<sup>1/</sup> Project numbers used in this report refer to Project Memoranda which are the basic documentation used in the design and approval of projects by the GOB. Part II of this report contains brief descriptions of each project being financed under the RSG.

Boards. Both positions are now filled and these activities can now be expected to proceed as planned. In fact, a major study of local institutions in connection with the Communal First Development Areas (CFDA) program is about to get underway under ARU auspices (see the review of LG 31 Year 2 activities for details).

#### GROUP II: AGRICULTURAL PRODUCTION AND INCOMES

The objectives of this group of projects are to: 1) carry out preliminary activities that are necessary before the GOB's Arable Lands Development Program (ALDEP) can get fully underway, 2) test ways of diversifying agricultural production, 3) facilitate production-related initiatives by farmers groups and 4) upgrade the technical and managerial skills of the MOA field staff. Year 1 activities addressed the first two objectives. No Year 1 funds were required for addressing the third objective which will be pursued under the Small Projects Project (AE 10) in the second and third years of the RSG. Thus far there are no plans to finance MOA field staff training under the RSG, although ALDEP pilots and AE 10 will provide valuable work experiences that will increase staff effectiveness in the medium term.

The major successes in Year 1 were related to ALDEP. The most important ALDEP pilot activity, a credit scheme to test the acceptability and viability of the recommended improved technical package, was fully implemented and the results are being evaluated by the Farm Management Unit in MOA. Other pilot activities, which have included donkey draft, water tanks, fencing and extension improvement schemes, have not progressed as quickly but lessons are being learned from the problems encountered. There is little doubt that the ALDEP pilot activities financed under the RSG will result in significant improvements in the full-scale ALDEP scheduled to begin next year.

The agriculture activities that fall under the rubric of diversification, horticulture (AE 10) and forestry (AE 15), have not fared as well. In the case of horticulture, the main delay was caused by AID's environmental requirements, but a more basic problem was the need to redesign the project in response to unforeseen technical and institutional constraints. Similarly, the forestry program is hampered by manpower shortages. Specifically, the MOA Forestry Section does not have the capacity to organize and implement a national village woodlot program in an expeditious manner. The evaluation team included a forestry expert who studied the forestry program's many problems in depth. His analysis is presented in the review of AE 15 second year activities. Essentially, both horticulture and forestry production in Botswana are sufficiently complex and novel to require both institution building and carefully monitored experimentation prior to any major expansion in activity. This is reflected in the evaluation team's recommendation for second year activities.

#### GROUP III: NON-FARM INCOME AND EMPLOYMENT

The specific objectives of this group of projects are to: 1) provide improved GOB support for rural industry development, 2) provide a solid data base regarding production potentials and markets for rural industries and 3) undertake activities that will lead to at least one new wildlife utilization project. In Year 1 there were two projects in this grouping: the Rural Industry Officer (RIO) program (CI 08) and Wildlife Development (GA 02). Substantial progress occurred under CI 08. The RSG-financed

the Senior Rural Industry Officer (SRIIO) in the Ministry of Commerce and Industry and provided logistic support for a newly recruited cadre of RIOs in the districts. During 1980/81, seven of the eleven RIO positions were filled as planned. Surveys of existing producers were carried out in six of the seven districts that had RIOs, and in all seven districts activities were undertaken that had immediate benefits for industrial businesses in rural areas. There is currently a strong momentum in this program and morale among RIOs is high. The only serious problem with the RIO program has been the difficulty in recruiting counterparts. This has serious implications for the sustainability of the RIO program and needs to be addressed by MCI on an urgent basis.

In contrast to the RIO program, Wildlife Development was not able to get started in 1980/81. This was due to the delay in identifying a natural resource economist to undertake policy and project planning in this potentially important sector. Activities undertaken by some of the RIOs indicate that wildlife and wild plant gathering are two of the highest potential areas for non-farm employment in rural Botswana. If this proves correct, activities to expand processing of wildlife products will have to be accompanied by carefully designed wildlife utilization schemes.

#### Implementation Problems

Details of implementation problems experienced during the first year of the RSG are provided in the reviews of each individual project. The main cause of delays, and perhaps the least worrisome because it is essentially a one-time problem, was the late obligation of funds by USAID (July 1980). The GOB and USAID had anticipated that the PP would be approved and funds made available by April 1, 1980. Once funds were obligated, the MFDP was able to warrant funds to line ministries in a timely manner. However, there were some delays in the sub-warranting of funds by the ministries, especially MOA, to their respective departments and to the districts.

Perhaps the most serious long-term problem is the local manpower constraint. This is most visible for the rural industries project which has only two counterparts identified and none yet actually posted. However, almost all of the projects were affected by manpower constraints, especially at the district level. ALDEP, Horticulture and Forestry are all constrained by the shortage of well qualified agricultural field staff. District initiatives under TG 31 are also hampered by the lack of personnel to provide technical and administrative assistance at the district and local level. Related to the manpower constraint are institutional bottlenecks. This is most evident in attempts to implement integrated Land Use Plans which usually require the coordinated efforts of several ministries. During Year 1 of the RSG the forestry program was also hampered by lack of organization and institutional capacity to plan, design and implement.

For some projects, recruitment of technical advisors caused serious delays. The wildlife development project did not get started in 1980/81 because a qualified natural resource economist could not be identified quickly. In MLGL, the training of Land Board staff was postponed until Year 2 because of the lack of a training consultant, and the newly created ARU did not become functional until late in the year because of the delayed arrival of its director. The horticulture project would be even more delayed than it is if a horticulturalist already in Botswana had not fortuitously become available to manage the Mogobane project.

Where construction and commodity procurement was significant, performance was generally satisfactory, Construction proceeded on schedule under LG 36, and substantial equipment was provided in a timely manner under LG 36 and CI 08. Several ALDEP pilot projects, however, experienced problems with both construction and procurement, primarily because of their unique requirements. The water catchment tanks to be constructed were an innovation and builders had to be trained, and farm implements needed for the credit scheme could be obtained only from one supplier.

The implementation problems faced during the first year of the RSG were not unexpected and in fact were less severe than most observers would have predicted. The effectiveness of the Rural Development Unit (RDU) and the implementing ministries in dealing with the problems that did arise is discussed below in the section on project management and monitoring.

### Financial Situation

By March 31, 1981 the RSG will have spent about P450 000, or 51% of the funds that became available in July 1980. The projects that experienced the largest shortfalls were Horticulture Development and Implementation of Land Use Plans. Although it does not show up in table 1, the Wildlife Utilization project also had little expenditure in 1980/81. Last quarter expenditures for that project represent a transfer of funds for the salary of the natural resource economist who will not arrive in Botswana until just before the end of the fiscal year. The projects that had the best expenditure performance are Development of Land Institutions, ALDEP Pilots and Rural Industries.

Overall, considering the decentralized nature of this project, the late availability of funds and normal start-up problems for a new project, first year expenditures reflect a satisfactory performance. Also, as can be seen from the reviews of the individual projects, the main reasons for the delays have largely been overcome and expenditures are expected to increase dramatically in Year 2.

TABLE 1  
RURAL SECTOR GRANT BUDGET, 1980/81  
(Pula<sup>†</sup>)

Project	Amt. budgeted in orig. PM	Expected expend. as of 4/1/81	Exp. balance as of 4/1/81
<u>Land Use Planning and Mgmt.</u>			
LG 31 - Impl. of Land Use Plans	86 749	7 228	79 521
LG 36 - Land Institutions Water Points	172 700 41 540	103 860 41 540	68 840
<u>Agricultural Production and Income</u>			
AE 11 - Horticulture	99 555	-	99 555
AE 15 - Afforestation	58 228	26 604	31 624
AE 19 - ALDEP Pilots	180 500	104 400	76 100
<u>Non-Farm Employment</u>			
CI 08 - Rural Industries	168 150	100 350	67 800
GA 02 - Wildlife Utilization	80 000	67 650	12 350
	887 422	451 632	435 790

<sup>†</sup> 1 Pula = U.S. \$1.51

#### Assessment of Overall Design

The evaluation team feels that the stated objectives of the RSG are realistic and that there is a sound relationship between those objectives and the projects financed during the first year of the grant. By designing the project around three specific objectives, it has been possible to achieve both focus and flexibility. The possibility of adding new projects consistent with stated project purposes but not identified at the time of original design is one of the strongest features of the RSG. An assessment of how well this feature has been utilized thus far is included in the section of RSG management and monitoring.

The relationships between RSG purposes and first year projects are particularly strong for Groups I and III. LG 31 and LG 36 are the two main efforts within the GOB to improve land use planning and management in Botswana. Similarly, GA 02 is the first step in setting up a long-range program to make effective use of the country's wildlife resources. In the rural industry sector, CI 08 provides the main thrust around which other rural industry programs (e.g. loans, subsidies) should be organized.

In agriculture, there is a less strong but still clear relationship between first year activities and stated objectives. The ALDEP Pilots project, the most important first year activity in Group II, is being successfully implemented. No further funds are required for Year 2 since other donor funds are available for the major ALDEP program. In Year 2,

ALDEP is being replaced by AE 10, which is important for encouraging participatory development activities but is by definition and design very small scale. RSG projects related to diversification, horticulture and forestry, are marginal in terms of the overall problem. There is general agreement that in the long-run diversification efforts will have to concentrate on cash crops such as oilseeds and cotton. It appears that increased production and incomes may be too broad an objective for the types of agricultural activities likely to be financed by the RSG. A narrower objective that reflects the fact that the main effort to increase agricultural production will take place through large projects outside the context of the RSG may help to improve the programming of RSG funds in this sector.

## RURAL SECTOR GRANT, 1980/81

(Pula)

	Amount budgeted in orig. PM1/	Expend. as of 12/31/80 <sup>2/</sup>	Expected Expend. as of 4/1/81 <sup>2/</sup>	Expected Balance as of 4/1/81 <sup>3/</sup>
<u>Land Use Planning and Management</u>				
LG 31 Imp. of Land Use Plans	86 749	3 477	7 228	79 521
LG 36 Land Institutions	172 700	61 504	103 860	68 840
Water Points Survey	41 540	12 219	41 540	-
<u>Agricultural Income and Employment</u>				
AE 11 Horticulture	99 555	-	-	99 555
AE 15 Afforestation	58 228	11 524	26 604	31 624
AE 19 ALDEP Pilots	180 500	102 100	104 400	76 100
<u>Non-Farm Employment</u>				
CI 08 Rural Industries	168 150	67 806	100 350	67 800
GA 02 Wildlife Utilization and Mgmt.	80 000	5 650	67 650	12 350
	887 422	264 280	451 632	435 790
Annual Evaluations (DA1)	39 370		25 000	14 370
Communal Area Coordinator	35 433	35 433	35 433	-
Monitoring Studies	22 028	7 750	7 750	14 278
	984 253	307 463	519 815	464 438

Notes 1. Amount budgeted in original PM is based on the dollar budget in the Project Grant Agreement using an exchange rate of P1 = \$1.27.

2. Expenditures as of 12/31/80 are generally defined as actual disbursement of funds. Expected expenditures as of 4/1/81 include actual disbursements plus firm commitments as reflected by orders placed or items and services received but not yet paid.
3. During the course of 1980/81 the exchange rate fluctuated from P1= \$1.27 to P1= \$1.36 and as of 2/28/81 has dropped back to P1= \$1.31. The result is that the pula value of unspent dollars as of 4/1/81 is less than the figure shown in the last column. The difference will be made up by the GOB for the Domestic Development Fund (DDF).

SUMMARY ASSESSMENT OF  
SECOND YEAR PROPOSALS

Proposed Activities

Aside from two new projects, the AE 10 - Small Projects Fund for crop farmers, and consultancies for the Communal First Development Area Program, second year RSG activities are essentially a combination of what was initiated in the first year.

In the Land Use Planning and Management grouping, construction activities under LG 36 will continue and the training of Land Board staff that was to have started in Year 1 will get underway. For LG 31, the main activities will be: 1) a study of the local institutions in relation to communal area development programs, 2) inventories of land use patterns and demarcation of sub-land board boundaries and, 3) implementation of the initial phases of land use plans in proposed Communal First Development Areas (CFDAs). More details in the CFDA program are provided in the review of LG 31 second year activities.

Under the Agriculture Production and Income grouping, the horticulture and forestry programs are continuing, the former having been redesigned to better reflect production and marketing conditions in southeastern Botswana, and ALDEP will finish carrying out pilot activities started in Year 1. Additional funding for ALDEP pilots activities will not be needed since they will be financed as part of the full-scale program being funded by other donors. A new activity under this group will be AE 10 - Small Projects Fund which finances group activities by small farmers up to a level of P5 000 per activity. The project, whose objective is to encourage and assist farmers to organize for the purpose of carrying out production-increasing activities, has been ongoing for several years with Dutch financing. It is being incorporated into the RSG because it represents precisely the type of district level activity the grant was designed to support.

Under the Non-farm Employment and Income group, the Rural Industries Project will continue the activities started in Year 1, but on a considerably larger scale, and the Wildlife Utilization Project will initiate and implement the planning and analysis activities that were to have started in Year 1.

Financial Requirements

During Year 2, planned expenditures for the projects summarized above total P1 266, 407. Of this amount P456 405 will be funded from carry-over from Year 1, leaving additional requirements in Year 2 of P810 002. In addition to the funding of development projects the RSG will finance the following activities: the annual evaluation - P36 765 (P50,000); the Communal Area Coordinator in the RDU - P33 088 (P45,000); external evaluation - P38 541 (P52,416); and a small additional amount to supplement P14 278 in carry-over funds from Year 1 for monitoring of sub-projects - P722. The full requirements for Year 2 are P919 118 which, when converted at the exchange rate of P1=1.36, equals P1,250,000. (See Table 2 at the end of this section for details of the Year 2 budget.)

## Overall Assessment of Proposed Activities

### Selection of Activities

The second year of the RSG will be a period of new initiatives and, for some projects movement from the solving of pre-implementation problems to the actual carrying out of planned activities. The salient features of the Year 2 program as compared to Year 1 are summarized below:

1. Support for local initiatives. During Year 1, the RSG supported district and local initiatives through the Small Projects Fund of the Rural Industry Project and through some of the pilot schemes under ALDEP. During Year 2, ALDEP will be transferred to other donor funding, but two new district-level activities will be added. The most important of these is AE 10 - Small Projects Fund which can be used for any production-related activity initiated by groups of small farmers. This activity could utilize P50 000 of RSG funds in 1981/82. A second new district-level activity is a small woodlots fund under the Afforestation Project. This fund provides financial support for village groups that wish to establish woodlots to meet local needs for firewood, roofing poles or fence posts, as well as for soil conservation purposes. In horticulture, a pilot program for financing small horticulture projects which is being funded by ALDEP in 1981/82 could lead to a small projects fund for these activities under AE 11 - Horticulture Development in Year 3 of the RSG. There is clearly increasing support within the GOB for production-increasing activities at the district and local levels and these small projects funds are ideally suited to assist such initiatives.

2. Support for Communal First Development Areas (CFDA). The CFDA program has recently been started by the GOB to carry out integrated rural development programs in specific locations in the communal areas. The approach to be taken in developing these areas is described in the review of the Western Ngamiland Land Development Project under LG 31, (see review of LG 31 in Part II). The RSG is providing important support for the initial stages of the CFDA program. First, the RSG is financing the preparation of an integrated land use plan for Western Ngamiland and, using this activity as a model, is providing P45 000 for CFDA land use planning at two other locations. Second, also under LG 31, the RSG is funding a major study of the role of local institutions in the design and implementation of development activities in CFDA's. Finally, a new project called Consultancies for CFDA's is being added in Year 2. The purpose of these consultancies will be to provide expertise needed for the planning and design of development activities being considered by CFDA's.

3. Redesignated Activities. Two activities that were to have started in Year 1 have been modified significantly to improve performance and increase their viability over the long-term. These are horticulture and afforestation. The horticulture estate that was to have been established in Year 1 was delayed primarily because of an environmental review required by USAID. In the meantime, the activity was scaled down for technical reasons and because of additional information that became available on the optimal size of group horticulture schemes and on the constraints to vegetable production and marketing in southeastern Botswana. The redesigned schemes cost less, have a larger number of beneficiaries and have fewer implementation problems than what had been originally proposed. In forestry, major organizational changes were made relating to the village

woodlot program. This program has been severely hampered by manpower shortages and lack of specificity on division of responsibilities. Although manpower availability has not improved, changes in design and approval procedures will expedite the approval and funding of woodlots while at the same time improving the quality of proposals. Assignment of implementation responsibilities has also been clarified. The result should be a larger and more efficiently implemented woodlot program than would have been possible previously.

4. Delayed Starts. Although the list of projects in Year 2 is basically the same as for Year 1, the activities actually being implemented will be considerably different. In Year 1 the major accomplishments occurred in ALDEP pilot activities, the rural industries program, construction activity under LG 36 and a forestry nursery. In Year 2, the full range of RSG activities will be underway. Specifically, activities under Implementation of Land Use Plans, Horticulture Development and Wildlife Development will show concrete results in Year 2, whereas very little was accomplished in Year 1. In addition components of two other projects, woodlots under Afforestation and staff training under Land Institutions Development, will begin to be implemented in Year 2. Thus, it can be expected that at the end of 1981/82, RSG accomplishments will be more visible and wider ranging than was the case at the end of 1980/81.

#### Implementation

Expenditures for 1981/82 are projected at about P1.5 million compared to P450 000 in 1980/81. Although an increase this magnitude raises questions of implementation capacity, major shortfalls do not appear likely at this time.

For the MLGL projects construction under LG 36 should continue on schedule; there could be a small shortfall in the training component but this cannot be determined until the Land Board training consultant makes her recommendations. ARU activities under LG 31 should proceed on schedule now that the Director position is filled and the major research activities are already underway. Similarly, arrangements have been made for the proposed land inventories and these should proceed on schedule.

Under the Ministry of Agriculture, it appears that the major problems with the Horticulture and Afforestation projects have been resolved and implementation of all proposed activities should get underway as soon as funds become available. On the other hand, AE 10 is an ongoing program which has consistently experienced shortfalls in expenditures. (See the review of AE 10 in Part II.) However, based on experience with other local action programs of this type, a quantum increase in activity can be expected when existing projects start to have a demonstration effect. Also, it is expected that ALDEP and the CFDA's will have a positive effect on demand for AE 10 funds. The allocation of RSG funds to this project has been conservative but arrangements have been made to provide additional funds if they are needed.

In the Ministry of Commerce and Industry, both the CI 08 - Rural Industries and CA 02 - Wildlife Utilization projects will be fully operational when Year 2 funds become available. Under CA 02, uses for the entire amount of consultancy funds have not been identified. A final decision on the use of these funds will be made after the arrival of the

natural resource economist in March 1981. Under CI 08, the MCI request for the Small Projects Fund was cut from P150 000. On the basis of experience with this fund in Year 1, demand can be expected to increase significantly in Year 2.

Overall, it appears that there are no major constraints to a rapid increase in activity under Year 2. As discussed in the following section, certain measures should be taken by the RDU to facilitate the reprogramming of funds during the course of the year. This would result in improved implementation as funds could be reallocated expeditiously from activities that are proceeding more slowly than expected to those that are ahead of schedule.

#### Environmental Statement

All activities proposed for Year 2 are continuations of Year 1 activities except for the following:

1. Feasibility study on the gathering and marketing of wild plants for export under CI 08. Although the uncontrolled gathering of wild plants could have an adverse environmental impact, the first phase of this study will be to assess available supply and determine the quantities that can be harvested without causing long-term reductions in growth and availability of the plants. Environmental concerns are incorporated into this phase of the study.
2. A pilot training program for blacksmiths under CI 08. This project involves the training of blacksmiths to repair implements that will be introduced under ALDEP. The training will take place at an existing institution (RIIC) and will therefore have no environmental impact.
3. The construction of weirs in connection with two vegetable production schemes under AC 11. There are small structures that do not entirely stop the flow of water but cause water to be kept in a catchment area. The water being retained by these weirs will be used for irrigation of vegetable gardens. The basic flow of water will not change significantly and consequently there will not be any significant environmental impact.

TABLE 2  
RURAL SECTOR GRANT, 1981/82 AND 1982/83  
(Pula)

	Expected balance as of 4/1/81	Planned Expend. 1981/82	Additional funds required	Planned Expend. 1982/83
<u>Land Use Planning and Management</u>				
LG 31 - Impl. of Land Use Plans	79 521	263 941	184 420	61 709
LG 36 - Land Institutions	68 840	205 840	137 000	31 900
<u>Agricultural Income and Employment</u>				
AE 10 - Small Projects <sup>1/</sup>	20 000	70 000	50 000	90 000
AE 11 - Horticulture	99 555	99 555	-	60 000
AE 15 - Afforestation	32 239	111 500	79 261	130 000
AE 19 - ALDEP	76 100	76 100	-	-
<u>Non-farm Employment</u>				
CI 08 - Rural Industries	67 800	302 000	234 321	240 000
GA 02 - Wildlife Utili- zation & Mgmt.	12 350	92 350	80 000	80 000
<u>Rural Production &amp; Incomes - General</u>				
Consultancies for CFDA's	-	45 000	45 000	45 000
SUB-TOTAL	456 405	1 266 407	810 002	738 609
Monitoring studies	14 278	15 000	722	
Communal Area Coordinator	-	33 088	33 088	33 088
External evaluation	-	38 541	38 541	-
DAI	-	36 765	36 765	36 765
TOTAL	470 683	1 389 801	919 118	808 462

## RSG MONITORING AND MANAGEMENT

The responsibility for monitoring and managing the Rural Sector Grant is shared by the Government of Botswana and USAID. A variety of institutions are involved in this, including line ministries, the Rural Development Unit in the Ministry of Finance and Development Planning, the RSG Reference Group, the USAID country mission, and a USAID project evaluation team.<sup>1/</sup> Specifically, each ministry oversees day-to-day implementation of its respective projects using ministerial staff both in the field and at the center. Monitoring of implementation and coordination of RSG activities is also carried out on a continuing basis by the Rural Development Unit, an advisory body within the MFDP, responsible for overall coordination of the government's rural development efforts. In addition, the head of the RDU chairs an inter-ministerial reference group comprised of RDU staff, ministerial senior planning officer, and counterpart planning officers in the MFDP, which is responsible for determining how funds available under the RSG are to be utilized. Beyond these established Botswana institutions, the USAID mission in Botswana periodically reviews reports of project financial progress from the MFDP and consults informally on RSG implementation and planning. Toward the end of each GOB fiscal year, the USAID mission, with the assistance of a project evaluation team, reviews the implementation of RSG projects undertaken, and assesses ministerial project memoranda proposed for upcoming RSG funding. Altogether the RSG provides various mechanisms for institutionalized project monitoring and management in the course of each project year.

In Year 1 of the RSG nine projects were funded for implementation by either the Ministry of Local Government and Lands, the Ministry of Commerce and Industry, or the Ministry of Agriculture. Inevitably these ministries focussed considerable attention this year upon getting RSG programs underway and on establishing a variety of fiscal and implementation monitoring procedures for those programs. In some cases, such as the rural industries program and ALDEP pilot projects, new monitoring systems needed to be established; in others, such as projects falling within the Ministry of Local Government and Lands' Implementation of Land Use Plans, a basic reporting system involving district-level institutions was already in place. This year every effort needs to be made to sustain and improve these monitoring systems.

Throughout the year the Rural Development Unit has made energetic attempts to monitor RSG project develops through continuing contact with ministry personnel both at the center and in the districts. Much of this contact has been on an ad hoc basis. While this has been, and should continue to be, extremely valuable, in addition the RDU needs to give time and thought this coming year to ways to systematizing the monitoring of the RSG. First, there is a need for brief, periodic reporting by the ministries on the status of RSG project implementation. Second, the RDU needs a system for its own use in monitoring ministerial trouble-shooting.

The RSG Reference Group can play a very important role in achieving both of these objectives. First, quarterly meetings can provide a regular forum for reporting on each ministry's progress regarding RSG activities; this has the advantage of disseminating information not only to RDU but to senior ministry personnel in other RSG line ministries as well. Then the

<sup>1/</sup>For a fuller discussion than that provided here of the role of these various institutions in the context of Botswana's development planning, see Appendix.

action items which emerge from each meeting, which would be routinely recorded in meeting minutes, can serve as the RDU's guide in following up on ministerial responsibilities to take designated actions. Through its periodic meetings and minutes, then, the Reference Group can readily and appropriately facilitate and improve the systematic monitoring and management of the Rural Sector Grant.

The Rural Development Unit, the ministries, and the RSG Reference Group should frame these ongoing efforts next year within the context of concrete RSG planning and programming needs. For example, the RDU and the Reference Group need to give careful thought to how to shift project allocations during the course of the year. If a reprogramming exercise is undertaken periodically, the development of sound project memoranda to feed into that process during the year is vital. Likewise, increased dialogue between district officials and staff both in the line ministries and the RDU should focus this year upon needs and priorities which affect Year 3 programming. Efforts should be made to begin to work through this now, rather than toward the end of the fiscal year. In the final analysis, that will undoubtedly produce better informed, better focussed Rural Sector Grant programming than Government has been able to carry out so far.

The RSG Reference Group met eight times during 1980/81, often with donors. So far it has functioned primarily to establish project funding priorities. While the Reference Group will continue to do this next year, it will be valuable if the Group meets quarterly, as outlined above, specifically to review RSG developments and identify action needs. Within this context of progress review, it is possible that as competition for RSG funds increases, the Group will provide a forum for discussion and mutual assessment of ministerial implementation of RSG-funded projects which will exert pressure on every ministry to try to maximize the potential of its RSG programs.

There has been good cooperation between USAID and the Rural Development Unit in Year 1. Procedures ensuring that line ministries clear RSG funding proposals with the RDU, rather than trying to deal directly with AID, are being established. To improve information flow and enable better informed funding decisions, USAID plans to institute reports to the RDU on the actual expenditure of RSG technical assistance funds which the mission holds. Likewise, USAID has requested that HFDP quarterly reports and requests for expenditure reimbursement be submitted by the Ministry on time next year. Ongoing discussions and consultation between the RDU and AID, however, which have been important in the past, will continue to be AID's most crucial input to RSG monitoring and management.

The USAID annual RSG project review toward the end of Year 1 has served two important functions. In providing the minimal formal program review that AID requires, the annual project evaluation has given Government the opportunity to assess critically, with the visiting team, the strengths and shortcomings of its implementation efforts. This has been especially important for projects which have floundered since the RSG was established. In addition, the team's visit has provided a focus for Government planning of Year 2 RSG expenditure; project design, manpower, and budgetary considerations have all been under scrutiny in this joint programming exercise. In the words of one observer, this has forced the various ministries to pause and take stock of where their programs are heading; they might not have undertaken such a careful assessment otherwise.

In the first annual review of the RSG, however, several problems have arisen which have complicated the planning and programming exercise for Year 2 activities. First, different ministries use different definitions for such budgetary terms as "commitment", "allocation", and "expenditure". This makes the determination of carry-over funding for projects within the whole grant from one year to the next very difficult. It is important that in its budgeting of RSG resources in the future and in its preparation for the next review team's visit, the Government make a clear distinction between the mere sub-warranting or allocation of funds by line ministries to implementation agencies such as the NDB or district institutions, and the actual expenditure of those funds by those organizations. Second, it is important that in its annual financial summary of the allocations and expenditures of each RSG sub-project, Government include a statement of its own contribution to those programs, and not just the contribution of the RSG.

It will be important to the future development of the Rural Sector Grant for Botswana officials, both in the districts and at the center, to approach the possibilities and assess the development opportunities of the RSG in the most creative fashion possible.<sup>1/</sup> In the first year of the grant, when the project was new and untried, the RDU tried to foster this. Indeed, it did not take long for funding proposals to be put forward, often by districts, which were similar to those already included in the RSG. Only occasionally, however, did institutions propose programs for funding which attempted to use the RSG in fresh and different ways. To manage the RSG most effectively, district officials from across the country, line ministry personnel, and RSU staff will have to continue not only to familiarize themselves with the RSG as a funding mechanism in a narrow sense, but also to begin to experiment with new projects which capitalize upon the project's flexibility. Government might find it useful to tap short-term RSG consulting funds held by the AID mission for assistance in examining and formulating methods of creatively managing the RSG. Only when district and center alike perceive the RSG as a vehicle for tackling constraints to effective land use planning, to increasing small farmer arable production, and to increasing non-farm employment opportunities in rural areas in changing, innovative, coordinated ways, and not feel constrained by the shape of the various activities which may currently be funded, can the full potential of this development project be realized. It is precisely this approach which can make the overall impact of the Rural Sector Grant greater than the combined impact of each of the individual projects.

#### FUTURE REQUIREMENTS

Current projections of expenditures in the third year of the RSG show funding requirements of almost P810 000 or \$1.1 million. These projections are based mainly on more or less ongoing activities under projects started in the first and second years. For some projects the assumption is made

<sup>1/</sup>George Honadle's discussion of district participation in RSG monitoring and management in Year 1 explores the institutional constraints to full and meaningful participation and suggests alternative means for alleviating those constraints over the next two years. See Appendix.

that there will be no new initiatives. This results in substantial drops in activity for LG 31 and LG 36. For other projects it is possible to project some growth. It is assumed that AE 10, the Small Projects fund under CI 08, and the Small Woodlots Fund under AE 15 will grow moderately in 1982/83. Also, it is assumed that it will be possible to start a small projects fund under AE 11 - Horticulture Development, in 1982/83. In short the projected requirements of P810 000 assume no new initiatives other than increased use of district-level small projects funds. Other possibilities for increased requirements for RSG funds are described in the remainder of this section.

1. Rural Industries. As RDOs and others involved in rural industry development begin to develop a better understanding of potentials and constraints in that sector, it is likely that numerous needs for studies, R&D, and pilot projects will be identified. This has already begun to happen. In year two, the RSG will finance a gathering study and a pilot blacksmith training program. In the near future, it is expected that MCI will request funds for a food processing laboratory to test ways of efficiently processing the increased production that could result from ALDEP. Another possible activity that should be ready to start in late 1981/82 or early 1982/83 is the setting up of a Supply and Marketing Agency to support small cottage industries. This agency would supply raw materials, tools and technical assistance and purchase the resulting production for resale either in Botswana or abroad. Possibilities include tanning, knitting and woodworking. Both of these activities would cost more than P100 000 to carry out.

2. Land Use Planning. The figures in Table 2 do not reflect any new inventory or demarcation activities under LG 31 in 1982/83. By late 1981 it can be expected that the pilot inventories being carried out in year two will have led to proposals for more full-scale inventories of land use and water points. Also under LG 31, it is likely that the ARU will continue to require funds for long and short-term studies related to communal area development. These two sets of activities combined could require funding of P200-300 000 over what is currently being projected.

3. Communal First Development Areas. Most districts have now identified CFDA's and, already in year two, the RSG is funding the first stage in preparing for the development of some of these areas through the inventory of available land and water resources. It is not yet clear what specific development activities will occur in these areas, nor where funds will be obtained. This will be studied by the RDU and others during year two. The RSG project consultancies for CFDA's could be used for this purpose. There is a good possibility, however, that a new RSG sub-project to finance activities not easily addressed through larger more structured projects could be needed.

4. The Management and Monitoring section above and the Appendix to this report recommended that the RDU expand its dialogue with districts and local officials to obtain a better idea of their needs and of the constraints preventing local development initiatives. This dialogue could lead to the identification of technical assistance needs that could appropriately be met through the RSG.

5. Agriculture. It should be recognized that if ALDEP becomes the comprehensive program to increase agricultural production and income that it is intended to be, this will greatly limit the possibilities for interventions under the RSG. ALDEP will include technical assistance, training, research, financing of inputs and crop marketing programs. Given the strong production focus of ALDEP, however, it is likely that those aspects of small farmer production programs that are not directly related to production; i.e., activities to encourage decentralization, farmer participation and the

equitable spread of benefits, will not be given adequate attention. In view of the fact that ALDEP as presently designed will have little impact in the bottom 40% of arable farmers, there is a clear need for activities that address the equity issue. The RSG could play a useful role in financing socio-economic research and pilot activities that are aimed at understanding and addressing the special problem of the poorest farmers.

6. Conclusions. In conclusion, it appears that there are potential requirements for RSG funds that greatly exceed what will be available in 1982/83. These requirements should be carefully analyzed as part of the external evaluation of the RSG that is scheduled to take place in late 1981 to determine if additional RSG funding is appropriate. It should be noted that such an analysis would be greatly facilitated if specific possibilities were thoroughly explored by the RDU and line ministries prior to the arrival of the evaluation team.

## REVIEW OF YEAR 1 ACTIVITIES

## GROUP 1: LAND USE PLANNING AND MANAGEMENT

LG 31 - Implementation of Integrated Land Use PlansDESCRIPTION

This sub-project serves as a funding umbrella for a variety of activities relating to land use planning. A major issue in the creation of a viable rural development program in Botswana is the need to evolve methods for the proper utilization of commonly-held land. LG 31 has been designed to provide assistance to districts in the development of productive activities and the essential services to support such activities. LG 31 especially seeks to support investigation, planning, and initial implementation of integrated land use development. The objective within the context of the Rural Sector Grant is to provide a foundation for development of productive activities in the communal areas. In Year 1, three activities were funded -- Western Ngamiland Land Development, Lepashe Communal Service Center and studies by the Applied Research Unit in MLGL. Ngamiland is a three-year activity which aims to provide a land use plan for improving agriculture in the Etsha-Gomare-Nokaneng village area, which has very good potential for expanded crop production. During the first year, a land inventory was to be carried out by the Ngamiland LUPAG and policy alternatives for productive land management were to be developed with the Tswana Land Board (Ngamiland District). Lepashe is a one-year activity which aims to establish a communal service center in the Lepashe commercial ranching development area to provide services to the ranching enterprises as well as to the people resident on the ranches and in the communal area adjacent to the ranches. These services are to include a communal borehole, a small school, a health post, and an office/storeroom as the base for various extension services to promote development of productive activities in the new settlement area. The applied research activity involves the carrying out of surveys, research, and private consultancies under the newly-established Applied Research Unit (ARU). The ARU has been established to carry out research in all aspects of the portfolio responsibilities of the Ministry of Local Government and Lands (MLGL).

Estimated RSG contributions to this sub-project in Year 1 were P17 500 for Ngamiland, P43 659 for Lepashe, and P25 591 for applied research. Estimated GOB contributions were P20 000 for Ngamiland (vehicles and aerial photography), P6 810 for Lepashe (salaries and miscellaneous), and P16 170 for applied research (technical assistance).

PROJECT PERFORMANCEAchievements:

In Ngamiland a pilot inventory and registration of cultivated lands was carried out in an area 5x5 km on Tubu Island, east of Gomare, by the Gomare Subordinate Land Board, the Land Tenure Officer, the Agricultural Officer (Land Resources), the District Officer (Lands), and three students from the University of Botswana and Swaziland. In the period July/August 1980, fields were identified, measured, mapped, and their owners identified. In addition, a start was made on the reorganization of the Gomare Subordinate Land Board filing system.

At Lepashe, the Central District Council, which has responsibility for the communal service center, has acquired rights to the borehole and has

selected a contractor to construct the buildings at the site. The contractor is due to start construction immediately.

The ARU research funds have been used to finance local support for one researcher from the University of Wisconsin, during the period September 1980 to March 1981. The research is examining the relationship between access to land and water resources and returns to labor in agricultural production. In addition, local subsistence costs of a land tenure consultant from University of Wisconsin were covered by ARU funds. The consultant prepared during September-October 1980 a report to MLGL dealing with land tenure changes in the context of access to credit for housing in the major villages.

#### Implementation Problems:

In Ngamiland, lack of adequate aerial photography -- both recent enough and at large enough scale to show the many small, recently ploughed fields -- slowed the inventory work greatly, because identification of the fields had to be done by ground checking following the indications of the farmers. New, large-scale aerial photography was flown for the area in 1980, but prints were not received until late in the year.

In Lepashe, there were difficulties in acquiring rights to the borehole and in finding a building contractor, which has delayed construction until now.

The ARU was not in a position to start using its funds until the new head of the Unit began work in November 1980.

#### Financial Situation:

Of the P17 500 budgeted for Ngamiland, only about P3 500 will have been spent in Year 1 on office equipment for the Subordinate Land Board, prints from the new aerial photography, and other supplies. The unspent balance will be carried over into Year 2. Of the P43 659 budgeted for Lepashe, none has been spent to date. The construction work will be completed and paid for in Year 2. The borehole was acquired without using the P10 000 allocated for that purpose. Therefore, the P10 000 will be subtracted from the Lepashe budget and only P33 659 will be carried over into Year 2 to pay for construction. Of the P25 590 budgeted for ARU, only P3 382 will have been spent in Year 1. The unspent balance will be carried over for Year 2 research activities.

#### Monitoring Arrangements:

All three activities funded under this sub-project are monitored and coordinated by the Planning Officer (Lands) of the MLGL, which reports on project performance to the RSU. The Ngamiland activity is directed by the DO(L) and the Gomare Subordinate Land Board, while funds are held, disbursed and accounted for by Northwest District Council, which reports expenditures quarterly to the Planning Officer (Lands). The Lepashe activity is monitored by the DO(L) at Tutume but is the responsibility of the Central District Council, which has contracted the construction work to a local private contractor. The applied research activities are directed by the Head of the ARU.

USAID monitors the expenditures and progress of the sub-project through regular reports from the RDU. A USAID engineer will soon examine the contractual arrangements made for construction at Lepashe and will inspect the

construction work at the time the buildings are handed over officially to the Central District Council by the contractor.

It appears that the GOB and USAID monitoring arrangements are adequate to identify implementation problems at an early date and to undertake corrective actions when necessary.

## ANALYSIS

### Nqamitlind:

This District activity has carried out a pilot scheme for land inventory while hardly exceeding normal District recurrent costs. The scheme involved a large number of District officials and local area farmers and apparently taught many operational lessons, as a pilot scheme is meant to do. Most of the original budget for this activity was allocated to hiring a consultant photointerpreter-mapper. However, the District officials have held off the consultancy until they are better able to define their needs. This will be done through broad consultations with local organizations on future policy for development of productive activities in the Gomare area. At the same time, pilot activities in labor-intensive infrastructure development and improvement of crop agriculture are going forward. The careful, yet energetic approach to planning for development of the Gomare area indicates that this activity will become a model for communal area development in other parts of Botswana. It is especially encouraging that the officials involved in the Year 1 activities will almost certainly continue to be involved in Year 2 and probably Year 3 as well.

### Lepashe:

There is concern about this activity, not because the construction has been delayed, but because it is uncertain that the Lepashe area has the productive potential to usefully employ the people who are already moving or will soon move to the area as the service center is developed. Aside from possibilities for small stock raising and about 300 ha of good arable land nearby, the potential is limited. Even those stock-raising and crop-growing possibilities require the active interest of District agricultural experts to help the local people develop their capabilities. It is fortunate that the Regional Agricultural Team based in Francistown has a good performance record and is already visiting the vicinity of Lepashe regularly. Furthermore, an Agricultural Extension Assistant has just been posted to the Lepashe area. However, there are no definite plans yet for an intensive, coordinated effort to develop the limited potential for productive activities, and it is unclear who or what institution is taking the responsibility for developing and implementing such plans.

### ARU:

Under the direction of its new rural sociologist and with the support of the University of Wisconsin Land Tenure Center, the ARU is developing a clearly focussed, policy-oriented research agenda targeted on development problems of the communal areas. The Unit has joined in a working group with the other social science research units of the GOB to identify research priorities for communal area development. One of these priority areas has been developed into a detailed research proposal submitted in part to RSG for Year 2 funding.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

1. Delays in implementation of the Western Ngamiland Land Development sub-project were due primarily to the late obligation of funds by AID and the late arrival of new aerial photography. Implementation is now proceeding in a manner that will lead to the rational use of land resources in the Gomare area of Ngamiland. Special attention is being given to participation by local institutions. This relatively well conceived and implemented sub-project will probably serve as a model for other land use planning and management projects in the communal areas.
2. The major cause for delay of the Lepashe Communal Service Center was difficulty in obtaining rights to the borehole. Now that those rights have been obtained, the key issue is whether productive employment opportunities can be developed in the Lepashe area. It is recommended that MLGL take the measures necessary to assure that district and regional officials provide adequate production-related extension services to the Lepashe area.
3. It is clear that sustained communal area development cannot be achieved without a thorough understanding of the socio-economic decision-making process in those areas. The evaluation team feels that the type of research being proposed by the ARU is an essential prerequisite to a sound development strategy for communal areas.

LG 31 - IMPLEMENTATION OF LAND USE PLANS, 1980/81

	Amount budgeted in orig. PM	Amount Warranted as of 12/31/80	Expend. as of 12/31/80	Expected Expend. as of 4/1/81	Expected balance as of 4/1/81
Ngamiland Land Use Plan	17,500	17,500	249	3,500	14,000
- short-term consult.	(10,000)				
- local costs	( 7,500)		(249)	(3,500)	
Lepashe	43,659	43,659	-	-	43,659
- equipment	(10,000)				
- construction	(19,690)				
- contingency and inflation	( 3,969)				
- borehole purchase	(10,000)				
Applied Research Unit	<u>25,590</u>	<u>500</u> <sup>1/</sup>	<u>3,382</u>	<u>3,382</u>	<u>22,208</u>
TOTAL	86,749	61,659	3,631	6,882	79,867

<sup>1/</sup> Remaining funds were held by USAID, P13,200 (U.S. \$17 900) were transferred to an AID/Washington contract with the Wisconsin Land Tenure Center (LTC). None of these funds were used prior to 4/1/80. The residual was retained to cover LTC costs in Botswana (housing, utilities, enumerators, etc.)

GROUP I: LAND USE PLANNING AND MANAGEMENTLG 36 Development of Land InstitutionsDESCRIPTION

This sub-project has been designed to strengthen the Tribal Land Boards to carry out their responsibilities as trustees, allocators, and adjudicators of trival land. Land Boards are new institutions, having been set up in 1970. The complexity of the job they are expected to perform is such that a considerable amount of training is necessary for both Land Board staff and members. They need assistance in understanding the administrative procedures and skills required in land allocation. Also, as land policy evolves, through such programs as TGLP and ALDEP, Land Boards must be given policy guidance from MLGL. This requires a research unit that can understand and interpret the impact of land use and land tenure policies. Finally, the Land Boards need infrastructure (offices, vehicles, and equipment) so they can conduct daily operations.

During Year 1, the RSG was to provide logistical support in the form of new office buildings for four Subordinate Land Boards in remote areas, office furniture, camping equipment, and technical equipment for Land Board staff in the districts, and a four-wheel drive vehicle for the newly established Applied Research Unit (ARU) of MLGL. The RSG was also to support training of Land Board staff by providing funds for a Land Board Training Consultant, training course development, and the training courses themselves. The estimated RSG contribution of P172 700 is complemented by a GOB estimated contribution of P268 400, consisting mostly of vehicles and construction.

PROJECT PERFORMANCEAchievements

All four Subordinate Land Board office buildings programmed for Year 1 have been built to proposed specifications - at Nata (Ngvato Land Board), Lentsveletau (Kweneng Land Board), Artesia and Mathubudukwane (Kgatleng Land Board). Funds for equipment and furniture have been used by the newly appointed Land Tenure Officers to build up their equipment, and money for camping and technical equipment is being disbursed as the funds are requested by Land Boards. The four-wheel drive vehicle has been purchased and is being used by the ARU.

The Land Board Training Consultant was contracted in early November through the Central Tender Board and began the four-month consultancy at the end of January. The Land Tenure Officers (advisors to the Land Boards) are holding introductory training courses, but progress beyond introductory courses until completion of the training consultancy.

Implementation Problems:

The MLGL had difficulties for many months in identifying a Land Board Training Consultant who was qualified, available at a reasonable fee, and acceptable to the Ministry. Late recruitment of the consultant has delayed implementation of the training program for Main and Subordinate Land Board staff.

### Financial Situation:

All money budgeted for office construction and vehicle purchase in 1980/81 will be spent before 1 April 1981. Of the P10 000 budgeted for furniture and equipment, P7 000 will probably be spent before April, the unspent balance to be carried over for Year 2 purchases. Of the P30 000 budgeted for the training consultancy, only P11 860 is required; the balance will be used in Year 2 for training courses. Of the P39 000 budgeted for training, only P7 000 will be spent before April; the balance will be carried over into Year 2.

### Monitoring Arrangements:

All the construction, purchasing, consulting, and training activities funded under this sub-project are monitored and coordinated by the Planning Officer (Lands) of the MLGL, which reports to the RDU. Construction of offices is the responsibility of the appropriate District Council, which tenders the work to contractors and judges the acceptability of the work. The vehicle purchased is part of the CTO fleet and is assigned to the Head of the Applied Research Unit, MLGL. The Planning Officer (Lands) is responsible for disbursement of funds to Land Boards and Land Tenure Officers to purchase specified pieces of furniture and equipment. The Commissioner of Lands in MLGL, having overall responsibility for the Land Boards and Land Tenure Officers, will supervise the training consultancy and course development, while the Land Tenure Officers follow-up with the organization of training courses.

USAID monitors the expenditures and progress of the sub-project through regular reports from the RDU of the MDP. A USAID engineer will inspect the construction work at the time the office buildings are handed over officially to the District Councils by the building contractors.

Based on the performance of this project during Year 1, it appears that the GOB and USAID monitoring arrangements are adequate to identify implementation problems at an early date and to undertake corrective actions when necessary.

### ANALYSIS

The logistical support activities of this sub-project are proceeding on schedule and promise to achieve their objective - to provide physical support to Land Board operations - either directly or through the Applied Research Unit, which is responsible for providing the necessary research support for the Land Board system. Recurrent costs of maintenance can be readily absorbed by the District Council and CTO budgets.

A more crucial constraint to the effectiveness of Land Boards is the lack of training for members and staff. The Land Tenure Officer (LTO) cadre was established to provide advisory services, but those services must be linked to a well-designed training program. In fact, the role of the LTO's depends to a great extent on the nature of the training program. Unfortunately, the LTO's had been working about one year at the time the consultancy started, which means they already had developed work programs, including a few training courses, without specific advice on their role as trainers and advisors. The result is inevitably some confusion, wasted effort, and delay. Nevertheless, the situation can be put right through a well-directed Land Board training consultancy.

The simplest and perhaps most meaningful measures of the success of the training program are the rate at which land allocation requests are processed and decided by Land Boards, the rate at which land disputes are processed and adjudicated, and the percentages of allocations and adjudications which lead to further disputes. The very existence of such data, if reliable, would imply greatly improved record-keeping by Land Boards. It is one role of the Commissioner of Lands to monitor the performance of Land Boards by ensuring that adequate records are kept at the Land Board offices and that summary data are reported regularly to MLGL in a form that can be used to evaluate performance of the Land Boards' role as trustee, allocators, and adjudicators of tribal land.

## LG 36 - LAND INSTITUTIONS, 1980/81

	Amount budgeted in orig. PM	Amount Warranted as of 12/31/80	Expend. as of 12/31/80	Expected expend. as of 4/1/81	Expected balance as of 4/1/81
Office Construction-4 SLBs	68,000	68,000	43,288	68,000	-
Vehicle Purchase-Applied Research Unit	10,000	10,000	10,000	10,000	-
Office Furniture and Equipment - Land Boards	10,000	10,000	4,995	7,000	3,000
Land Board Training Consultant	30,000	-	-	11,860	18,140
Land Board Training Course Development	9,000	-	-	-	9,000
Land Board Training Courses	30,000	30,000	3,221	7,000	23,000
Contingency (10%)	15,700	-	-	-	15,700
TOTAL	172,700	118,000	61,504	103,860	68,840

## GROUP I: LAND USE PLANNING AND MANAGEMENT

### Water Points Survey

#### DESCRIPTION

In January 1979, the Ministry of Agriculture asked the Center for International Studies, Cornell University, to undertake a survey of water points in the eastern communal areas to provide policy guidance for future planning and implementation of dam construction and water development. This sub-project was designed to perform policy-oriented research, training, and consultancy services with the following goals:

- a) To identify current water point locations, to evaluate water point construction, participation in use, and management practices, and to suggest ways to provide additional facilities which reduce monetary costs and limit adverse environmental impact.
- b) To analyze livestock production in the communal areas, in terms of its demands on water and range resources, and to indicate patterns of more efficient resource use.
- c) To determine the reasons and conditions under which some rural households have access to various types of water points, while others do not, as well as to understand the nature of participation in water point management and construction.
- d) To provide policy guidance for the planning and implementation of both dam construction and water development under the Tribal Grazing Land Program (TGLP) and the proposed Arable Lands Development Program (ALDEP).

Initial funding (prior to the RSG's existence) of \$50,000 was provided through USAID's Agricultural Planning project. Further funding was shifted to the RSG following its approval by AID/W. The estimated level of RSG contribution was P41 540 (see attached budget). The GOB contribution was expected to be P14 900, primarily for enumerator salaries, transport, and training.

#### PROJECT PERFORMANCE

##### Achievements:

The study was undertaken by a team of three people from Cornell University -- a rural sociologist, a policy analyst, and a resource economist. Short-term assistance was provided by an animal production specialist, an agricultural economist, a water engineer, and an airphoto interpreter. The survey team collected data over a ten-month period at twelve sites in the eastern communal areas. The survey consisted of three sets of interviews with a random sample of households at each site, key informant interviews, monitoring the use and conditions of water points, range monitoring, and scoring cattle conditions. All household interviews were done by twelve Botswana enumerators who lived full-time at their sites. Supplementary observations were done by the Cornell team and by a researcher seconded from the MOA Rural Sociology Unit.

Several special-topic publications and an overall report have been produced by the survey team. The report includes three sets of policy guidelines for: a) planning projects which affect livestock and domestic use of water in eastern Botswana, b) choosing water point types and sites for water development in the communal areas of eastern Botswana, and c) group management of dams.

The study team is currently discussing the survey results and resulting guidelines with officials in the districts and villages in which the survey work was carried out. This activity will complete the Water Points Survey.

#### Implementation Problems:

There have been no implementation problems that have delayed the completion of this survey. However, the survey team found that airphoto coverage was not complete for the total survey area and that airphoto interpretation was not a reliable method for inventory of water points. This problem of inventory prevented determination of the "universe" of water points from which the survey sample was drawn.

#### Financial Situation:

Only P12 219 of the P41 540 budgeted for this sub-project from the RSG has been used. Although the survey started in August 1979, it did not start using funds from RSG until September 1980. Most fieldwork and consultancies had been completed by that time. By the end of Year 1, the Water Points Survey will have been completed. However, the sub-project has been amended to allow the balance of budgeted funds to be spent on a companion study by the same team to assess current policy for water point site allocation by Land Boards.

#### Monitoring Arrangements:

The Water Points Survey directly serves the Ministry of Agriculture and operates from a base at the MOA Headquarters in Gaborone. It is overseen by a reference group consisting of representatives of MOA (and the Animal Production Research Unit separately represented), MGL, Ministry of Mineral Resources and Water Affairs (and the Director of Water Affairs separately represented), and the National Institute of Research. The survey is conducted by Cornell University under the terms of a standing research contract with AID/W and a Memorandum of Understanding between Cornell and the GOB. The USAID Mission in Gaborone monitors expenditure and progress of the survey. Activities funded by RSG are reported to the RDU. These management and monitoring arrangements are judged to be adequate.

#### ANALYSIS

The Water Points Survey appears to have achieved, within the context of a sample survey of twelve areas of eastern Botswana, all four original goals. The design for data collection and analysis is probably adequate to ensure that the conclusions drawn from the data are solidly based on the real situation in the twelve sample sites. Furthermore, these twelve sites are probably representative of the whole rural communal area of eastern Botswana, given the careful selection of sites by the survey team.

However, it should be noted that in a narrow statistical sense the validity of the study's conclusions on water points can be challenged on the grounds that the "universe" of water points from which the sample of water points was drawn was not adequately known, and therefore the representativeness of the sample of water points is technically doubtful. However, since much of the survey concerned household behavior based on a statistical sample of households, this is not a major concern. Furthermore the kind of data and the way in which it was collected and analyzed made statistical inference difficult or impossible in a few cases. These are perhaps minor points. The final report of the study incorporated changes suggested by the reference group and was released for printing by the Chief Agricultural Economist. Depending on a request by the reference group, it may be desirable from USAID's point of view to arrange for outside technical evaluation.

The survey team is to be commended for two especially important achievements. First is the publication of three sets of immediately useful policy guidelines for water development in communal eastern Botswana. However, their utility for operational guidance may be limited in the case of specific project design. Second is the team's serious effort to disseminate the survey results to relevant decision-makers at all levels, including the villages from which the results were drawn. This effort is an unusual and welcome aspect of the sub-project.

WATER POINTS SURVEY, 1980/81

	Amount budgeted in orig. PM	Expend. as of 12/31/80	Expected as of 4/1/80	Expected balance as of 4/1/81
Salaries and support	16,660	5,290		
Reporting, Communications, and Computing	8,525	2,095		
Vehicles-leasing and Operation	12,580	4,231		
Misc. and Contingency	3,775	603		
	41,540	12,219	41,540 <sup>1/</sup>	

<sup>1/</sup>The sub-project has been amended to allow the balance of budgeted funds (41540-12219) to be spent on a companion study by the same team. The breakdown of expenditure under that companion study is not yet available.

## GROUP II: AGRICULTURAL PRODUCTION AND INCOME

### AE 11 - Horticultural Development

#### DESCRIPTION

The objectives of this sub-project are import substitution, rural income generation and crop diversification. In Year 1 the RSG was to have funded the establishment of a horticultural estate at Mogobane in Southeast District. The Mogobane pilot project is intended to develop a horticultural estate model which addresses the crop husbandry, management, marketing, credit and water supply constraints to smallholder fruit and vegetable production in Botswana. In contrast to previous attempts to develop irrigated farms which employed local inhabitants as laborers, the Mogobane estate is based on the formation of a management association of smallholders. This sub-project supplies technical assistance in the form of a volunteer horticulturalist/manager, site development costs, implements, transport, and a credit and initial consumable stock fund.

RSG support for Mogobane, all of which was to have been provided in Year 1, was budgeted at P99 555. In Year 2 of the RSG, a second horticultural estate was scheduled for development at Mothobudukwane in Kgatleng District. RSG support to this activity had been tentatively budgeted at P125 124.

#### PROJECT PERFORMANCE

##### Implementation Problems

The only activity that occurred in Year 1 was some site clearing and fencing using P5 000 from DDF and labor contributions from members of the producers association. The main problem was a nine-month delay in AID/W approval of the risk benefit analysis of pesticides proposed for use in the project. Approval was finally received in January 1981. Also, during 1980/81 it was discovered that due to accumulated silting the reservoir at Mogobane could go dry following several years of very low rainfall. This led to a scaling down of the scheme at Mogobane from ten hectares to about four hectares, and the selection of two other sites for group horticulture production in the same vicinity. An addendum to the original Project Memorandum has been prepared describing the revised scheme. Since this activity will now be funded in Year 2 of the RSG, it is discussed in detail in the section of this report dealing with Year 2.

##### Financial Situation

All of the P99 555 of RSG funds originally budgeted for Year 1 will be carried over to Year 2. During Year 1 P5 000 was obtained from the DDF to pay for site clearing, fences and some irrigation equipment.

##### Monitoring Arrangements

Primary responsibility for monitoring the implementation of this project rests with the Senior Horticulturalist in the Ministry of Agriculture. Day to day monitoring was to have been done by an Agricultural Demonstrator (MOA extension agent) stationed in Mogobane and an expatriate horticulturalist advisor to the vegetable producers. It appears that the implementation problems experienced in Year 1 were identified in a timely manner and appropriate action to address the problems was taken.

## AE 11 - HORTICULTURE, 1980/81

	Amount budgeted in orig. PM	Amount Warranted as of 12/31/80	Expend. as of 12/31/80	Expected Expend. as of 4/1/81	Expected balance as of 4/1/81
Vehicle	8 815				8 815
Tools & equipment	7 971				7 971
Horticulture supplies	3 800				3 800
Transport and maintenance	3 600				3 600
House construction	18 000				18 000
Site development	48 319				48 319
Contingency	9 050				9 050
	<u>99 555</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>99 555</u>

GROUP II: AGRICULTURAL PRODUCTION AND INCOME

Year 1

## AE 15 - Afforestation

DESCRIPTION

The objectives of the afforestation program are to:

- 1) provide individuals, village groups, and government agencies with tree seedlings for afforestation and amenity planting, and
- 2) financially and technically assist village groups and government agencies in the establishment of village woodlots for the purpose of providing firewood, posts, and hut construction materials for local use.

The afforestation program is divided into AE 15 (I) expansion and establishment of Government tree nurseries and, AE 15 (II) small afforestation projects program (woodlots).

The Ministry of Agriculture (MOA) currently operates six nurseries. A seventh nursery built with RSG funds is close to completion at Ramatlabama. Two more nurseries are planned in the coming two years. In addition, two village woodlots (in Matsheng and Takatokwane) were to have been constructed in 1980/81 and funds were tentatively set aside for additional woodlots in the second and third years of the RSG. At least six village groups in different locations are establishing or managing woodlot projects. Plans have been submitted to MOA for establishing nine woodlots between 1980 and 1982. Total RSG support for this project is currently budgeted at about

P270 000 for the three year period of the grant. The GOB contribution to this project in Year 1 is limited to the payment of local salaries at the Ramatlabama nursery.

### PROJECT PERFORMANCE

#### Achievements

Nursery construction is staggered over a three year period. The Ramatlabama nursery will be completed in the 1980/81 GOB fiscal year. Two more nurseries are planned for the fiscal years 1981/82 and 1982/83. One small woodlot (.5 ha) was planted in Mahalapye. Two other woodlots that were to have been started in 1980/81 (in Matsheng and Takatokwane) have been postponed to 1981/82.

#### Implementation Problems

There were no implementation problems in the nursery construction at Ramatlabama.

Originally, woodlots at Takatokwane and Matsheng were to have been established in 1980/81. However, because MOA did not subwarrant the funds for Takatokwane until December 1980 and Matsheng lacks a project manager, neither woodlot was established. The site at Takatokwane has been prepared for planting using GOB funds. It will lie idle until the rains begin in November or December 1981, at which time planting will take place. A proposal for a village woodlot in Mahalapye was received and financed by the RSG using funds originally budgeted for contingencies under the Ramatlabama nursery. The cost of the Mahalapye woodlot was P615.

#### Financial Situation

In year one, P29 240 was budgeted for the Ramatlabama nursery construction, of which P25 989 will be spent by 1/4/81. Of the P28 888 budgeted for the Takatokwane and Matsheng woodlots, none was spent as of 1/4/81. The entire unspent balance will be carried over into Year 2.

#### Monitoring Arrangements

The nursery financial flows are controlled by the Ministry of Finance accounting procedures. Beginning with the arrival of the Forestry Officer in June 1980, each nursery began monitoring the outflow of seedlings. Monthly reports of plant sales are sent from each nursery to the head office. Amenity and plantation seedlings are kept separate as raw data but not in the monthly reports. Since the factors affecting demand for each type of seedling are very different, separate sets of data should be kept for each one.

No standardized monitoring procedures exist for the village woodlots program. With the small number of woodlots currently being established or expanded the forestry staff can easily monitor these activities. If there is significant growth in the village woodlot program, however, a standardized monitoring system will be required. Monitoring should cover: an inspection of the fencing, a reliable area estimate, a spacing observation, and a check for signs of maintenance. These activities when compared against standardized activity and cost guidelines will be easy to verify. MOA foresters could perform this function as part of their regular field trips.

## ANALYSIS

The nursery people are managing and operating the nurseries in a manner consistent with typical nursery practices in the Southern Africa region. They are somewhat overstaffed and inefficient in their activities, but they produce healthy seedlings.

The location of the Ramatlabama nursery is a poor choice. Prior to the construction of the Ramatlabama nursery there were two nurseries within easy driving distance of Ramatlabama; these being Gaborone and Kanye. The woodlots, of the size being currently established, use on the order of 5,000 to 10,000 seedlings for each planting season. This quantity can easily be transported to the woodlots by pickup truck. The Ramatlabama nursery lies within sight of the South African border in the southeast corner of Botswana, which means that its distribution area is only one-third of a circle, if one can make the assumption that a normal distribution area radiates 360 degrees from a focal point. Thus far, the main user of seedlings from Ramatlabama is the Good Hope plantation which could easily have obtained its seedlings from Kanye.

The design of the Ramatlabama nursery appears to be excessively expensive. First, a nursery needs a tractor and implements only for soil loosening prior to hauling to the nursery. The great majority of tractor and implement use in forestry programs is for plantation or woodlot use. In fact this is how the tractor that was provided for the Ramatlabama nursery is currently being used. The allocation of tractors and implements should be shifted to activities other than nurseries to reflect actual use patterns. Second, a vermin-proof shed can be justified for tool storage, office, and other use; but not a P10 000 store/office. The level of activity at a nursery the size of Ramatlabama does not justify buildings of that size.

The only other Year 1 activity under this project is the Mahalapye woodlot. The woodlot is a .5 hectare demonstration plot near the edge of Mahalapye. It is being established as part of the literacy school run by the Mahalapye Brigade and its purpose is to demonstrate woodlot design and management for village groups in the area. The management of the woodlot is following the standard Botswana practices: fencing, plowing, planting, weeding, and watering. There are no technical or institutional issues related to this activity.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

1. The nursery construction was completed on schedule. Under the woodlot component the Mahalapye woodlot was established during 1980/81. The Takatokwane trials woodlot was postponed by one year due to late arrival of funds and the Matsheng project has been postponed until a manager can be identified.
2. It appears that the site for the first nursery under the RSG was not well selected. Any prospective users of seedlings from Ramatlabama could easily have been supplied from at least two other nurseries in southeastern Botswana.
3. The design of the Ramatlabama nursery appears excessively expensive relative to likely volume of sales. It is recommended that future MOA nursery projects not include funds for tractors or for

any building other than a vermin-proof shed for storage of tools and supplies, unless the tractor and/or buildings can be justified for uses other than those related directly to the nursery. This issue is discussed further in the review of Year 2 forestry activities.

4. The monitoring of the nursery program is satisfactory now that records are being kept on the outflow of seedlings. Similarly, as long as the number of woodlot projects remains small, MOA monitoring is adequate. However, if the village woodlot program increases significantly a standardized and regular reporting system will be required.

AE 15 - AFFORESTATION, 1980/81

	Amount budgeted in orig. PM	Amount warranted as of 12/31/80	Expend. as of 12/31/80	Expected Expend. as of 4/1/81	Expected balance as of 4/1/81
1. Ramatlahama nursery	29 340	30 000	11 524	25 989	3 351
- tractor & imple.	(11 330)	(11 330)	( 9 980)	(11 330)	-
- office & equip.	(14 170)	(14 170)	( 47)	(12 659)	( 1 511)
- hand tools	( 1 173)	( 2 000)	( 1 173)	( 1 173)	-
- contingency	( 2 667)	( 2 500)	( 324)	( 827)	( 1 840)
2. Matsheng woodlot	(19 088)	-	-	-	(19 088)
- materials	(11 703)				
- labor	( 4 133)				
- tractor hire	( 2 210)				
- contingency	( 1 042)				
3. Takatokwane	9 800	10 000			9 800
- fencing	( 3 894)	( 3 894)			
- labor	( 2 436)	( 3 436)			
- trees	( 1 625)	( 1 625)			
- contingencies	( 1 845)	( 2 045)			
4. Mahalapye woodlot	-	-	-	615	- 615
	58 228	40 000	11 524	26 604	31 624

GROUP II: AGRICULTURAL PRODUCTION AND INCOMES

AE 19 - Arable Lands Development Program Pilot Activities

DESCRIPTION

In 1980/81 the Rural Sector Grant provided financing of P180 500 for a series of pilot projects designed to remove constraints to arable agriculture, undertaken within the Arable Lands Development Programme (ALDEP), a major Botswana Government initiative targeted to reach 40,000-65,000 smallholder crop producers who plow no more than ten hectares. It is a program aimed at increasing the production of staple foods, generating productive employment, and raising incomes in the rural areas. Pilot objectives were to: 1) test ideas which might be included in the main ALDEP programs, 2) develop implementation capacity, 3) provide transition into full ALDEP implementation, and 4) maintain the momentum generated during ALDEP's initial district consultative planning phase. The five pilot programs approved for RSG Year 1 funding were:

1) Implement Credit Scheme	P43 500
2) Donkey Draft Power Credit Scheme	29 000
3) Small-scale Water Development Scheme	29 000
4) Fencing Development Scheme	29 000
5) Lock-up Stores Development Scheme	50 000

District institutions, however, were given the latitude to adapt ministerial guidelines for implementation of these programs to meet their individual needs or to generate other pilot proposals for funding.

PAST PERFORMANCE

Actual allocation of funds by the Ministry of Agriculture varied from the Year 1 budget in one important respect. No RSG resources were spent on the Lock-up Stores pilot, but instead most of these funds were allocated by the Ministry of Agriculture to a pilot Extension Assistants Training and Support Scheme in several sandveld areas. In addition, approximately P3 700 was warranted for a project aimed at extending and improving a secondary school garden in Ghanzi. The Ministry also made an important decision at the beginning of Year 1 when it concluded that the timely implementation of pilot projects in all areas was less important than the process of districts modifying ministerial programs or developing their own initiatives, thus capitalizing upon a long-term institution-building effort begun during the ALDEP planning phase. Following is a brief examination of each of the major pilot projects actually aided by the RSG.

1) Implement Credit Scheme

At the heart of ALDEP lies the introduction of an improved agricultural technology package which emphasizes use of the single-row planter and cultivator within an overall program of improved cropping practices. In fiscal year 1980/91 the RSG provided the subsidy element and Government the loan component of a pilot program in which 500 individual or small groups of farmers across the country could participate. In this scheme the full cost

of purchasing a planter, cultivator, and fertilizer applicator, estimated to be approximately P290, was subsidized at the rate of 30% (P87), while a loan of P203 was made, repayable over a five-year period at 3 3/4%. To be eligible, farmers had to have direct access to a plow, adequate draft power, and a minimum of four hectares of cleared, destumped land. They also had to agree verbally to undertake improved crop management practices and attend demonstrations or training courses relevant to effective implement use. Following on the heels of a similar pilot program the previous year in which 50 subsidy/loan packages were made available to farmers in two districts of the country, the scheme aimed at assessing specifically: 1) farmers' response to the opportunity to undertake an improved arable land management and credit program, 2) the effect of a 30% subsidy on the demand for selected farm equipment, and 3) the capabilities of agricultural supply organizations, as well as of credit delivery and agricultural extension systems, to support such a program.

Farmers' initial response to the subsidy/loan package, which was advertised through the efforts of the extension service's Agricultural Demonstrators (ADs), was enthusiastic and the program was fully subscribed. The National Development Bank (NDB), which was slated to handle 390 of the 500 loans, and the Botswana Cooperative Bank (BCB), which was responsible for administering the remaining 110 packages, by and large proved capable of handling applications expeditiously, and efficiently extended the necessary credit. Problems began to arise, however, when the South African/Zimbabwean manufacturer of the planters and cultivators failed to meet its delivery deadlines. The problem of delayed deliveries was then compounded by the inefficiencies of the Botswana Cooperative Union, which served as delivery agent for the machinery, in moving implements out of its depots. On top of this, assembly of the planters, which was to be undertaken jointly by the AD and the participating farmer, did not always go smoothly. In some areas missing parts and an absence of spare parts posed a particularly serious problem to the assembly process and resulted in some unuseable planters. So far 500 planters, but only 330 cultivators, have been delivered by the manufacturer for this pilot program. An estimated 10% of the planters have been either unserviceable or were delivered too late to be used fully this year.

It is not clear how actively agricultural field staff have mounted demonstrations and short training courses for scheme participants in an effort to maximize the potential of the available planters and cultivators, but it seems that at least in some areas, not much extension assistance has been given to prepare farmers for full use of their new tools. Likewise, despite the importance of follow-up work with farmers regarding implement use and the adoption of improved management practices, it seems that farm visits have not always been undertaken. There is no clear-cut evidence as yet regarding the extent to which implement credit scheme participants have used their new machinery. District agricultural officials, however, indicate that this year available planters have often been used on only part of farmers' fields. In the final analysis, crucial extension assistance to farmers regarding utilization of equipment and improved techniques and practices may prove the weakest link in the future success of this key ALDEP program, whatever its final form.

## 2) Donkey Draft Power Credit Scheme

Access to adequate draft power when the plowing season begins constitutes an important constraint to increasing production for approximately 30,000 arable farming households. The Donkey Power Credit Scheme is

ALDEP's initial attempt to assist such poorer target households through a subsidy/credit program. In 1980/81, 110 packages, funded fully and solely by the RSG, were made available throughout the country to those smallholders without their own draft power. The package provided a 50% subsidy on the purchase price of a team of donkeys (up to a maximum of ten head) @ a maximum price of P25, and a 50% subsidy on donkey harnesses @ a maximum cost of P20. If necessary, the purchase price of a plow was also to receive a 50% subsidy. A loan for unsubsidized costs was to be made through either the NDB or BCB, with the principal repayable at 4 3/4% straight line interest for a period of up to eight years.

Despite submission of project memoranda to the Ministry by some districts only at the time plowing was to begin, and despite an apparently unenthusiastic response in certain areas by agricultural field staff and farmers to adoption of what some have traditionally considered "poor man's draft", it appears that one-half of the donkey draft power packages have been subscribed to by farming households. Farmers have sometimes had problems, however either in finding the requisite number of animals in their area to make up a draft team, or in putting together a team of available donkeys at an uninflated price. Although this pilot project is young and experience with it limited, obstacles so far may portend substantial problems in trying to promote donkey draft power within the main ALDEP effort.

### 3) Small-scale Water Development Scheme

The purpose of the small-scale water development pilot program is to help farmers develop a water supply at their lands for use during key activity times, particularly plowing/planting and winter cultivation periods. In 1980/81 the scheme, underwritten entirely by the RSG, took the form primarily of a generous subsidy for individual farmers in the labor-intensive development of an underground sealed and covered tank to catch and store water running off from a nearby threshing floor, for draft power and human consumption. This was to be achieved by a farmer's preparation of a hole for the tank, for which he would receive a P20 payment, followed by the actual construction of the tank by a contractor in the area. The maximum grant allowable for materials, transport, and labor in tank construction was P230.

It was anticipated that up to 100 smallholder families would participate in the catchment tank scheme during 1980/81. So far this year time has permitted the construction of only a limited number of tanks. The greatest constraint to full implementation of this pilot project, which has been well received by farmers, has been submission only recently of sub-project memoranda to the Ministry by the districts. Another constraint has been the identification and organization by various district officials of local builders to construct the tanks. By the time that builders had learned about tank construction and were ready to begin, plowing had often begun and farmers had little time to devote to hole preparation or, in some districts, participation in tank development. The Ministry anticipates that most pilot scheme tanks will be built this year, but only after the harvest.

There are indications that the water held in at least some of the ALDEP-financed tanks is contaminated with coliform bacteria, probably from either the dung-surfaced threshing floors or areas near them. Until more data become available, the Ministry of Agriculture is recommending in its program for 1981/82 that all tank water to be consumed by humans, first be boiled. Although alternative water sources which farming households use may be polluted in the extreme, the Ministry intends to continue monitoring tank water potability in the coming year.

#### 4) Fencing Development Scheme

Effective control of livestock in lands areas has long posed a problem for crop producers. Herding of livestock by young children and bush fencing have been traditional solutions to the threat of crop destruction, but these mechanisms have become increasingly difficult to maintain as primary education has spread to the rural areas and bush and labor in lands areas become more scarce. The 1980/81 ALDEP Fencing Development Scheme tackled the problem of livestock intrusions into crop areas with a subsidy/loan program for enclosing individual fields up to ten hectares in size. The scheme, whose subsidy element has been funded by the RSG and whose loan component is underwritten by the NDB, provides for 260 packages. Each package allows for a payment of P50 for fencing labor plus a 50% subsidy of the cost of fencing materials, up to a maximum subsidy of P225. The remaining expenditure can be financed through a NDB loan, repayable over five years at 4 3/4%.

The fencing scheme has proved very popular and been fully subscribed, but as yet, given submission of district project memoranda toward the end of 1980 and the onset of the plowing season, few fences have been built. In order to improve information flow to scheme participants concerning the alternative types of fencing which they can build, and to assist farmers more in actual construction, ADs and DAOs will attend in-service training courses during the coming winter months which will focus on fencing as well as other ALDEP matters. Regardless of what types of fencing are put in under the scheme in the months ahead, however, or how it is done, it will be important for ALDEP to monitor the effects of the individual fencing ALDEP package upon group fencing projects and to examine the effect of fences upon livestock's access to grazing.

#### 5) Extension Assistants Training and Support Scheme

Manpower shortages in the agricultural extension service have meant that over the years, vast and sparsely populated areas of western Botswana have received very little extension coverage. Agricultural Demonstrators, the country's farm-level extension workers, have never been posted to the West. In an attempt to fill the gap created by the absence of ADs, while recognizing the extension service's manpower constraints, the RSG has supported in their entirety, programs in Kgalagadi and Central Districts which employ locally recruited individuals to serve as extension assistants following a one-month training course in the application of certain basic farming operations. Concomitantly, the Government has supported one such program in Ghanzi District. Supervised by the District Agricultural Officer, these extension workers are responsible for advising local residents about cropping procedures, demonstrating improved farming techniques, and informing supervising officers about the constraints farmers face.

During 1980/81 nine Agricultural Extension Assistants in the two RSG-funded programs were recruited; those from Kgalagadi District were given a short training course in basic agricultural practices and skills, while Central District project recruits were from the Farmers' Brigade in Serowe, and therefore did not require special training. All of these individuals have been at work in the field for four to six months. The scheme has encountered no major obstacles as yet, but a full evaluation of the project will be carried out in mid 1982. The RSG will fund these two programs through the 1982/83 fiscal year. This will give the Ministry ample time to assess the project and, if warranted, to include provision for its support in the Ministry's 1983/84 expenditure estimates.

## ANALYSIS

The four schemes selected for piloting across the country within ALDEP in 1980/81 -- those focussing upon implements, donkey draft, water development, and the fencing of individual fields -- as well as the Extension Assistants Training and Support Scheme, have met to varying degrees the ALDEP pilot objectives of testing ideas, developing implementation capacity, providing a transition into full ALDEP implementation beginning later this year, and maintaining the momentum generated during the district consultative planning phase. Giving district institutions the opportunity to develop their own pilot projects, or to tailor the various ministerial packages to meet their own needs, has been fruitful in developing district decision-making capacity, but has meant that the pace of project implementation this year has been geared to the pace of sub-project preparation. As a result, several of the pilot programs, although enthusiastically received by farmers, were launched too late in the 1980/81 agricultural season to be fully implemented this cropping year. Once projects were initiated, supply, distribution, technical, and institutional capacity constraints appeared, particularly in the implement, donkey draft, and water tank development schemes. Of considerable importance, the ability of the extension service to carry successfully its responsibilities in the delivery of assistance to ALDEP farmers, especially those using row planters and cultivators for the first time, has emerged as a crucial issue.

Monitoring of implementation of the donkey draft, water development, and fencing pilots so far this year has been an ad hoc, informal collection of feedback from district officials and implementing institutions as pilots have gotten underway. The Ministry of Agriculture feels that this has been sufficient for supervision and support purposes since developments within these pilots have been slow to materialize. The ALDEP Preparation Team, however, is planning a tour of the districts during the next few months to determine much more precisely than heretofore, the status of each of the programs, and to discuss thoroughly implementation bottlenecks with district officials. In addition to this, the Team has asked district officers to prepare their own informal evaluations of pilot projects. These are to include information about both district experiences with the pilots so far and actual progress on the ground; they are also to offer ideas concerning solutions to implementation problems. With these reports and the data gathered in its tour, the ALDEP Team should soon be able to provide AID with answers to the following specific questions which are necessary to meet US Government requirements for ensuring the proper "end use" of US funds.

- 1) How many packages within each scheme have actually been fully implemented?
- 2) At what stage of implementation are the other packages within the various pilot programs?
- 3) How many loans for the different pilot activities are currently being processed and what is the schedule for completing NDB and BCB processing?
- 4) How much of the RSG allocation for each pilot project in 1980/81 has actually been spent and what is the schedule of anticipated expenditure for remaining funds?

- 5) How closely have pilot project memoranda eligibility criteria been adhered to in the selection of different pilot package beneficiaries? Specifically, do most of all beneficiaries of every pilot program plow fewer than ten hectares? In the Implement Credit Scheme, did package recipients have direct access to a plow, adequate draft power, and a minimum of four hectares of cleared, destumped land? Were Donkey Draft Power Credit Scheme participants smallholders without their own draft power? How many female-headed households benefited from the Implement, Donkey, Tractor, Water Dev. and Fencing credit schemes?
- 6) What have been the most important constraints to the implementation of each pilot program?

Although RSG baseline data research funds have not been used in 1980/81, the Ministry's Farm Management Unit is undertaking, with other financial resources, a close examination and evaluation of the Implement Credit Scheme, which is clearly the single pilot most important to ALDEP's long-term success. In addition, a staff member of the Ministry's Division of Planning and Statistics will soon be designing a monitoring/evaluation program for next year's pilot projects, as well as for the main ALDEP effort, which the Ministry maintains will be much more comprehensive and systematic than that carried out this year. The system to be developed will be influenced by the findings of this year's district reports and Team district tour, and will incorporate cross-sectional data in this country of erratic rainfall, rather than time series data. It will draw in its implementation upon various research-supporting divisions within the Ministry. Indeed, the personnel and resources of at least five units might be tapped. They are:

- 1) The Farm Management Unit, which has experience in monitoring changes on selected farms over time, as well as experience in evaluating the Implement Credit Scheme;
- 2) The Department of Agricultural Field Services, which has a cadre of Agricultural Demonstrators experienced in keeping records on individual farms and households;
- 3) The Agricultural Statistics Unit, which works on a year-round basis to gather farm production and farmer socio-economic data;
- 4) The Action Research Unit of Agricultural Information Services, which is experienced in monitoring the effectiveness of various media interventionist strategies; and
- 5) The Rural Sociology Unit, which over the past decade has mounted considerable intensive and extensive survey research.

Assuming the Ministry of Agriculture's thoughtful mobilization of the resources available to it in monitoring and evaluating ALDEP efforts closely, the information necessary to maximize the utility of future ALDEP programs can be made available to program planners. Unless a comprehensive program is developed, however, which examines not only what is happening on individual farms, but why it is happening, the crucial inputs to informed planning will not be available. This is particularly true, given the wide-ranging experience which districts can be expected to have as this decentralized agricultural program grows.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The ALDEP pilot projects, which have focussed upon implement, donkey draft, water development, fencing, and extension service schemes, have been launched in different districts at various times throughout the year, sometimes not until after the agricultural season was underway. This, coupled with a variety of implementation problems, has meant that some pilot efforts have only barely begun. Experience in the implement credit scheme, however, has raised some question about the capacity of the agricultural extension service to carry out fully its responsibilities in ALDEP implementation.

Ministerial monitoring so far this year of the donkey draft, water development, fencing, and extension service pilots has consisted of the informal collection of feedback. Districts are now preparing progress reports on the pilots, however, and the ALDEP Preparation Team is about to embark upon a tour of the districts. Together these should yield sufficient information to enable the team to answer the series of questions outlined previously in this ALDEP pilot project review.

Although RSG baseline data research funds have not been tapped this year, the Ministry's Farm Management Unit is examining ALDEP's Implement Credit Scheme. The Ministry is now preparing to design a monitoring and evaluation program for future pilots and the main ALDEP effort which it believes will meet upcoming programming needs. This monitoring and evaluation program may utilize the resources of a variety of ministerial divisions which are experienced in survey and other research methodologies.

AC 19 - ALDEP Pilots, 1980/81  
(Pula)

	Amount budgeted in orig. PM	Amount warranted as of 12/31/80 <sup>1/</sup>	Expend. as of 12/31/80 <sup>1/</sup>	Expected expend. as of 4/1/81	Expected balance as of 4/1/81
Implement credit	43 500	43 500	43 500	43 500	0
Donkey draft credit	29 000	35 900	15 000	15 000	14 000
Fencing	29 000	37 000	26 000	26 000	3 000
Water catchment tanks	29 000	19 500	13 500	13 500	15 500
Lock-up stores <sup>2/</sup>	50 000	0	0	0	50 000
Extension assistants <sup>2/</sup>	-	47 760	4 100	4 900	-4 900
Gardens <sup>2/</sup>	-	3 700		1 500	-1 500
	180 500	187 360 <sup>3/</sup>	102 100	104 400	76 100

<sup>1/</sup> Figures are as of 2/28/81

<sup>2/</sup> Because of delays with the Lock-up Stores program, funds were reallocated to the Extension Assistants program and to a gardening project.

<sup>3/</sup> Funds exceeding budgeted amounts will be taken from the Domestic Development Fund.

GROUP III: NON-FARM EMPLOYMENT

## CI 08 Rural Industrial Officer Cadre

DESCRIPTION

The purpose of this project is to increase employment opportunities in rural areas through small scale rural industries. The project establishes a new Rural Industrial Officer (RIO) cadre consisting of an RIO in each District and a Senior Rural Industrial Officer (SRIO) in the Ministry of Commerce and Industry (MCI). The role of the RIO cadre will be to identify possibilities for increased small and medium-scale industrial production in rural areas and provide assistance to individuals or groups who wish to start or expand rural enterprises. USAID funds are being used to finance: 1) the salary of the SRIO, 2) office equipment and vehicles for the SRIO and some of the RIOs, 3) training for the RIOs and their counterparts and 4) a P60 000 Small Projects Fund to be used by RIOs for training, surveys, demonstrations and other assistance to rural businesses. Total RSG funding for this project over three years will be about P650 000. The GOB contribution to the project consists of vehicles, offices and recurrent costs including counterpart salaries and travel expenses. These commitments are being met from the DDF and the MCI recurrent cost budget.

PROJECT PERFORMANCEAchievements

The project has benefited from the early arrival of the SRIO who was responsible for the overall organization of the rural industries program. Also, many of the RIOs were in Botswana and ready to begin work by March 1980. Unfortunately, significant activity by the RIOs in the districts was delayed by the late availability of funds from the RSG which was not signed until June 1980.

Since then, several significant activities have gotten underway. First, rural industry surveys have been carried out in most of the districts. These surveys have been used to identify present industrial activity in rural areas and obtain information on problems being faced by existing businesses and potentials for increased production. The RIOs that were scheduled to begin work in 1980/81 (seven out of an eventual total of 11) have offices and vehicles. They began by carrying out the surveys mentioned above and went on to initiate a wide range of activities in support of rural businesses. Some of the assistance provided by RIOs is essentially advice on such matters as loan applications, market identification and sources of information on technical and management matters. In almost all districts, RIOs have been instrumental in facilitating contacts between small businesses and sources of funds or expertise that have led to concrete benefits for the small businesses.

As RIOs have gained knowledge about their respective districts and as small businessmen have become aware of the RIO program, increasing use is being made of the Small Projects Fund (SPF). Between July 1980 when the SPF became available and 12/31/80, P12 476 was committed in the Districts. Between 1/1/81, it is expected that an additional P15 000 will be committed. Most of the funds have been used for short-term training. Several district-level feasibility studies have also been completed and one fairly large activity (P4 830) to subsidize the repair of machines for cream production

in Kgalagadi District has been approved. Part of the SPF (P25 000) has been retained by MCI activities that affect more than one district or are of national interest and to supplement district allocations when necessary. (Commitments for the use of the SPF as of 12/31/80 are listed in Attachment 1.)

Although P28 000 had been allocated for the training of RIOs and the SRIO counterpart in 1980/81 none of this amount was used. The RIO training program occurred prior to the signing of the RSG and was therefore funded from other sources. Long-term training in the U.S. for the SRIO counterpart will begin in 1981 and will be financed under USAID's Southern Africa Manpower Development Program. Consequently, all of the funds budgeted for training in 1980/81 will be carried over into 1981/82 and will be utilized for the training of RIO counterparts.

### Implementation Problems

Once the RSG was signed in June 1980, almost all of the activities under this project proceeded on schedule. One exception was the procurement of two RSG-financed vehicles which did not arrive until February 1981 due to supply shortages. A more serious problem concerns the recruitment of counterparts for the RIOs. Although all RIOs were to have counterparts assigned to them, as of February 28 only two counterparts had been recruited. It is essential to the long-term sustainability of this project that a cadre of local rural industry officers be recruited and trained as soon as possible.

A potential implementation problem concerns the approval process for the SPF. At present, uses of the SPF up to P300 are approved by the District Production Development Committee (PDC). Amounts above P300 must be approved by the District Development Committee (DDC) which meets only four times a year. Since many training or demonstration activities can easily exceed P300, and since demand for SPF is expected to increase sharply in Year 2, it would be advisable to increase the ceiling on amounts that can be approved by the PDC. This committee contains a broad spectrum of expertise related to productive activities. (DOD; CPO, RIO (Secretary), Brigade representative, BEDU representative and usually the RAO or DAO) and can meet as frequently as needed. The evaluation team, therefore, recommends that the ceiling for PDC approvals be raised to P1 000 per activity and that this higher ceiling be reviewed at the end of Year 2 of the RSG to determine if further modification will be needed.

### Financial Situation

Of the P168 150 originally budgeted for the first year of this project about P108 000 will have been spent by March 31, 1981. The expected balance of P67 800, which will be carried over into Year 2, consists of P31 808 from the Small Projects Fund, P28 000 for training and P7 992 resulting from a savings in the SRIOs salary. (See attachment 2 for details on the 1980/81 budget.)

### Monitoring Arrangements

Overall management of the RIO cadre is the responsibility of the SRIO. The SRIO is responsible for organizing the rural industry development program, for supervising the RIOs and for providing guidance in the use of the SPF. With assistance from the Planning Officer he also monitors procurement activities and expenditures under the SPF. A regular reporting system between RIOs and the central ministry has been established and meetings of

the SRIO, and the RIOs are held periodically. Although there have been minor problems in the flow of documents between field staff and the SRIO, it is the feeling of the evaluation team that a sound monitoring system that can identify implementation problems in a timely manner has been established. The related issue of how to measure the impact of RIO activities on rural incomes and employment is discussed in the next section.

## ANALYSIS

### The Small Projects Fund

For 1980/81, P60 000 was budgeted to be spent under the SPF. Although less than half of this amount will have been spent by the end of Year 1, the sharp increase in the use of the SPF during the last quarter indicates that it will become an increasingly important tool for promoting industrial development in rural areas. In the original PM, the specific uses of the SPF were listed as training, exhibitions, small studies and demonstration equipment, but there were no general guidelines for how the fund was to be used. Experience with the SPF to date indicates that the most common use of the fund is for short-term training programs. However, proposals not foreseen in the original PM have also been received. The most important of these are support for the establishment of market places in major villages, which requires substantial amount of funds per activity, and direct financial assistance to rural businesses.

Since it has become evident that there are many possible uses of the SPF, it is important that guidelines be established to assure that, 1) the SPF is used in ways that are consistent with the overall objectives of this project and 2) the SPF is not used to finance activities that would more appropriately be financed through other mechanisms. After extensive discussions with RIOs in the districts and the SRIO and Planning Officer in MCI, the evaluation team prepared a set of guidelines which are presented as Attachment 2 to this review of Year 1 performance. It is recommended that these guidelines be accepted by MCI and distributed to RIOs as soon as possible.

### Economic and Social Impact

Although the level of activity during Year 1 of the RIO program indicates that there are numerous opportunities for industrial development in rural areas, it is too early to measure impact in terms of employment generation and increased rural incomes. In order to assure that economic and social impact can be measured in future years it is important that an information system be established now when the project is just getting started.

Data needs to be obtained at several levels. First, there should be macro-economic data on rural industries generated by the Central Statistics Office. Second, MCI should set up a system for following up on individuals and firms that have benefitted from RIO activities. The most realistic way of doing this is to conduct a survey of beneficiaries annually for several years. This will determine, for example, how many participants in training programs are using the skills they learned. On the cost side, MCI needs to know how much was spent on various programs. This will make possible cost-benefit analyses to determine which projects have had the most impact relative to funds spent.

Finally, MCI should obtain socio-economic data beneficiaries to provide information the extent to which the poorer elements of the rural population

are benefiting from the RIO program. There are early indications that two areas of high potential for non-farm rural employment are the gathering of wild plants and the processing of wildlife products, particularly skins. If this assessment proves correct, it implies important benefits for remote area dwellers who currently constitute the poorest segment of the Botswana population. On the other hand, it is well known that the more progressive producers tend to benefit the most from small business development programs. An information system is needed to help indicate when special opportunities exist for helping those with the lowest incomes and highest levels of unemployment.

Given resource and manpower constraints, it will not be possible to undertake a large statistics gathering and analysis effort as part of the RIO program. It will, therefore be necessary for the RIOs themselves to obtain most of the information requirements described above. To minimize workload this data gathering should be systematized as much as possible and sampling techniques should be applied when appropriate. From time to time this ongoing data gathering activity should be supplemented by in-depth studies carried out by researchers from outside the rural industries promotion program.

#### SUMMARY OF FINDINGS AND RECOMMENDATIONS

1. The major implementation problem for this project has been the recruitment of RIO counterparts. This is due to, 1) a shortage of qualified candidates and 2) cumbersome personnel procedures. Since the early identification of counterparts is essential for continuing the momentum of the RIO program, MCI must give top priority to fitting all RIO counterpart positions in 1981/82.
2. The original project design did not provide adequate guidelines for the use of the Small Projects fund. While there appears to have been no improper use of funds to date, it is recommended that guidelines be instituted as soon as possible. Suggested criteria to be applied in the review and approval of applications for SPF funds are attached to this report.
3. Currently, district-level uses of the SPF are approved by the PDC for amounts below P300, and by the DDC for amounts above that amount. Since, 1) the DDC meets only four times a year and, 2) the PDC has the expertise needed to assess applications, it is recommended that the ceiling for PDC approvals be increased to P1 000.
4. No training funds were used in the first year of the RIO program because, 1) the RIOs were trained prior to the signing of the RIDG and, 2) the SRIOS training in the U.S. will be financed by another USAID project. The evaluation team strongly supports the decision of MCI to utilize all of the unspent funds for the training of RIO counterparts.

RIO SMALL PROJECTS FUND  
Commitments as of 31/12/80<sup>1/</sup>

Activity	Cost	No. & Kind of People Assisted <sup>2/</sup>
<u>CENTRAL MINISTRY</u>		
	<u>P 5 800</u>	
1. Blacksmith toolmaking - R & D	200	
2. RIIC tour of agricultural shows	5 600	
<u>NORTHEAST DISTRICT</u>		
1. Management seminar for graduates of Boswa sewing center, Francistown	294	(50) women came from all parts of N.E. District back to the center where they had trained
<u>SOUTHEAST DISTRICT</u>		
	<u>1 240</u>	
1. Tailors' pattern workshops	300	(6) women from Ramotswa initially
2. Tie dye workshop	160	10 women from Flokong
3. Management skills training	300	(10) men and women in part-time self employment
4. Beekeeping extension	300	(50) men, women & children from all over S.E.
5. ALDEP water catchment tank training	150	(12) men who were already part-time builders
<u>KGALAGADI DISTRICT</u>		
	<u>6,770</u>	
1. Grapple plant market research	30	300 RADs at a minimum. If marketing network extended, impact could be much greater.
2. Donkey harness design investigation	103.50	6 men leather workers, 3 in Tsabong and 3 in Mukuntsi
3. Assistance to BCW sewing group	288	(10) women from Tsabong
4. Youth skills training workshop	299	(30) teenagers from all over Kgulagadi District

<sup>1/</sup> Commitments are defined as activities that have been approved by MCI and/or district-level authorities.

<sup>2/</sup> Indicates an estimate

Activity	Cost	No. & Kind of People Assisted
5. Development of prison training	P 299	(20) male prisoners in Tsabong. Additional courses will be run with the same set of tools.
6. Scales for marketing of grapple and karakul wool	920	(600) grapple gatherers & sheep owners
7. Dairy processing	4 830	53 farmers between Tsabong and Werda
<u>CENTRAL DISTRICT</u>	<u>1.566</u>	
1. Basic management seminar	70	(25) women graduates of Tlhwaafalo sewing & knitting center, Serowe
2. Mud oven technology	266	6 women from Lerala, Kgagodi, Maunatlala, Sefhope & Molalatau
3. Second mud oven group	300	68 women from Maitengwa, Nkange, Goshwe & Matobo
4. Lerala Knitting project	240	? women from Lerala
5. Rural builders' course	690	5 carpenters from Letlhakane & Toromoja
<u>KGATLENG DISTRICT</u>	<u>146</u>	
1. Village woodlot booklet prepared	56	? 1,000 copies distributed throughout district
2. Knitters upgrading	90	5 women from Mchudi and Bokaa
<u>KWENENG DISTRICT</u>	<u>660</u>	
1. Mud ovens seminar	271	19 women from Molepolole and nearby villages
2. Beekeeping demonstration	350	?
3. Gameskin upgrading	14.35	20 men in Takatokwane
4. Rabbit extension	25	?
<u>SOUTHERN DISTRICT</u>	<u>1 000</u>	
1. Tannery training		(10) men from Mabutsane
2. Beekeeping demonstration		(20) people from Kanye
3. Notice boards		?

## CI 08 - RURAL INDUSTRIES, 1980/81

P1 = \$1.27

	Amount budgeted in orig. PM	Amount warranted as of 12/31/80	Expend. as of 12/31/80	Expected expend. as of 4/1/81	Expected balance as of 4/1/81
<u>RSG</u>					
Vehicles	28 000	28 000	12 000	28 000	-
Equipment	12 150	12 150	7 650	12 150	-
Small projects fund	60 000	60 000	10 648	28 192	31 808
Counterpart training	21 000	21 000	-	-	21 000
RIO training	7 000	-	-	-	7 000
SRIO salary	40 000		32 008	32 008	7 992
	<u>168 150</u>	<u>121 150</u>	<u>67 806</u>	<u>100 350</u>	<u>67 800</u>

Criteria to be applied in the use of the SPF are as follows:

1. The activity must be shown to address a constraint to the expansion of a potentially viable rural industry or business. Examples of activities to be funded are: small feasibility studies, small market surveys, training programs, dissemination of information, demonstrations and direct financial assistance to businesses.
2. Uses of the SPF by the central ministry are limited to P10 000 per activity. Uses of the SPF by the RIOs are limited to P5 000 per activity. District-level activities of up to P1 000 will be approved by the Production Development Committee (DC). Activities that require more than P1 000 will be endorsed by the Kgotla and approved by the DDC.
3. Activities located in towns (Gaborone, Lobatse, Francistown and Selibe-Pikve) will not qualify for SPF funding.
4. The SPF will not be used to purchase vehicles.
5. SPF funds cannot be used to provide direct financial assistance to profit-making industrial enterprises with capital assets of more than P or a labor force of more than ten employees.
6. With the exception of activities that are clearly of a pilot or experimental nature (see No. 7 below) no single firm can receive more than P500 in direct financial assistance (e.g. grants to cover part of the costs of tools, equipment or raw materials). Also, to demonstrate an adequate level of commitment, the recipient must make a self-help contribution at least equal to the amount of SPF funds being provided.
7. When assistance is provided to an industrial business for an activity that is experimental in nature, the funding limits presented in Item 2 will apply, and the self-help contribution need not be more than ten percent of the grant. In such cases, it must be demonstrated that, risks for an individual business and, 2) there is significant potential for replication if the undertaking succeeds.
8. Applications for uses of the SPF will be appraised in terms of income distribution, employment generation and target group. Activities which are shown to be aimed at poorer income groups, such as female-headed households or remote area dwellers, will be given preference.

### GROUP III: NON-FARM INCOME AND EMPLOYMENT

#### GA 02 Wildlife Management and Development

##### DESCRIPTION

The objective of this sub-project is to assess the ecological viability and economic soundness of various possible wildlife utilization schemes and to develop wildlife-related employment opportunities for remote area dwellers while preserving healthy and diverse wildlife populations. Due to the ability of wildlife to tolerate semi-arid conditions and resist disease, the potential economic benefit from appropriate wildlife utilization in remote, dry areas probably exceeds that of cattle ranching with its attendant water requirements and potential for overgrazing around water points.

RSG funds were to be used to support for three years an OPEX natural resource economist who would serve as planning officer for wildlife projects in the Department of Wildlife and National Parks of the Ministry of Commerce and Industry. In addition, RSG funds were to finance short-term consultancies to: a) establish a training program to increase the harvesting and processing skills of local hunters, b) investigate the market potential for wildlife products, and c) advise on the design of a system for harvesting and processing common wildlife species. The estimated cost of this sub-project was P80 000 from the RSG and P15 784 from the GOB, during Year 1.

##### PROJECT PERFORMANCE

###### Achievements

The Wildlife Department and USAID have recently chosen a person to fill the natural resource economist position. That person is not due to arrive in Botswana until March, the end of Year 1.

The terms of reference for the hunter training consultancy have just recently been prepared. The consultancy has been transformed into two courses for game scouts. These people will be trained to serve as extension agents who themselves hold training courses for local hunters in techniques of shooting, meat handling, and treatment of skins and trophies. The two instructors are to start preparations for the training courses in March 1981.

The marketing consultancy is ready to take place in March. A local expert has been identified.

Terms of reference for the harvesting and processing consultancies are yet to be prepared.

A study tour of a wildlife utilization scheme in Kenya has been added to the Year 1 activities. Participants will be senior Wildlife Department and Ministry HQ officials. The trip will take place in March.

###### Implementation Problems

There has been effectively no progress on this sub-project during Year 1. The primary reason is delayed recruitment of a natural resource economist. The preparations for the short-term consultancies have been delayed, because it was felt that the new economist-planner should be

involved in those preparations. Only when it became clear that the new recruit would be very late in arriving did the Wildlife Department proceed with preparations for the consultancies. However, no important opportunities have been missed due to the delay, and the sub-project should perform as intended.

#### Financial Situation

The original budget of P80 000 for Year 1 activities is largely unspent (see attached budget). The unspent balance will be carried over to Year 2.

#### Monitoring and Evaluation:

Among other duties, the economist-planner (assigned to MFD and seconded to the Wildlife Department) will monitor and evaluate expert consultancies and projects for development of wildlife management and utilization. He will report through MCI to the RDU which will in turn report regularly to USAID.

#### ANALYSIS

The slow start-up of this sub-project, due to slow recruitment, is not unexpected. It is difficult to find a person who both fills the requirements of the job and is available on short notice. However, the recruitment process can be unnecessarily delayed by too narrow conception of the qualifications required for the job. It appears that the contract recruiter attempted only to find a person who was both wildlife ecologist and economist, which is a rare combination. After much delay, they had to settle for a wildlife ecologist with considerable course work in economics but without work experience overseas and without practical experience as an economist-planner. This individual may be perfect for the job, but is so, it will be as much due to good luck as to wise recruitment. The USAID Project Paper itself calls for a natural resource economist, which is not such a rare category of expertise.

A similar narrow conception may have delayed preparations for an abattoir (processing) design consultancy. The Wildlife Department appears to feel that they must find an expert on the design of wildlife abattoirs. It is doubtful that wild ungulate carcass requires a processing facility significantly different from a standard livestock abattoir. The important difference is in how the carcass is brought to the facility, not in processing the carcass at the facility. If so, a person familiar with design, construction, and operation of livestock abattoirs should be able to effectively adapt a standard design to suit requirements of both wildlife and livestock carcasses. Both types should be accommodated, because it is highly unlikely that an abattoir can operate economically on wildlife alone for more than a few months of the year. It is probably more important that the consultant understand the requirements of abattoir operation rather than the peculiarities of handling wildlife. The consultant can be requested to briefly study abattoir operations that handle wildlife carcasses at least occasionally. Such a person should not be exceptionally difficult to find.

#### SUMMARY OF FINDINGS AND RECOMMENDATIONS

The lack of progress during Year 1 of this project is due to the late recruitment of a wildlife/natural resource economist. Now that this position has been filled, it appears that the proposed short-term studies will proceed as intended but with a delay of about nine months. The delay will not have any significant impact on the achievement of project objectives.

## GA 02 - WILDLIFE DEVELOPMENT, 1980/81

	Amount budgeted in orig. PM	Amount warranted as of 12/31/80	Expend. as of 12/31/80	Expected expend. as of 4/1/81	Expected balance as of 4/1/81
<u>RSG</u>					
Natural Resource Economist	48 000	-	-	48 000	-
Consultancies (Short-term)	32 000	32 000	5 650	19 650	12 350
Hunter training	( 6 400)		( - )	( 6 000)	( 400)
Marketing	(12 800)		( - )	( 8 000)	( 4 800)
Processing	( 6 400)		( - )	( - )	( 6 400)
Harvesting	( 6 400)		( - )	( - )	( 6 400)
Study Tour - Kenya	( - )		(5 650)	( 5 650)	(-5 650)
TOTAL	80 000	32 000	5 650	67 650	12 350

TABLE 2  
RURAL SECTOR GRANT, 1981/82 AND 1982/83  
(Pula)

	Expected balance as of 4/1/81	Planned Expend. 1981/82	Additional funds required	Planned Expend. 1982/83
<u>Land Use Planning and Management</u>				
LG 31 - Impl. of Land Use Plans	79 521	263 941	184 420	61 709
LG 36 - Land Institutions	68 840	205 840	137 000	31 900
<u>Agricultural Income and Employment</u>				
AE 10 - Small Projects <sup>1/</sup>	20 000	70 000	50 000	90 000
AE 11 - Horticulture	99 555	99 555	-	60 000
AE 15 - Afforestation	32 239	111 500	79 261	130 000
AE 19 - ALDEP	76 100	76 100	-	-
<u>Non-farm Employment</u>				
CI 08 - Rural Industries	67 800	302 121	234 321	240 000
GA 02 - Wildlife Utili- zation & Mgmt.	12 350	92 350	80 000	80 000
<u>Rural Production &amp; Incomes - General</u>				
Consultancies for CFDA's	-	45 000	45 000	45 000
SUG-TOTAL	456 405	1 266 407	810 002	738 609
Monitoring studies	14 278	15 000	722	-
Communal Area Coordinator	-	33 088	33 088	33 088
External evaluation	-	38 541	38 541	-
DAI	-	36 765	36 765	36 765
TOTAL	470 683	1 389 801	919 118	808 462

GROUP I: LAND USE PLANNING AND MANAGEMENT

LG 31. Implementation of Integrated Land Use Plans

DESCRIPTION:

For Year 2, several activities have been proposed for funding under LG 31. These activities can be grouped into the following categories: pilot lands inventory, water points inventory, demarcation of Subordinate Land Board boundaries, development of a communal service center, applied research, and Communal First Development Area land use planning.

Pilot Lands Inventory:

A new activity, Barolong Farms Arable Lands Inventory, has been proposed for a two-year period (Years 2 and 3). Building on two recent lands inventory and registration pilots in the Barolong Farms area (Rolong Land Board, Southern District), this activity aims to inventory and register all the cultivated fields in the Rolong Land Board area. It will be the first attempt to develop a comprehensive land registration program for an entire Land Board area. As such, this activity is a pilot at a large scale. The estimated cost to RSG is P38 045 over two years (P24 336 in Year 2).

Two small-scale pilot activities have also been proposed for Year 2 - Tlokweg Arable Land Registration Pilot Project (Tlokweg Land Board, Southeast District) and Ntlhantle Pilot Land Inventory (Ngwaketse Land Board, Southern District). Both activities follow a project design like that of the Ngamiland pilot (Year 1). Both will involve at most 350 fields and can be completed within about six months by District and Land Board staff with the help of one or two student enumerators. The estimated costs to RSG in Year 2 are P4 855 and P1 960, respectively.

All pilot activities are monitored by the Commissioner of Lands, MLGL, with a view to eventual development of a nation-wide land inventory and registration system for the communal areas.

Water Points Inventory:

The Southern District Water Points Survey proposal differs from the MOA Water Points Survey in that it is to be a complete inventory of existing water points rather than a sample survey. The inventory will include description, ownership, location, and use data. Funds are requested to finance a consultancy which will bring together information now with the Department of Water Affairs, the Geological Survey, and the Water Apportionment Board about boreholes and dams in the district. More specific information will be gathered in the field about wells, haffirs, harrir dams, springs, and sand rivers for the communal areas of the district. The estimated cost to RSG is P14 400 in Year 2.

Demarcation of SLB Boundaries:

In those Land Board areas which are divided into several Subordinate Land Board (SLB) areas, confusion often exists among members and staff of contiguous SLB's over jurisdiction. Substantial time and resources are required to resolve disputes, adversely affecting land use planning. Two proposed activities, Demarcation of Ngwaketse Sub-Land Board Boundaries (Southern District) and Demarcation of Ngwato Sub-Land Board Boundaries (Central District), would permanently demarcate the SLB boundaries. The estimated costs to RSG in Year 2 are P6 410 and P7 904, respectively.

### Development of Communal Service Center:

The Lepashe Communal Service Center is a Year 1 activity to acquire a borehole and build a school, health post, and office/store for extension work; however, implementation has been delayed, with the exception of borehole acquisition and selection of a construction contractor, until Year 2. The estimated cost to RSG in Year 2 is P33 659.

### Applied Research:

The Applied Research Unit of MLGL has put forward a proposal for Research on the Role of Local Institutions in Communal Area Development. Under the terms of a Memorandum of Agreement between GOB and the University of Wisconsin Land Tenure Center, three rural sociology researchers from the Land Tenure Center would be funded by this activity. The research team would be completed by an additional researcher from the Rural Sociology Unit of MOA and the Head of the Applied Research Unit, who would act as overall monitor of the research activity. Working in four (perhaps more) officially-designated Communal First Development Areas, the team's research will be broken into two phases: a) identification of area-specific institutional problems which significantly affect prospects for collaboration between regional/district-level officials and villagers on village land management and development projects - through examination of literature, files discussion, and inventory of village institutions and institutional relationships (the latter activity using university student "enumerators"); b) in-depth participant observation and analysis of the research problems identified in the first phase. The problem selection, analysis, and report writing will be specifically targeted on formulation of government policy for development activities in the communal areas. The estimated cost to RSG is P92 417 (the salary and support expenses for one researcher will start in September 1981 and will end in September 1982; all other expenses are expected to fall solely within Year 2). The estimated cost to GOB is P38 161.

### Communal First Development Area Land Use Planning:

The Western Ngamiland Land Development activity will continue through Year 2 and Year 3. The cultivated fields inventoried in Year 1 will be demarcated on the ground after formal allocation procedures are completed. Then the inventory will be resumed in another area near Gomare. It will be possible to form two or three field teams, using working maps derived from the 1980 aerial photography. There will also be labor-intensive, small-scale infrastructure works, like firebreaks, cut lines, road repair, and building of pole bridges to allow farmers easier access to their fields during flood time. This activity will be accompanied by other activities, not under LG 31, designed to build up agricultural production in the Gomare area, which has been designated a Communal First Development Area. The estimated cost under LG 31/TSG is P33 000 for Year 2 and P48 000 for Year 3. The estimated GOB contribution is P17 000 (Year 2 only).

Two mini-PM's are expected to be submitted to USAID by the end of April 1981. They will propose land use information collection and analysis activities in two designated Communal First Development Areas (CFDA's). The northern Bokalaka area near Tutume, Central District, is likely to be one CFDA selected for activities such as aerial photointerpretation, soil and vegetation survey, water points inventory, lands inventory, study of local livestock and crop management strategies, and assessment of local use

issues and constraints and opportunities for productive land development. The distinguishing feature of these proposals will be an attempt to integrate information collection and analysis with local-level planning for land development.

The estimated cost of these two sub-project proposals is P45 000 for RSG.

### DESIGN ISSUES

All the activities proposed for funding under sub-project LG 31 of the RSG are consistent with the overall GOB Project Memorandum for LG 31 and the selection criteria set for Grouping I in the USAID Project Paper. However, there are specific design issues to be discussed.

First, the pilot lands inventories are, as the word "pilot" implies, untried activities from which the district and central government should be able to learn. Therefore, it is important for their success as pilots that these activities involve active participation by an official capable of managing the pilot flexibly enough to respond quickly to unforeseen implementation problems and to lucidly observe and report the course of events to the Commissioner of Lands. The person to do this job is in most cases the District Officer (Land). Pilots should not be attempted in Districts which are not likely to have a DO(L) during the proposed pilot period. A small-scale lands inventory pilot proposed for Chobe District was dropped from the list above, because Chobe is unlikely to have a DO(L) during Year 2. However, if a DO(L) is posted to Chobe in the next few months, USAID should reconsider the possibility of funding this low-cost activity (P2 140 estimated). Furthermore, if the Nquaketshe Land Board area of Southern District does not have a new DO(L) in the next few months, the Land Board and District Council, in consultation with the Commissioner of Lands, should seriously consider moving the location of the pilot from Ntlhantlhe to Pitsane-Molopo so that it is convenient to the DO(L) who will be overseeing the Rolong Land Board's comprehensive lands inventory activity, based at Good Hope.

Second, there was some doubt during review of the applied research proposal whether the individual researchers proposed for this activity are in fact the best choices from the available researchers. However, institutional constraints within the Land Tenure Center and under the agreements between the Land Tenure Center and GOB on one hand and USAID on the other effectively "designed" these researchers into the proposal, leaving little flexibility at the proposal review stage. The proposal is considered sound at the current stage of review, but it should be noted that some misgivings were overridden by the general feeling that the likely research results must be obtained in Year 2 in order to influence GOB policy for the communal areas. This problem of research design should cause GOB and USAID to reflect on the wisdom of making institutional commitments for supply of research services. The better approach may be to fund individual proposals that address specific needs rather than fund institutions to address general research needs.

### FUTURE ACTIONS REQUIRED

- a) MLGL must submit by the end of April mini-PP's for two proposed CFDA activities through the RDU to USAID for approval prior to disbursement of funds.

- b) As a pre-condition for reimbursement, a USAID engineer must inspect the building construction at Lepashe at the time the buildings are officially handed over from the construction contractor to the Central District Council.

LG 31 - IMPLEMENTATION OF INTEGRATED LAND USE PLANS, 1981/82

	Expected balance as of 4/1/81	Planned expended 1981/82	Additional funds required	Planned expended 1982/83
Ngamiland CFDA	14 000	33 000	19 000	48 000
Lepashe <sup>1/</sup>	43 659	33 659	(-10 000)	-
Applied Research	21 862	92 417	70 555	-
Barolong Farms Lands		24 336	24 336	13 709
vehicle		( 7 000)		( - )
travel		( 6 590)		( 6 590)
supplies/equipment		( 1 500)		( - )
salary		( 4 584)		( 4 584)
miscellaneous		( 606)		( 250)
contingency (20%)		( 4 056)		( 2 285)
Tlokweg Lands	-	4 855	4 855	-
Ntlhantlhe Lands		1 960	1 960	-
Southern District Water Points	-	14 400	14 400	-
Ngwaketse SLB boundaries	-	6 410	6 410	-
Ngwato SLB boundaries	-	7 904	7 904	-
2 CFDA proposals	-	45 000	45 000	-
<b>Total</b>	<b>79 521</b>	<b>263 941</b>	<b>184 420</b>	<b>61 709</b>

<sup>1/</sup> Lepashe will require P10 000 less than originally planned because the borehole will not need to be purchased. The savings will be applied to the cost of the applied research.

## GROUP I: LAND USE PLANNING AND MANAGEMENT

### LG 36 Development of Land Institutions

#### DESCRIPTION

Year 2 activities are a continuation of those started in Year 1. Four more Subordinate Land Board Offices will be constructed in remote areas of Botswana - at Charles Hill and Ghanzi (Ghanzi Land Board) and at Tsabong and Hukuntsi (Kgalagadi Land Board). One more four-wheel drive vehicle will be purchased for the Applied Research Unit, and more furniture and equipment will be purchased for the Land Boards. The training consultancy and course development will be completed in Year 2. Training courses will be held for Land Board staff. All these activities are proposed, budgeted, and justified in the GOB Project Memorandum and the USAID Project Paper.

The revised Year 2 budget (see attached) differs from the original Year 2 budget (P151 000 from RSG and P159 500 from GOB) primarily because many of the expenditures expected in Year 1 have been delayed until Year 2 and because savings from the consultancy are transferred to the training courses. Furthermore an office construction cost overrun of P37 565 is expected. The RSG contribution for construction will remain at P72 000 while the overrun will be covered by the GOB Domestic Development Fund.

#### DESIGN ISSUES

The planned expenditure on training courses in Year 2 is P66 140. There is some doubt whether the manpower exists in-country to implement these courses and spend this amount. Already the Land Tenure Officers and District Officers (Lands) are overworked even without additional training responsibilities. The Land Board Training Consultant will no doubt take account of this feasibility issue and design a suitable training program. However, the USAID Mission should review the proposed training program at the time of the consultant's report to assess more exactly how the training budget will be spent.

#### FUTURE ACTION REQUIRED

As a pre-condition for reimbursement, USAID engineer must inspect the Land Board office construction at the time the offices are officially handed over from the construction contractors to the District Councils.

## LG 36 - LAND INSTITUTIONS, 1981/82 and 1982/83

	Expected balance as of 4/1/81	Planned expend. 1981/82	Additional funds required	Planned expend. 1982/83
<u>RSG</u>				
Office construction - 4 SLB's	-	72 000	72 000	-
Vehicle purchase - Appl. Res. Unit	-	10 000	10 000	-
Office furniture/Equip. Land Boards	3 000	33 000	30 000	9 000
Land Board Training Consultant	18 140	-	(-18 140) <sup>1/</sup>	-
Land Board Training Course Development	9 000	9 000	-	-
Land Board Training Courses	23 000	66 140	43 140	20 000
Contingency (10%)	15 700	15 700	-	2 900
	<u>68 840</u>	<u>205 840</u>	<u>137 000</u>	<u>31 900</u>

<sup>1/</sup> Savings from the Land Board Training Consultancy are to be applied to Land Board Training Courses in 1981/82.

GROUP II: AGRICULTURAL PRODUCTION AND INCOMESAE 10 - Small ProjectsDESCRIPTION

The Government of Botswana established the Small Projects Program (AE 10) in August 1978 as a mechanism to respond to village-level initiatives involving small-scale agricultural infrastructure and production activities. Administered by the Ministry of Agriculture's Department of Agricultural Field Services, this flexible fund can assist groups in a variety of efforts which are not aimed specifically at livestock development. These include the establishment of vegetable gardens and poultry projects, the building of storage and marketing facilities for crops and agricultural inputs, the erection of fences to separate crop lands from grazing lands, and the development of soil conservation and water resources for cropping purposes. There is a funding maximum of P5 000 per project and beneficiaries normally must contribute at least 10% of total costs in cash, kind, or labor. In addition groups must demonstrate their capacity to maintain project infrastructure and to manage project enterprises.

PAST PERFORMANCE

Since 1978 the Ministry of Agriculture has funded 67 projects throughout the country, using Dutch aid. There has been steady growth in total funds approved annually, with P17 768 approved in 1978/79 for 27 projects, P24 560 in 1979/80 for thirteen projects, and approximately P49 000 in 1980/81 for 27 projects. Individual project grants have averaged P1 800 during each of the last two years. In addition to an increase in total funds approved, there has been a broadening of project focus; although fencing efforts have constituted from between 48% and 63% of AE 10 projects annually, in 1980/81 projects included poultry, vegetable, grain storage, planter, woodlot, and milling endeavors as well. Accordingly the type of groups initiating projects -- fencing groups, Farmers' Committees, women's groups, 4B organisations, and Village Development Committees -- has broadened. Proportionate cash self-help contributions to project establishment may have decreased somewhat since 1978, but labor inputs have remained constant. Many of the 1980/81 projects, unlike most earlier AE 10 efforts, will require some ongoing management and technical support to succeed.

FUNDING REQUIREMENTS

In 1980/81, AE 10 project approvals will not total more than about 70% of available donor funding; consequently unused Dutch aid of approximately P20 000 will be carried over to the new fiscal year. The Government has requested that the RSG, which will assume the full share of donor assistance to AE 10 in 1981/82, provide P80 000 for the project at the beginning of the fiscal year. In light of previous experience with a somewhat similar funding mechanism administered through the Ministry of Local Government and Lands, officials believe that there may soon be a quantum jump in demand for AE 10 funds. This they view as especially possible given the demonstration effect of ongoing projects, given the possible expansion of complementary projects such as Services to Livestock Owners in Communal Areas (SLOCA), the Rural Industries program, and ALDUP, of which AE 10 can be viewed as the group funding component, and given Botswana's growing effort to develop Communal First Development Areas.

In view of the level of expenditure of AE 10 funds over the past few years, however, it is recommended that P50 000 of the Government's request be allocated to the Small Projects Program. This allocation, when combined with carry-over donor funds, provides for expenditures more than one-third again as great as funds allocated to projects in 1980/81. If during Year 2 it appears that funds in addition to these are required, they can be obtained from the Domestic Development fund.

### DESIGN ISSUES

While those both at the center and in the districts view AE 10 as extremely useful in the government's effort to decentralize planning and development, ultimately to the village level, questions and issues regarding the improvement of project performance have been raised. First, given the objective of AE 10 to enable a quick and efficient ministerial response to group initiatives, while strengthening decision-making at the district level, it has been suggested that final funding approval authority, at least for proposals of P2 000 or less, reside with the Regional Agricultural Officer (RAO), as stipulated in the original AE 10 project memorandum, rather than with the Director of Agricultural Field Services, as is currently the case. Proponents of this argue that RAO decision-making would be consistent with government's decentralization development thrust, while it would avoid delays occasionally incurred when proposals have been lost either in the post or in the Ministry's registries. Should an RAO want guidance in proposal assessment beyond that provided in the ordinary course of project review, he could consult the district's Land Use Planning Advisory Group for assistance. Advocates of the status quo, claim that centralized decision-making allows for uniformity in the application of project eligibility criteria, provides a useful check on project feasibility and costs, and protects the RAO, as an extension agent, from possibly having to alienate client groups.

Given the diversity of views on this issue of project approval procedure, it is recommended that the MOA undertake a full review of the question, involving both central and district-level staff in deliberations. It has tentatively been suggested that a useful experiment in the near future might be decentralized decision-making, either in single district or in all agricultural districts, for a short, specific period of time. Whatever the outcome of discussions, however, the Ministry should develop comprehensive guidelines for district officials to use in reviewing AE 10 projects.

Should the project approval procedure review result in permanent decentralization of decision-making to the district level, the Ministry should consider increasing the funding maximum of projects approved there from P2 000 to at least P3 000, given double-digit inflation annually since the project was established in 1978. The Ministry may even want to allow decisions on all applications for project funds to be made at the district level.

Second, although there is no stipulated minimum group size for AE 10 funds eligibility, agricultural field staff often believe that a group must have at least ten members in order to qualify for support. Indeed, it seems that all but one group ever receiving funds claimed at least ten members. Because large groups frequently experience internal management problems, and because there are a number of development programs which groups considerably small than ten might productively undertake, especially

some with long-term management requirements, it is important that the question of minimum group size be clarified for field staff who are assisting group development and identifying and encouraging small agricultural projects. The project approval procedure, which requires endorsement of memoranda by the kgotla, and appraisal by the local District-Development Committee and the Finance and General Purposes Committee of the District Council, provides safeguards against the funding of projects or groups perceived as inappropriate by the community concerned.

Third, AE 10 projects increasingly appear to require management skills and technical assistance, not just in infrastructure construction, but in project operation. Running a successful poultry or vegetable garden project has very different management and technical implications from erecting a drift fence. This means that there will be a growing demand on the resources of agricultural field staff -- especially Agricultural Demonstrators, District Agricultural Officers, and Group Development Officers -- as well as technical personnel at the district and at the center, if the necessary support is to be given at the appropriate time to an expanding number of project groups. Closer, more comprehensive monitoring of project activities in the future, perhaps by supplementing the Ministry's quarterly report system with feedback on project activities at the agricultural field staff monthly meetings, will help identify implementation bottlenecks quickly and determine what resources are required to alleviate constraints.

#### SUMMARY OF FINDINGS AND RECOMMENDATIONS

The Small Projects Program has been successful in financing a number of agricultural projects initiated by a variety of groups throughout the country over the past two and one-half years. Given previous levels of sub-project allocations and carry-over donor funding, it is recommended that in 1981/82 the RSG allocate to the program P50 000 of Government's P80 000 funding request. If additional funds should be needed during the year, they can be obtained from the DDF.

To improve project performance in the next fiscal year the following is recommended:

- 1) District and central-level Ministry of Agriculture officials should carefully examine the AE 10 sub-project approval procedure to determine whether or not RAO's should have final project approval authority; if a decision is reached in favor of decentralized decision-making, new ceilings of at least P3 000, and perhaps P5 000, should be considered for projects approved in the districts. In any case, comprehensive guidelines for considering AE 10 proposals should be developed to assist agricultural field staff in project review.
- 2) The Ministry of Agriculture should clarify for agricultural field staff the terms of AE 10, especially minimum group size for funds eligibility; and
- 3) The Ministry of Agriculture should carry out more comprehensive monitoring of project activities than in the past in order to backstop better increasingly complex projects.

## AE 10 - SMALL PROJECTS PROGRAM, 1981/82

(Pula)

Expected balance as of 4/1/81	Planned expend. for 1981/82	Additional funds required for 81/82	Planned expend. for 82/83
20 000 <sup>+</sup>	70 000	50 000	90 000

<sup>+</sup>These are funds remaining from Dutch assistance, 1980/81

## GROUP II: AGRICULTURAL PRODUCTION AND INCOMES

### AE 11 - Horticulture Development

#### DESCRIPTION

##### Background

The purpose of this project is to test the feasibility of vegetable production by groups of small producers. The approach proposed in the original Project Memorandum was to establish two ten-hectare horticulture estates, each with about twenty members. The proposed sites for these estates were Mogobane in Southeast District and Mathubudukwane in Kgalleng District. The Mogobane scheme, which was to have been constructed first, has been redesigned because of: 1) a shortage of water at the dam site and 2) a reassessment of the optimal size of group schemes when they are still in the pilot phase. An additional consideration was the findings of a recently completed study of horticulture in Botswana which concluded that smallholder horticulture in southeastern Botswana is not likely to be economically feasible for the foreseeable future.<sup>1/</sup> Although there are sound reasons for questioning this blanket conclusion, the constraints to the production and marketing of vegetables in southeastern Botswana are sufficiently serious to warrant keeping pilot efforts as small as possible. These constraints are discussed further in the analysis section of this review. The Mathubudukwane scheme has been postponed until Year 3 and will be scaled down for basically the same reasons that Mogobane was redesigned.

The model for the redesign of the Mogobane scheme is the Kolobeng Horticultural Cooperative Society located in the same area (Manyana). This activity, with fourteen members cultivating about 3.5 hectares, has been operating in its present form since 1977. In 1979, a similar group scheme was started in Ithuteng, about five kilometers from the Kolobeng site. The present situation at Mogobane is that the site has been cleared and fenced, work is underway on rehabilitating the irrigation system and plots have been allocated to members of the group.

##### Proposed Activities

Activities being planned for Year 2 funding under the RSG will take place in Mogobane and at the sites of the existing schemes, Manyana and Ithuteng. The three schemes will be operated under the general supervision of the existing horticulture advisor to the Kolobeng group. In addition, a second horticulture advisor has been identified to work exclusively with the Mogobane group. All three schemes will receive extension support from MOA field personnel (Agricultural Demonstrators) assigned to their areas.

During 1981/82, the major activities will be the construction of two houses in Mogobane (for the horticulture advisor and the AD), the purchase of a vehicle for the Mogobane group and the construction of weirs at Manyana and Ithuteng. In addition, fencing, tools, and planting equipment will be provided to all three sites, and mules will be purchased for plowing at Mogobane and Ithuteng. The proposed activities at Manyana and Ithuteng are intended to increase the efficiency of these two schemes, while the activities at Mogobane are intended to provide the basic structures and equipment needed for the production and marketing of vegetables.

<sup>1/</sup>E.B. Egner and I.A. Martin, Horticulture in Botswana. Gaborone. 1980.

The RSG contribution to this project will be the house construction at Mogobane, the pickup for Mogobane, the weirs at Manyana and Ithuteng, the fencing, tools, equipment and horticulture supplies needed at all three sites, and transport expenses for the horticulture advisor based in Manyana.

#### FUNDING REQUIREMENTS

The total RSG budget for Year 2 activities at all three sites is P99 555, consisting of P25 000 for houses, P31 000 for weirs, P5 200 for a pickup and the remainder mostly for fencing, tools, equipment and horticulture supplies. A detailed budget is attached to this review. The salaries of the two horticulturalists will be financed by other donors and the AD will be funded by the GOB.

#### ANALYSIS

##### Technical Issues

The two existing schemes are already functioning and do not appear to be experiencing any technical difficulties. At Mogobane, design work has been proceeding over the past two years and it appears that the major technical problems have been identified and resolved. The main technical issue for Year 2 concerns the construction of the two weirs. An AID engineer will need to inspect the design of these weirs prior to the start of construction.

##### Economic Issues

The Egner study referred to above, and experience with the Kolobeng farmer group indicate that the key constraints to smallholder vegetable production are economic. On the production side, returns to labor are low because of inefficient farming practices on the one hand and competition from South Africa on the other. This has proven to be a very difficult problem to overcome. Low incomes have contributed to a high turnover in membership in the Kolobeng group. However, the better farmers are staying and there is increasing evidence that efficiency is improving gradually and, for the most efficient growers, incomes are clearly higher than could be earned from alternative employment in the area.

Aside from production inefficiencies the major constraint is marketing. For these smallholder schemes to become viable it is essential that they find a way of supplying their markets with steady and reliable deliveries of quality produce. Further, marketing costs need to be much lower than those that prevail at present. Part of the reason for the high marketing costs is the road infrastructure which appears to be steadily improving. In addition, valuable lessons are being learned from previous failed efforts at marketing vegetables in Gaborone and other towns. To overcome the various constraints to efficient marketing, local vegetable producers have formed the Southeastern Grovers Association. The objective of this group is to establish wholesale and retail outlets for locally grown vegetables. Their major efforts will be aimed at lowering marketing costs and assuring steady supplies.

High costs of production, poor marketing and competition from South Africa were the main reasons cited by Egner for why smallholder vegetable production is not viable in Southeastern Botswana. Past experience

provides considerable support for his conclusions but the continued efforts of schemes like the Kolobeng farmers group are leading to increased efficiency and better marketing techniques. For this reason, it is felt that pilot activities of the type being proposed for RSG funding have sufficient prospects for income and employment generation to justify moderate levels of donor and GOB support. It must be emphasized, however, that these schemes are not likely to be self-sustaining by the end of Year 3 of the RSG. During the time frame of the RSG, progress will have to be measured in terms of declining trends in production costs, sustained commitments on the part of the small producers, and evidence of increased competitiveness vis a vis South African suppliers.

### Beneficiaries

Although the three activities will have a direct impact on only 38 producers, this is four times as many as the original Mogobane scheme would have benefited in the early years. Most members of these groups are women who would otherwise have no source of cash income. There will be spread effects as these incomes are converted into effective demand for other goods and services supplied in rural areas and, if the schemes prove replicable, the result will be additional job creation in the vicinity of all the major population centers of Eastern Botswana.

### Monitoring and Evaluation

The proposed horticulture schemes are clearly of a pilot nature and should be carefully evaluated to determine long-term viability. It is essential that each of the three schemes keep accurate data on costs of production, costs of marketing, retail and wholesale prices received and net returns to labor. Implementation problems should also be well documented. During Year 3 of the RSG, there should be an evaluation to look at experience up to that time, assess future prospects and recommend whether the schemes should be continued and replicated.

### SUMMARY OF FINDINGS AND RECOMMENDATIONS

1. The redesign of the Mogobane estate into three small schemes was the appropriate response to the technical problems encountered at Mogobane as well as to the serious constraints to the production and marketing of vegetables in southeastern Botswana. It is recommended, however, that each scheme be carefully monitored to determine whether long-term viability is in fact possible.
2. The Mathubudukwane estate proposed for Year 3 should be redesigned in light of experiences during Year 2 and the findings of the horticulture study by Brian Egner.

### FUTURE ACTIONS REQUIRED

1. The MDA will prepare a PM addendum before March 31, 1981 describing the revised Year 2 activities and including an updated budget. The approval of the PM addendum by MFDPI and USAID will be a pre-condition to the disbursement of funds from the RSG.
2. An AID engineer will inspect and approve the designing of the weirs to be constructed at Manyana and Ithuteng.

## AE 11 - HORTICULTURE DEVELOPMENT, 1981/82 &amp; 1982/83

(Pula)

	Expected balance as of 4/1/81	Planned expend. 1981/82	Additional funds required	Planned expend. 1982/83
Mogobane Farmers Group		41 300		
- vehicle		(5 200)		
- fencing		( 1 162)		
- pump		( 3 080)		
- net house		( 824)		
- tools and equipment		( 6 034)		
- housing		(25 000)		
Kolobeng Farmers Group		20 398		
- fencing		( 1 310)		
- weir and piping		(17 428)		
- tools and equipment		( 1 660)		
Ithuteng Farmers Group		(18 839)		
- fencing		( 966)		
- weir and piping		(14 177)		
- tools and equipment		( 3 696)		
Common expenditures		9 925		
- horticulture supplies		( 3 800)		
- transport		( 6 125)		
Sub-total		90 462		
Contingency - 10%		9 093		
TOTAL	99 555	99 555	-	60 000

GROUP II: AGRICULTURAL PRODUCTION AND INCOMEAE 15 - AfforestationDESCRIPTION:

Government nurseries in Serowe and Kasane were originally proposed for construction in 1981/82 under this project. The Serowe nursery is now being replaced with a nursery at Kang, since there is already a small brigade nursery at Sorowo and a nursery at Kang will improve the geographic distribution of nurseries in Botswana. The nursery at Kasane has been postponed to Year 3 of the RSG.

In addition to the Matsheng woodlot and the Takatokwane sandveld trials which were postponed from Year 1 to Year 2 of the RSG (see the review of Year 1 for details) it is proposed that P50 000 be allocated for small village woodlots in Year 2. Project Memoranda have been received for three new woodlot projects, at Mochudi, Palapye, and Kang. The Mochudi project consists of planting six, eight, and ten hectares over a three-year period. The Mochudi Farmers' Brigade will act as contractor for village groups in the design and establishment of the woodlots. These woodlots will be aimed at soil conservation as well as production of firewood, roofing poles and fence posts. Although the brigade is prepared to assist with projects anywhere in Kgatleng District it is expected that most of the woodlots will be in the Mochudi area.

The Kang woodlot will be established and managed by the Matshe Brigades Development Trust. A five hectare area three kilometers from Kang has been petitioned of the Kgalagadi Land Board for the site of this woodlot. The objectives of this woodlot will be to: provide building poles and firewood to Kang village, study the suitability of various species in the Kgalagadi environment and gain experience with the operation of village woodlots in the sandveld area of Kgalagadi District.

The Palapye project will be a demonstration of the use of windbreaks, shelterbelts, woodlots, and fruit tree orchards. The project will be located on the Palapye Dryland Crop Demonstration Farm. The brigade operates on the philosophy of implementing demonstration projects with equipment available to the average farmer, these being donkey and cattle-driven implements. This project will be established using these implements.

The three new woodlots projects will cost about P24 000, leaving P26 000 for additional woodlot proposals in Year 2.

FUNDING REQUIREMENTS

Funding requirements for the Kang nursery in Year 2 are estimated at P29 164 of which P3 351 is carried over from Year 1. The budget for woodlots in Matsheng and Takatokwane are P13 851 and P12 485 respectively. This represents an increase in total requirements of P3 343 over what is being brought forward from Year 1. The entire increase is due to inflation. Of the P50 000 budgeted for village woodlots in Year 2, the following projects have been approved: Palapye, P5 928, Kang P11 010 and Mochudi P7 140. There remains P25 922 available to other woodlots when their proposals are received.

## FEASIBILITY AND DESIGN ISSUES

Forestry programs in Botswana face serious constraints stemming from the climate, domestic animal grazing, and traditional wood utilization practices. The demand for wood is varied. Areas surrounding the cities and major villages have a major need for firewood and materials for hut construction. In more remote areas, demand for wood products is low and supply is relatively plentiful, especially for firewood. Also, surrounding the major village areas overgrazing has allowed thorn bush to become the predominant vegetation. With this constant grazing pressure any woodlot must be fenced, which is expensive.

Two systems of woodlots exist based on indigenous and exotic species. Several studies indicate that fifteen to 45 hectares of indigenous woodlots will produce the same quantity of wood as one hectare of exotic plantation. For many uses the choice is between the implementation problems related to managing large areas of indigenous species on the one hand and the large capital investments necessary for exotic woodlot plantations on the other. Comparisons of costs and benefits should be made before initiating a national program based on exotic species.

The trees grown in plantations are mostly Eucalyptus camaldulensis, a species very adaptable to arid climates. A few other species are also being planted, such as E. tereticornis and E. grandis/saligna. However, tree planting currently does not adequately take into consideration genetic variability, indigenous species, and site-species interactions.

A large variation in tree vigor, size and shape is readily seen in the various plantations in Botswana. Part of the reason for this is that E. camaldulensis has a large genetic variation and that the Botswana tree planters indiscriminately plant all the seedlings they receive. There are no selective seed collections programs in Botswana and no culling of poor seedlings. The Takatokwane and Good Hope plantations will be establishing the only species and provenance trials in the country.<sup>1/</sup> More should be planned as better trees come into maturity in the existing plantations. Also, indigenous species should be given more attention in the forestry program. They are preferred by the people of Botswana, have higher caloric value, higher rot resistance, and higher termite resistance than E. Camaldulensis, E. tereticornis, or E. grandis/saligna.

Finally, site and species interactions need fine tuning. E. camaldulensis, will do best when it is planted in a water catchment area or where there is a relatively high watertable. The KRDA stands near Molepolole are outside of catchment areas and show stress conditions on a substantial number of trees. The crowns are thin and the leaves are pale green instead of a healthy dark green. The KRDA stand near Kopong, on the other hand, is close to a stream and shows full crowns and healthy leaves. In both locations some trees had grown to a respectable height and diameter. Seed from these trees should be collected for further selection processes.

## INSTITUTIONAL ISSUES

### The Lack of a Policy Framework

The GOB does not currently have a forestry policy that is useful for planning purposes. The existing policy statement describes the objectives

<sup>1/</sup> Provenance trials are field plantings of one or more species using seed from several known genetic sources.

of the forestry program but provides no indication of the relative seriousness of the different problems being addressed, relative priorities of the different objectives and clear strategies based on a thorough analysis of the constraints to increased production.

The first step in setting a useful forestry policy for Botswana is a supply and demand analysis. Botswana's needs for forest products both at the national and regional level need to be identified. This demand should then be related to the production potential of the country by region and by type of product. Given the semi-arid conditions in this country it is clear that some forest products will never be able to be produced domestically. Those factors should be well understood before undertaking large-scale commercial woodlot programs. Some Brigades which have strongly committed themselves to commercial plantations have requested Government support in marketing when they should have requested assistance in economic feasibility analysis before making the commitment.

Another phase of this policy formulation process is the identification of goals other than production to be sought by a forestry program. These are primarily related to soil conservation and amenities. Here again the magnitude of the needs must be identified. Stating that a forestry objective is reforestation of areas critically denuded of vegetation is not useful and can be misleading, since Botswana has very few such areas. In fact, most forestry projects in Botswana require the clearing of existing vegetation before planting.

Once the needs and production possibilities are established there should be an analysis of all of the constraints to increased production: technical, economic, social and institutional. It is this stage which provides the basis for a strategy that includes the clear objectives, priorities and time frames that are required for sound project design and resource allocation.

### The Project Approval Process

Approval procedures for forestry projects are unnecessarily cumbersome and time consuming. The required documentation is non-standardized resulting in unclear statements of objectives and description of activities, and inaccurate estimates. In addition to requiring that the GOB Project Memorandum format be closely adhered to, the MOA should standardize costs as much as possible. To establish a woodlot there are certain steps which must be taken. These include: site preparation, fencing, weeding, watering, planting, harvesting and transportation. It is also possible to define the inputs required for each activity. For example, site preparation in Botswana usually consists of land clearing, destumping and ploughing. A set of guidelines should be produced by the Forestry Section stating what activities will receive assistance, what the maximum amount of assistance will be and what type of voluntary inputs are needed. The following is an illustrative list of standardized costs for activities related to established woodlots:

<u>Activity</u>	<u>Government Support</u>
Site preparation	P 250/ha
Fencing	1 000/kin
Planting	500/1 000 seedlings
Watering	100/ha/yr
Weeding	100/ha/yr

The group receiving the assistance would make a self-help contribution probably in the form of labor and would cover any costs incurred above the standards established by Government. The amounts should be reviewed annually and revised to reflect changing conditions. The above is an example and should be modified to fit Botswana conditions.

Some of the proposals received for Year 2 of the RSG request funding for land rental and land application fees. These costs should be part of the local contribution. A second issue relating to the village woodlot proposals is why storage sheds are needed. The hand tools and supplies could just as easily be stored at a villager's home or in a group's shed. Finally, there appears to be little justification for financing pipe and flexible hose for watering at Matsheng and a 4,500 liter storage tank at Kang instead of a donkey cart and 55 gallon drums. These issues could be addressed much more easily in the approval process if woodlot design were standardized.

### Monitoring

There is currently no system for the regular monitoring of the woodlot program. This would not be a serious problem if there were a forestry field staff well distributed throughout the country. However, in the absence of field staff it will be necessary to set up a system of reporting and field visits using what staff is available at the Central forestry Office with assistance from MOA field personnel. Financial monitoring for brigade activities can be handled through the Brigade Development Center. The monitoring of funds for other projects will rely on the MOA system of financial control. The MOA should assure itself that it is able to monitor the flow of funds under a village woodlot program effectively.

### Manpower Requirements

The ongoing MOA forestry program, consisting of nurseries and government plantations, combined with proposals for new projects under the second year of the RSG imply the following manpower requirements:

- 1) management and labor for MOA nurseries and plantations,
- 2) staff to perform extension services for village groups and
- 3) staff for monitoring of afforestation activities particularly village woodlots.

Of these requirements, the first is easiest to assess. In general, nurseries are overstaffed in terms of labor but lacking in qualified management. Seedlings are being produced but seed selection and culling of seedlings are not occurring in a systematic way. Given the shortages of qualified management throughout MOA and the ministries own priorities, it is unlikely that this situation can be rectified in the near future.

The MOA has implicitly made a decision not to become involved in forestry extension to any significant degree. Here again, the obvious reason is manpower shortages. This means that whatever extension services will be required by groups establishing woodlots will have to be provided from sources other than MOA staff. The most important of these sources are the brigades, several of which have ongoing forestry programs of their own.

Most have indicated the desire to work with groups in the actual construction of woodlots as well as provide technical assistance for woodlot design and management. Where forestry brigades exist, they have the capacity to perform these functions satisfactorily. Thus, extension advice is available in areas around Serowe, Mochudi and Molepolole and perhaps other small areas (e.g. Palapye and Kang) as well. One promising possibility for supplementing the brigades in performing extension work is to recruit forestry volunteers (e.g. Peace Corps) and assign them to areas where there appears to be significant demand for woodlots but little or no extension capacity. During the course of the next year the Forestry Section of MOA should assess extension needs and provide a report as part of its request for village woodlot funding for Year 3 of the RSG.

Similarly, for monitoring the MOA will need to set up a system of regular reporting and field trips and assess whether its available manpower can perform this task adequately. This issue shall also be assessed by the RSG evaluation team during the review of Year 2 activities and Year 3 proposals.

#### SUMMARY OF FINDINGS AND RECOMMENDATIONS

1. The evaluation team concurs with the decision to establish a nursery at Kang instead of Serowe. The proposed nursery at Kasane, which is now scheduled for Year 3, is justified only if the existing nursery at Kachikau is scaled down to a small holding nursery and the staff at Kachikau is reduced accordingly. Also, as noted in the review of first year activities, the funding of tractors and office buildings should not be approved unless they can be justified for activities other than those related directly to nurseries. A PM amendment covering: 1) the moving of one nursery to Kang, 2) plans for the Kachikau nursery and 3) justification for tractors and offices at both nurseries is needed.
2. A standardized project approval system including guidelines for approval of proposals is needed for the Small Woodlots Fund. A suggested set of guidelines is attached. The three woodlot proposals already received meet these guidelines so it is recommended that they be approved for RSG funding. Approval of future proposals, however, should be based on established guidelines. These can be provided to the RDU and USAID either as part of the PM addendum required for the nurseries, or as a separate document.
3. It appears that the brigades can provide much of the extension services required by the small woodlots program and needs not covered by the brigades could be met through expatriate volunteers. However, manpower requirements for extension and monitoring related to small woodlots should be assessed by the MOA and a report submitted as part of the Forestry Section proposal for funding in Year 3 of the RSG. One immediate requirement that will not be met through brigades is for an advisor/manager for the Matsheng woodlot. Consideration should be given to recruiting a volunteer for that position at an early date.
4. The overall forestry program including government plantations, large brigade plantations/woodlots and small village woodlots suffers from the lack of a clear overall policy. The formulation of such a policy requires studies and analysis of needs, production

potential and constraints. These studies should be undertaken as soon as possible with assistance from outside experts.

5. As part of an ongoing program of research and analysis, the following actions are recommended:
  - a. Species and provenance trials should be incorporated into village woodlots whenever possible. The Forestry Officer should approve the design of these trials as well as the seed source selection. He should monitor the trials about every six months and publish his findings as and when appropriate.
  - b. An economic feasibility and marketing study of government and KRDA plantations should be carried out before any further expansion is undertaken.
  - c. Economic studies of firewood, post, and pole fiber production and of indigenous woodlands and exotic plantations under managed and unmanaged conditions should be undertaken.

#### FUTURE ACTIONS REQUIRED

1. The MOA is required to prepare a PM addendum which includes:
  - a. a discussion of the relocation of the second nursery from Serove to Kang and of plans for the Kachikau nursery in connection with the new nursery proposed for Kusane in Year 3;
  - b. justification for the financing of tractors and offices at both nurseries; and
  - c. revised budgets for the nursery component of AC 15. The PM addendum must be approved by MCDP and USAID prior to April 30, 1981 as a precondition to disbursement of funds for nurseries.
2. Before any proposals for additional village woodlots are accepted for funding under the RSG, the MOA must prepare standardized guidelines for the design and approval of proposals and provide them to USAID for approval.

Suggested Guidelines for the Small Woodlot Fund

1. All proposals for woodlots should follow the GOB Project Memorandum (PM) format and contain the following information:
  - a) the objectives of the woodlot,
  - b) the group that will manage the woodlot,
  - c) the organization that will build the woodlot,
  - d) type and value of contribution by the beneficiary group,
  - e) description of the woodlot:
    - location (include map),
    - size in hectares,
    - kilometers of fencing,
    - number of seedlings: total and per hectare,
    - type of site preparation:
      - i) clearing in hectares,
      - ii) destumping in number of stumps/hectare and hectares,
      - iii) plowing in hectares,
    - watering schedule in trees/hectare and hectares,
    - weeding schedule:
      - i) mechanical in hectares,
      - ii) hand in trees/hectares.
2. The maximum MOA contribution will be as follows:
  - a) P - hectare for land clearing
  - b) P - ha for 1 to 10 stumps/ha  
P - ha for 11 to 25 stumps/ha  
P - ha for 25+ stumps/ha
  - c) P - ha for ploughing
  - d) P - for goat-proof wire fence  
P - for bush fence  
P - 1000 seedlings for watering
3. Support from the Small Woodlot Fund will be limited to a maximum of ten hectares per year per woodlot
4. Fencing, tree spacing, species and other technical guidelines issued by MOA Forestry Unit will be the basis for designing each woodlot
5. The group will provide at least 10% of the value of the project in labor or in material
6. The group will not be paid for its labor contribution but the labor can be included in the required 10% self-help contribution
7. The Forestry Section will approve all applications.

## AC 15 - AFFORESTATION, 1981/82 &amp; 1982/83

	Expected balance as of 4/1/81	Planned expend. 1981/82	Additional funds required	Planned expend. 1982/83
1. Nurseries (Kang and Kasane)	3 351	29 164	25 813	30 000
- tractor and implements	-	(11 330)	(11 330)	
- office & equipment	( 1 511)	(14 146)	(12 635)	
- hand tools	-	( 1 173)	( 1 173)	
- contingency	( 1 840)	( 2 515)	( 675)	
2. Matsheng woodlot	19 088	19 851	763	
3. Takatokwane trials	9 800	12 485	2 685	
4. Small Woodlots Fund	-	50 000	50 000	100 000
	32 239	111 500	79 261	130 000

GROUP II: AGRICULTURAL PRODUCTION AND INCOMESAE 19 - Arable Lands Development Program Pilot ActivitiesDESCRIPTION:

Activities under this project are a continuation of implementation begun in Year 1. No additional funding will be required in Year 2. Details of each ALDEP activity can be found in the review of ALDEP pilots for Year 1.

## AE 19 - ALDEP PILOTS, 1981/82

	Expected balance as of 4/1/81	Planned expend. 1981/82	Additional funds required	Planned expend. 1982/83
Donkey draft credit	14 000	14 000	-	
Fencing	3 000	14 000	-	
Water catchment tanks	15 500	15 500	-	
Extension assistance	42 100	42 100	-	
Gardens	1 500	1 500	-	
TOTAL	76 100	76 100	-	

**GROUP III: NON-FARM EMPLOYMENT OPPORTUNITIES****CI 08 - Rural Industries Development****DESCRIPTION:**

The Year 2 activities under this project are essentially a continuation of activities started in Year 1. Four RIOs will be added to the seven assigned in Year 1. The districts where new RIOs will be assigned are: Central (Tutume), Northeast, Chobe and Kgalagadi. These RIOs will be provided with offices, office equipment and vehicles. Also, counterparts are to be assigned to each RIO. There is provision in Year 2 for counterpart training both in-country and abroad. Finally, the Small Projects Fund (SPF) will be increased from P60 000 in Year 1 to P150 000 in Year 2. The RIO program will continue the same types of activities initiated in Year 1, i.e., market surveys, feasibility studies, training programs, demonstrations and other assistance to existing or new rural businesses that wish to initiate or expand productive activities. As in Year 1, RSG contributions to the RIO program will be the SRIO salary, vehicles, office equipment, training funds and the Small Projects Fund. The GOB contribution will consist of offices, vehicles and the salaries of counterpart and administrative staff.

In addition to the above ongoing activities, this project will contribute to a major study of the gathering, processing and marketing of wild plants for export and a pilot project to train and provide support services to rural blacksmiths. The gathering study will attempt to expand on the experience gained by Pelegano Village Industries in exploiting the market for wild plant materials growing in Botswana. The products to be studied include: medicinal herbs, bush trees, edible caterpillars, florist supplies, vegetable dyes and fresh and dried fruits, vegetables and fungi. If the results of this study are positive a pilot processing and marketing infrastructure will be established to test the findings. The total cost of this study is P196 000 of which about half consists of technical assistance and local salaries. The West German technical assistance agency is financing the foreign costs (P85 780) and DDF is financing most of the local salaries and other non-capital expenses (P75 720). The RSG contribution to this activity will be a leased vehicle, equipment and funds to purchase samples of plants and to help cover the salaries of short-term collectors. The amount of the RSG contribution will be P34 500.

The blacksmith training and support activity will be in support of the MOA's Arable Lands Development Program (ALDEP). This sub-project will set up model village blacksmith shops which will be able to repair and maintain a package of animal drawn agricultural implements presently being developed under ALDEP. They are also expected to fabricate simple agricultural inputs (cow bells, branding irons, harness buckles, wheel-barrow, donkey-carts) as well as simple consumer goods (knives, buckets, roof caps for traditional dwellings, axes). The Rural Industries Innovation Center (RIIC) will set up within its premises a demonstration/training unit equipped with the same type of simple tools and facilities as the envisaged village blacksmith shops. The training of the blacksmiths will take place at RIIC in short-term product-oriented courses. Follow-up and technical as well as managerial advice will be provided by through MCI's extension agency (BEDU) and RIIC. The total cost of this activity is estimated at about P220 000. The UNCDF has agreed in principle to finance the capital cost component, about P160 000. The RSG will finance the costs related to the training courses

fees to RIIC, training materials, etc.) estimated at P20 000 and the DDF will finance the salary of a technician and transport costs (P40 000). MCI is currently finalizing the PM on this activity. MCI and MFDP have agreed to submit an approved PM to USAID before April 30, 1981.

#### FUNDING REQUIREMENTS:

The unexpended balance being carried over from Year 1 is P67 800, consisting of P31 808 from the SPF, P21 000 for training abroad, P7 000 for training in-country expenditures for 1981/82 are estimated at P27 740 for vehicles and equipment, P32 000 for training, P150 000 for the SPF and P37 881 to finance the SRIO for eighteen months. Total additional funds required for 1981/82 will be P234 321.

#### DESIGN ISSUES:

##### The Small Projects Fund

As noted in the review of Year 1 activities the main issue with respect to the SPF at this time is the need to establish guidelines for its use at both the headquarter and district levels. Suggested guidelines are attached to the Year 1 review. For Year 2, the major issue is the large increase in the size of the fund. In 1980/81, the SPF was budgeted at P60 000 of which an estimated P28 000 will be spent by March 31. Of this amount, about P17 500 will have been spent in the fourth quarter (Jan.-March). For Year 2, projected expenditures total P150 000, or almost P40 000 per quarter.

The expenditure rate in Year 2 can be expected to increase considerably because: 1) uses for the carry-over will already have been identified, 2) districts with existing RIOs will have one year's experience to build upon and 3) four additional districts will have RIOs for the first time. The initial allocation of the Year 2 amount is P50 000 for headquarters (i.e., the SRIO's office) mainly for feasibility studies and R&D work, and P10 000 for each district. The allocations to the districts will be in tranches of P5 000. On the basis of discussions with the SRIO and with RIOs in four districts, the evaluation team feels that P150 000 is a reasonable estimate for Year 2 expenditures. Uses for much of the P50 000 headquarters fund have been identified and the RIOs are showing considerable initiative, imagination and sound judgment in the use of funds allocated to them. (See Attachment 1 to the Year 1 review of CI 08 for details in how the SPF was used in 1980/81.)

The original request from MCI for Year 2 included P175 000 for the SPF. The SRIO continues to feel that this level of expenditure is possible. If during Year 2 it appears that funds in addition to these are required, the Rural Development Unit anticipates that they can be obtained either from other RSG programs or from the Domestic Development Fund.

##### Counterpart Recruitment

During Year 1, only two of the seven counterparts to be assigned to RIOs were identified and none were officially assigned to their posts. It appears that this recruitment problem will continue into Year 2. The two most likely sources of applicants are National Service leavers and individuals who received business administration training for assignment to brigades but for which there were no openings. Three of this latter group

have already applied for RIO counterpart positions. A third much less likely source is University graduates. The problem of shortage of applicants is compounded by a cumbersome personnel system.

The SRIO feels that it is very unlikely that all RIO counterpart positions will be filled in Year 2 and that in fact there could possibly be only a total of five positions filled by mid-year. Since all RIO positions except one will be filled by short-term expatriates, the lack of counterparts seriously endangers the continuity of the rural industries development program, further, from a strictly implementation standpoint, the lack of counterparts has implications for how much of the funds allocated for training will be spent.

The evaluation team recommends that MCI give urgent attention to recruiting RIO counterparts. A report on efforts to recruit counterparts should be made to the RDU by June 30, 1981. It is also recommended that MCI be prepared to reallocate training funds to other activities if it appears that little use can be made of them in Year 2.

#### Organization of the Rural Industries Program

There is some question as to how the rural industries promotion program should be organized within MCI. There are three separate MCI programs in rural areas: 1) the RIO cadre, 2) the Business Advisory Service (BAS) which deals mostly with commercial rather than industrial enterprises, and 3) the Botswana Enterprise Development Unit (BEDU). Until recently BEDU has concentrated mostly on urban industrial estates. However, during its last review BEDU, SIDA who is the main donor for that organization, strongly recommended a shift in focus to rural areas.

At present both the RIO program and BEDU are in the Industrial Affairs Division of MCI and BAS is in the Commercial Division. The organizational issue facing MCI is how to coordinate its various activities at the district level. The current mechanism is through the Production Development Committees (PDC) which is an arm of the DDC. The secretary of the PDC is the RIO and all district-level government officials responsible for production programs are members. An alternative to this approach that is currently being considered by MCI is to place the RIO program under BEDU on the grounds that BEDU has been in existence for several years, has relatively large amounts of funds at its disposal and has ongoing activities relating to industrial development in rural as well as urban areas including credit, market surveys and feasibility studies.

There are, however, several major disadvantages to incorporating the RIO program into BEDU. One is that BEDU has had very few staff in rural areas and has had little experience with rural industrial development. Another is that BEDU expertise and programs have traditionally been concentrated on large and medium scale industries in the formal sector. The RIO program, on the other hand, focuses on problems of small businesses in the informal sector. Experience has clearly shown that the most feasible approach to generating non-farm employment and income in rural Botswana is through very small businesses that are labor rather than capital intensive. Although there are needs for both formal and informal sector programs in Botswana, as in all LDCs, it is widely recognized that the problems and need of the two sectors are very different and call for significantly different types of government programs. Placing the RIOs under BEDU would almost certainly involve a difficult and lengthy transition period which in the end could be detrimental to both the formal and informal sector programs.

In the view of the above, it is recommended that the PDC continue to be the means for coordinating rural industry development programs in rural areas. It is strongly recommended that the RIO program not be incorporated into BEDU. Such an action would lead to a reassessment by USAID of its financial support to the RIO program.

#### SUMMARY OF FINDINGS AND RECOMMENDATIONS

1. Although the growth in the use of the Small Projects Fund has been impressive during Year 1, it is recommended that the MCI request for Year 2 be reduced from P175 000 to P150 000. If, during the course of the year additional funds appear to be needed, the RDU should seek to obtain them from other RSG activities or from the DDF.
2. Recruitment of counterparts did not progress satisfactorily in Year 1 and it appears that the situation will improve only slightly in Year 2. It is recommended that MCI give urgent attention to recruiting counterparts and establish a minimum goal of six counterparts in place by October 1. It is also recommended that a report on recruitment efforts be prepared for the RDU and USAID before June 30, 1981.
3. After reviewing the present organization of the MCI rural industry program, it is recommended that MCI programs at the district level continue to be coordinated through the PDC. It is specifically recommended that the RIO program not be made part of BEDU on the grounds that the RIO program would certainly be adversely affected and possibly the BEDU program as well. Such an action would necessarily lead to a reassessment by USAID of its financial support to the RIO program.

#### FUTURE ACTIONS REQUIRED

1. Approved Project Memoranda for the Gathering Study and the Blacksmith Training and Support Project must be submitted to USAID for final approval before RSG funds can be disbursed for these two activities.

## CI 08 - RURAL INDUSTRIES DEVELOPMENT

	Expected balance as of 4/1/81	Planned expend. 1981/82	Additional funds required for 81/82	Planned expend. 1982/83
<u>RSG</u>				
Vehicles	-	20 240	20 240	
Equipment	-	7 500	7 500	
Small Projects Fund	31 808	150 000	118 192	200 000
Counterpart training abroad	21 000	21 000	-	30 000
RIO and counterpart training	7 000	11 000	4 000	10 000
Gathering Study	-	34 500	34 500	
- vehicle		(14 500)		
- equipment		( 7 750)		
- purchase of plant samples		( 2 500)		
- salaries of short-term				
- collection agents		( 9 750)		
SRIO salary	7 792	37 881	29 889	
Blacksmith training and support		20 000	20 000	
	67 800	502 121	234 321	240 000

GROUP III: NON-FARM EMPLOYMENT OPPORTUNITIESGA 02 - Wildlife Management and DevelopmentDESCRIPTION:

The original budget for Year 2 was P48 000 from the RSC and P15 784 from the GOB, to continue support of the natural resource economist assigned to the Department of Wildlife and National Parks. However, short-term consultancies budgeted for Year 1 have been late in starting and all will run into Year 2. In addition, the Year 2 budget has been revised to include an additional P32 000 from the RSC (no additional funds from the GOB) to finance short-term technical assistance to the Wildlife Department. The exact nature of the technical assistance is not specified, to allow the new economist-planner to use the funds flexibly to solve particular problems that he identifies over the next few months. The technical assistance which can be funded in Year 2:

- a) study tours in and outside Botswana, for the purpose of gaining knowledge/experience of the operation of wildlife utilization schemes;
- b) short training courses necessary to increase the value of products of the existing offtake from wildlife populations;
- c) consultancies on different aspects of wildlife utilization, including pre-implementation assessment of population responses of wildlife species to proposed utilization schemes.

With this amendment, the PM remains consistent with the criteria set for selection of Grouping III sub-projects in the USAID Project Paper.

DESIGN ISSUES:

This sub-project funds only technical assistance, both long-term and short-term. The Wildlife Department is keenly interested in the prospects for wildlife utilization and increased offtake as justification both for maintaining Wildlife Management Areas and free-living wildlife populations in Botswana and for increasing the income-earning opportunities of remote area dwellers who are already hunting wildlife on a casual basis. This sub-project allows the Department to explore the feasibility of improved wildlife utilization by providing access to technical assistance. However, pilot utilization schemes or other activities that actually increase offtake from wildlife populations beyond the present level may not be funded by this sub-project until an Environmental Assessment is carried out and approved by USAID/Washington.

## GA 02 - WILDLIFE DEVELOPMENT, 1981/82

	Expected balance as of 4/1/81	Planned expend. 1981/82	Additional funds required	Planned expend. 1982/83
<u>RSC</u>				
Natural Resource Economist	-	48 000	48 000	48 000
Consultancies (Short-term)	12 350	44 350	32 000	32 000
TOTAL	12 350	92 350	80 000	80 000

GROUP IV: RURAL PRODUCTION AND INCOMES - GENERAL

DP 01 - Consultancies - Support of Communal First Development Areas (CFDAs)

DESCRIPTION:

Government established a Consultancies Project under National Development Plan V to provide feasibility and other specialist studies in the fields of commercial, industrial, and rural development. For the Second Year of the Rural Sector Grant a block of funds will be provided within this project to provide expertise needed for planning and design of development activities in Communal First Development Areas.

Government is in the process of reaffirming its commitment to the Communal Areas. The Communal Areas contain the majority of the country's population who depend upon subsistence agriculture and various non-farm activities to earn a marginal income. In keeping with the goals of the National Development Plan or rural development and employment creation renewed emphasis is being placed on assisting and expanding productive activities in Communal Areas. This is in line with the other RSG sub-projects such as Rural Industries, Wildlife Development, and ALDEP Pilot Projects.

One of the most serious constraints impeding progress in communal areas is manpower. Government has acknowledged its limitation in delivering additional manpower for the new initiative in the Communal Areas. As an economising measure as well as making sure that this initiative gets off to a good start Government intends to establish Communal First Development Areas. On the ground CFDA's will be a cluster of villages, lands, and cattleposts which will assist to improve and expand its production base in an integrated fashion. The requirements of this approach will include: a mixed farming component, rural industries, labour-intensive public works, production related infrastructure, land use planning, manpower training, selected social services, and supporting institutions.

The Rural Sector Grant is requested to finance short to medium term technical assistance which can assist the Government of Botswana overcome its manpower shortages within the Communal First Development Area initiative.

FUNDING REQUESTED:

For Year 2 a total of P45 000 is required for this project. The Funds will be controlled by the USAID Mission. Requests for technical assistance in relation to the Communal First Development Areas can originate either at the district or ministerial level. In the case of a district proposal it must first get the clearance from the appropriate ministry which will then pass it to the Ministry of Finance. The Rural Development Unit as coordinator of the RSG, will in turn make a request to the USAID Mission.

USAID will be responsible for identifying and contracting the requested technical assistance. Government of Botswana will be provided with background information on potential candidates and reserves the right to withdraw the request if none of the candidates are acceptable. Since these funds will be outside the accounting control of GOB the USAID Mission will report on the expenditure on this project within the framework already established for similar below the line expenditures.

## CONSULTANCIES FOR CFDA's, 1981/82 and 1982/83

	Expected balance as of 4/1/81	Planned expend. for 1981/82	Additional funds required	Planned expend. for 1982/83
Consultancies	-	45 000	45 000	45 000

### III. THE ADMINISTRATIVE CONTEXT OF THE RURAL SECTOR GRANT

By George Honadle, DAI

The Rural Sector Grant (RSG) is an innovative response to the need for an integrated rural development strategy. It exists in an administrative environment characterized by a highly dispersed population and both a lack of and an inefficient utilization of human resources.<sup>1/</sup> Moreover, the Botswana administrative context has a history of highly centralized decision-making. Recently, however, the Government of Botswana (GOB) has articulated a policy of decentralization.

This chapter of this report presents the RSG approach to IRD implementation in light of the Botswana context. First, the organization of responsibility is noted. Second, the planning cycle is outlined. Next, the approach to decentralization is identified and finally pertinent issues are discussed.

#### RSG ORGANIZATION

The RSG is a national-level IRD program. Overall responsibility is vested in a coordinating and approving body placed in the Ministry of Finance and Development Planning. That body is the Rural Development Unit (RDU). The RSG is essentially a financing mechanism which establishes a development fund which may be tapped by various ministries. Each ministry, therefore, retains responsibility for implementing individual sub-projects supported by RSG.<sup>2/</sup>

The RDU was established in 1973 to act as a secretariat for the top-level coordination mechanism in the GOB - the Rural Development Council (RDC). Chaired by the Minister of Finance and Development Planning, the RDC is composed of Permanent Secretaries and other key officials. Thus the RDU is a non-executive, coordination and oversight body whose effectiveness is based on persuasive ability and access to key decision-makers.

To assist the RDU with its coordination responsibility, a lower level standing committee called a "reference group" has been established. The reference group is composed of planners working within the ministries with programs supported by the RSG. The chairman of the reference group is the head of the RDU. This arrangement provides the RDU with direct access to decision-makers with responsibility for finalizing the configuration of program activities.

An additional RSG-specific entity is the annual "RSG Review Team". This group consists of a multidisciplinary team of consultants responsible for collaboratively evaluating, with USAID and GOB, sub-project performance during the previous year and for reviewing and approving (or rejecting) sub-projects proposed for the following year. The review team functions

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<sup>1/</sup>See A.H. Barclay, Jr. and Others, Botswana Rural Sector Study. Washington, D.C.: Development Alternatives, Inc., 1979.

<sup>2/</sup>This contrasts with the use of a single line agency, or a subnational Government body (such as a District), or an autonomous Project Management Unit as the primary implementation mechanism. See, George Honadle and Others, Integrated Rural Development: Making it Work? Washington, D.C.: Development Alternatives, Inc., 1980.

during the February-March period just before the beginning of the GOB fiscal year in April. It receives scheduling, substantive and communication assistance from the RDU, reference group and USAID.

Since the implementation of RSG-funded activities is the responsibility of the functional line ministries, organizational arrangements at the field level are not RSG-specific. Rather, they are built upon ministry and district operational units as well as the GOB planning-financing process.

#### THE PLANNING-FINANCING PROCESS

Planning in Botswana occurs on both a functional and geographic basis. Line agencies develop their intended activities and incorporate them into the District Development Plans which are aggregated on an annual basis and combined with national-level activities to constitute a national plan of action.

The planning cycle is geared to the April 1 - March 31 fiscal year. Consultations and thinking begin in April. By October the planning is in full swing with districts preparing to present papers to the National District Development Conference held during the first week of December. Although the exact procedures for plan preparation vary by sector,<sup>3/</sup> all drafts are considered by District Development Committees and by sub-committees of the District Council. Final plans are due by March 31. The RSG provides funding for selected activities contained in these plans.

The basic document for securing resources for a specific sub-project activity (such as a communal woodlot) is the Project Memorandum (PM). PMs for RSG funding are prepared by the appropriate field staff and submitted to Central Agency staff who review it and forward it to the Division of Economic Affairs in the Ministry of Finance and Development Planning, who send it on to the RDU. After the RDU has examined and approved the PM it then is submitted to the RSG review team for a joint review.

Use of the PM follows standard GOB procedures. Activities which do not qualify for RSG funding may be submitted to other donors or funded from local revenue. In any case, the central role of the PM in RSG administration reflects a strategy of adhering to existing GOB procedures rather than imposing new ones.

Financial flows for RSG activities also follow regular GOB channels. In the case of MLGL sub-projects, funds are credited to a District Council account in a bank in Gaborone and the District Council treasurer writes checks on that specific earmarked warrant in the account. With other line Ministries (such as Ministry of Agriculture), the Ministry of Finance warrant is issued to the Ministry and then sub-warranted to the responsible officer, such as a Regional Agricultural Officer. This officer then issues Government Purchase Orders drawing down on the sub-warrant. In both cases tranches are released quarterly.

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<sup>3/</sup>For details, see John Wheeler, District Planning Handbook, Gaborone: Ministry of Local Government and Lands, 1979.

The RDU receives monthly printouts which identify RSG expenditures. The monitoring of those expenditures follows normal GOB procedures, with USAID receiving quarterly reports.

As the discussion above implies, the RSG administrative strategy is to augment ongoing GOB efforts, within a multisectorial focus, by fitting into established procedures. This nondisruptive strategy is useful in an environment characterized by severe manpower shortages. However, it may also unwittingly support some practices which do not emphasize the new priority for decentralization.

#### DECENTRALIZING ADMINISTRATION

The basic sub-national administrative unit in Botswana is the District, thus any discussion of decentralization will tend to focus on district-level administration and, on the other hand, with village-level decision structures. The beginning point, therefore, is the district.

There are two major institutions which promote district-level development efforts - the District Development Committee (DDC) and the District Council. The DDC is composed of district officers (the district heads of all line agencies present in the district) and representatives of the District Council, Land Board and Tribal Administration. It is headed by the District Commissioner (DC), who is responsible to the MLGL.<sup>4/</sup> The DDC is a technical coordinating body with standing subcommittees responsible for coordinating specific sets of activities, developing sections of district plans and overseeing implementation.

The District Council is a local elected body with statutory responsibility for providing services such as primary education, primary health care, domestic water, non-gazetted roads and community development efforts. Although a portion of recurrent costs for council programs is met by local revenue, all councils receive deficit grants from Central Government. The Council is responsible to MLGL. Although DDC subcommittees prepare district plans, those plans must be approved by the Council. Moreover, the Council Planning Officer is intimately involved in the local planning process.

A third important institution is the Land Board. The board is partly appointed by MLGL and partly chosen by the Council and tribal authorities. The board has allocation authority over land held in trust for the tribe and community. It receives technical advice from the technical officers of Central Ministries through the Land Use Planning Advisory Group (LUPAG).

This brief overview of district-level administration provides a background for discussion of both district-national and district-village interactions. This, in turn, can help to identify both the actual and potential contributions of the RSG to decentralized administration in Botswana.

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<sup>4/</sup>A controversial, and not yet approved, report has suggested weakening the DC role and making other adjustments in local institutional relationships. See Report of the Presidential Commission on Local Government Structure in Botswana, 1979 Vols. I & II.

## PERSONNEL PICTURE

Most District Officers are expatriates. In fact, only one DO(D) is a Motswana.<sup>5/</sup> This is one indicator of the limited inventory of trained indigenous personnel.

Another indicator is the percentage of established field positions which remain unfilled. For example, approximately 25% of the Agricultural Demonstrator posts in the Ministry of Agriculture are vacant.<sup>6/</sup>

This situation is further compounded by inefficient use of those personnel who are in place. Limited chances for promotion, rapid turnover and transfers which make District Officers with over two years tenure in a post often the most senior one in the area, and ineffective use of incentives are commonly reported elements in the personnel picture. Thus the manpower situation identified in early 1981 is basically the same as conditions reported in mid 1979 by the Rural Sector Study Team.<sup>7/</sup>

There are, however, some attempts to improve these conditions. For example, the introduction of Unified Local Government Services (ULGS) has begun to upgrade district administration. This removed tribal affiliation from the criteria for selection to local posts, it allowed for transferability of staff and it provided a nationally-based common pension system for district staff. It should be noted that this is a centrally-initiated program to upgrade and establish a decentralized cadre of administrative personnel. Thus central leadership may sometimes be a prerequisite for building decentralized capacity. In fact, experience in other countries such as Tanzania, Egypt, Indonesia and Nepal suggests that this is common.

Central initiatives for decentralization usually take two forms of actions, "deconcentration" of personnel, equipment and funds, and "devolution" of decision-making authority. Activities such as ULGS and deficit funding of District Council programs provide rough evidence of human and material resource deconcentration.<sup>8/</sup> The bottom-up planning process, the importance of PMs and the use of the RSG to respond to district initiatives indicate a devolution of priority-setting and project design authority to the district level. A further question, however, is the degree to which this penetrates to the village level.

## VILLAGE PARTICIPATION

Villager involvement has been identified as a major determinant of success in rural development programs. Successful involvement includes

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<sup>5/</sup> DO(D) is District Officer (Development), who reports directly to the DC.

<sup>6/</sup> There are 210 established AD posts. Between 50 and 60 are unfilled as of this writing.

<sup>7/</sup> See A.H. Barclay, et al op cit Chapters 5 and 6.

<sup>8/</sup> Although time-series data showing the personnel percentage shift and the budgetary percentage shift would be required to fully document a deconcentration process.

such factors as effective two-way communication between bureaucrats and villagers, organizational arrangements which give villagers a voice in project decisions, and resource contributions.<sup>9/</sup>

In rural Botswana those factors are represented by a process of consultation and by a discussion arena called Kgotla. Consultation refers to a constant interactive process among civil servants and between civil servants and villagers. It is a consensus-building practice which minimizes overt conflict and tends to err on the side of inaction rather than on the side of rash initiatives. For example, on a trip to one district the writer witnessed the cancellation of a Land Board meeting because it was decided that not enough consultation had occurred to allow a decision on land allocation. Further investigation disclosed that this was a common occurrence. Moreover, the constant use of reference groups and committees suggests that this behavior pattern permeates the bureaucracy at all levels. In fact, the planning process in Botswana might be depicted as institutionalized consultation.

The second item noted above, the Kgotla, is a public arena for presenting views, discussing issues, promoting consensus and making decisions. The various levels of Kgotla (ranging from family to village and Paramount Chief) serve as open councils. The term refers to the people, the meeting place and the institution. Review by the institution is, in fact, incorporated into the district planning process. It should also be noted that the Kgotla, like the RDU, is not an executive entity. Rather, it is a forum for gathering data, airing issues and perhaps inducing a consensus or communicating decisions.

The third type of participation which occurs in many RSG sub-projects is resource contribution. This may take the form of self-help labor or a cash contribution. In fact, for most RSG-funded categories a 10% share of the cost must be provided by villagers.

In broad terms, then, the management of the RSG does appear to be conducted in a way which supports decentralization and beneficiary involvement. If, however, local-level implementation capacity is not improved as a result of these efforts, then the contribution of the RSG to decentralized rural development in Botswana will be short-lived.

#### LOCAL CAPACITY

When discussing institutional capacity, observers often focus only on the stock of resources available. For example, percentage of posts filled, numbers of staff with degrees, budget levels, and numbers of landrovers or telephones suggest implementation capacity. However, such resources might be available but lie unused for lack of maintenance, disbursement procedures or incentives to work. Thus, a more accurate focus is on behavior. In the case of district development in Botswana, that focus might be on the following items:

- participation of villagers in district planning;
- generation of technically sound and creative project designs;
- procurement of national resources to fund those projects;

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<sup>9/</sup>Elliott Morse, Gohn Hstch, Donald Mickelwait and Charles Sweet, Strategies for Small Farmer Development: An Empirical Study of Rural Development Projects. Boulder: Westview Press, 1976.

- efficient implementation;
- adequate monitoring of impact; and
- use of monitoring data to design better projects in the future.

Observing Year one activity through the RSG leads to the following conclusions on each point. First, the ability to promote participation is very high. In fact, the practices followed highlight that old question of "How do you get everyone in on the act and still get some action?" In sum, however, district capacity to involve people in planning appears to be strong.

The second point produces mixed reviews. Although most PMs submitted were funded, some were less than ideal from a technical perspective. Moreover, many of them were simple "shelf items" which had been around for some time but were previously unfunded. Thus, rather than embodying creative new responses, they represented just an extension of the same old thinking. Some of the thinking was improved, however. For example, one person interviewed suggested that the AC 10 Small Projects Fund had made agricultural field staff see things in terms of objectives and discrete activities rather than as aimless work that just "trickled on".

The third point is also somewhat complex. Although most initiatives were funded, the long-term implications are not clear. Success in procuring RSG support appears to be partly related to the entrepreneurial skills of the DO(D) Central Government Officials. Since most planning officers are expatriate, an expatriate DO(D) has an advantage over a local. In fact, the one local DO(D) views his ministry counterpart as more of an adversary than a team member. Thus it is difficult to conclude that local capacity to tap national resources has been raised significantly.

The last three of the six points were not readily observable. However, other observers have some doubts about district abilities to monitor performance and incorporate new knowledge into improved designs.

In sum, then, during the first year of implementation the RSG appears to have augmented a process with a strong capacity to support participation. Moreover, it may have had a limited incremental effect on improving sub-project designs. However, it has not noticeably raised district capabilities to implement, monitor or redesign activities. This is not expected. In fact it would be unreasonable to expect all this to have been achieved in seven months. The question is, however, "How can capacity building be enhanced during the next two years?"

#### BUILDING CAPACITY

An interesting paradox was noted earlier in this chapter - central initiatives may be necessary to build decentralized capacity. The RSG appears to be an effective response mechanism but the approaching needs may require more of a leadership role. That is, technical assistance should be used to introduce new perspectives among those people with local knowledge and traditional skills. For example, skill with simple monitoring methods might be built into local groups.

Another ongoing example also comes to mind. The RSG-funded study of organizational dynamics in the Communal First Development Areas might

present some new ways of looking at program interventions. This applied research, conducted by the Land Tenure Center at the University of Wisconsin, could suggest new directions for the organization and implementation of a major rural development initiative. Thus it has the potential to provide innovative guidance.

There are two basic approaches to capacity-building.<sup>10/</sup> The first is cognitive. There is people assume that by changing attitudes and knowledge capacity is raised. This is the rationale for training.

The second approach is structural. This view examines the constraints and incentives for behavior. For example, a farmer is not likely to invest in a planter if the increased yield will all go to the Chief. Likewise, a bureaucrat such as an Agricultural Demonstrator is not apt to do a good job of data collection if that data is not useful to do his job or if he is not rewarded for collecting it.

From this perspective training is not enough. If the work situation does not support new skills, they will not be used. Thus a structural approach to capacity-building emphasizes environmental factors which guide human behavior and leadership rather than just response. Moreover, it suggests that district level capacity-building will involve helping districts to identify, articulate and develop action plans to remove disincentives to rural development. The subject of this assistance will be the three institutions noted at the beginning of this section - District Councils, District Development Committees and Land Boards, especially in those areas chosen as Communal First Development Pilot Areas.

#### ISSUES AND CONCLUSIONS

This discussion leads to two sets of issues. They are the overall management strategy for RSG and the capacity-building strategy to be followed during the next two years. Each is noted below.

#### MANAGEMENT STRATEGY

The overall management strategy of using standard GOB processes to provide assistance is good. The RDU-reference group - review team structure is appropriate, notwithstanding some minor examples of communication problems. The RDU should continue to play a coordinative-approval role and should not be given direct implementation authority.

During the first year of implementation, the RSG demonstrated its response capability. Now the challenge is to stimulate more creative thinking at the district level. RDU staff participation in District-level Development conferences might be used to communicate the fact that technical assistance could be made available for skill-building and for assistance in identifying new ways to meet district needs.

At the same time, the Technical Assistance Budget for Year 2 and 3 should be doubled. The original project design called for 50% of the TA budget to be used during year one. Yet, this was logically the most passive of the three years. If the RSG is, indeed, to move into more of a

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<sup>10/</sup>For a detailed examination, see George Hondle, Fishing for Sustainability: The Role of Capacity-Building in Development Administration. Cambridge: Harvard University/Lincoln Institute of Land Policy, 1981.

leadership role during its remaining life-cycle, then additional TA funds will be required.

One of the first uses of technical assistance might be to help GOB to standardize its reporting of RSG expenditures. This would facilitate the USAID monitoring process as well as assisting GOB.

In sum, then, the overall management strategy should be maintained but more of a leadership role should be assumed during the next two years. This will require an increase in the technical assistance budget.

#### CAPACITY-BUILDING STRATEGY

Capacity-building is often considered synonymous with training, however this is an unfortunate connection. While it is true that learning is an integral component of all capacity-building, much of this activity has little in common with traditional classroom teaching.

Effective learning deals with real problems. Moreover, it occurs with the very people who must overcome those problems. Thus a DDC might use technical assistance to learn planning methods during plan preparation, in the district. Moreover, "echo seminars" might be used to spread that knowledge to a wider group.

The product of such an exercise might be actual PMs. As demand for RSG resources grows relative to the supply, the desire for such exercises will also grow. As data from the Wisconsin Study becomes available, it should be introduced directly into district decision-making.

The emphasis of RSG technical assistance, then should be on directly building capacity into District and GOB personnel through action-oriented activity.

#### SUMMARY

The RSG management strategy has generally been effective and appropriate for the Botswana context. However, a more active stance should be taken during the next two years.

That stance should include district-level capacity-building through the use of technical assistance. When this initiative is combined with the more technical and sub-project-specific recommendations contained in the other sections of this report, it should lead to an even better performance record for the Rural Sector Grant.