Botswana's Accelerated Rural Development Programme 1973-6

Experience and Lessons

Robert Chambers

February, 1977

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The ARDP in Quotations

"Experience since Independence with the difficulties of implementing small construction and other rural improvement projects indicates that dramatic progress cannot be expected"
(National Development Plan 1973-1978, page 41)

We were shattered actually at the speed with which they intended to act and then did act"

(a central government official)

"The Districts were suffering from shock for several months"

(a districtict-level official)

"A lot of screaming and bad words.. and then people got down to it"

(a council official)

"What is rather good about a crunch like this is being able to say -, OK, put your plan on the table and say you can start... The crunch of planning should be that every Ministry should have plans on hand..."

(a central government official)

"We were told "Don't worry about the money. We will give it to you as you need it"
(a council official)

"Oh by the way I hear there's some ARDP money lying around — we must get in" (reportedly a contractor overheard on the Gaborone golf course)

"The Council's success in solving the logistical problems amazed me"

(a well-informed observer)

"The speed with which they (the large contractors) put things up staggered the Council" (a council official)

"The normal slippage which we depend on did not occur"

(a finance officer)

"The Councils also wanted to say something and were a bloody nuisance"

(a contractor)

"It was all the time Gaborone and these people worked for Gaborone"

(a District Commissioner, speaking of contractors)

"I liked the protests from the districts. It showed that they were alive"

(a central government official)

"These buildings are rather strange to us and I do not think our works teams will be able to maintain them"

(a Council Works Superintendent)

"They (contractors) got away with some things they should not have got away with"

(a District Commissioner)

"We are capable of making mistakes in our own quiet way without this sort of thing" (a central government offical)

"Who the hell wants a tarred road in a village anyway?"

(an inhabitant of Gaborone)

"ARDP will always be remembered in some villages; people were pleased with their compensation"

(a District Commissioner)

"We learnt about villages we had never been"

(a contractor)

"We are really not very happy about how it was done but we are very glad that something was done"

(a District Commissioner)

"We really enjoyed it because everyone worked at a high pitch and it really pulled the office together, with a clear goal to work for"

(a central government official)

"There was an awful lot of evening and weekend work"

(a council official)

"The construction phase was quite the worst experience of my life"

(a district-level official)

"I had a physical breakdown"

(a council official)

"It was the first time people looked at the bureaucracy of government and council and asked — how can we make this more efficient?"

(a council official)

"Since the ARDP we feel that there has been an equal share"

(a District Commissioner)

"We are aware now that there is local government"

(a professional officer in central government)

General Verdicts

"It was a building programme. I do not think it was a development programme"

"It broke down a lot of psychological barriers"

"It was more an attitude of mind than a programme"

"Never again"

"A hell of a lot got done; and all the carping is a bit of a luxury."

"We are a more or less permanent ARDP now"

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Abbreviations and Usage

(i) Abbreviations

ARDP Accelerated Rural Development Programme
BEDU Botswana Enterprise Development Unit
DDC District Development Committee

DDF Domestic Development Fund

DEA Director of Economic Affrairs (in MFDP)

FFW Food for Work

IDM Institute of Development Management

MFDP Ministry of Finance and Development Planning

MOA Ministry of Agriculture

MOW Ministry of Works (and Communications)

M² Square metre

MRWA Ministry of Mineral Resources and Water Affairs

n.a. not available

NDP 3 Third National Development Plan 1973-78 NDP 4 Fourth National Development Plan 1976-81

NORAD The Norwegian Aid Agency

P Pula

POL Petrol, oil and lubricants

RDU Rural Development Unit (in MFDP)
RIDS Rural Income Distribution Survey, 1974/75

SA Statistical Abstract

SIDA Swedish International Development Agency
UNHCR United Nations High Commissioner for Refugees
UNICEF United Nations Children's Emergency Fund

VDC Village Development Committee

WFP World Food Programme

(ii) Usage

There is confusing and inconsistent usage of the words "large," "major," "small," and "minor" to describe categories of villages. The National Development Plan 1973-78 distinguished large villages, with populations over 1,000, medium villages with populations of 500 to 1 000, and small villages with populations of less than 500 (NDP3:9). Much of the ARDP had its own division into two classes of village: large, or major villages, which were those in which buildings were constructed by big contractors; and small or minor villages where construction was carried out by or supervised by the District Councils. This division was once-only and ad hoc for administrative convenience and was not strictly based upon population (see para 3.43). To avoid confusion with the categories used in NDP3 and elsewhere, the usage in most of this report will be:

"larger villages" = those (27) villages where big contractors built

"small villages" = those (some 195) villages where Councils or small contractors built.

An exception to this usage is the water projects where the official terminology of major, large and small villages is followed. It should be noted that neither the "smaller villages" as defined above, nor the "small" villages of the water projects were defined in the same way as the "small" villages of NDP3 — i.e. with populations of less than 500. Finally, the programme of major roads through villages was confined to eight of the largest villages (see para 2.1.).

Preface

The consultancy which has given rise to this report was sponsored by the Commonwealth Fund for Technical Cooperation. I spent from 6 November to 11 December 1976 in Botswana. A first draft of the report was discussed on December 10 at a seminar at the Institute of Development Management in Gaborone. I have subsequently worked on a fairly major revision of the draft while at the Institute of Development Studies in the UK, benefitting from criticisms and suggestions both from Botswana and from colleagues in IDS. The responsibility for the views expressed is, however, entirely mine.

My terms of reference were:

"to evaluate the achievements made under the Accelerated Rural Development Programme recently completed in Botswana, to identify the lessons learnt and to make recommendations for future action. Specifically the consultant will look into the following:

- (a) Project selection and appraisal. The analysis should provide information on the actual methodology of selection and appraisal with emphasis on efficient allocation of resources.
- (b) Preparation, procedures and achievement. Comparison of actual achievements with original physical and financial targets.
- (c) Financial control/control mechanism.
- (d) Information/monitoring systems. An analysis of linkages between ministries and with district level planning authorities.
- (e) Performance of District Council Work Units. Evaluation of the performance and potential of the work units in implementing the ARDP.
- (f) Major constraints. Identification of the major constraints in achieving targets at projected costs and within the projected time frame.
- (g) Costs and Benefits. Analysis of the direct and indirect costs and benefits of the ARDP. Close attention to be given to the overall distribution of costs and benefits by region and receiver group, particularly the employment and income effects. Of concern here is the alteration in the costs and benefits occurring because of the accelerated nature of the ARDP.
- (h) *Impact of the ARDP*. An analysis of the social and political impact of the ARDP on the Rural populous' attitudes toward Government and rural development.
- (i) Effect on larger Development Programme. An examination of the effect of the ARDP on the balance of Government's development programme."

As the charitable reader will appreciate, attempting to cover these terms of reference in about one month required that the evaluation be selective. A balance had to be struck between time spent in the field and in interviews, and time spent drafting. I had the advantage of a week visiting Tsabong, Ghanzi, Maun, Shakawe, Gomare, and Serowe, and then Mogorosi, Tlhabala, Moijabana and Shoshong, and of day visits to Molepolole, Mochudi and Kanye. And I was able to interview, both in Gaborone and elsewhere, central and local government officials, contractors, and people living and working in rural areas. All the same, time was short and there were many people and places I should have seen but did not. A comprehensive and exhaustive study based on my terms of reference would have taken several man-years and would have led to a massive report. But work and writing have to shrink to fit the time available. In the spirit of my terms of reference, I took the view that ex post evaluation would be sterile unless it identified lessons which could be applied in the future. I have therefore tried to avoid excessive immersion in detail and have instead tried to tease out some of the main threads and to draw the main conclusions which seem possible. These are less well founded in carefully checked fact than I should have liked, but to the best of my knowledge and judgement they are correct.

That said, it would be surprising if there were no errors in this report. For reasons of time, I have had to rely heavily on interviews rather than detailed study of written records. I have tried to canvas different points of view on controversial points but I cannot pretend that my coverage has been as full as I should have liked. To those whom I have not consulted, and to any organisation or person misjudged or misrepresented, I apologise.

I am grateful to all who have enabled me to complete this report. The data could not conceivably have been compiled in the time available without the full cooperation of many people in the ministries and in the districts. I was also helped in the interpretation of my terms of reference by the interministerial Reference Group which was set up to guide the consultancy. I have begun to list those whom I wish to thank for their help only to realise that once I start naming names it is exceedingly difficult to know where to stop. However, I would like to record with thanks that the report could not have come out in anything like its present degree of completeness without the painstaking and detailed contributions of Jenny Shepherd in MFDP and David Watson in MLGL. The many others in the Districts and in the Ministries, especially in the Rural Development Unit in the MFDP, who went out of their way to provide me with detailed information, comments, and support, often at short notice, know themselves who they are and will, I hope, allow me to express my gratitude in the form of this general acknowledgement.

It was a privilege to be invited again to Botswana. I hope that uses will be found for this report which will justify the time and energy of those in Botswana who have contributed to it. I have attempted in the final section to draw some of the main lessons which, as they seem to me, emerge from the experience of the ARDP. Like so many of Botswana's innovations in rural development, the ARDP has importance for other countries. I hope that the lessons of this experience can be made available to those elsewhere who are also engaged in the struggle for rural development with social justice.

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7 February 1977

Summary

The Third National Development Plan 1973-78 set a high priority on rural development. In 1972/73 Botswana achieved budgetary self-sufficiency for the first time and funds became a less serious constraint on development. At the same time the need for rural infrastructure was acute and becoming more so. In both Central Government and more particularly in District Councils, institutional developments including the creation of the Rural Development Unit reporting direct to the Vice-President, and the recruitment of staff to strengthen District Councils, were augmenting the capacity to implement programmes. A sense of opportunity and urgency was enhanced by a general awareness that the Government had not yet been able to achieve dramatic, tangible results in most of the rural areas where the great majority of the people lived and by the steady approach of the date in October 1974 when the electorate would pass their verdict on the Government's performance. The Accelerated Rural Development Programme (ARDP), resulting from a Cabinet Decision in November 1973, was a logical outcome.

The ARDP had as a primary objective that projects should be visible on the ground by a target date of 30 September 1974. Various "invisible" projects were proposed but dropped. Visibility came to mean mainly buildings, roads and water supplies. Building construction was undertaken in 27 larger villages by big contractors and in 195 smaller villages by District Councils and by medium and small contractors. Other programmes were undertaken either by contractors — much of a programme for drilling boreholes in villages, and a programme for tarred major roads through large villages — or directly by Government Ministries or Departments. While a start had been made on most of the programmes by the target date, the ARDP was twice prolonged and finally ended only on 31 March 1976. By that time it has cost just over 21 million Pula. Of this sum, the Ministry of Local Government and Lands accounted for 53 per cent, the Ministry of Works and Communications for 25 per cent, and the Ministry of Mineral Resources and Water Affairs for 19 per cent. The Ministry of Agriculture's share was only 2.3 per cent.

The most accelerated and most controversial programme was major roads through villages. 76-79 km of tarred road were to be made in eight of the largest villages. Because of urgency, the work was put out to tender on the basis of a schedule of rates instead of a bill of quantities. When it was found that the cost would be much higher than expected, the length and width of tarmac were reduced. The final cost of Pula 43 700 per km was high compared with Pula 27 600 for a short stretch of the North-South road constructed to higher specifications. Much dissatisfaction was expressed about the roads, especially the narrow access culverts and the deep ditches. Even at these high costs the roads were, however, probably justified economically because of the growing volume of traffic in the villages concerned.

The construction of buildings in the larger and smaller villages accounted for 43 per cent of all ARDP expenditire. The main components were primary school classrooms, stores and latrines, teachers' quarters, health clinics and health posts, and District Council and Administration housing. After a competitive tender, work in the larger villages was awarded to big contractors using conventional construction for some villages and prefabricated construction for others. There were many complaints about the prefabricated buildings put up by Modular Construction. Costs generally were high. Work was carried out most rapidly in the Northern Kgalagadi where the impact was dramatic. In the smaller villages, District Councils and smaller contractors shared the work. Performance was mixed but more was done than many would have expected. By 31 March 1976, for example, 305 classrooms had been constructed in the smaller villages alone. This may be compared with the five-year target of NDP 3 of 700 classrooms in the whole country.

It is dificult to compare the costs of the big contractors in the larger villages and those of the District Councils' Work Units and of small contractors in the smaller villages, not least because many of the costs in the smaller villages were hidden in Councils' recurrent expenditure. However, it is probable that the M² cost to Government and Councils was higher in the larger villages than in the smaller villages. This is partly because of the higher overheads, supervision costs, and wage bills of the big contractors in the larger villages. The ARDP identified and assisted

small contractors who became more experienced and more competitive. District Councils' Works Units were on the whole slow, expensive and inefficient. The ARDP not only achieved much infrastructural building; it also developed the national capability to build.

The school furniture programme, organised by the Botswana Enterprise Development Unit (BEDU), involved two small engineering firms which successfully substituted local for imported fabrication of school furniture and which towards the end of 1976 had become independent of BEDU and were handling a third school furniture contract.

The village water supplies programme used the Domestic Development Fund to engage contract borehole drilling for small villages, thus diverting contract drilling from cattle posts where it would benefit those who were already well off to villages where the water would be of more general benefit. Contract drilling was competitive and fairly cheap. The 25 small villages affected by 31 March 1976 benefitted from their water supplies earlier than they would have done without the ARDP.

In the Ministry of Agriculture both the livestock saleyards project suffered from, and were delayed by, staffing problems, but performance improved. The experience with these two projects illustrates the extent to which implementing capacity rather than finance was the main constraint in the Ministry. It also highlighted the priority of innovations in management to enhance the Ministry's capacity to implement.

Since budgetary self-sufficiency was achieved in 1972/73, implementing capacity has been more of a brake on development than have shortages of funds. In these circumstances it is often rational to use money to buy or expand implementing capacity, which is precisely what the ARDP did by putting work out to contractors.

The speed of the programme did, however, probably mean that some donor funds were foregone. For example, the DDF was used to finance Pula 2.6 million of the primary school improvement programme which might, with less urgency, have been provided by SIDA.

The ARDP was timely, coming as it did near the end of the construction phases of the Shashe and Orapa projects, and helped to level off the trough in capital spending and construction. The overheating of the construction sector by the ARDP has been exaggerated. Statutory wage increases were a more significant factor in higher contract prices, and the ARDP's contribution appears to have been relatively minor, during six months of 1974 of the order of 8 per cent.

The ARDP did little damage to other programmes, since what was delayed or left undone as a result of the ARDP was usually of low priority. The ARDP did, however, provide a convenient scapegoat to blame for delays and deficiencies. It also showed up ministries, departments and individuals responsible for lagging performance, and showed that they could do more and do it faster.

The administrative and accounting load placed on District Councils by the ARDP created a crisis which was largerly overcome through streamlined procedures and diligent work by Council staff. One factor was a reporting and monitoring system designed to improve financial and physical monitoring and control. This management system proved effective and has been continued and refined.

The ARDP enhanced implementing capacity. In particular, it increased the capacity and credibility of District Councils and competence and confidence of Council staff.

During 1974-5 the ARDP may have generated an average monthly employment for semi-skilled and unskilled labour of the order of 2 000 to 3 000 persons, with a gross payment in wages of Pula 1.2 to 1.8 million, or from 12 to 18 per cent of ARDP expenditure in that financial year. The ARDP does not appear to have led to wage rises. Some additional long-term employment was created, especially through the growth of small building contractors and the new, higher plateau of District Councils' building programmes.

District-wise ARDP expenditures have to be treated with great care in assessing the regional distribution of benefits from the ARDP. Per caput expenditures tended to be high where implementation was relatively easy (South East, Kgatleng) and where special measures were taken to augment implementing capacity (Kgalagadi) and low where implementation was difficult for reasons of scale (Central) or administrative capacity was a special problem (North West).

Except in the North East District, self-help made little contribution to the ARDP. The effect of the ARDP on self-help is difficult to assess but it probably did not weaken self-help much. Self-help has some disadvantages, and will anyway continue for purposes which touch people closely. A sensitive review of VDC's Community Development and self-help would be timely to see the best way forward.

The ARDP helped to combat the bias of services towards towns and large villages and to push services out towards the rural periphery where most of the poorest people live. This push continues, and peripheral people are at the same time becoming more vocal and active, using self-help to attract services. Unfortunately buildings do not ensure efficient services. For example, there is a strong bias against small villages in the proportion of trained teachers and in performance in examinations. The situation was improved by ARDP construction of classrooms, but teachers' quarters do not appear a major attraction to induce trained teachers to work in the remoter areas, especially as Councils' rents are high compared with private rents. Apparently because of high rents, about half the 190-odd teachers' quarters built under the ARDP in Central District are standing empty.

The Plan objective, that "All Batswana, wherever they live and whatever their social background, should have equal access to services that the Government provides — such as education, health and water supplies" requires a positive bias towards the poorer people and the remoter areas. This has implications for both staffing and paying for services. Concerning staffing, a new approach may be needed, including perhaps a period of national service and also special incentives. Concerning paying for services, access to education, health services, and water would be made more equitable if charges for them were abolished in the rural areas. The poor and the very poor would benefit and social justice would be served.

The speed and priority of the ARDP had both costs and benefits. On the cost side, financial expenditure was higher than it would have been, especially with the programme for major roads through villages and with construction carried out by big contractors; some outcomes were bad because of lack of local consultation, of inappropriate designs (prefabricated buildings, school furniture etc.), and of problems of supervision; and there was a bias towards what could be done quickly to the neglect of types of programme needing more care and patience. On the benefit side, it is difficult to separate benefits from speed from benefits from the programme as a whole. Facilities were often ready for use years earlier than they would have been. Services were pushed further out into the rural areas. Government capacity to implement was lifted onto a new plateau. The priority of rural development came to be better appreciated in Government, especially among urban-biased technical officers. Developmental changes were forced indirectly through the chain of bottlenecks created by the ARDP. Procedural innovations were made. Government and Councils gained in confidence and credibility. One major lesson of the ARDP is that strong political leadership and a sense of urgency can force and enable the civil service to do more, more quickly and better, than wise and prudent men might advise to be possible.

This selective evaluation of the ARDP is more favourable than the writer expected. Much was achieved and does not now have to be repeated. But development is not bricks and mortar. It is one thing to construct. It is another, and harder, to ensure that services are well staffed, operate well, and are accessible to all. It is yet harder to achieve the national aim of an equitable distribution of income when so many of the poorest people are precisely those who are furthest away, least well educated, worst informed, least in contact with government, and least able to help themselves. The ARDP was a step towards them but only on one front. The main frontier and the main challenge seem now to lie in the much harder task of ensuring that economic growth means better lives not just for those rural people who are more able to help themselves, but specifically for those who are poorer, weaker, and less capable of taking advantage of opportunities; for those, in short, who tend to get left behind and left out.

Lessons can be drawn from the ARDP experience and suggestions made for the future. These are:

1. Concerning infrastructure:

- (i) avoiding crash programmes with big contractors
- (i) monitoring building programmes
- (iii) taking care over designs

2. Concerning implementing capacity:

(i) building up staff before any large programme

(ii) using District Councils to undertake construction for Government departments

(iii) making block grants to District Development Committees

(iv) pursuing devolution to District Councils and to government staff at the local level.

3. Concerning management procedures:

(i) making management procedures a focus for attention, especially in ministries where implementation lags.

(ii) using locally available management expertise for the collaborative design, testing and introduction of such procedures

(iii) introducing a poverty ranking in the project identification and appraisal process.

4. Concerning political leadership:

(i) galvanising the civil service into action for priority programmes

(ii) enabling Ministers to direct and review performance in their Ministries.

5. Concerning the poorer people in the rural areas:

Mounting a programme for promoting rural equity. This programme, set in the framework of the Fourth National Development Plan, would, like the ARDP, provide support and impetus to existing and new projects. These Projects would be selected and designed to focus and accelerate the provision of access to resources, income opportunities and services, to the more disadvantaged people within the rural sector.

1. The ARDP in Outline

ORIGINS AND OBJECTIVES

1.1 The origins and objectives of the Accelerated Rural Development Programme (ARDP) can be understood against the background of the Botswana policies for national and rural development. The fundamental objectives of the National Development Plan 1973-78 included: to secure the fastest possible rate of economic growth in a manner designed to raise the living stands of the great mass of the inhabitants of Botswana; to maximise the number of new job opportunities; and to promote an equitable distribution of income, in particular, by reducing differentials between the urban and rural sectors through rural development (NDP 3:xi). The Plan left no doubt about the priority attached to rural development. It noted that:

"Over 90 per cent of the population live in the rural areas, and at least 70 per cent (45 000) are attached to traditional farming house holds. The average per capital rural income in 1971/72 was estimated at R50 per annum including remittances received from relatives in wage employment. However, living standards will vary greatly depending on the agricultural season. This average, low as it is, disguises the extent of rural poverty, which for the majority is extreme. The urgent challenge faced in this Plan is to alleviate this poverty. The Government is concerned not only to increase rural incomes, but also to improve basic social services and generally to raise the quality of life in the rural areas." (NDP 3: 41).

The strategy to be followed was to secure rapid and large returns from capital investment in mining and to invest a large proportion of the resulting revenues in "the improvement and expansion of social services and infrastructure in the rural areas and in the creation of income generating activities in the rural areas" (NDP 3:58).

- 1.2 The ARDP was not originally part of the Plan, although it incorporated many of the rural Projects put forward in it. It was, rather, a programme conceived and executed very largely to speed up the implementation of what was already proposed. It resulted from a Cabinet decision in November 1973. That decision itself can be interpreted in the light of four factors.
- 1.3. First, funds were becoming a much less serious constraint. The last support for the recurrent budget received from the UK was R1.9 million in 1971/72. In 1972/73 Botswana had for the first time achieved recurrent budgetary self-sufficiency. The Development Plan 1973/78 projected

Table 1.1: Projected Surpluses of Revenue over Recurrent Expenditure 1973/74 through 1977/78 in Pula millions

| | 1973/4 | 1974/5 | 1975/6 | 1976/7 | 1977/8 | Total |
|--------------------------------------|--------|--------|--------|--------|--------|-------|
| Reccurent budget | 28.6 | 32.7 | 37.1 | 42.4 | 48.3 | 189.1 |
| Domestic revenue Recurrent budget | | 44.2 | 45.6 | 50.5 | 56.1 | 234.1 |
| surplus | 9.1 | 11.5 | 8.5 | 8.1 | 7.8 | 45.0 |

Source: NDP 73-78 — Table 4.6

The Government had, thus, for the first time the prospect of funds which it could use completely at its own discretion. In addition programmes of grant financing for rural schools and health facilties were being negotiated with SIDA and NORAD respectively. Whatever other problems there might be, lack of funds certainly was not likely to be the most serious constraint on the creation of new rural infrastructure.

1.4. Second, the need for rural infrastructure was acute and becoming more so. To take but one example, the position of rural schools, far from improving, had been steadily deteriorating. In primary schools the excess of classes over classrooms went up from 526 in 1968 to 758 in 1972. In 1973 the situation was aggravated by a sharp increase of 17 per cent in total primary school enrolments, from 82,000 in 1972 to 96,000 in 1973. 1100 new classrooms

would be needed by 1978 if all classes were to be housed. The Plan, perhaps basing its projections on the disappointing performance of self-help which produced only 438 rooms in 1968-1972, targetted for 700 new classrooms by 1978. More generally, it noted that "While the Government regards the achievement of an effective programme of rural development as its greatest challenge during the Plan period, it recognises the problems inherent in the execution of this policy" and added drily "Experience since Independence with the difficulties of implementing small construction and other rural improvement projects indicates that dramatic progress cannot be expected." (NDP 3:41)

Table 1.2: Numbers of Primary School Classes and Classrooms
1968-1972

| | 1968 | 1969 | 1970 | 1971 | 1972 |
|----------------------------------|------|------|------|------|------|
| Number of classes | 1767 | 2015 | 2254 | 2412 | 2437 |
| Number of classrooms | 1241 | 1305 | 1442 | 1519 | 1679 |
| Classes without Classrooms | 526 | 710 | 812 | 893 | 758 |
| Source: NDP 73-78: 99-table 7.12 | | | | | |

- 1.5. Third, by the second half of 1973, quiet but important institutional developments had taken place or were in hand. A Rural Development Unit, reporting direct to the Vice-President, and with considerable potential for coordination, had been set up in the Ministry of Finance and Development Planning. District Development Committees had been established and had already gained experience. District Plans, including plans for rural infrastructure, had been drawn up and incorporated in the National Plan. A crucial decision had been taken in 1972 to reinforce the District level planning and implementing cadre with volunteers to fill posts as District Officers (Development), Council Planning Officers, Council Works Superintendents, and Council Building Supervisors. For some of these positions volunteers were already in post. Other were in the pipeline so that later, by May, 1975, the Unified Local Government Service had 67 expatriate staff, mainly volunteers, from Canada, Denmark, Germany, Sweden, the United Kingdom and the United States. In these various ways, some of the machinery for a more vigorous programme of rural development had already been created or was in the process of being created.
- 1.6. In the event, however, a fourth factor was decisive in determining the timing and nature of the ARDP. In his introduction to the Plan, the Vice-President had stated that "Botswana now has resources to undertake a major assault on the problems of the rural areas. The basic planning has been done and the revenue is available. Beginning in 1973, the programme of action should move into top gear." (NDP 3: xi). The sense of opportunity and urgency was heightened by a general awareness that the Government had not yet been able to achieve dramatic, tangible results in most of the rural areas where the great majority of the people lived, and by the steady approach of the date in October 1974 when the electorate would pass their verdict on the Government's performance. There was thus a growing demand for decisive and effective action on the ground.
- 1.7. Against the background of these four factors the availability of funds, the need for rural instrastructure, the building-up in the capacity to implement, and the political accountability of the Government, a programme to speed up rural projects can be seen as a logical outcome. At a Cabinet meeting on 23 November 1973, the President directed that the Ministry of Finance and Development Planning should produce proposals within one week for an accelerated programme for rural development projects for 1974, the primary objective being for projects to be visible, on the ground, by a target date of 30 September 1974. Urgent meetings were called by the Coordinator of Rural Development. Ministries were given 48 hours in which to produce proposals. Ministries varied widely in the extent to which they were willing or able to put proposals down on the table at such short notice. As it later worked out, it was the Ministries of Local Government and Lands, of Works and Communications, and of Mineral Resources and Water Affairs, which provided the bulk of the projects in the programme, with a much lower level of participation by the Ministry of Agriculture.
- 1.8. At first a wide range of projects were, albeit briefly, considered. The Ministry of Local Government and Lands proposed a long list of visible projects involving building, most of which were accepted and which will be described and discussed below. It also proposed four "invisible" projects variously aimed at the poorer rural people and designed to raise rural productivity. The four projects were:

(i) the abolition of the minimum (R3) local government tax

(ii) the provision of food for 3,000 chronically destitute families

(iii) cash to replace food for 10,000 workers in the food for work programme

(iv) higher pay for 300 village project leaders in charge of the food for work projects.

These projects, especially the first two, appear to have conformed closely with the Government's aims of attacking rural poverty and redistributing incomes to the poorest; but not only were they not visible but, more importantly, they involved major questions of policy, debating which would have complicated and delayed the programme. They do not appear to have been seriously considered. Speed required simplicity. The purpose of the ARDP came to be defined as to give priority to certain items of rural infrastructure which would serve as the focus and catalyst of further rural development, as well as providing visible evidence to the people of Botswana of the Government's rural development policies. And visibility came to mean mainly buildings, roads and water supplies. The question was what could be done, with what costs and what benefits, by 30th September, 1974, given that the ARDP was to take priority over all other programmes and that finance was for this programme nothing like as serious a constraint as it has been in the past.

STRATEGY AND COMPONENTS

1.9. The main constraint was the administrative capacity to plan, design and implement. The strategy adopted was to divide villages into 27 larger villages and some 195 smaller villages. Works in the larger villages were to be undertaken exclusively by big contractors. Buildings in these larger villages were to include school buildings, teachers' houses, offices, and council and staff quarters and were to be supervised by the Chief Architect's Office in the Ministry of Works. Roads were to be tarmacked in eight of the largest villages — Maun, Palapye, Serowe, Mahalapye, Mochudi, Molepolole, Ramotswa, and Kanye — and were to be supervised by the Roads Branch of the Ministry of Works. Works in the smaller villages were to be undertaken by District Councils or by contractors hired by them. District Councils were expressly forbidden to undertake any construction work in the larger villages, or even to complete work which was already in hand there. The rationale for these decisions was that implementing capacity was the crucial constraint, that big contractors could only be attracted in to the larger villages where there would be better facilities and economies of scale in construction, and that District Councils, with their detailed local knowledge, would have a comparative advantage for construction in smaller villages.

1.10. As it developed, the ARDP was linked to a greater or lesser degree with a rather confusing number of projects. These were, however, classified according to their novelty and according to the degree to which they were being accelerated. The line up in April 1974 was as follows:

Table 1.3. ARDP-LINKED PROIECTS

| Status | Code Number | e 1.3. ARDP-LINKED PROJECTS Description | | Components |
|--------------------------|----------------------|--|--|---|
| Substantial acceleration | LG23/27 | Primary School facilities: | A direction of the control of the co | classrooms fencing toilet blocks offices teachers' quarters |
| | LG26 LG30 PW41 | Primary School Stores Council and Government Staf Major Roads through Villages | f Housing | |
| Moderate acceleration | GS02/09 LG22 | organia (m. m. m | ah as assis | Maryo waya wan wa e weellikay wa ali wani wa ee i eb wa i x |
| | LG20 | Boreholes for Village Supplies Primary School Equipment Equipment | | |

| | LG09 | Health Care Facilities: Council Vehicles | health posts clinics maternity wards nurses' houses | |
|--------------|------------|---|--|---|
| Little or no | LG28 | Rural Infrastructure: | Industrial Areas | _ |
| acceleration | anitus the | Carlo ggan a to the | water supply | |
| | LG 29 | Council/Government Office Blocks | 11.7 | |
| | LG19 | Customary Court Offices | | |
| | PW35 | Rural Roads | | |
| | WB17/WB26 | Major/Rural Village | | |
| | | Water Supplies | | |
| | WB14 | Rural Electricity | | |
| New Projects | AG07 | Dam Construction | | |
| | AG09 | Livestock Saleyards | | |

Source: Rural Development Council Paper 1/74 prepared for the meeting of 13th May 1974.

PROGRESS COSTS AND ACHIEVEMENTS

- 1.11. The progress of the main ARDP programmes will be taken up later below. Suffice it here to note the broad outlines. Tenders were invited and awarded for construction in the larger villages, and also separately for the construction of tarmacked roads in eight of the larger villages. Councils adopted various approaches to the challenge of a massively increased construction programme in the smaller villages, including labour-only contracts to small contractors (with the Council supplying materials and often some supervision and advice) and to varying degrees direct construction by Council Works Units. A critical constraint was removed by bringing forward a project to buy new vehicles for Councils. This replaced worn out vehicles and also dramatically increased the size of Councils' fleets. By the target date of 30 September 1974 there was something to show for the ARDP. Work had begun on building construction in at least 9 of the larger villages. Work had begun on the major roads in 7 out of the 8 villages in which they were to be tarmacked. In the smaller villages, at the end of July 1974, 61 classrooms had been completed and 122 were in progress. Headway had also been made with other programmes.
- 1.12. Measured against the targets which had been set, these achievements may appear disappointing. But evaluating programmes against their targets can be misleading. It often makes sense to set unrealistically high targets as a carrot and incentive; by striving for the impossible, more may be achieved. The criterion here for evaluating the ARDP should not be the extent to which its targets were achieved, but the extent to which more was achieved than would have been the case without the ARDP. This must always be a question of difficult judgement. Moreover, the ARDP was extended, first to the end of March 1975, and then to the end of March 1976, by which time it had cost a little over 21 million Pula (see table 1.4). By then its achievements were substantial and varied. A monitoring system had been introduced with quarterly, and later thriceyearly reports on progress. Some of the earlier targets had been passed: 9 major villages water supplies had been constructed against an original target of 5; 489 classrooms against 400; 425 teachers' quarters against 400; 29 dams against 20. And some of the original targets had not been achieved: only 10 livestock saleyard kraals were complete against a target of 18, and only 43 rural health posts against 64. But buildings in most of the larger villages had long since been completed as had the improved (tarmac and gravel) major roads in eight of the largest villages. Construction in the smaller villages had built up momentum which had since been sustained. The monitoring system was still operating and has continued since. As table 1.5 shows, much else had also been achieved.
- 1.13. As with other innovative and controversial programmes, evaluation was called for, both of the component programmes, and of the approach as a whole. The evaluation which follows is divided into two sections: the first deals with the main programmes; the second considers general questions of costs, benefits and impact.

Table 1.4. ARDP EXPENDITURE BY YEARS FROM 1973/4 to 31 MARCH 1976 (PULA)

| PROJECT | MINISTRY | 1973/4 | 1974/5 | 1975/6 | Total | % Of Total ARDP Expenditure (Rounded) |
|---|----------|-------------|--------------|-------------|--------------|--|
| Major/Rural Village Water Supplies | MRWA | 251,056.4 | 993,506.8 | 1,030,687.4 | 2,275,250.6 | |
| Underground Water Development | MRWA | 964 | 14,493.2 | 67,967 | 83,424 | |
| Contact Borehole Drilling | MRWA | 98,647.2 | 1,073,289.3 | 602,239 | 1,774,175.5 | |
| MRWA SUBTOTAL | | 350,667.6 | 2,081,289.3 | 1,700,893.4 | 4,132,850 | 19 |
| Dams | MOA | _ | 145,892 | 290,385.9 | 436,277.9 | |
| Livestock Saleyards | MOA | _ | 7,502 | 50,391 | 57,893 | |
| MOA Subtotal | | - | 153,394 | 340,776.9 | 494,170.9 | 2 |
| Local Authority Development Grants | MLGL | 384,920 | 262,718 | 256,825 | 904,463 | |
| Tribal Administration | MLGL | 5,826.8 | 23,873 | 5,967.2 | 35,667 | |
| Basic Health Services | MLGL | 105,785 | 776,800 | 515,475.8 | 1,398,060.8 | |
| Primary School Equipment | MLGL | _ | 338,959 | 855,775.5 | 1,194,734.5 | |
| Primary School Improvement and Facilities | MLGL | 487,072 | 2,312,523 | 2,672,738 | 5,472,333 | |
| Primary School Stores | MLGL | 52,500 | 157,620 | 90,288 | 300,408 | |
| Rural Industrial Infrastructure | MLGL | 15,372.5 | 27,534 | _ | 42,907 | |
| Integrated Office Blocks | MLGL | _ | 8,271 | 49,786 | 58,057 | |
| District Council and Administration Housing | MLGL | _ | 1,075,707 | 795,880.7 | 1,871,587.7 | |
| MLGL SUBTOTAL | | 1,051,476.3 | 4,984,005 | 5,242,736.2 | 11,278,218.5 | 53 |
| Rural Power Supplies | MWC | 60,000 | 8,125 | _ | 68,125 | |
| Rural Roads | MWC | 124,331 | 722,699.3 | 1,134,083.7 | 1,981,114 | |
| Major Village Roads | MWC | 64,726 | 2,126,212.7 | 1,049,828.3 | 3,240,767 | |
| MWC SUBTOTAL | | 249,057 | 2,857,038 | 2,183,912 | 5,290,006 | 25 |
| ARDP TOTAL | | 1,651,209.9 | 10,075,725.3 | 9,468,318.5 | 21,195,245 | 100 |

Table 1.5. THE MAIN ARDP WORKS COMPLETED AT 3 MARCH 1976, BY DISTRICT

| TOTAL | North East | Southern | South East | Kweneng | Central | North West | Ghanzi | Kgalagadi | Kgatleng | District |
|-------|------------|----------|------------|---------|---------|------------|--------|-----------|----------|--|
| 186 | 8(1) | 36 | O1 | 34 | 38 | 27 | 10 | 7 | 21 | Boreholes |
| 34 | 12 | œ | 19 | UT | 6 | 10 | Ç | O1 | - | Major/Rural Village Water Supplies |
| 29 | œ | 4 | 15 | 6 | _ | ı | 1 | į | œ | Dams |
| 10 | | 10 | 1 | 1 | - | 44 | į | I | ıs | Livestock ² ss Saleyards |
| 489 | 31 | 67 | 1-1 | ×. | 197 | 20 | F1 | 38 | 27 | Primary School Classrooms |
| 425 | 1 | 59 | 27 | 30 | 182 | 46 | 10 | 5 | 26 | Teachers' Houses |
| 43 | S | 6 | j | ST | 24 | 10 | ı | - | 19 | Health Posts |
| | | | | | | | | | | 100 |
| 21 | | U | - | S | 1 | Ü | 1 | S | 3 | Clinics |
| 00 | 1 | 1 | I | S | | 1 | 1 | 19 | - | Maternity Wards |
| | - 31 | | | | | | | | | |
| 30 | 1 | | 1 | 4 | | | 1 | 4 | 3 | Nurses Houses |
| 103 | | 7 | 7 | 9 | | 12 | 11 | 16 | 7 | Government Staff Houses |
| 75 | 1 | 4 | 19 | 17 | 22 | 7 | 4 | ~7 | ST | Council Staff Houses |
| 4 | 1 | _ | ī | 1 | 1 | 1 | 1 | ĺ | ı | Rural Roads |
| œ | ı | | _ | 1 | ယ | _ | I | 1 | 1 | Through Large Village |

Excluding 24 in Francistown
 Completed kraals. At that time, no weighbridges had been satisfactorily installed and negotiations with the manufacturers were continuing.

2. The Main Programme in Review

MAJOR ROADS THROUGH VILLAGES

- 2.1. The programme for major roads through villages was probably the most accelerated and most controversial part of the ARDP. It was developed from a more modest proposal (PW 41) in the National Development Plan 1973-78 for improving the through roads in a few of the biggest villages. In its first ARDP form it was a proposal to construct 76-79 km of tarmac roads in eight of the largest villages - Maun, Serowe, Mahalapye, Mochudi, Kanye, Ramotswa, and Molepolole. Ghanzi was considered but ruled out on the ground of excessive cost. In the project memorandum of January 1974 the completion date was given as the end of August 1974 and the total estimated capital cost as R2.5 million. The Ministry of Works had been engaged on design for the Mochudi and Maun roads for some time but there were no designs for the other villages. Contracts had, therefore, to be based on a schedule of rates instead of the more common and usually cheaper system of a bill of quantities. Contracts were negotiated mainly with Stirling Astaldi and Fowler Construction. The construction contract for seven villages went to Fowler who were cheaper, while that for the eighth village - Maun went to Bechuana Construction. Supervision of the construction was carried out by three consultant firms - Sir Alexander Gibb and Partners, John Burrows and Partners, and Brian Colquhoun, Hugh O'Donnell and Partners. The Ministry of Works had warned that it would not be able to provide close supervision of the consultants.
- 2.2. Negotiations revealed that the cost might exceed the estimate by about R1 million. Several reasons can be suggested for this. The schedule of rates system is more expensive than the bill of quantities since contractors are faced with a higher degree of uncertainty and risk, and inflate their estimates to cover this. Mobilisation costs, while less significant than for building construction, were higher for a series of small jobs than for one larger one. It may well be, however, that the main factor was the weak negotiating position of Government. This suggestion cannot be substantiated in detail, but the pressure on the Ministry of Works for rapid completion combined with the inexactness of the schedule of rates approach put the contractors in a strong bargaining position.
- 2.3. To reduce costs, economies were made. The width of the roads was reduced: the tarmac from 6.7 metres to 6.0, the edge to shoulder from 0.6 metres to 0.3, and the shoulder from 3.0 metres to 1.5¹. The total length of tarmac road was reduced from 76-79 km to 46 km, with 37 km of cheaper gravel road. Finally, the normal second chip and spray seal was eliminated so that the roads would have only one chip and spray seal.
- 2.4. Rapid implementation led to difficulties at the local level. Some district councils were irritated that they had not been consulted. In one case, Mochudi, where the Council had already worked with a contractor on the North-South road, the experience proved useful. The Land Board stood by at 24 hours notice to deal with issues arising and there was closer collaboration and less dissatisfaction there than in some other places. Elsewhere, however, Councils had difficulty in securing small changes to alignments or to the proposals for which sections should be tarred. Land Boards had to work out compensation to those whose houses were demolished. This was complicated by the absence of people in the lands. Sometimes the contractors were held up while people were fetched from the lands. and standing time had to be paid for their idle equipment. Compensation tended to err on the side of generosity. Some Councils which had worked out compensation at normal rates were irritated to discover that they could have been more generous. At Molepolole, in the laconic words of one observer, "there was much consultation which was why much compensation was paid."
- 2.5. The design and construction of the roads also led to widespread complaints from villagers and Councils. The shortcomings, as they saw it, included:
- the roads were too narrow
 - This narrowness is said to make it difficult for large vehicles to pass one another. However, as traflic usually travels slowly in villages this criticsm loses some of its force. In Mahalapye the road is narrower than the rest of the North-South road of which it is a part.
 - 1. These figures are for Serowe and are assumed to be the same for the other villages.

- the ditches were too deep.
 - In the case of Maun, the road had to be raised 6 inches because the borrow for the base course was too weak. To reduce the extra cost, a second base course in stronger material was placed on top of it. This raised the road higher above its ditches than intended. Elsewhere complaints are common that the ditches are dangerously deep and there have already been accidents. On the Paje road in Serowe, women carrying water from the borehole on one side of the road to their houses on the other have difficulty crossing the deep ditches and have to put down their loads and help one another.
- poor access. The points of access for vehicles are too narrow and too few and sometimes, as at Mahalapye, make it difficult to park off the road for shopping. People fill in the ditches to provide access. Foot-bridges are also needed.
- deterioration. The edges of the shoulders and of the bitumen are already eroding. In Maun the
 road is breaking up, perhaps partly because of the custom of dragging 44 gallon drums full of
 water behind donkeys along the surface.
- 2.6. Vocal protests and conspicuously visible errors are liable to draw attention away from the very substantial benefits brought by these roads. The tarmac reduces dust. The roads are appreciated by vehicle owners. Their economic benefits can be related to the amount of traffic they bear. The IBRD appraisal of the Palapye-Serule stretch of the North-South road is reported to give an internal rate of return of 11-12 per cent with a traffic growth rate of 8-10 per cent per annum and a current daily traffic density of only 110 vehicles a day. The Roads Branch of the Ministry of Works usually assumes that 130 vehicles a day justifies tarring a road. However, road traffic in the villages in question is much higher than this, perhaps usually between two and three times as high. Traffic counts are not normally made inside villages, but for Maun in September 1973 they varied between 175 and 395 vehicles per day, towards the end of the tourist season. More generally in Botswana the past three years have seen a sharp rise in vehicle registrations. (see Table 2.1). From 1973 to 1975 the increase in the number of motor vehicles licensed was 42 per cent for the villages in the major roads programme and 60 per cent for Botswana as a whole. For all these reasons it seems likely that all normal costs a strict economic evaluation of the programme for major roads through villages would come out very favourably.

Table 2.1.: 1973-1975 Increase in the Number of Private Vehicles Licensed in the Villages Receiving Roads

| | 1973 | 1975 | %Increase | |
|------------|------|-------|-----------|---------|
| Serowe | 838 | 817 | -3 | |
| Molepolole | 186 | 348 | 87 | |
| Kanye | 188 | 430 | 129 | |
| Maun | 172 | 263 | 53 | |
| Maun | 294 | 372 | 27 | |
| Mahalapye | 285 | 481 | 69 | |
| Palapye | 103 | 163 | 58 | |
| Ramotswa | 45 | 132 | 193 | |
| - 1-12 | 2111 | 3 006 | 42 | 7 77 77 |
| | | | | |

2.7. The costs were, however, unusually high. The cost history of the major roads through villages is summarised in table 2.2.

Table 2.2.: Cost History of the Major Roads Through Villages

| | | | KM | | (Rounded) | |
|------------|---|------------|---------------|-------|------------------------|------------------------|
| Date | Detail | tar gravel | | total | Estimated Cost in Pula | Cost per km in Pula |
| 10. Jan 74 | Project Memorandum | 76-79 | municipani be | 76-79 | 2,500,000 | c.32,000 |
| Jan/Feb 74 | After Negotiation | 76-79 | in smarty | 76-79 | c.3,500,000 | c.45,000 |
| Feb. 74 | After reduction of specifications | 46 | 37 | 83 | 2,704,320 | c.32,600 |
| Nov. 76 | As paid up to Nov. 1976 | 48,9* | 29,3* | 78,2* | 3,240,767 | 41,400 |
| Nov. 76 | As claimed by contractors and Consultants | 48,9* | 29,3* | 78,2* | 4,519,950 | 57,800 |
| Dec. 76 | Final Settlement | 48.9* | 29.3* | 78.2* | 3,420,767 | 43,700 |

^{*}These are the lengths to be constructed under the December 1974 amendment to the contract.

- 2.8. Some of the main reasons for the rises in costs were:
 - (a) external (i.e. unrelated to the way the project was undertaken)
 - claims for delays because of weather conditions.
 - rise in POL prices
 - -statutory rise in wages in mid-1974 an additional P650.000 was estimated for these.
 - (b) internal (i.e. related to the way the project was undertaken)
 - cost of consultants for design and supervision instead of using MOW (about 10 per cent of the total)
 - cost of more expensive solutions liable to arise from Consultants' decisions when working without MOW Supervision.
 - standing time for equipment when construction was held up in order to settle compensation matters.
 - high compensation rates paid to those whose properties were affected.
 - costs of schedule of rates approach instead of bill of quantities.
 - mobilisation overheads for small jobs
 - more and larger culverts than at first required.

2.9. The final cost of 43,700 Pula per km, while much lower than the 57,800 Pula claimed, is still high. It can be compared with the cost of the Content Farm-Sebele section of the North-South road. This length of 3.7 km was started in November 1973 and completed in August 1974. It might have been expected to cost more per km than the major roads through villages because (a) over one third of the major roads through villages were only improved gravel, and not tarred, and (b) it was wider (6.7 metres of bitumen against 6.0) and had a second chip and spray seal. But on the other hand the contract was based on a bill of quantities following design by the MOW and not on a schedule of rates. In addition there were no consultants supervision costs as the MOW provided supervision. The original contract was for P90,000 and the final settlement was for P102,000, giving a cost of P27,600 per km or only two/thirds of the cost per km of the major roads through villages. In other words, the major roads through villages cost half as much again per km as a short stretch of the North-South road built to a higher standard. In mitigation, it is true that with the major roads through villages the costs of transport must have been higher and the costs of mobilisation were almost certainly higher. But even so, it seems a fair conclusion that they cost more than they need have done and that the quality of work was lower than it need have been.

Much of the higher cost and lower quality are directly attributable to the speed with which the programme had to be carried out and especially to two factors: first, the negotiated schedule of rates contracts; and second, the lack of supervision of consultants who are paid on the basis not of savings which they secure but instead on the basis of a percentage of final costs, and who anyway on strictly professional grounds may not opt for lower cost solutions which may be most in the public interest.

2.10. Given the high and rising traffic densities in the villages affected, the programme may have been economically justified even at these higher costs. There are, moreover, complicated time discount factors, and questions of the opportunity costs of MOW design and supervision capability, which might make the accelerated programme appear more favourable. These factors appear unlikely to offset the large sums which could probably have been saved with a less rushed programme. The lesson is clear. Crash programmes of road construction should be avoided.

THE CONSTRUCTION OF BUILDINGS

2.11. The scale of the various programmes for the construction of buildings is shown in table 2.3.

Table 2.3.: ARDP Building Targets and Achievements in the Large and Smaller Villages

Figures in brackets indicate numbers reported completed as at 31 March 1976)

| | Larger Villages | Smaller Villages | Target Total |
|-------------------|-----------------|------------------|--------------|
| Classrooms | 178(184) | 338(305) | 516(489) |
| Teachers' houses | 176(182) | 253(243) | 429(425) |
| Storerooms | 31(30) | 67(n.a.) | 98(n.a.) |
| School offices | 9(n.a.) | 28(n.a.) | 37(n.a.) |
| Latrines | 490(490) | 52(106) | 542(596) |
| Clinics | 7(7) | 22(14) | 29(21) |
| Health Posts | -(1) | 62(42) | 62(43) |
| Nurses' Houses | 8(10) | 24(20) | 32(30) |
| Council/Governm | ient | | |
| Staff Houses | 204(178) | | 204(178) |
| Integrated Office | | | |
| Blocks | 5(1) | | 5(1) |

Note: In addition 5 maternity wards were built in larger villages and 3 in smaller villages Sources: "Ministry of Local Government and Lands 1974 ARDP Construction Programme" (undated, but about April 1974) for targets. RDU, MFDP for completions.

Notes: In some cases these figures exceed the original targets. In November 1973, for example, the classrooms target was only 400. The figures above do, however, represent the construction programme envisaged at sometime in the second quarter of 1974 and are related to a detailed village by village breakdown.

2.12. The ARDP has sometimes been described as a building programme. This is misleading, but the construction of buildings in the larger and smaller villages did account for over 9 million of the 21 million Pula spent on the ARDP, amounting to 43 per cent of the total. A breakdown is given in table 2.4.

Table 2.4: Principal ARDP Expenditures on the Construction of Buildings up to 31 March 1976

| Tribal administrative/customary | Pula | Percentage of to ARDP expendi | | |
|--|---------------------|----------------------------------|---------------|--------|
| courts Basic Health services | 35,667 1,398,060 | 0,2 6,6 | | |
| Primary School Improvement | io it tal | | | |
| and facilities | 5,472,333 | 25,8 | | |
| Primary school stores | 300,408 | 1,4 | | |
| Integrated Office Block (Tsabong) District Council and | 58,057 | 0,3 | | |
| Administration Housing | 1,871,587 | 8,8 | | go |
| Total buildings | 9,136,112 | 43,1 | star to P | ,lfr |
| Total ARDP expenditure 21,195,24 | 15 | 100 | | 101011 |

Sources: Coordinator of Rural Development's Circular Savingram FDP. 13/5/1 of 27th August, 1976.

2.13. The strategy for the unprecedented volume of construction intended was to give all work in the 27 larger villages to big contractors supervised by the MOW while District Councils were to be responsible for all construction in the smaller villages. The rationale was that big contractors would be needed if the work was to be completed in time and that they would only contemplate and be attracted by the greater volume of work that would be available in the larger villages and that District Councils, with their local knowledge, would have a comparative advantage in the smaller villages. Moreover it was felt that unless the District Councils were forbidden to undertake work in the larger villages, they would go on concentrating there, to the continuing neglect of the more distant smaller villages.

Construction in the Larger Villages

2.14 As big contractors had never before worked in the rural areas away from the line of rail and had no experience of them, the MOW anticipated difficulty in attracting them to bid. Permission was given by the Central Tender Board for negotiated contracts but in the event these were not necessary as there was competition. Details of water supplies and sources of building materials locally available were obtained by the MOW and included in the tender documents. Because of problems with water and building materials, it was decided to invite tenders for prefabricated construction in some villages. The villages were grouped for the purposes of tendering. The tenders received are shown in table 2.5. As table 2.5 shows the contracts were awarded to the lowest bidders. The contracts for conventional construction were awarded to Minestone and three of the four prefabricated contracts to Modular Construction, a Zambia-based firm which came in and set up a small factory in Gaborone to make up its components.

Table 2.5.: Tenders Received for the Larger Villages Building Construction Programme.

| | | | (ruia) | | | | | |
|----------------------|----------|-------------|-----------|---------|---------------|---------------|---------|--|
| | | CONT | TRACT AI | REA | | | | |
| Bidder | Conven | tional Cons | struction | | Prefe | abricated | | |
| | T1 | T2 | T3 | Pl | P2 | P3 | P4 | |
| Botoka | | | 657,453 | | | | | |
| Botswana Engineering | | | | | | | | |
| Construction | 768,043 | 77,453 | | | | 896,360 | | |
| Insulation Equipment | | | | 800,221 | 758,000 | 517,582 | 968,247 | |
| Italtswana | 771,457 | 744,260 | | | | | | |
| Master Builders | | | | | $729,160^{1}$ | $536,807^{1}$ | | |
| Minestone (Botswana) | 485,7622 | $610,802^2$ | 567,775 | | | | | |
| Modular Design | ro Well | 1 1 | | | | | | |
| Construction | | | | 572,244 | 560,575 | 506,761 | 855,618 | |
| | | | | | | | | |

The tenders accepted are underlined.

¹ A 12½ reduction was offered for construction in precast concrete

² P25,000 reducation was offered if T1 and T2 were awarded together.

Note: The clusters of villages were:

Tl Mochudi, Tlokweng, Ramotswa

T2 Kanye, Moshupa, Mmathethe

T3 Tonota, Palapye, Bobonong, Mmadinare

Pl Molepolole, Gabane, Lentsweletau, Letlhakeng

P2 Goodhope, Thamaga, Mabutsane, Manyana, Ranaka, Mmankgodi

P3 Hukuntsi, Tshane, Kang, Lehututu, Lokgwabe

P4 Tutume, Mahalapye

2.15. The bids for P3, the Northern Kgalagadi area, were considered excessive. A special Kgalagadi Works Unit of the Kgalagadi District Council was established. A Government officer was seconded to manage the Unit, especially in financial matters, due to lack of capacity in the Council. Against a M² estimate of P145 from Master Builders, the Unit estimated it would be able to build for P112M², but this latter figure involved indirect subsidies in the form of some overhead costs borne by Government, (costs of three Government officers, use of Government Accounting Units, etc.). Both estimates were made before the wage increases and other rises in costs. Transport and materials tenders were submitted to the Central Tender Board and the transport contract was

awarded to Speedy Lines Holding, while Continental Engineering, Johannesburg, received the prefabricated materials supply contract. Volunteers recruited to assist in the work turned out to be generally unsuitable and it was necessary to go back to Central Tender Board to obtain authority for the Works Unit to sub-contract the erection of the buildings. This was agreed and Speedy Lines Holding was also chosen as the erection sub-contractor.

- 2.16. In the whole of the larger villages programme, construction began first and was completed first in the Northern Kgalagadi. This was largely a result of the energy and enterprise of the officer in charge and of the efficiency of the contractor, and in spite of the considerable administrative and logistical problems of the operation. Over 4,300 M² of buildings were put up by a work force compring only six foremen-artisans from Eastern Botswana and up to 150 locally recruited persons, initially largely unskilled and including some 20 women who worked as painters.
- 2.17. In other areas, work began in July and August 1974 and was mostly completed in 1975. By December 1976 all work was complete and handed over except for Mabutsane and some minor details at Bobonong.
- 2.18. Many problems arose. Reservations were expressed about the prefabricated buildings made and put up by Modular. Maintenance appears to be impossible without dismantling most of a building. Spare panels are not available, and not likely to be as Modular was in liquidation towards the end of 1976. At one stage the Ministry of Local Government and Lands endeavoured to get the contract with Modular terminated but this move was unsuccessful. Occupants of the Modular prefabs complain that they (the prefabs) shake in the wind, that strips tear off, that the kitchens are small, and that there is no store for food. A more general problem arose over sanitation. Aqua privies were installed on the assumption that occupants would be able to pour water down them. However, when potential occupants discovered that if they had piped water they would have to pay much higher rents, they protested and plumbing was either not put in, or, where it had been put in, taken out again. Some houses therefore now have aqua privies, but no water. The matter has attracted keen interest, and has been debated in the National Assembly. Sanitation in larger villages is important and the ARDP did not provide a satisfactory solution for many of the staff houses.
- 2.19. Costs rose. The estimates following the acceptance of tenders were no less than 54% higher than those calculated by the MOW in the project memorandum, as shown in table 2.6. The contractors' case for these costs rests heavily on their ignorance of conditions in the villages. As a prudent (and potentially profitable) precaution they padded their bids. At the same time they were not desperate for work. The South Alrican construction sector was still quite ebullient and contractors take work where it pays best. There is also the imponderable question of the extent to which the tenders were competitive. Minestone's tender was for P1,648,000, less by P521,000 than its nearest competitors. Modular's tenders for P1, P2 and P4 came to P1,988,000, less by P509,00 than its nearest competitors (apart from Master Builders' precast concrete bid). On the one hand, this appears to save the Government over P1 million. But on the other hand one cannot but wonder how much lower the bids might have been had competition been keener. In the event, some of the padding was needed to offset unforeseen losses, but the agreements protected the contractors against many risks and cost rises (such as rises in wages and materials) which were passed on to the Government.

Table 2.6.: Cost Escalation of the Construction Programme in the Larger Villages

| ITEM | Project memo estimate | Post-tender revised estimate | Per cent Increase |
|----------------------------|-----------------------------|------------------------------------|----------------------|
| Primary School Facilities | 1,867,500 | 3,043,500 | 63 |
| Primary School Stores | 69,000 | 115,500 | 67 |
| Clinics and Health posts | 323,400 | 388,800 | 20 |
| Government/Council housing | 1,380,600 | 2,050,800 | 49 |
| Total | 3,640,500 | 5,598,600 | 54 |

Source: "Accelerated Rural Development Programme 1974 Status Report and Evaluation," 17 December 1974, Schedule VI

CONSTRUCTION IN THE SMALLER VILLAGES

- 2.20. Construction in the smaller villages was the responsibility of District Councils. The selection of projects by Councils was simplified by the existence of District plans. Whatever the criteria used for selection in drawing up these plans, the ARDP selection was usually carried out in an ad hoc common sense fashion without detailed analysis of criteria such as pupil-teacher ratios. In the case of Central District, the main criterion appears to have been wide and fairly standard distribution: 3 teachers' quarters were targetted for each of the 47 smaller villages in which teachers' quarters were to be built. In general, and especially in the other, smaller, Districts, Councils were in a position to use their local knowledge to make what were probably fairly sound decisions differentiated in terms of need.
- 2.21. Councils' programmes were implemented in two main ways: by Councils' Works Units; and by small contractors who provided and organised labour, with the Council providing materials, transport, and often supervision.
- 2.22. The Councils' Works Units were generally slow and expensive. At both Malatwana and Matebele, in Kgatleng District it took a Council Works Unit about five months to complete a stage II teacher's quarter. At Tsabong, a Council team of 7 to 8 men is said to have taken between 6 and 8 months to put up a block of two classrooms. Slow construction can be explained in terms of Councils' inability to pay bonuses or to adopt piece work rates, by reluctance to dismiss ineffective labour, by problems of material supply, by poor supervision, and by workers' appreciation that they would be paid whether they worked or not. Costs tended to be high. Workers were paid at least the statutory basic minimum wage to which might be added variously a per night subsistence allowance, a local allowance, and a housing allowance, and were paid whether they were working or not. There may have been isolated exceptions; but in general Councils' Works Units were ineffective and costly.
- 2.23. With small contractors' labour-only contracts, performance was mixed. There are accounts of small contractors who failed, who took a long time, or who built badly. Of one it was said 'He is a good builder, but fantastic slow.' The contractors themselves had difficulties with unpredictable or late deliveries of materials by Councils, and with the supply of sand and stone by local communities. Their labour costs were, however, less than those of the Councils: they could pay by piece work, could pay below the statutory minimum wage (perhaps less than a third of the Council's gross daily payments to labourers), and could take on and lay off labour even on a half day basis so that they were less penalised by bad weather or delays in the delivery of materials. A calculation made in Tsabong suggests that for one type of project, a small contractor's labour costs would be only 4% per cent of those of the Council (P1746 against P3750, which includes a nights allowance).
- 2.24. The achievements of the building programme in the smaller villages took many people, including the Councils themselves, by surprise. At first there was a great deal of scepticism about what could and would be done. This was justified to the extent that the original target dates were highly optimistic. The targets and achievements are shown in table 2.7.

Table 2.7.: Smaller Villages Construction Targets and Achievements

| | Target to 30.9.74 | Completed by 30.9.74 | Completed by 31.3.76 |
|------------------|----------------------|-------------------------|----------------------|
| Classrooms | 338 | 82 | 305 |
| Teachers' houses | 253 | 31 | 243 |
| Storerooms | 67 | 9 | n.a. |
| School Offices | 28 | 2 | n.a. |
| Toilets | 52 | 13 | 106 |
| Clinics | 22 | 3 | 14 |
| Health posts | 62 | 6 | 42 |
| Nurses' houses | 24 | 2 | 20 |

Source: Ministry of Local Government and Lands 1974 ARDP Construction Programme (no date) Programme source for targets.

RDU, Ministry of Finance and Development Planning for achievements by 31.3.76.

Contractors and Costs

2.25. There has been considerable discussion about the relative costs of construction in the larger and smaller villages, and as between different sizes of contractor, different types of contract, and direct construction by Councils. This is a huge subject. One tentative evaluation has stated, with reservations, that the average construction cost per square metre in the larger villages was P147 as against P56 in the smaller villages¹ and that the villages programme thus appeared to be 2½ to 3 times as expensive as the smaller villages programme. This finding is the more remarkable since the transport cost for the smaller villages might be expected to be rather higher than lor the larger villages, and larger village construction should benefit from economies of scale.

2.26. There are, however, offsetting reasons for believing that this comparison of costs is misleading and should be carefully hedged with qualifications. The most important concerns the many ways in which the true costs to Government, Councils and communities of construction in the smaller villages were understated, whether work was undertaken by labour-only constructors or by Councils' Works Units. Councils often provided labour-only contractors with supervision, transport, and cement-mixers without costing these or making a charge. Where Councils carried out construction directly through their Works Units, many costs, including ones like these, were carried on existing recurrent votes and attributed directly to particular items of construction. It is not surprising that the expenditure of Works Departments, including transport, for the four Councils for which complete figures are available (table 2.8) indicates very sharp increases over the ARDP period. It is likely that much of the expenditure incurred under these votes was related to rural construction but not attributed to the costs of the buildings, at least in the earlier years. Other "subsidies" include bricks produced by the Food for Work programme, said to be available in 300 villages, some self-help which was generally patchy or non existent, except in the North East District, and simply the speed with which "estimates" were prepared, evidence of which comes from cost overruns recouped as part of the 1975/6 budgets. In these circumstances, it is difficult to know from the books the true unit costs to Councils of construction in the small villages.

Table 2.8.: District Councils' Works Department Expenditures1

| District Council | 1972 | 1973-42 | 1974-5 | 1975-6 |
|---|--------------------|------------------|---------|--------------------|
| 7 17 17 11 12 10 1 10 10 10 10 10 10 10 10 10 10 10 1 | anderen in anderen | For Foods with a | | • 4 0 to 2 1 1 2 1 |
| Kweneng | 13,000 | 20,800 | 34,000 | 121,000 |
| Southern | 10,000 | 28,800 | 31,000 | 138,000 |
| North-East | 4,000 | 5,200 | 12,000 | 33,000 |
| Kgatleng | 10,000 | 14,240 | 33,000 | |
| TOTAL | 37,000 | 69,040 | 110,000 | 340,000 |
| Percentage increase | | 711- 11- | 1-2 | There is by |
| over previous year | n.a. | 87 | 59 | 209 |

¹ Including transport but not including water supply or roads recurrent costs.

The 1973-4 figures are expenditures for the 15 months accounting period which resulted from a change in the financial year, multiplied by 12/15 to average the figures to one year.

^{2.27.} Some attempt is, however, made in appendix B to present comparable costs for a block of two classrooms. A block of two classrooms was selected for the comparison since this was a major and common element in both the larger and smaller villages programmes. But the comparability is far from exact. A strict and fair evaluation would require much professional work. In the case of the District Councils figures (under D in appendix B) it is not known what hidden subsidies there may have been (except for Central District) and in the case of the Central District estimates it is not known what element was allowed for contractors' profits. If a statement is required, it is probably true that the M² cost to Government and Councils was higher in the larger villages than in the smaller villages, and it may have been about twice as much.

¹ Accelerated Rural Development Programme 1974 Status Report and evaluation: 4

- 2.28. In considering the big contractors and the costs in the larger villages, two questions have to be disentangled. The first is whether the big contractors had to face higher costs than smaller contractors and were therefore bound to be more expensive; and the second is whether the big contractors in the ARDP made the big profits.
- 2.29. First, the big contractors in this case faced higher costs, including:
 - headquarters overheads
 - mobilisation costs
 - costs of expatriate supervision
 - a higher wage bill, (having to pay the statutory minimum wage and overtime rates whereas small contractors usually get away with paying very much less)
 - possibly higher design standards than in the smaller villages
 - almost certainly, higher completion standards required at the time of handover.

They also knew little about the environment in which they were to work and thus felt themselves subject to high risk.

- 2.30. Second, it is not knowable without very detailed investigation what profits were made by the big contractors. Modular Construction went into liquidation which may speak for itself. However, it is likely that in bidding for any future contracts, big contractors may be able to benefit from the experience gained and thus to reduce the costs in real terms to Government and District Councils. They would in any case probably have to as this sector has become much more competitive than it was when the ARDP bids were put in.
- 2.31. In the smaller villages the choice was and remains between Councils Works Units and small and medium local contractors.
- 2.32. The small and medium local contractors performed rather better in the ARDP than might have been expected. Some went to the wall; others gained in experience and strength. In some cases, following a labour-only construction contract, small contractors were able to buy vehicles and start on more comprehensive work. Councils gained experience of different contractors so that those who were more reliable could be selected in future. Private clients were also helped in their selection, preferring to give work to contractors who had already worked satisfactorily for a Council. Tendering for Councils' work became much more competitive. In Kgatleng District towards the end of 1976 there were no less than 12 bids for one construction contract put out to tender. Some of the basis was laid for the widespread minor housing contruction which subsequently went on in major villages. In sum, the ARDP helped to develop a rural construction capability which would otherwise not have flowered so soon.
- 2.33. In contrast, Councils' Works Units appear to have been generally slow and expensive during the ARDP. There may be a case for preserving some Works Units for some repair and maintenance tasks and for construction in very remote and difficult areas. In general, however, the trend away from construction by Works Units appears desirable on the grounds of both cost and speed and should be continued.
- 2.34. If future construction in smaller villages should lie mainly or entirely with small and medium contractors, improvements are possible. First, cheaper and more efficient construction can be secured through putting out to tender bundles of construction in neighbouring villages, as is already being done in Central District. Second, the review of Councils' contract procedures should lead to standardisation, which would make bidding much easier especially for medium contractors, and to more regular and frequent payments to contractors as building proceeds, bringing Councils' practice closer to that of Central Government's and reducing contractors' liquidity problems.
- 2.35. In summary evaluation, the evidence examined suggests that the ARDP achieved and provoked much construction that would otherwise have occurred only years later, that the costs were sometimes rather high, and that the benefits were not only what was built but also the competitive building capability which was developed and which has enabled rural building to continue on a higher plateau since the ARDP. The creation of this capability can be considered one (though only one) of the necessary corner stones of the national policy of attempting to direct more revenues to the rural areas to benefit the rural population.

SCHOOL FURNITURE

2.36. The Third National Development Plan 1973-78 (NDP3) included a project called "Primary School Equipment" (LG22) under which it was intended to spend annually P100,000 rising to P145,000 over the Plan period. The project was to supply teaching aids, equipment and books. The ARDP provided both an opportunity and, through the increased number of primary classrooms, a need, to expand this project which came to concentrate on school furniture. Before the ARDP, most school furniture had been imported by the District Councils. In 1974, however, as part of the ARDP, the Batswana Enterprise Development Unit (BEDU) became the agent of all District Councils for selection of suitable contractors, purchase of material in bulk, and financial and physical guidance and control of contractors during fabrication. Two contractors were selected — Bamalete Engineering in Ramotswa and Serowe Engineering (part of the Brigades) in Serowe. The contracts negotiated with them were:

| | Numbers of Classroo | m Sets |
|----------------------|---------------------|--------|
| | 1974/5 | 1975/6 |
| Bamalete Engineering | 210 | 258 |
| Serowe Engineering | 220 | 404 |

In 1974/5 the classroom sets amounted to 9,000 tables and 18,000 chairs. Both Bamalete Engineering and Serowe Engineering were forced to tool up for a much higher level of production than before and to take on a larger work force. Production started in January 1975 on a first contract. A second contract (an extension of the first) was negotiated in June 1975 and in October the furniture programme was extended to include items such as blackboards, wooden racks and cupboards, all manufactured locally under BEDU auspices. By 31 March 1976, expenditure on the programme, which was financed mostly by SIDA, had been about P1,200,000.

- 2.37. On the negative side, the haste with which the programme was mounted allowed unsatisfactory designs to be adopted. In particular, tables were produced which could not be used for group work. These and other design defects were tackled but only after large numbers of the inappropriate items had been produced.
- 2.38. On the positive side, the production of school furniture outstripped anything that had been envisaged in NDP 3. 90 per cent of the second contract for classroom furniture had been produced
- by 31 March 1976. Local production substituted for imports. Employment was generated and skills developed. For example, the steel furniture section of Serowe Engineering was employing, as of April 1976, 26 people, 10 of them trainees.
- 2.39. The school furniture programme was only possible because of the existence of BEDU and of the two small engineering companies; what it did was to provide them with an opportunity and to galvanise them into action as a result of which they can now stabilise at a higher level of employment and production. For the third contract, starting in October 1976, for school desks and chairs, the two producers became completely independent of BEDU and began to handle all material procurement and production on their own.

VILLAGE WATER SUPPLIES

2.40. Before the ARDP there were four projects included in NDP 3 which were actually or potentially concerned with village water supplies. Their respective titles and cost estimates are given in tables 2.9.

Table 2.9.: Cost Estimates of Actually or Potentially Village-Related Water Projects

| 40 | | 1711 X 1911 X | (Pula'000 |) KROW HE WAS | 100 | 7 | |
|-------------------|--------------|---------------|-----------|---------------|-------|-------|-------|
| | | | | | | | |
| Title | Code | 73/74 | 74/75 | 75/76 | 76/77 | 77/78 | Total |
| Major Village | | | | | | | |
| Water Supplies | WB17 | 343 | 370 | 380 | 390 | 300 | 1,783 |
| Rural Village | | | | | | | |
| Water Supplies | WB26 | 40 | 90 | 90 | 90 | 90 | 400 |
| Underground Water | | | | | | | |
| Development | GS02 | 94 | 94 | 100 | 100 | 105 | 493 |
| Contract Borehole | | | | | | | |
| Drilling | GS 09 | 312 | 613 | 462 | 7. T | _ | 1,387 |
| Totals | | 789 | 1,167 | 1,032 | 580 | 495 | 4,063 |

Source: NDP 3 Vol. 2 pp. 107, 114, 242, and 247

Note: At the time of NDP3, GS02 and GS09 were mainly concerned with borehole drilling for cattle posts, not villages.

- 2.41. The Major Villages Water Supplies Project (WB17) was intended to improve the water supplies in 15 large villages with, typically, additional boreholes, pumping equipment, storage tanks and improved reticulation to standpipes. This project appears to have been unaffected by ARDP.
- 2.42. The Rural Village Water Supplies Project (WB26) was directed towards rather small villages, but not the smallest since the lowest population limit was taken as 500 persons. It was a modest proposal in which, it was said, Government would confine its activities to certain basic tasks such as equipping borholes and installing simple reticulation piping. It did not involve drilling new boreholes. Three village projects were to be undertaken on a pilot basis in the first year, and subsequently it was anticipated that about ten villages a year would benefit from the scheme. Funds were available from UNICEF and SIDA.
- 2.43. The Underground Water Development Project (GS02) was for continuing and augmenting Government's own water drilling capability for all purposes including agriculture and industry as well as domestic use.
- 2.44. The Contract Borehole Drilling Project (GS09) was designed to deal with the backlog of borehole applications which at the time when NDP3 was written numbered 304. This figure was set beside the successful completion by Government of only 130 boreholes in the previous two calendar years. It was proposed to eliminate the backlog and to deal with new applications in a phased programme over three years.
- 2.45. The ARDP had no effect on the Major Village Water Supplies Project (WB17) which followed its own course largely undisturbed. The main impact of the ARDP was on the contract borehole drilling project (GS09) and through it, on rural water supplies. There were difficulties funding GS09. Donors held off for two reasons: first, the project was rather general, and vague in its objectives; second, donors were reluctant to support what was in effect a land grab in which those who were already better off would establish de facto control ever large areas of land through a monopoly of water supply from new boreholes. Domestic funds were thus used for a programme which both halted the land grab and provided benefits to many of the poorer people living in smaller villages. Complementing this programme, SIDA financed 89 per cent of the cost of the major villages and rural water supplies programmes which equiped the new boreholes. Contract drilling appears to have been reasonably cheap. According to one informant, bids were very competitive and some contracts were let for 7 Pula a metre as against earlier rates of 10 Pula.

2.46. A full evaluation is not possible here, but the magnitude of the programmes can be gauged from summary expenditure figures in table 2.10. A simple comparison of expenditures and development plan estimates can easily be misleading for reasons too obvious and too numerous to elaborate. It may be noted, however, that in the three year period 1973/76 for the projects under consideration, actual expenditure was P4,132,851 against the plan estimate of P2,988,000 for the same period, an excess of 38 per cent. Even after allowing for inllation, this does not appear a sector in which the capacity to spend was in the event a major constraint, partly because some of the implementing capacity could be bought by contracting out.

2.47. Data are not available to evaluate the cost-effectiveness of the work done or in any detail its geographical distribution. By 31 March 1976, water supplies and boreholes were reported completed as in table 2.11.

Table 2.10. Rural Water Supplies: Expenditures 1973/4 through 1975/6

| Projects | Source of Finance | 73/74 | 74/75 | 75/76 | Total | |
|----------------------|----------------------|---------|-----------|-----------|-----------|------|
| Major and Rural | SIDA | 228,734 | 872,979 | 914,275 | 2,015,988 | |
| Village Water | UNICEF | 8,901 | 6,728 | OBS. N. | 15,629 | |
| Supplies | DDF | 13,422 | 113,800 | 116,413 | ,243,635 | |
| Underground Water | | | | | | |
| Development | UK Devt Loar | n 964 | 14,493 | 67,967 | 83,424 | |
| Contract Borehole | 2 | | | | | |
| Drilling | DDF | 98,647 | 1,073,289 | 602,239 | 1,774,175 | |
| Totals | r managa at | 350,668 | 2,081,289 | 1,700,894 | 4,132,851 | Flor |

Source: RDU, MFDP

2.48. Short of a much fuller evaluation, the following conclusions appear justified concerning the ARDP.

- (i) the ARDP did not significantly affect the programme for water supplies in major villages.
- (ii) the ARDP prevented further delay in the contract borehole drilling programme by enabling DDF funds to be made available for financing it.
- (iii) the ARDP was instrumental in diverting drilling from new cattle post areas where it would benefit those who were already well-off to smaller (i.e. with populations over 500) villages where water would benefit more people.
- (iv) water supplies were provided to these villages earlier than would have been the case without ARDP.

Table 2.11.: Village Water Supplies and Boreholes Complete at 31 March 1976

| District | Water Supplies in Large Villages | Water Supplies in Small Villages | Total Boreholes |
|-----------|-------------------------------------|-------------------------------------|-----------------|
| Kgatleng | _ | 1 | 21 |
| Kgalagadi | 1 | 4 | 7 |
| Ghanzi | 1 | 2 | 10 |
| Northwest | 1 | 1 | 27 |
| Central | 3 | 3 | 38 |
| Kweneng | 2 | 3 | 34 |
| Southeast | 2 | s had s <u>d</u> radbar | 5 |
| Southern | 6 | 2 | 36 |
| Northeast | ar or ar it who <u>le</u> gram | 2 | 8 |
| | 16 | 18 | 186 |

Source: Department of Water Affairs, letter of 25 January, 1977

MINISTRY OF AGRICULTURE PROGRAMMES

- 2.49. The Ministry of Agriculture had only a small part of the ARDP. Of the expenditure to 31 March, 1976, the Ministry was responsible for only 2.3. per cent, compared with 19.5 per cent for Mineral Resources and Water Affairs, 53 per cent for Local Government and Lands, and 25 per cent for Works and Communications.
- 2.50. The Ministry of Agriculture had two projects in the ARDP: dams; and livestock saleyards.
 - (a) Dams
- 2.51. The dams project was included in the ARDP in order to implement a decision, taken a month or two earlier, to reorganise the dam construction programme of the Ministry of Agriculture. In January 1974 the Ministry circulated an outline statement of Government policy on haffirs and dams and the Chief Land Utilisation Officer visited all the District Councils and District Development Committees which were affected. Although the policy was clearly set out, there appears to have been a communication gap between the Ministry of Agriculture and the authorities at the local level. At district level, DAOs were left to work out the siting and administration of dams, while the Ministry set about rebuilding its construction teams and letting contracts. On the construction side, changes in senior staff and delays in recruiting supervisory staff contributed to a very slow start: only P146,000 were spent in 1974/5. However, by 31 March 1976, 29 dams had been repaired or constructed, 8 of these by contract in the North East District and the remainder by the Ministry's construction units. By then, four construction units were fully operational and a fencing and concreting crew made up a fifth unit. In the districts, DAOs had gone ahead and found sites by consulting farmers and communities but the policy and its implications do not appear to have been fully understood. It was not until April 1976 that the Ministries of Agriculture and Local Government and Lands, at the instance of the Tribal Grazing Land Coordinating Committee, made a serious attempt to introduce a system for the selection, siting and management of dams. With the dams programme, then, physical targets were achieved about a year late and a start was made, rather belatedly, on establishing a system for siting and management.
 - (b) Livestock Saleyards
- 2.52. In contrast with dam-building which was an existing project, the livestock saleyards project was a new idea. The proposal was to build livestock saleyards at strategic points, to install weighbridges, and to organise sales so that cattle owners would get better prices. Auctions were to be arranged at which buyers would compete and at which owners would have the option of withdrawing their animals if they wished. Prices at auction are normally calculated on a live weight basis, so the presence of a weighbridge would enable DAOs and ADs to advise farmers more accurately on the prices they should expect from buyers, as well as assisting the Botswana Livestock Development Corporation to determine buying prices at the auctions which it organises at Makalamabedi and elsewhere in North Western Botswana. Since all auctions are licensed by the Ministry of Agriculture, the saleyards could be made the major venues for buying, thus improving control and surveillance.
- 2.53. The programme got off to a good start. The Livestock Marketing officer (LMO) in charge toured District Councils explaining the proposal, discussed it with auctioneers, selected 18 provisional sites, made financial estimates, drew up a project memorandum, entered into correspondence with 6 weighbridge manufacturers, and tested two weighbridge models at a site near Gaborone. In early 1974 a start was made in confirming sites with Village Development Committees and preparing applications to Land Boards. After approval by the Central Tender Board, an order was placed for scales from Berkel Africa (Pty.) Ltd. Later in 1974, money was warranted for the project. A number of sites were approved and some 6 kraals were completed. But in September 1974 the LMO in charge left for another posting and the programme lost momentum. By December 1976 it had been the responsibility of 4 different officers during its short life. Further problems were weaknesses in the weighing scales which have had to be returned and strengthened, lack of continuity and clear records in the filing system, and difficulties in recruiting a good fencing foreman. By December 1976 these problems had been largely overcome. 14 kraals had been completed and 4 of these were fully equipped with weighbridges. There appeared a good prospect that most of the remainder would shortly be fully equipped. Although long delayed, the construction phase was nearing completion. How effective the saleyards would be in operation remained to be seen.

- 2.54. The experiences and difficulties of the Ministry of Agriculture are a source of lessons. The lack of projects to submit to the ARDP in the first place and then the slow implementation of projects that followed can be attributed in part to the following factors:
 - (i) Low Priority. Neither the dam programme nor livestock saleyards received consistently high priority within the Ministry. The dam programme was under something of a cloud and attitudes towards it were ambivalent, to say the least; and the livestock saleyards depended largely on the enthusiasm of one officer. Since the Ministry as a whole was not involved in a major way in the ARDP, the ARDP label did not help these projects much within the Ministry.
 - (ii) Lack of Staff Continuity. Loss of continuity is sometimes necessary in order to improve performance. This was not the case with the saleyards project, where the loss of continuity from posting the original LMO in charge led to a serious loss of momentum.
 - (iii) Lack of Management System. Unlike the Ministry of Local Government and Lands, the Ministry of Agriculture did not institute a system of target-setting, monitoring and reporting. The original LMO in charge of the sale-yards project did draw up bar charts, but these were never part of a larger system nor were they maintained after he left.
 - (iv) The Nature of Agricultural Programmes. Involving land and local people as they do, agricultural programmes often require patience, especially in the initial negotiations and in early operation. (The construction phase, however, is much the same as with other types of projects and can be improved and speeded up by programming and good management.)
 - (v) Lack of Decentralisation. The management of the Ministry of Agriculture is highly centralised compared with, say, the Ministry of Local Government and Lands. Whereas the MLGL had District Councils to which it could devolve responsibility for much of the building construction programme, the Ministry of Agriculture relied much more on centralised decision-making with Gaborone-based officers making brief field visits.
 - (vi) Implementing Capacity the Prime Constraint. In the Ministry of Agriculture implementing capacity was more of a constraint than finance. The livestock saleyards and the dams projects were being undertaken during a period (1973/4-1975/6) when the Ministry was only able to spend 30 per cent of its development budget. There are many imponderables, but these two projects may have enabled the staff involved to be more productive than they would otherwise have been.
- 2.55. In sum, the ARDP highlighted the difficulties experienced by the Ministry of Agriculture and the priority of innovations in management to enhance the Ministry's capacity to implement.

3. Costs and Effects

FINANCE AND THE ECONOMY

Financial Costs in Perspective

3.1. The examination of the programmes for major roads in villages and for the construction of buildings in villages suggests that with slower and more careful implementation, costs might have been lower. The costs and benefits of speed are taken up in paras 3.55-3.58. A less obvious but equally important set of issues concerns the value of funds available to the Government. Since money provides the units in which economists and accountants deal, it is easy to miss the point that its value depends on its scarcity or abundance relative to other resources and constraints. Just before the ARDP, Botswana had moved into a recurrent budget surplus with the prospect of a continuing surplus. Both domestic revenue and donor funds were likely to be buoyant. Funds were then less of a constraint on development than they had been. That implementing capacity was a stronger constraint than funds is indicated by table 3.1 which shows that in the three years 1973/4 to 1975/6 the Government only managed to spend 67 per cent of its development budget.

Table 3.1.: Planned and Actual Development Expenditure 1973/4 through 1975/76

| | Ministry/Sector | Planned Expenditure P'000 | Actual Expenditure P'000 | Actual as a Percentage of Planned % |
|-----|--------------------------------------|---------------------------------|--------------------------------|--|
| 1. | Agriculture | 9 600 | 2 885 | 30 |
| 2. | Commerce, Industry and Tourism | 1 704 | 695 | 41 |
| 3. | Water Affairs and Geological Survey | 5 615 | 5 904 | 105 |
| | Education | 11 246 | 11 941 | 106 |
| 5. | Health | 3 247 | 1 855 | 57 |
| 6. | Roads and Airfields | 28 809 | 18 755 | 65 |
| 7. | Government Infrastructure | 8 131 | 3 771 | 46 |
| 8. | Posts and Telecommunications | 4 624 | 2 951 | 64 |
| 9. | Urban Development | 15 930 | 9 590 | 60 |
| | Rural Development, Ministry of Local | | | |
| | Government and Lands | 1 765 | 2 994 | 170 |
| 11. | Miscellaneous | 1 212 | 460 | 38 |
| | TOTAL | 91 883 | 61 801 | 67 |

Sources: NDP 3; Annual Statements of Accounts

Notes: 1. All figures have been adjusted to constant 1973/74 prices. '100 in the last column' does not necessarily mean that all projects were carried out as original costs were frequently underestimated.

- 2. 'Government Infrastructure' comprises Government Buildings, CTO, all MFDP projects, Printer, Electrical Department, Meteorology, Police, Prisons and Justice.
- 3. 'Miscellaneous' comprises Museum, Libraries, Information, Broadcasting, Sports.
- 4. 'Health' and 'Education' include MLGL projects. The expenditire rate on primary school projects was over 200%; on other education it was arond 50%.
- 3.2. There is always a case for the prudent use of Government funds: there are dangers from rapidly rising recurrent expenditure, and from "bad habits" such as slack financial control and corruption, if Government funds are used without care and circumspection. The point being made here is *not* that money should be splashed around irresponsibly; it is that it is sane and

rational, where not funds but the capacity to use them is the greater constraint, to use money to overcome that constraint. This is precisely what the ARDP did. Any evaluation of the ARDP which identifies what appear to be excessive costs must also weigh the fact that domestic and donor funds were available to help break the bottlenecks of implementation and it was worth paying something extra in order to do this.

The Use of Domestic and Donor Funds

3.3. A further question is whether the urgency of the ARDP meant spending domestic revenue where, with a little more time, donor grant finance might have been negotiated. A breakdown of ARDP expenditure by source is given in appendix C. Given more time, SIDA would quite likely have agreed to finance at least some of the 250,000 Pula from the Domestic Development Fund (DDF) which was spent on major and rural village water supplies. With both the NORAD supported programme for Basic Health Services and the SIDA-supported programme for Primary School Improvement, costs were incurred using the DDF in advance of donor funds being available, and then reimbursed. With the Basic Health Services Programme, no donor funds appear to have been foregone. With the Primary School Improvement Programme, the ARDP expenditure pattern is shown in table 3.2.

Table 3.2.: Expenditure and Sources of Funds for the Primary School Improvement Programme (Pula)

| Source | 1973/4 | 1974/5 | <i>1975/6</i> | Total |
|--------|---------|-----------|---------------|-----------|
| SIDA | 408,625 | 646,710 | 1,751,540 | 2,806,875 |
| DDF | 78,447 | 1,594,853 | 912,158 | 2,585,458 |
| WFP | | 70,960 | 9,040 | 80,000 |

SIDA financed the smaller villages programme while the Botswana Government through the DDF financed the larger villages programme. This is bound to be a difficult matter to judge, but several informed opinions agree that had there been less urgency, and had it been possible to fit negotiations in the Swedish budget cycle, SIDA would very likely have been prepared to provide grant funds for the whole of the larger villages programme as well. This supposition is borne out by the 295,000 Pula which SIDA provided in November 1975 in order to complete the programme. Here, then, is a case where it does appear very likely that Botswana domestic funds might have been saved. Against this, however, can be set the benefits in long-term support from reserving for donors those programmes which are most attractive and in their eyes best value for money. It may have been prudent of the Botswana Government to finance from its own resources two of the programmes — major roads through villages, and the construction of primary school facilties in the larger villages — which were most controversial in terms of cost-effectiveness.

The ARDP, Development Expenditure, and the Economy

3.4. The ARDP was launched at a time when development expenditure on construction in Botswana had passed a peak as the Shashe project and Orapa came towards completion.

Table 3.3. ARDP Expenditures as a Proportion of total Development Expenditures
Pula 000

| | (actual) | (actual) | (actual) | |
|---|----------|----------|----------|--|
| | 1973/4 | 1974/5 | 1975/6 | |
| ARDP expenditure | 1,651 | 10,076 | 9,468 | |
| Other development expenditure | 28,615 | 22,708 | 25,981 | |
| Total development expenditure | 30,266 | 32,784 | 35,449 | |
| ARDP expenditure as a (rounded) percentage of the total | 5 | 31 | 27 | |
| | | | | |

Sources: Development expenditure — Annual Statements of Accounts. ARDP expenditure — FDP 13/5/1 of 27/8/76

Note: ARDP expenditure is assumed to have been included in the total development

expenditure. "Other development expenditure" is arrived at by subtracting ARDP expenditure from total development expenditure.

In real terms and taking 1976/77 prices, there was a gradual decline in development expenditure from a peak of P52 million in 72/73 to P48 million in 73/4 and P43 million in 1974/5. This decline occurred in spite of the ARDP. It seems that the ARDP was timely in levelling off what would otherwise have been a much deeper trough in government development spending. In the words of one economist, the ARDP produced "fantastically a situation where our luck was better than our intelligence."

- 3.5. It has been suggested that the ARDP overheated the construction sector, as shown by.higher bids for tenders. One analysis found an underlying rate of inflation of 26 per cent in 1974/75 but only a 5 per cent increase in tender prices during the same period, and concluded that at the beginning of 1974/75, when ARDP contracts were being let, shortage of capacity in the building industry was causing a scarcity premium on tender prices of about 20 per cent. Folkmann, in his study of the building industry in Botswana, commented:
- ".....from February 1974 to August 1974 prices in Botswana jumped some 28 per cent while prices in South Africa increased by about 8 per cent. The major part of the extra price increase of 20 per cent is because labour wage rates were raised by 100 per cent for unskilled and 40 per cent for skilled labour.... A minor part (some 8 per cent) of the extra increase could be because the Accelerated Rural Development Programme (ARDP), introduced in spring 1974, created a shortage of capacity of the building industry. (The Ministry of Finance evaluated the scarcity premium to be 20 per cent.... This is most probably exaggerated)." (Folkmann 1976: 4.3).

This order of magnitude (some 8 per cent) is also supported by another recent analysis in the MOW. There may well have been a short-lived increase in prices of materials purchased by Councils as a result of the demand created by the ARDP, but the ARDP may also have been instrumental in attracting to Gaborone a third supplier (in addition to J. Haskins and Sons and Gaborones Hardware who were already established) in the form of Builders Merchants Botswana. The increased competition permitted by this Company may have later tended to keep material prices down. Further, no informants have suggested that there was any rise in wage rates for artisans or unskilled labourers during the period before the statutory increase in wages in mid-1974. It appears that artisans laid off towards the end of the construction periods in Selebi-Pikwe and Orapa were coming onto the market as the ARDP started so that there was no shortage of labour supply to drive wages up. In any case, it was not long before there was a general decline in South Africa as well as Botswana in the amount of construction being let. The ARDP probably did not overheat the construction sector very much or for very long.

IMPLEMENTING CAPACITY

Effects on Other Programmes

- 3.6. It is not easy to judge what effect ARDP had on other programmes. It does not seem likely that any programme was stopped or held up because funds were diverted to the ARDP since funds, as we have seen, were not the main constraint. There were complaints that the programming of donor funds was upset. But the programming of donor funds was not a crucial bottleneck. There were plenty of donor funds in the pipeline and which could not be spent because of the constraint of implementing capacity.
- 3.7. Ministries, Departments and other organisations fall into two categories: those directly involved in ARDP; and those not directly involved.
- 3.8. Direct involvement in ARDP tended to mean that other activities were given lower priority or abandoned. At the Council level some existing building projects were neglected. In Central District at most 10 of the 85 toilet blocks for schools proposed for 1974/5 were actually built (through this programme was subsequently overtaken by the waves of ARDP construction). The market place for Serowe for which funds were allocated at the end of 1973 still has not been built, perhaps partly because of ARDP though there are also other reasons. At the Central Government level geological survey work is said to have been held up by the need to site boreholes in villages. The Chief Architect's Office has been cited as a bottleneck but this may have been exaggerated. At the time of the ARDP, two of the projects on which his office was working, and which may be presumed to have been delayed, were the High Court for Gaborone and the Magistrate's Court for

Francistown. Neither of these has yet been built. Similarly, some of the work in hand in the Roads Branch was of rather low priority. There was a delay resulting from ARDP in the design of the airstrip at Kasane and in the design of the road from Selebi-Pikwe to Zanzibar, both low priority projects which have still not been implemented. No doubt some programmes were delayed somewhat, but the delay appears to have been either slight or unimportant. The main casualties were low priority projects which were not likely to be implemented for some time anyway. One candid remark sheds some light on what happened: "Nothing was actually held up but we used it (ARDP) as an excuse on some occasions".

- 3.9. Ministries not directly involved in ARDP can very understandably be expected to complain that ARDP held up their work. A much more careful and detailed evaluation would be necessary for definitive statements to be made about particular cases. The one programme often cited as having been delayed is secondary schools. The ARDP and consequent work in the MOW may indeed have been responsible for a delay of some months. But a prior delay was the preparation of design specifications by the Ministry of Education which appears to be a recurring bottleneck (e.g. with the Technical Wing for the Selebi-Pikwe Secondary School for which DANIDA funds are said to have been available since March 1975). In the event, two of the secondary schools Moleli School in Mochudi and Seepapitso School in Kanye were probably built more cheaply and possibly even more quickly as a result of the ARDP: contracts were negotiated with Minestone who were already on site for ARDP work and who could show a substantial saving through not including mobilisation costs in their tender. Molefi School was completed in May 1976 and Seepapitso School in July 1976.
- 3.10. The evidence reviewed points towards the conclusion that the ARDP did little damage to other programmes. What it did was provide a heaven-sent scapegoat to which delays and deficiencies could be attributed. It also provided an example of rapid implementation which shook complacency and showed up those ministries, departments and even individuals responsible for lagging performance. One of the most important long-term effects of the ARDP was to show that there were other gears into which other ministries, departments and individuals could (and should) change.

Management: Financial and Physical Monitoring and Control 3.11. The ARDP placed an immense strain and responsibility on District Councils. The increase in Councils' expenditures is shown in table 3.4.

Table. 3.4. Increases in District Councils' Budgets 1972 – 1975/6 in Pula '000

| | 2 | Actual | Estir | mated |
|--|-------|--------|-------|--------|
| | 1972 | 1973-4 | 1974 | 1975-6 |
| Capital Budget | 206 | 1,018 | 1,312 | 3,104 |
| Recurrent budget | 3,265 | 3,800 | 5,400 | 7,200 |
| Total | 3,471 | 4,818 | 6,712 | 11,304 |
| Percentage increase over previous year | N.A. | 39 | 39 | 68 |
| Percentage increase of capital budget over | | -11 | | |
| previous year | N.A. | 394 | 29 | 137 |

Note: The recurrent budget includes teachers' salaries

The capital budget increased 15-fold over four years from 1972 to 1975-6. Most of this increase can be attributed to the ARDP, as can some of the increases in recurrent expenditure. In the words of one Central Government official "We held our fingers at the amount of money we were pouring

out into a system incapable of handling it"; and in the words one another official at the receiving end "the Districts were suffering from shock for several months".

- 3.12. Councils' accounting systems could not handle either the volume or the nature of the work. They were not organised to separate development expenditure from recurrent. Recurrent funds were therefore used for what was strictly capital expenditure. From an accounting point of view it was lar easier to pay for drivers and petrol, to take two examples, using the existing recurrent votes than to charge them to a capital vote. The strain was gravely exacerbated by the system of labour-only contracts for building which at that time were commonly (and necessarily) used by Councils. Whereas a contract in which the contractor himself purchases and supplies all the materials may involve writing only 4 or 5 cheques over the lile of the project, a labour-only contract has been said to involve as may as 400 or 500 cheques for the same work. This figure may be exaggerated, but there is certainly a huge difference in the volume of accounting involved. Inundated as they were, Council accounting staff found it especially difficult to change their system.
- 3.13. The results might have been much worse. These were conditions presenting ample opportunities for corruption, especially as the audit service was not geared up for the amount of work required of it. There were, it is true, cases of multiple misdemeanours and misappropriations. The worst case was probably the North West District Council of which the auditor wrote for 1974/5 "There was no control of expenditure and every main head was overspent", and where he found that some councillors had claimed up to 14 days subsistence for one committee meeting. All the same there does not appear to have been the widespread corruption that might have been expected in some other countries. And in the longer term, Councils were forced and are still being forced to streamline and adapt their accounting and to recruit and train their staff so as to be able to handle a much greater volume of work.
- 3.14. One innovation of the ARDP was a reporting and monitoring system designed to improve financial and physical monitoring and control. Reports were at first quarterly and later three times a year. On the financial side the reports had six heads.
 - (a) Funds received from Ministry
 - (b) Funds committed against orders placed
 - (c) Funds spent on materials/services received
 - (d) Total (b) + (c) committed and spent
 - (e) Difference (a) (d) funds received but not committed or spent
 - (f) retention money funds (if any) withheld from builder pending final Council approval of completed project.
- 3.15. At first some, perhaps most, Councils were unable to supply these details accurately. One Council officer said that "The financial statements given during the ARDP were guesses". Accounts were not kept in ways which enabled the required information easily to be extracted. The reporting had the effect of forcing Councils to change their ledger systems so that a check could be kept on commitments and cost overruns could be loreseen. In one large Council, these thrice-yearly reports have three times enabled staff to foresee over-expenditures and to take appropriate action in time. This appears, then to be a case where a judicious demand for information eventually helped to provoke a reform of accounting procedures and financial control.
- 3.16. On the physical reporting side of the same monitoring system, the stage of implementation of projects is indicated in a simple three category code:
 - A = materials ordered
 - B = construction started
 - C = construction completed.

(This has subsequently been refined or complicated, according to one's point of view, in Central District into a seven category code with A as contract signed, B through F as percentage completions in 20 percent brackets, and G as handed over to Council). This simple reporting again had an effect on monitoring and reporting within Councils, which had to devise their own methods for obtaining the information required.

3.17. A deliberate attempt was made at the Gaborone end to keep the reporting requirements simple. Like any other reporting system, this one has costs in terms of staff time. Surprisingly, no

person interviewed had serious criticisms of the system. To the contrary, there was universal agreement that it had been and continued to be beneficial and that it was not unduly onerous to compile now that Councils had organised themselves to be able to provide the information needed.

- 3.18. Taking the system as a whole, some of the main benefits appear to be:
 - early warning of cost overruns
 - increased cost and vote consciousness
 - improved knowledge of progress and identification of bottlenecks in implementation.
 - up-to-date and accurate information for donors
 - greater ease of evaluation.

It is difficult to asses to what extent the system has speeded and improved implementation but its contribution may well have been substantial. Any system of this sort is liable to encourage and induce organised work methods and regular checks. The use of bar charts for programming is one related practice, although their use for monitoring appears still to be rare. It may not be entirely a coincidence that implementation tends to lag in ministries which were not affected by this approach. Such ministries might benefit from similar management procedures.

Enhanced Implementing Capacity

3.19. The ARDP gave a lot of useful experience to a wide range of people and institutions as a result of which implementing capacity, that crucial resource, was augmented. Big contractors learnt how to work in villages. Small and medium contractors grew in competence, confidence and capital, and now constitute a continuing and growing capability for rural works. Many semiskilled labourers must have learnt on the job, increasing this national resource. At the key level of site foreman, however, it was only with the rather unsuccessful Council Works Units that there was much attempt to develop local capability and in late 1976 the Kgalagadi District sent two of its ex-ARDP foremen on a course. In other fields such as water development and school furniture there was an increase in skills and in the ability to get things done in and for villages.

3.20. The most important development was the enhanced capability and credibility of District Councils. They surprised most observers, including rural people and some of their own staff, with what they showed could do. When ARDP broke it was said that Councils lacked direction and were doing little. After a huge convulsion they settled down at a much higher level of performance. Taking merely the construction programmes, the figures in table 3.5 are revealing.

Table 3.5.: Councils' Construction Programmes: Estimates and Targets

| | 1973-78 Plan | | |
|--------------------------------|-----------------------------|------------|---------------|
| Primary School Facilities | Target for New Construction | 1975/6 | 1976/7 |
| Classrooms | 7004 | 300 | 296 |
| Teachers' Quarters | n.a. | 191 | 148 |
| Toilets | n.a. | 164 | 171 |
| Estimated cost | | 1,960,0001 | $2,505,000^2$ |
| Health Facilities ³ | | | |
| Clinics | 62^{4} | 13 | 5 |
| Health Posts | 156 | 22 | 41 |
| Nurses' Quarters | hall to what n.a. he was | 7 | 13 |
| Estimated cost | | 553,000 | 792,300 |

- Notes: ¹ Including P330,000 ARDP overrun from the previous year.
 - ² Including P98,000 overrun, mainly ARDP, from the previous year. This is not a complete listing. Some maternity facilities are omitted.
 - ⁴ Urban and rural. The figures in this table are rural only.

By the end of the ARDP Council construction programmes had reached a new plateau, higher than anticipated in the 1973-78 Plan.

3.21. One aspect of the increased capability of District Councils was the personal development of Council staff who discovered more of what they were able to do. Most of the experience gained by Volunteers is lost to Botswana as they leave (though some stay on) but it may prove an asset elsewhere. The experience gained by Batswana should be a lasting asset to the country.

3.22. Finally, the ARDP showed Gaborone that District Councils were alive, articulate and active. One professional officer in central Government said "We are aware now that there is local government". The ARDP helped to lay the foundation of that central faith in local capability which is fundamental to any programme of devolution.

THE RURAL IMPACT

- 3.23. A comprehensive review of the rural impact of ARDP would be a massive task. All that will be attempted here is a selective examination of certain key aspects.
 - (i) Employment and Income Effects
- 3.24. The employment and income effects of the ARDP were not limited to Botswana or to rural areas. Employment and incomes were generated in Rhodesia and South Africa through orders for materials and equipment placed there—and a few non-Batswana (including this evaluator) benefitted from temporary employment, mainly as building construction and road supervisors. Employment and incomes were also generated in urban areas, notably Gaborone, where Modular Construction set up a small factory and where Minestone had its headquarters. But most of the employment and income effects were rural, taking rural to include the larger villages.
- 3.25. Some informal estimates of the numbers of semi-skilled and unskilled persons employed at the peak periods by some of the 5 employers can be listed by way of examples:

| (for 15 months) | 400-450 |
|--------------------|-----------------|
| some Per Hend of R | 125-150 |
| (at Molepolole, | over 100 |
| for 4-5 months) | |
| | |
| | about 110 |
| | |
| | 70-80 |
| | |
| | 15-30 |
| | (at Molepolole, |

It may be noted that the prefabricated construction adopted for some of the larger villages was probably less labour-intensive than traditional construction and probably required less labour at the local level.

- 3.26. These scattered estimates give only the crudest idea of orders of magnitude, and do not include the water programme, the rural roads programme, the production of school furniture, or brickmaking. During 1974-5, the average monthly semi-skilled and unskilled employment generated by the ARDP might (on an uneducated guess) have been of the order of 2,000 to 3,000.
- 3.27. Some permanent employment was stimulated by the ARDP. A small example is the Kweneng Rural Development Association which doubled its brickmaking capacity, employing an additional 16 people, and which has managed to maintain that level of employment since, benefitting from the quiet construction boom in Molepolole. In the public sector, most of those employed in Councils' Works teams were laid off although sometimes attempts are made to get them back on Councils' recurrent budgets. Some permanent employment was created in the maintenance and servicing sectors of councils, for example for Family Welfare Educators. Most of the long-term employment generated, however, has probably been in the small entrepreneurial sector. Before ARDP, Councils were partly unaware of the small contractors in their areas. During ARDP some came to light, others started up, and Councils and contractors gained experience. Many fell by the wayside but a substantial number established themselves and are now doing work both for Councils and in the private sector. The amount of new building going on in large villages is noteworthy and must be providing employment which partly compensates for the slack in urban sector construction. Without the ARDP some of this capability would not have been developed and consequently some of this current construction might not be taking place. Moreover, as we have seen Councils' construction programmes have stabilised at a high plateau which they might not have reached, and certainly would not have reached anything like as quickly, without the ARDP.
- 3.28. No evidence has come to light that ARDP affected wages. The minimum wages rise of mid-1974 affected those working for large contractors. It is not known whether, following the rise, any

labour was laid off. There should have been no need since in the terms of their contracts, these contractors could claim back from the government all the additional expenditure entailed. Councils similarly followed the new rates, except in some of the more remote villages. Small contractors, however, were generally not directly affected, and daily wages of as low as 70-80 thebe have been reported. It is a bizarre fact that the poorer people are, the less they tend to be paid. As usual, it was at the rural periphery that benefits, in this case in wages, were lowest. In consequence, those of the poorest people who live in the remoter areas and who were employed by contractors gained much less than those who managed to be employed in the larger villages. Moreover, wage payments by some of the smaller contractors were erratic.

3.29. In gross terms, in 1974/5, an extremely rough estimate of the wages paid to Batswana as a direct result of ARDP expenditure, can be calculated as follows:

Average daily wage (including overtime)

Number employed

Number of days for which paid

Gross payment

2P per day

2,000-3,000

300

P1.2 to 1.8 million.

This compares with an ARDP expenditure in 1974/5 of Pf0 million. Most of this expenditure was in the rural areas and much of it to unskilled labour, which can be presumed to include some of the poorer rural people.

(ii) Distribution by District

3.30. Any breakdown of ARDP expenditures or achievements by geographical area is liable to mislead unless it is carried out in detail and with supporting information, including previous levels of development and services, relative capital costs of providing services, levels of living of populations by areas, relative accessibility of services, and populations served. Such meticulous work may better be concentrated on planning future services rather than on evaluating past actions. Some statements can, however, be made about the distribution by district of some ARDP expenditures and achievement.

3.31. A district-wise breakdown of expenditures for most of the ARDP programmes is given in appendix D. For reasons explained in the notes to the appendix, the figures can only be provisional. Taking these expenditures, which amount to some P16 million out of the P21 million for the ARDP as a whole, the breakdown by district and the relationships between expenditure and rural population are shown in table 3.6.

Table 3.6. Rural Population and Selected ARDP Expenditure² by District

| DISTRICT | Population (1976) ¹ | ARDP Expenditure ² | Percentage of ARDP Expenditure | Percentage of Rural Population | % of Expenditure % of Population | Per Capita Expenditure (rounded) Pula |
|----------------------|-----------------------------------|----------------------------------|--------------------------------------|--------------------------------------|----------------------------------|--|
| Central ³ | 260,400 | 5,137,479 | 31,8 | 42 | 8,0 | 20 |
| South-East | 24,300 | 1,012,327 | 6,3 | -1 | 1.6 | 42 |
| Southern | 96,400 | 2,675,694 | 16,6 | 16 | 1.1 | 28 |
| North-East | 30,600 | 504,197 | 3,1 | 5 | 0,6 | 16 |
| ———————Ghanzi | 14,700 | 706,776 | 4,4 | 2 | 1,9 | 48 |
| ———— Kgalagadi | 18,100 | 1,082,313 | 6,7 | 3 | 2,3 | 60 |
| Kgatleng | 37,600 | 1,269,051 | 7,9 | 6,0 | 1,3 | 34 |
| Kweneng | 75,800 | 2,026,085 | 12,6 | 12 | 1,0 | 27 |
| | | | | | | |

| Ngamiland | 57,300 | 1,721,469 | 10,7 | 10 | 1.2 | 27 | |
|-----------|---------|------------|--------|-----|-------|----|--|
| Chobe | 7,400 | 1,721,103 | 10,7 | 10 | 1,5 | 2. | |
| TOTAL | 622,600 | 16,135,391 | 100,00 | 100 | N , 1 | 26 | |

Notes:

3.32. A breakdown of achievements by District as reported complete at 31 March 1976 is given in table 1.5.

3.33. To illustrate the distribution of one particular item, school classrooms, table 3.7 shows the number of new classrooms constructed under the ARDP per thousand rural population.

Table 3.7. New Classrooms Per Head of Rural Population by District

| District | Number of new classrooms | Rural Population (1976) | Number of New classrooms per thousand people | |
|------------|--------------------------|----------------------------|--|--------|
| Central | 197 | 260,400 | 0,76 | |
| South East | 14 | 24,300 | 0,58 | |
| Southern | 67 | 96,400 | 0,70 | |
| North East | 31 | 30,600 | 1,01 | h h- h |
| Ghanzi | 14 | 14,700 | 0,95 | |
| Kgalagadi | 38 | 18,100 | 2,10 | |
| Kgatleng | 27 | 37,600 | 0,72 | |
| Kweneng | 81 | 75,800 | 1,07 | -1 |
| North West | 20 | 64,700 | 0,31 | |

Note: The self-help contribution to these classrooms was substantial only in the North East District where it is reflected in the low cost per classroom of P2,400 (rounded).

3.34. Care has to be taken in interpreting these figures. In particular:

- (i) recorded costs per unit of construction were generally higher in the large villages and in the remote districts (Northwest, Ghanzi, and Kgalagadi) than elsewhere. This means that per caput expenditure figures for the remote districts give an exaggerated impression of per caput benefits.
- (ii) the cost figures do not cover all the ARDP projects and are not final figures.
- (iii) the primary school classroom figures can be misleading because districts varied considerably in the extent to which they opted to build teachers' quarters instead of classrooms and the extent to which other buildings, such as clinics and health posts were put up.

3.35. The reader may wish to examine the tables and make his or her own analysis. In the meantime, the following observations appear justified:

¹ NDP 1976-81, Draft, Part I, p 1.8

² excluding integrated office blocks, dams, livestock saleyards, Local Authority Development Grants, Tribal Administration/Customary Courts, Primary School Equipment, Rural Industrial Infrastructure, and Rural Power Supplies. See Appendix D for sources.

³ excluding Selebi-Pikwe and Orapa

- 1. Per head of population the remote districts of Ghanzi and Kgalagadi benefited disproportionately, as intended. Per caput expenditures were 48 and 60 Pula respectively, compared with a mean of 26 Pula (All Districts). Kgalagadi District had by far the highest proportion of new classrooms built per thousand population (2.1 compared with the next highest 1.1 in Kweneng).
- 2. Considering its remoteness North West District did not do so well. This may partly reflect administrative difficulties experienced by the North West District Council. Per caput expenditures were only about average, at P27, although construction costs were high. However, the construction of 5 clinics all in small villages and 6 nurses houses should mean a substantial benefit to a population exposed to a more disease-ridden environment that the rest of Botswana.
- 3. The lowest per caput expenditures were in the North East District, with only 16 Pula per caput. This figure is low partly because North East did not have a district headquarters and therefore did not have any major roads through villages or District Council or District Administration housing.
- 4. The per caput expenditures for Central District at first sight appear surprisingly low, at P20. This may, however, reflect two factors: some economies of scale leading to lower unit costs; and difficulties with implementation resulting from the size of the district.
- 5. Per caput expenditures for the South East District, at P42 are high. In contrast with the North East District, it has, however, a district headquarters. About one third of the expenditures was for the tarred road in Ramotswa. Even so, the South East appears to have done quite well out of the ARDP.
- 3.36. A general conclusion is that, given that funds were not seriously constraining, expenditures and achievements depended largely on administrative capacity and ease of implementation. Per caput expenditures tended to be high where implementation was relatively easy (South East, Kgatleng) and where special measures were taken to augment implementing capacity (Kgalagadi), and low where implementation was difficult for reasons of scale (Central) or administrative capacity was a problem (North West).
 - (iii) The ARDP and Self-help
- 3.37. Three questions can be asked about ARDP and self-help. These concern first, the effects of self-help on ARDP; second the effects of ARDP on self-help; and third, what conclusions can be derived from the experience.
- 3.38. First, in most areas villagers made some contribution to ARDP construction in the small villages. The most common form was bricks made under the Food for Work programme which provided food to people who made bricks. The greatest self-help contribution was probably in the Northeast District. Elsewhere it was very variable. The usual intention was that village communities would provide free the sand and stone needed by labour-only contractors in small villages. In practice the Council usually had to intervene with its transport and labour and to do much or all of the work directly itself.

A study conducted in Central District concluded that self-help in that District contributed less than 2 per cent of the value of the ARDP programme (Riordan 1975:26). The uncertainties and delays of relying partially on self-help probably cost more than it saved.

3.39. Second, the effect of ARDP on self-help is much more imponderable. Opinions differ. Some consider that a dramatic intervention by government to build, say, a school classroom block in a village where previous classrooms had been constructed, albeit slowly, by the villagers, had a damaging effect on future prospects for self-help. Others consider the ARDP to have been only a minor influence. In this view, there is a long-term trend away from voluntary labour contributions and towards cash contributions; and perhaps a further trend away from self-help for communal facilities altogether. It is widely believed that the Food For Work programme had a much more damaging effect than did ARDP on willingness to work on self-help without reward. This receives some support from a recent evaluation of the Food For Work programme in Botswana. ("The uses of Food Aid in Botswana", 23 ff. and 39-40). It is perhaps to be expected that as employment opportunities multiply and the cash economy becomes more pervasive, voluntary labour on communal village projects will decline. To some extent, the ARDP may have accelerated this process, but self-help in various forms continues in many villages including some such as Gabane and Thamaga where there was an ARDP input.

- 3.40. Third, one possible conclusion is that these trends do not matter very much. Self-help is quite often regressive. Women usually do most of the work. Financial contributions tend to be on a llat rate which discriminates against the poor and in favour of the relatively rich. Moreover, in practical terms self-help can be a very expensive means of construction. An analysis of self-help brick-making in Central District (Riordan 1975) has shown that because of high waste, failure rates and delays involved, self-help brick-making may be more expensive than other methods. It can also be both expensive and demoralising for communities when something they have built (for example Brightmore School) collapses and the Council has to come in and replace it. Self-help is likely to continue and even expand in what closely touches people: perhaps in customary and religious matters like constructing or repairing the kgotla or a church: and in economic matters like fencing off lands from grazing areas. Since Councils now have an enhanced capability to construct educational and health facilties through local contractors and since they have the funds necessary, the case is weakened lor burdening local communities with all these tasks as well.
- 3.41. What seems needed is a sensitive review of VDCs, Community Development and self-help in order to see the best way forward. As a first step a clear distinction might be sought between types of activity which Councils or Government should undertake, and types of activity which should lie within the domain of communities. There are dangers of ideological paternalism among those who do not themselves have to take part in self-help but who advocate it for others. All the same, there are values in it for community solidarity and mobilisation. It is possible to suggest types of construction, such as shelters for health posts and perhaps staff housing, which might be the responsibility of communities; but it might also be right at this stage to review the nature of development and to see whether there are not other realms, especially institutional, educational and economic, to which VDCs and village communities might not better become committed.

(iv) Reaching the periphery and the poor

- 3.42. Urban and large village bias is notorious. Urban centres and large villages, by comparision with small villages, are easier to develop, more attractive to professionals to work in, more visible and more important politically, wealthier, better provided with services, better staffed and better served by communications, and have better recreational facilities, better employment opportunities and higher wages. The contrast is even more marked as one moves progressively into scattered lands areas, cattle posts and remote boreholes. The Rural Income Distribution Survey 1974/75 found household incomes in small villages, lands areas and cattle posts averaging only about two fifths of those in large villages (RIDS: 121). Many of the poorest people who are the target of the national policy of social justice live precisely in this periphery.
- 3.43. The extent to which the ARDP reached and benefited such people is difficult to evaluate. A comparison of the physical achievements of the large and small village programmes is not particularly helpful since the larger – smaller distinction was rather arbitrary. The "larger" villages included 1971 populations of only 472 (Good Hope), 459 (Mabutsane), 604 (Tshane), and 720 (Lentsweletau), while the "smaller" villages included with 1971 populations of 3,132 (Shoshong), 1,767 (Shakawe) 1,783 (Maitengwe) and 1,386 (Letlhakane). All the same, the larger village programme both forced and enabled District Councils to work in smaller and less accessible villages: forced them through the instruction that they should cease all building activities in the larger villages, which were left to the big contractors; and enabled them because they were assured that the needs of the larger villages were being met and because vital resources (especially transport) were provided for Councils. The outcome was an extension of construction work outwards from the centre. The spread of health posts, in particular, was steady and extensive. Moreover, a threshold was passed and Councils now have the capacity and opportunity (being taken up by the Central District Council) to phase construction in remote areas by grouping small villages and letting contracts for several buildings in several villages as a package. As a result of ARDP, physical facilities have been pushed and are being pushed out faster and further into the poor periphery than would otherwise have occurred.
- 3.44. But there remain people in that periphery who are still beyond the reach of these physical facilities. These include many of the Basarwa. There are also others, like the 6,000 people said to live to the northeast of the Okavango, who remain largely out of contact and largely unserved, in that case in an area where malaria is endemic. Peripheral people like these were not touched by the ARDP though they may be touched by its sequel.

3.45. In the meantime the ARDP appears to have contributed to a groundswell of demands for services. Peripheral people use self-help both to help themselves and as a means of drawing attention to themselves. The people of Tsetseng on the Ghanzi — Kgalagadi border raised money for classrooms through gumba-gumba parties (Botswana Daily News 10 November, 1976). The people of Manxotae some 33 km from Nata River contributed towards a school and health post. The people of Madibela in the Rakops area decided they wanted a health post and put one up, after which the Council built them a better one. The people of Ramotlabaki in Kgatleng built a school in an area which the Council did not recognise as a village, but once they had done that the Council built them teachers' quarters. These events might have happened anyway. The important point is that peripheral people are demanding more and Councils have a greater capacity and willingness to provide it, at least in terms of structures.

3.46. Unfortunately structures by themselves do not ensure effective services. A recent study of education by the IDM (Campbell and Abbott 1976) has shown a strong bias in the distribution of trained teachers and of A and B grades, as presented in table 3.8.

Table 3.8 Educational Indicators by Level of Urban-Rural Hierarchy

| | Perc | centage of | | |
|-----------------------|---------------------|-----------------------|---|--|
| Level of hierarchy | trained teachers | Untrained teachers | A & B Grades as percentages of those who sat the St. 7 exam. 1975 | A Grade as percentages of those who sat the St. 7 exam. 1975 |
| Towns | 98 | 2 | 42 | 16 |
| District Headquarters | 73 | 27 | 32 | 9 |
| Large villages | 51.5 | 48.5 | 26 | 8 |
| Small villages | 50 | 50 | 26 | 7 |

Source: Campbell and Abbott 1976: tables 2 and 6

These figures show clear enough trends but they conceal small villages where the position is even worse. At Mogorosi there are 6 untrained teachers to only 3 trained and not one of the 19 pupils who sat the Standard 7 examination last year obtained either an A or a B. This may be an extreme case but the general tendency is clear: children who go to primary school in small villages have a much worse chance of obtaining good grades than those who go in District Headquarters and even more so in urban centres.

3.47. The construction of primary school facilities in small villages as undertaken during and after the ARDP has brought obvious benefits: fewer classes have to be held outside (where quite apart from rain, wind, dust and sun there may be no black-boards or desks) and fewer classes have to be held on a double-shift basis; hygiene is better with more toilets; and school furniture if appropriate presumably improves learning. What is more debatable, but also important, is whether better teachers' quarters, as built by Councils under the ARDP, make more distant rural lile less unattractive for teachers, and especially trained teachers, making it easier to post them to such places, less likely that if so posted they will resign, and more likely that, once in post, they will give good service.

3.48. The scattered evidence and opinion collected combines to suggest that housing is, though a factor, not a crucial one. Although their location in District Headquarters was Iar from peripheral, it is perhaps relevant that out of 91 recent responses from District Council staff to the question "What problems are you encountering or have you encountered which made it unattractive to work in the setting that you are presently working in?" only 9 mentioned housing compared with 14 mentioning inadequate office facilities. More directly, it is striking that about half of the 190-odd teachers' quarters built under the ARDP in Central District are standing empty, the teachers preferring to live in villages and to avoid paying the rent, which is said to be 6 Pula for a rondavel without toilet or kitchen, and 7.50 Pula for a rondavel with toilet and kitchen. Insofar as housing can encourage teachers to serve in rural areas, it will only do so if they want to

- occupy it. There is a case for reviewing the policy on rents in both smaller and larger villages. But other factors like non-payment of salary (at Shakawe one teacher was said not to have been paid for eight months), irregular mail (on November 17th 1976 Gomare had had no mail since November 1, and that had been brought by a social anthropologist whose services must be considered temporary), lack of facilities for recreation, and problems over the supply of water when taken together are probably much more powerful disincentives than poor housing. In conclusion, then, the teacher's housing constructed during and since the ARDP appears to have had a disappointing impact and to have brought fewer benefits than might have been hoped.
- 3.49. In the health field there are similar problems of attracting staff into the remoter areas. Some of the nurses in distant clinics are expatriates, presumably as a stopgap until more nurses come out of training. The increased demand for staff created by the ARDP stimulated the extension of enrolled nurse training schools. In contrast with the shortage of nurses, the training of Family Welfare Educators to staff health posts has presented no problems and 250 have already taken the 3-month course.
- 3.50. The construction of facilities remains a necessary but not sufficient condition for the achievement of the social justice objective of the Fourth National Development Plan 1976-81. This states that:
 - "Development should benefit all sections of the population and all areas of the country. Specific implications that are relevant to rural development are:
 - All Batswana, wherever they live and whatever their social background, should have equal access to services that the Government provides such as education, health, and water supplies.
 - Services available to different groups and in different areas should be comparable in quality as well as mere availability" (NDP4, 4.2)
- 3.51. To achieve these objectives three further conditions are necessary. In the first place, adequate staff have to be trained and posted. This is not the place to enter into these questions in detail except to note that a radically new approach may be needed, including perhaps a period of national service early in each person's career when he or she is required to serve in one of the remotest areas, special incentive payments for those who serve in such areas after their national service, and special measures for communication which might include two-way radios.
- 3.52. Second, the staff concerned must act with dedication and impartially especially with Basarwa and with distant groups of people, precisely those who are poorest, least accessible, and least able effectively to demand or request services. A case is reported where staff on an antimalaria campaign sprayed all the huts except those of the Basarwa and where the Basarwa decided not to protest. Elsewhere the difference between dedicated and indifferent staff may be reflected in whether or not difficult and uncomfortable journeys are undertaken in the course of duty. It is easy to specify but hard to achieve the spirit of professional commitment to service that is needed.
- 3.53. Third, "equal access" to services requires a positive bias in the provision of services to offset the disadvantages of those who are remote and of those who are poor. Taken to its logical conclusion, equal access is geographically impossible: a person living in Kule is further from a hospital than a person living along the line of rail. Rural people usually have much further to go for services than people in large villages or urban areas. On top of this they are generally poorer. Equal access also implies an equal capacity to pay the fees required for a service. Charges are at present levied for education, for health services, and for water. The fee for primary education has been reduced from 6 Pula to 3 Pula per annum but there are additional charges (for uniform, sports fees, cook's wages, etc.) which amount to some 4 Pula per annum (RIDS:219) which more than double the cost to a parent. Health services are free for children up to age of 12, but for those who are over 12 a fee of 40 thebe is charged for a course of treatment (RIDS:218). Charges, reportedly of 2 Pula, are to be levied for village water supplies. Charges for all these services in the rural areas are regressive: they hurt the poorer more than the less poor. They conflict with the objective of equal access and with the national ideal of social justice.
- 3.54. Two justifications are usually advanced for levying fees of this sort.
 - (i) a need to provide government revenue to pay for the service. This has no force in Botswana, where the problem is precisely the opposite: how to divert revenue into the rural areas, not how to extract it from them.

(ii) a need to make people use a service sparingly. This applies to education only insofar as there is a shortage of primary school teachers, classrooms and equipment and consequently a need to prevent children from going to school. It applies to health only insofar as there may be malingerers, a situation more likely in urban areas than in rural areas where people have substantial distances to walk to clinics and health posts. It applies to water only if water is paid for by volume used, which is administratively expensive and does not appear to be proposed in rural Botswana.

The issues with education are complicated and it would be irresponsible to suggest otherwise. Sudden abolition of all fees might provoke an unmanageable influx into primary schools. It is a question of direction. If the aim is equal access, then the path towards it involves the abolition of fees and other charges, meaning that uniforms, books and equipment should also be provided free of charge. This might quite dramatically improve the access of poor rural children to education. One immediate measure could be in the short-term actively to discourage the use of uniforms in rural schools. Given the irrelevance or weakness of these two points, the case is strong for making access to education, health services and water less unequal by abolishing charges for them in the rural areas. Administration would be reduced, access would be more equal; the poor and the very poor would benefit; and social justice would be served.

THE COSTS AND BENEFITS OF SPEED AND PRIORITY

3.55. The ARDP was accorded high priority and carried out under pressure, especially during its first ten months. Since such an approach might again be considered, it is useful to assess its costs and benefits in the ARDP case, so that in future costs could be reduced and benefits increased.

- 3.56. The main extra costs attributable to the priority and speed of the ARDP were:
 - (i) raised financial costs to the Botswana Government

These were especially marked with the major roads through villages and with the larger villages construction programme carried out by big contractors. The main factors were:

- contractors in a strong bargaining position and civil servants in a weak position because of the deadline.
- the adoption of the schedule of rates instead of the usual bill of quantities for road construction.
- some overheating of the construction sector (but this has been exaggerated).
- supervision of roads contractors by consultants. (This may occur anyway and may be justified, but it does put up the costs).
- lost opportunities to obtain donor funds, mainly for school construction, for which domestic revenue was used instead.
- costs of modifications to designs, such as the removal of plumbing from some houses, changes in culvert size etc. which might have been avoided with more time and care.
- some of the compensation paid for houses demolished to make way for roads was higher than it would have been.
- (ii) bad outcomes. These can be attributed to:
 - (a) lack of consultation. This applied particularly to the major roads through villages and to the staff housing in larger villages.
 - (b) inappropriate designs. These occurred especially with the major roads, with prefabricated staff housing, and with school furniture.
 - (c) problems of supervision. This applied particularly with the programme for major roads through villages.
- (iii) programme bias towards what could be done quickly

Any programme with a close deadline is bound to concentrate on what can be done quickly. With the ARDP this reinforced the attention to physical works to the relative neglect of other aspects of rural development — the encouragement of groups and of self-reliance, the management of resources, adult education, etc — which may be damaged if rushed. The implication is that a series of strictly time-bounded programmes would tend to exclude these important aspects of rural development simply because they cannot easily be subject to deadlines.

3.57. The main benefits of the priority and speed of the ARDP were:

(i) benefits from accelerated construction. Facilities were ready for use often years earlier

than they would have been.

(ii) the implementation capacity of government was fully used and was enhanced. Many people worked harder than they would have and dropped or deferred work of low priority. More was done more quickly than many thought possible. A permanent change took place in the capacity of Councils to implement.

(iii) the priority of rural development was better appreciated in government, especially

by urban-biased technical officers.

- (vi) the "unbalanced growth" of the ARDP created problems, such as those of staffing clinics, which forced other developmental changes. For example, the training of health staff was expanded as a result of the additional demand which the ARDP provoked. The ARDP was a notable example of that part of development which consists of a chain of bottlenecks—attacking the construction bottleneck created others which were then tackled in turn.
- (v) innovations were made. Forced to work hard and fast, staff cut corners. New methods were introduced. The monitoring and control system is a notable example.
- (vi) government and councils gained in confidence and credibility
- 3.58. One main lesson is that strong political leadership and a sense of urgency can force and enable the civil service to do more, more quickly, and better, than wise and prudent men might advise to be possible.

4. Lessons for the Future

AN OVERVIEW.

- 4.1. The selective evaluation given above is mixed, but generally favourable. It is more favourable than the writer expected. There is a danger that this results partly from a failure adequately to gauge what would have happened anyway had there been no ARDP. Classrooms would have been built, but fewer. Tarred roads would have been built in large villages, but later. Staff would have worked, but less hard. The list could be lengthened. And some things would probably not have happened at all the monitoring system, for example. But these things now have happened and are in most cases continuing to happen quite satisfactorily. There is no need to repeat the ARDP in the same form. It has done its particular job. Some components of the basic strategy of trying to deploy and distribute the benefits of revenue from mining to the rural areas are now a little easier to implement than before. Councils using local contractors have a greater capacity to build even in remote rural areas than they had. Moreover, Central Government staff are now more aware of the priority of rural development.
- 4.2. But, as we are often reminded, development is not bricks and mortar. It is one thing, and an important thing, to get schools, health posts and roads built and water supplies installed. It is quite another, and more difficult, to ensure that they operate, are well staffed, and are accessible to all. It is yet harder to achieve the national aim of an equitable distribution of incomes, when so many of the poorest people are precisely those who are furthest away, least well educated, worst informed, least in contact with government, and least able to help themselves. The ARDP was a step towards them but only on one front.
- 4.3. The ARDP belonged to that important but easier part of the rural development process which consists of a pushing outwards from the centre towards the periphery. The other part, which consists of changes in people, families and communities, their attitudes, lives, access to resources and relationships with their environment, is more delicate, less tangible and more elusive. To deal with that side, and with the intractable problems of rural poverty, is strictly speaking beyond the terms of reference of this report. But overcoming those problems is both more difficult and more important. It is the end towards which a programme like the ARDP is only a partial means. In this respect the TGLP consultation, — and measures to redistribute opportunities and incomes as well as services to the poorer rural people — seem to this writer to present the main frontier and the main challenge. Botswana has shown in the ARDP a greater capacity to act, a greater ability to push physical works and services into the rural areas, than many would have predicted. This greater capacity was realised through an act of imagination and political will. The issue now is one of imagination and political will to direct policy and the civil service towards ensuring that economic growth means better lives not just for those rural people who are more able to help themselves but specifically for those who are poorer, weaker, and less capable of taking advantage of opportunities; for those in short who tend to get left behind and left out.

FOR THE FUTURE

- 4.4. Five main findings from this evaluation, and the lessons and suggestions for the future that flow from them, are as follows:
- 4.4.1. Urgency raised costs and led to avoidable errors of design and construction Urgency raised costs in many ways, including placing contractors in a strong bargaining position, the adoption of a schedule of rates system instead of a bill of quantities, and the employment of supervising consultants for the roads in major villages. It also led to errors of design and construction variously with housing, roads, and school furniture.

For the Future

- (i) crash programmes of road construction or buildings by big contractors should be avoided unless there are compelling reasons which justify the foreseeable extra cost.
- (ii) the need for crash building programmes should be reduced through a system of monitoring the process of project identification right through to completion. This should

be centred on the Building Programme Coordinator in the MOW. He should receive regular reports from Ministries and within the MOW showing the status of projects and should maintain records which will show where delays have occurred or are occuring, enabling remedial action to be taken. He should have full authority to request information to enable him to do his job.

(iii) designs, whether for houses, other buildings, roads, furniture or equipment, should be discussed with future users and where desirable modified before construction starts. A search for cheap and efficent designs should be a matter of routine, and innovations (for example for rondavel construction as pioneered by the Rural Industrial Innovations Centre at Kanye) should be appraised and where appropriate adopted.

4.4.2. The ARDP revealed and developed far greater implementation capacity in the districts than was expected. Councils and local contractors did more than many believed they could. Partly this was because the ARDP coincided with an influx of additional staff. Partly it was because Council staff as a whole worked harder and with more purpose than they would otherwise have done. A lasting change was made to implementing capacity. Councils gained in confidence and credibility. The policy of devolving responsibility to the local level paid good dividends.

For the Future

(i) any major programme should, as with District Councils in the ARDP, be preceded by a build up of staff and institutions to handle it. If any future priority programme is intended, planning the procurement and training of staff should precede it by at least 1-2 years.

(ii) the enhanced local building capacity through the employment of contractors by Councils presents an opportunity to relieve government departments of the costly and very time-consuming business of constructing buildings. On an agency basis, Councils could handle the tendering and supervision for, say, the construction of Agricultural Demonstrators' Quarters for the Ministry of Agriculture. This would save agricultural (and other departmental) staff much time, release their energies for their substantive work, and also speed up construction for some departments with which it lags.

(iii) a block grant system to District Councils should be considered to encourage initiative on the part of local-level officials and to enable local bottlenecks to be broken quickly.

(iv) in general, the policy of devolution to Councils and to central government staff at the local level, should be pursued.

4.4.3. Management procedures, improved performance and control

The reporting system introduced within the Ministry of Local Government and Lands was an important factor in reforming Councils' accounting systems, in identifying and monitoring problems and achievements, and in improving management and financial control. While this system demonstrated the potential for improved management, that potential has not generally been realised elsewhere within the government. Given that implementing capacity is a more acute constraint than finance, a very high priority should be to try through improved management to expand that capacity.

For the Future

- (i) especially in Ministries where implementation lags, management procedures should be a focus for attention and innovation. In particular, procedures for target setting, programming and monitoring (perhaps along the lines of Management by Objectives) should be used. If well done, the effect in some ministries could be dramatic.
- (ii) there is much to be said for using management expertise which is locally available for the collaborative design, testing and introduction of such procedures. What is required is something which goes a good deal further than conventional Organisation and may extend beyond the current scope of the Management Services Unit and methods in the Directorate of Personnel. The Institute of Development Management is a potentially valuable local resource for the sort of sensitive and innovative work which is needed.
- (iii) procedures can be specially designed to improve and monitor the achievement of national plan objectives. An example of a procedure for giving a poverty rating to project memoranda is given in Appendix E. This proposal is designed to remind those involved in project identification and design of some of the objectives of the plan and also to enable ministries to monitor the extent to which their new projects are directed towards the periphery and the poor.

4.4.4. Decisive political leadership made officials work harder and achieve more

The civil service responded loyally and well to the clear objectives set. There was grumbling and friction as some were forced out of their ruts, but many officials, especially in the districts, worked hard and not only achieved a lot but enjoyed it. Decisive leadership increased the output of government and Councils. With such decisive direction and leadership, the civil service might again achieve things which some consider impossible.

For the future

(i) providing it is not used too often, this sort of leadership at the national level can galvanise the civil service for priority programmes. Care will always be needed where rural people (as opposed to physical infrastructure) are concerned, since with people the costs of undue haste can be high.

(ii) there is scope for similar decisive political leadership within ministries. Ministers might wish to consider, in conjuction with new systems of management, instituting regular reviews of performance at which their senior staff would report on progress against targets and on problems encountered, and at which work targets would be set for completion by the time of the next review.

4.4.5. The ARDP was not designed to confront, and did not confront, the central issue of the poorer people in the rural areas

The ARDP and its aftermath were a step, and a significant step, towards reducing the gradient of imbalance in services and access to services between the urban areas, the large villages, the small villages, and the remoter areas. But the ARDP was not designed to tackle and did not in any major lasting way tackle, the issue, central to the policy of social justice elaborated in the Fourth National Development Plan 1976-81, of equitable levels of living for the poorer rural people.

For the future

(i) a programme for promoting rural equity should be considered. This programme, set in the framework of the Fourth National Development Plan, would, like the ARDP, provide support and impetus to existing and new projects. These projects would be selected and designed to focus and accelerate the provision of access to resources, income opportunities and services, to the more disadvantaged people within the rural sector.

Appendices

APPENDIX A. MAIN CONSTRUCTION COMFIETED BY 31 MARCH 1576 BY DISTRICT AND BY LARGER/SMALLER VILLAGE LARGER VILLAGES PROGREMME

| TOTAL | Central Rwaneng South East Southern North East | Kgatleng Kgalagadi Ghanzi North 'Vest | | TOTAL | Kwei ei g South East Southern | Ghai zi North West | District Kgarleng Kyarlayadi |
|-------|--|--|----------------------------|-------|-------------------------------------|-----------------------|------------------------------------|
| | | 7 | | | | | |
| | | 1.4 | | | | | |
| 305 | 138 31 6 35 35 | 17 34 5 | | 184 | 32 8 | 50 50 60 | Classrooms 10 |
| 10 | | 1, 1 | | 4. | , H~! | 9 | Sc |
| 106 | 29 31 | 15 20 | | 490 | 12 | 86 1 | Scinol Toilits 28 |
| 243 | 141 8 6 11 | 16 37 - | | 182 | 22 21 48 | 10 22 41 | Teachers' Hcuses 10 |
| | | 157 | | | | | Sc. |
| 1 | 11111 | | | 30 | וע אויט | 9 1 1 | School Stores 4 |
| 14 | 19 | 51 μω | SMALLER VI | 7 | 4 4 | | Cimics - |
| 42 | 36 54 | 29 129 | SMALLER VILLAGES PROGRAMME | 1 | 1 1 1 | 1 1 1 | Health Posts |
| S | 111-1 | -11- | RAMME | Sr. | 1 12 | | Maternity Wards |
| 20 | -2126 | 51 12 8 | | 10 | 01 I 10 | 111 | Nurses' Houses |
| ı | 1111 | 1111 | | 103 | 779 | 111 12 4 | Government Houses 7 |
| ī | 11111 | | | 75 | 17 9 4 | 22 7 4 | Courcil Howes 5 |
| 18 | 1010 60 60 | 1 2 2 | | 16 | O 10 10 | ယ ၊ ၊ | Water Supplies |
| 1 | 1111 | | | ∞ | | ∞ - 1 | Roids In Vilages |
| | i i | | | | | | jako e m |

¹Includes one Mother Health Unit

Source: RDU

APPENDIX B: Comparative Estimates For a Block of Two Classrooms

| Soi | ırce | Details | Year | Total cost in Pula | m² Cost rounded | NOTES |
|---------|---|-------------------------------|--------------|--------------------------|--------------------|--|
| Ā. | Larger villages Programme of ARDP including | Traditional | C.1974-5 | 11,109 | 89 | |
| | addition for ceiling at 17½%. | | | | | |
| | (MOW estimate) | Prefab (Modular) | C.1974-5 | 10,543 | 92 | |
| | Trad = 124.6 M ² No. 31 | Average | C.1974-5 | 10,836 | 91 | |
| | Prefab = 114.0 M ² No. 29 | | | 0 9 | | |
| В. | North Kgalagadi 120 m² | Prefab (Continental) | | | | |
| | | Engineering) | | 11,516 | 96 | Estimated final cost after over-runs. |
| C. | Kgatleng District Estimate | | 1975-6 | c.6,600 | | average for two classrooms. No cost overruns on this estimate. |
| _ | | | | | | |
| D. | North-West District Kweneng Southern | | 1974 1974 | 8,400 6,800 | 59 48 | |
| | District | | 1974 | 6,000 | 42 | |
| | Central | | 1974 | 5,800 | 41 | over 75 km |
| | | | 1974 | 4,750 | 33 | from rail. under 75 km from rail. |
| | Kgatleng | | 1974 | 4,560 | 32 | nom ran. |
| — Е. | Central | small contractor | 1974 | 4122-4965 | 28-36) | - |
| | | medium contractor | 1974 | 4548-6111 | 31-44) — | under 75 km from rail |
| | | Council Work Unit small | s 1974 | 51 9 6-5817 | 35-42) | nom ran |
| | | contractor medium | 1974 | 4896-6620 | 33-48) | |
| | | contractor | 1974 | 11,248-11,385 | 81-82) — | over 75 km from rail. |
| | | Council Works Unit | 1974 | 5716-7211 | 39-52) | |

(APPENDIX B - continued)

Sources and Notes:

A. MOW estimate of average final construction cost in large villages programme.

B. Project Memoranda:

Northern Kgalagadi ARDP 2/8/1974 Northern Kgalagadi Cost Overruns 17/1/75

The estimate of 11,516 is an average of 5 double classroom blocks with fencing, contingency and overrun costs, divided between the classrooms and teachers' quarters in proportion to their estimated basic capital cost. Final costs of classrooms were probably somewhat higher than this.

- C. Project memorandum, Kgatleng District Council Primary School Construction, and personal communication from DOD, Mochudi.
- D. Appendix 1 to "Minutes of the First Seminar for District Council Works Superintendents, held on the 5th and 6th February 1975." It is not clear what these figures include and do not include. In order to calculate the M² cost, an area of 143 m² has been taken. While this is much higher than the 124.6 M² of the conventional buildings in the larger villagers and the 114,0 M² of the prefabricated buildings in larger villages, it is preferred since it is an approximate mean for the two types of blocks calculated for Central District one with an area of 138.7 M², and one with an area of 147,0 M². Evidently, Central District at least was building bigger classrooms in the smaller villages than the contractors built in the larger villages.
- E. Central District Council Works Department, "Report on Construction 1975 mimeo, delivered to Works Superintendent Conference, Gaborone, 5th and 6th February, 1975. These figures are stated to be the "real" costs and do not appear to include hidden subsidies from the Council. They include, for example, estimated costs for the maintenance, depreciation and operation of vehicles. They also include an unspecified element for profit. It must be noted, however, that although these calculations appear to have been made carefully and on the basis of experience, they represent estimates and do not represent actual costs encountered in a particular cases. For full details, the reader is referred to the original document.

APPENDIX C: Sources of Finance for ARDP Project (Pula)

| Project | Source of Finance | 1973/4 | 1974/5 | 1975/6 | Total |
|---|-----------------------------|------------------------------|--------------------------------|-------------------------------|----------------------------------|
| —————————————————————————————————————— | SIDA UNICEF | 228,733.8 8,900.7 | 872,979.3 6,728.0 | 941,274.8 | 2,015,988 15,629 |
| supplies | DDF | 13,421.9 | 113,799.5 | 116,412.6 | 243,634 |
| Underground Water developmen | U.K. develop- tment loan | 964 | 14,493.2 | 67,967.0 | 83,424 |
| Contract borehole drilling | DDF | 98,647.18 | 1,073,289.3 | 602,239.0 | 1,774,175.5 |
| Local Authority Development | m Aughterp. | v rentri s 4 k-s | era Politika Patha | 1- 4 | 1 1× 2× 122 |
| Grants | DDF WFP | 384,920.1 | 247,418.0 15,300.0 | 256,824.7 | 889,163 15,300 |
| Fribal Admin. | DDF | 5,826.8 | 23,873.0 | 5,967.2 | 35,667 |
| Basic Health | | | Luver villare | e sendijentou | and about the |
| Services | NORAD UNHCR | 99,785 | 776,800 — | 488,595.8 26,880 | 1,365,180.8 26,880 |
| | Anglo- American | 6,000 | 7. HIII. 5-27.0 | | 6,000 |
| Primary School Equipment | SIDA Danish State | Barroll as I | 312,850.1 | 788,445.4 | 1,101,295 |
| Last button e ceek | Loan | er reliab el e le | 26,108.7 | 67,330.1 | 93,439 |
| Primary school improvement & facilities | SIDA DDF WFP | 408,625 78,447 | 646,710 1,594,853 70,960 | 1,751,540 912,158 9,040 | 2,806,875 2,585,458 80,000 |
| Primary School Stores | DDF SIDA | 52,500 | 157,620 | 39,187.9 52,100 | 248,307.9 52,100 |
| Rural Industrial nfrastructure | DDF | 15,372.5 | 27,534.0 | _ | 42,907 |
| Integrated Office blocks | DDF | _ | 8,271 | 49,786.1 | 58,057 |
| District Council And Admin. | | | | | |
| Housing | DDF | | 1,075,706.6 | 795,880.7 | 1,871,587 |
| Rural Power Supplies | DDF | 60,000 | 8,125 | _ | 68,125 |
| Rural Roads | NORAD | 124,331 | 722,699.3 | 1,134,083.7 | 1,981,114 |
| Major Village Roads | DDF | 64,726.1 | 2,126,212.7 | 1,049,828.3 | 3,240,767 |
| Livestock Saleyards | DDF | . ,- | 7,502 | 50,391 | 57,893 |
| Dams | DDF | | 145,892 | 290,385.9 | 436,277.9 |

Totals by Source

| DDF | 11,552,019 |
|-------------------|------------|
| SIDA | 5,976,258 |
| NORAD | 3,346,295 |
| WFP | 95,300 |
| Danish State Loan | 93,439 |
| UK Development | |
| Loan | 83,424 |
| UNHCR | 26,880 |
| UNICEF | 15,629 |
| Anglo-American | 6,000 |
| | |

Total 21,195,244

Source: Budget Administration Unit, Ministry of Finance and Development Planning.

APPENDIX D. ARDP EXPENDITURE BY PROJECT AND BY DISTRICT 1978-6

| District | % of Ru al Population | Primary Schoo improve- | Rura! Hea'th | Prinary Schoo! Siores | R sral Industrial Infras- tructure | I stee rated Office Blocks | District Council Housing | M. D.A. Housing | Major Village Water Supplies | Small Villages Water Supplies | Boreholes | Rural Poads | Myor Village Rads | TOTAL |
|------------|--------------------------|------------------------------|-------------------|-----------------------------|---|----------------------------------|--------------------------------|-----------------------|------------------------------------|--|-----------|----------------|-------------------------|------------|
| Central | 45 | 1.9 15.340 | 301.320 | 98.640 | | 1 | 292,440 | 275,900 | 615,000 | 35,000 | 241,412 | 199,429 | 1,172,998 | 5,137,429 |
| Ghanz | 01 | 234,060 | 53,000 | 7.320 | 1 | 1 | 44,355 | 133,010 | 102,000 | 46,000 | 87,656 | | 1 | 7.36,776 |
| Kgalatad | ത | 337,240 | 221.000 | 30,870 | 1 | 49,786 | 88,770 | 201,300 | 68,000 | 91,000 | 51,433 | ı | 1 | 1,032,313 |
| Kgalleng | 9 | 3 39,077 | 90.000 | 20,120 | 42,907 | 1 | 101,429 | 95,397 | I | 34,000 | 150,905 | I | 425,216 | 1,239,051 |
| Kwen ang | 12 | 617,832 | 169,230 | 33,744 | 1 | ı | 137,099 | 100,710 | 88,000 | 70,000 | 242,632 | 274, 141 | 292,397 | 2,026,085 |
| No th East | 10 | 75,000 | 100,000 | 14,500 | I | I | 1 | 1 | I | 39,000 | 189,150 | 86,547 | ı | 504,197 |
| North West | 10 | 631,320 | 120,000 | 25,690 | 1 | ı | 59,960 | 130,810 | 225 000 | 5,000 | 104,754 | 1 | 418,935 | 1.721,469 |
| South East | 7 | 295, 221 | 20,000 | 17,426 | 1 | 8,271 | 16,416 | 70,263 | 171,000 | 1 | 51,724 | 1 | 370,277 | 1,012,327 |
| So uthern | 91 | 1.001,418 | 202,820 | 51,856 | Ī | ı | 59,511 | 68,310 | 455 000 | 13,30) | 219,525 | 324,353 | 279,895 | 2,675,694 |
| TOTAL | 100 | 5,406,508 | 406,508 1,277,370 | 300,166 | 42,907 | 58,057 | 799,980 | 1,075,700 | 1,075,700 1,724,000 333,000 | 333,000 | 1,339,191 | 884,776 | 2,959,718 | 16,135,391 |
| | | | | | | | | | | | | | | |

APPENDIX E. A Poverty-Ranking Procedure for Projects

The proposal is simple. The originating ministry would indicate on each project summary (thumbnail sketch) and subsequently on each project memorandum, who would benefit from the project and in which zones. The relevant part of the summary and memorandum would look something like this:

| Who will benefit? | | |
|-------------------|---------------------|--|
| Group | Ranking | |
| Very Poor | eguela 1 | |
| Poor | . > 11° | |
| Small Men | MEDICAL MEDICAL CO. | |
| Well-Off | gos duderos | |
| anking | 1 | |
| Wealthy | | |

| In which zones? | | |
|-----------------|-------------|--|
| Zone | Ranking | |
| Extra-rural | | |
| Cattle Posts | | |
| Lands | | |
| Small Villages | este en 124 | |
| Large Villages | | |
| Urban Centres | | |

NOTES:

Poor:

A preliminary indication of the groups might be:

Very Poor: People without stock and who do not cultivate regularly, including borehole squatters, hunters and gatherers, destitutes, cattle herders and traditional dependents.

People with small stock only and/or 4 or less h/c and/or who cultivate by borrowing

animals for draught.

Small Men: People with small cattle herds (5-20 h/c) or income — equivalent small enterprises.

Well-Off: People with 20 - 200 h/c or income-equivalent medium enterprises.

Wealthy: People with over 200 h/c or income-equivalent larger enterprises.

The ranking (1, 2, 3.....) for group and for zone would be entered in the boxes as appropriate; I being high, and 5 low.

The ranking for the beneficiaries would be based on the expected total long-term net direct benefits to the group.

The ranking for the zones would be based on the total long-term net direct benefits to persons residing in the zone.

The procedure would fit easily into the present system for preparation and submission of summaries (thumbnail sketches) and project memoranda as prescribed in the Planning Officers Manual Chapter 3.

The ranking would often be a matter of commonsense judgement but occasionally, especially where there were disagreements about who would benefit, attempts to quantify might be justified.

In some cases the ranking would be a matter for discussion between the DEA and the originating ministry. The DEA would be enabled by the procedure to monitor the extent to which projects coming forward were directed towards different groups and zones.

Some hypothetical examples can be given:

Project: Health Posts for Remote Areas

| Who will benefit? | | In which zones? | |
|----------------------|--|---|--|
| Group | Ranking | Zone | Ranking |
| Very Poor | 1 | Extra Rural | 1 |
| Poor | 2 | Cattle Posts | 2 |
| Small Men | | Lands | - |
| Well-Off | Zone | Small Village | |
| Wealthy | lenor-small | Large Villages | = |
| | Caule Post- | Urban Centres | 5. 50 |
| | Project: Free Fencing Mate | rials for Communal Gr | razing Areas |
| Who will benefit | Smill Villages | In which zones? | |
| Group | Ranking | Zone | Ranking |
| Very Poor | Linbon Contres | Extra Rural | - 1 1953 |
| Poor | 3 | Cattle Posts | 3= |
| Small men | 1= | Lands | 3= |
| Well-Off | 1= | Small Villages | red self per en en en l'antique a |
| Wealthy | who was a second of the second | Large Village | 2 |
| gar vor for adeases) | a less bicand/acwho ten | Urban centres | Bros-dire-do-s dec |
| -17-18-201 -117- T | Project: Veterir | ary Quarantine Fence | Constitution of the state of th |
| Who will benefit | Programme in the section of | In which zone | es? |
| Group | Ranking | Zone | Ranking |
| Very Poor | 4= | Extra Rural | 4= |
| Poor | 164=100000000000000000000000000000000000 | Cattle Posts | 4= |
| Small Men | on 3 res . See sylving | Lands | 4=11.11.11.11.11.11.11.11.11.11.11.11.11. |
| Well-Off Wealthy | | Small Villages Urban centres Large Villages | 3 1 1 |

Notes: The main direct beneficiaries will be big cattle owners in large villages and urban centres. Permanent employment in maintenance gangs will be created for 2 foremen and 30 labourers, mainly from extra rural and cattle posts zones.

The categories for who will benefit and the definitions of zones have been deliberately left vague at this stage. They will need to be tightened a little and defined a little more clearly. Care should be taken, however, not to be too precise or too perfectionist or the procedure will become unnecessarily laborious.

References

Campbell, Neil M, and John G. Abbott "Botswana's Primary School System:

a Spatial Analysis," mimeo, Institute of Development Management, Gaborone, May 1976.

Folkmann, P.A. "A Study of the building industry in Botswana with the main emphasis on cost" Industrial Construction consultancy, Republic of Botswana, March, 1976.

Guide to the Villages of Botswana, Central Statistics Office, Ministry of Finance and Development Planning, printed by the Government Printer, Gaborone.

NDP 3: National Development Plan 1973-78 Part II: Description of Central Government. Development Projects, Ministry of Finance and Development Planning, printed by the Government Printer, Gaborone, September, 1973.

NDP 4: National Development Plan 1976-81: Part I: Policies and Objectives (draft Ministry of Finance and Development Planning,) printed by the Government Printer, Gaborone, 1976. "Report on Construction — 1974", mimeo, Central District Council, Works Services Department, 1975

Riordan, K.M. ""Self-Help:" A General Discussion," mimeo, January 1975

The Rural Income Distribution Survey in Botswana 1974/5, Central Statistics Office, Ministry of Finance and Development Planning, printed by the Government Printer, Gaborone.

"The Uses of Food Aid in Botswana", Working Paper No. 3, reference STUD/61, (1976)

BOTSWANA'S ACCELERATED RURAL DEVELOPMENT PROGRAMME

EXPERIENCE AND LESSONS

(Contents and Summary Only)

ROBERT CHAMBERS

The ARDP in Quotations

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SUMMARY

The Third National Development Plan 1973-78 set a high priority on rural development. In 1972/73 Botswana achieved budgetary self-sufficiency for the first time and funds became a less serious constraint on development. At the same time the need for rural infrastructure was acute and becoming more In both Central Covernment and more particularly in District Councils, institutional developments, including the creation of the Rural Development Unit reporting direct to the Vice President, and the recruitment of staff to strengthen District Councils, were augmenting the capacity to implement programmes. of opportunity and urgency was enhanced by a general awareness that the Government had not yet been able to achieve dramatic, tangible results in most of the rural areas where the great majority of the people lived and by the steady approach of the date in October 1974 when the electorate would pass their verdict on the Government's performance. The Accelerated Rural Development Programme (ARDP), resulting from a Cabinet decision in November 1973, was a logical outcome.

The ARDP had as a primary objective that projects should be visible on the ground by a target date of 30 September 1974. "invisible" projects were proposed but dropped. Visibility came to mean mainly buildings, roads and water supplies. Building construction was undertaken in 27 larger villages by big contractors and in 195 smaller villages by District Councils and by medium and small contractors. Other programmes were undertaken either by contractors - much of a programme for drilling boreholes in villages, and a programme for tarred major roads through large villages - or directly by Government Ministries or Departments. While a start had been made on most of the programmes by the target date, the ARDP was twice prolonged and finally ended only on 31 March 1976. that time it had cost just over 21 million Pula. Of this sum, the Ministry of Local Government and Lands accounted for 53 per cent, the Ministry of Works and Communications for 25 per cent, and the Ministry of Mineral Resources and Water Affairs for 19 per cent. The Ministry of Agriculture's share was only 2.3 per cent.

The most accelerated and most controversial programme was major roads through villages. 76-79 km of tarred road were to be made in eight of the largest villages. Because of urgency, the

work was put out to tender on the basis of a schedule of rates instead of a bill of quantities. When it was found that the cost would be much higher than expected, the length and width of tarmac were reduced. The final cost of Pula 43,700 per km was high compared with Pula 27,600 for a short stretch of the North-South road constructed to higher specifications. Much dissatisfaction was expressed about the roads, especially the narrow access culverts and the deep ditches. Even at these high costs the roads were, however, probably justified economically because of the growing volume of traffic in the villages concerned.

The construction of buildings in the larger and smaller villages accounted for 43 per cent of all ARDP expenditure. The main components were primary school classrooms, stores and latrines, teachers' quarters, health clinics and health posts, and District Council and Administration housing. After a competitive tender, work in the larger villages was awarded to big contractors using conventional construction for some villages and prefabricated construction for others. There were many complaints about the prefabricated buildings put up by Modular Construction. generally were high. Work was carried out most rapidly in the Northern Kgalagadi where the impact was dramatic. In the smaller villages, District Councils and smaller contractors shared the work. Performance was mixed but more was done than many would have expected. By 31 March 1976, for example, 305 classrooms had been constructed in the smaller villages alone. This may be compared with the five-year target of NDP3 of 700 classrooms in the whole country.

It is difficult to compare the costs of the big contractors in the larger villages and those of the District Councils' Works Units and of small contractors in the smaller villages, not least because many of the costs in the smaller villages were hidden in Councils' recurrent expenditure. However, it is probable that the M² cost to Government and Councils was higher in the larger villages than in the smaller villages. This is partly because of the higher overheads, supervision costs, and wage bills of the big contractors in the larger villages. The ARDP identified and assisted small contractors who became more experienced and more competitive. District Councils' Works Units were on the whole slow, expensive and inefficient. The ARDP not only achieved much infrastructural

building; it also developed the national capability to build.

The school furniture programme, organised by the Botswana Enterprise Development Unit (BEDU), involved two small engineering firms which successfully substituted local for imported fabrication of school furniture and which towards the end of 1976 had become independent of BEDU and were handling a third school furniture contract.

The village water supplies programme used the Domestic Development Fund to engage contract borehole drilling for small villages, thus diverting contract drilling from cattle posts where it would benefit those who were already well off to villages where the water would be of more general benefit. Contract drilling was competitive and fairly cheap. The 25 small villages affected by 31 March 1976 benefitted from their water supplies earlier than they would have done without the ARDP.

In the Ministry of Agriculture both the dams project and the livestock saleyards project suffered from and were delayed by staffing problems, but performance improved. The experience with these two projects illustrates the extent to which implementing capacity rather than finance was the main constraint in the Ministry. It also highlighted the priority of innovations in management to enhance the Ministry's capacity to implement.

Since budgetary self-sufficiency was achieved in 1972/73, implementing capacity has been more of a brake on development than have shortages of funds. In these circumstances it is often rational to use money to buy or expand implementing capacity, which is precisely what the ARDP did by putting work out to contractors.

The speed of the programme did, however, probably mean that some donor funds were foregone. For example, the DDF was used to finance Pula 2.6 million of the primary school improvement programme which might, with less urgency, have been provided by SIDA.

The ARDP was timely, coming as it did near the end of the construction phases of the Shashe and Orapa projects, and helped to level off the trough in capital spending and construction. The overheating of the construction sector by the ARDP has been exaggerated. Statutory wage increases were a more significant factor in higher contract prices, and the ARDP's contribution appears to have been relatively minor, during six months of 1974 of the order of 8 per cent.

The ARDP did little damage to other programmes, since what was delayed or left undone as a result of the ARDP was usually of low priority. The ARDP did, however, provide a convenient scapegoat to blame for delays and deficiencies. It also showed up ministries, departments and individuals responsible for lagging performance, and showed that they could do more and do it faster.

The administrative and accounting load placed on District Councils by the ARDP created a crisis which was largely overcome through streamlined procedures and diligent work by Council staff. One factor was a reporting and monitoring system designed to improve financial and physical monitoring and control. This management system proved effective and has been continued and refined.

The ARDP enhanced implementing capacity. In particular, it increased the capability and credibility of District Councils and competence and confidence of Council staff.

During 1974-5 the ARDP may have generated an average monthly employment for semi-skilled and unskilled labour of the order of 2,000 to 3,000 persons, with a gross payment in wages of Pula 1.2 to 1.8 million, or from 12 to 18 per cent of ARDP expenditure in that financial year. The ARDP does not appear to have led to wage rises. Some additional long-term employment was created, especially through the growth of small building contractors and the new, higher plateau of District Councils' building programmes.

District-wise ARDP expenditures have to be treated with great care in assessing the regional distribution of benefits from the ARDP. Per caput expenditures tended to be high where implementation was relatively easy (South East, Kgdleng) and where special measures were taken to augment implementing capacity (Kgalagadi) and low where implementation was difficult for reasons of scale (Central) or administrative capacity was a special problem (North West).

Except in the North East District, self-help made little contribution to the ARDP. The effect of the ARDP on self-help is difficult to assess but it probably did not weaken self-help much. Self-help has some disadvantages, and will anyway continue for purposes which touch people closely. A sensitive review of VDCs, Community Development and self-help would be timely to see the best way forward.

The ARDP helped to combat the bias of services towards towns

and large villages and to push services out towards the rural periphery where most of the poorest people live. This push continues, and peripheral people are at the same time becoming more vocal and active, using self-help to attract services.

Unfortunately buildings do not ensure efficient services. For example, there is a strong bias against small villages in the proportion of trained teachers and in performance in examinations. The situation was improved by ARDP construction of classrooms, but teachers' quarters do not appear a major attraction to induce trained teachers to work in the remoter areas, especially as Councils' rents are high compared with private rents. Apparently because of high rents, about half the 190-odd teachers' quarters built under the ARDP in Central District are standing empty.

The Plan objective, that "All Batswana, wherever they live and whatever their social background, should have equal access to services that the Government provides - such as education, health and water supplies" requires a positive bias towards the poorer people and the remoter areas. This has implications for both staffing and paying for services. Concerning staffing, a new approach may be needed, including perhaps a period of national service and also special incentives. Concerning paying for services, access to education, health services, and water would be made more equitable if charges for them were abolished in the rural areas. The poor and the very poor would benefit and social justice would be served.

The speed and priority of the ARDP had both costs and benefits. On the cost side, financial expenditure was higher than it would. have been, especially with the programme for major roads through villages and with the construction carried out by big contractors; some outcomes were bad because of lack of local consultation, of inappropriate designs (prefabricated buildings, school furniture, etc.), and of problems of supervision; and there was a bias towards what could be done quickly to the neglect of types of programme needing more care and patience. On the benefit side it is difficult. to separate benefits from speed from benefits from the programme as Facilities were often ready for use years earlier than they would have been. Services were pushed further out into the rural areas. Covernment capacity to implement was lifted onto a new plateau. The priority of rural development came to be better appreciated in Government, especially among urban-biased technical

officers. Developmental changes were forced indirectly through the chain of bottlenecks created by the ARDP. Procedural innovations were made. Government and Councils gained in confidence and credibility. One major lesson of the ARDP is that strong political leadership and a sense of urgency can force and enable the civil service to do more, more quickly and better, than wise and prudent men might advise to be possible.

This selective evaluation of the ARDP is more favourable than the writer expected. Much was achieved and does not now have to be repeated. But development is not bricks and mortar. It is one thing to construct. It is another, and harder, to ensure that services are well staffed, operate well, and are accessible to all. It is yet harder to achieve the national aim of an equitable distribution of income when so many of the poorest people are precisely those who are furthest away, least well educated, worst informed, least in contact with government, and least able to help themselves. The ARDP was a step towards them but only on one front. frontier and the main challenge seem now to lie in the much harder task of ensuring that economic growth means better lives not just for those rural people who are more able to help themselves, but specifically for those who are poorer, weaker, and less capable of taking advantage of opportunities; for those, in short, who tend to get left behind and left out.

Lessons can be drawn from the ARDP experience and suggestions made for the future. These are:

- 1. Concerning infrastructure:
- (i) avoiding crash programmes with big contractors
- (ii) monitoring building programmes
- (iii) taking care over designs
- 2. Concerning implementing capacity:
- (i) building up staff before any large programme
- (ii) using District Councils to undertake construction for Government departments
- (iii) making block grants to District Development Committees
- (iv) pursuing devolution to District Councils and to government staff at the local level

3. Concerning management procedures:

- (i) making management procedures a focus for attention, especially in ministries where implementation lags
- (ii) using locally available management expertise for the collaborative design, testing and introduction of such procedures
- (iii) introducing a poverty ranking in the project identification and appraisal process

4. Concerning political leadership:

- (i) galvanising the civil service into action for priority programmes
- (ii) enabling Ministers to direct and review performance in their Ministries

5. Concerning the poorer people in the rural areas:

mounting a programme for promoting rural equity. This programme, set in the framework of the Fourth National Development Plan, would, like the ARDP, provide support and impetus to existing and new projects. These projects would be selected and designed to focus and accelerate the provision of access to resources, income opportunities and services, to the more disadvantaged people within the rural sector.