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# Development of the NETWORK Project Identification Document Including a Pre-PID Analysis USAID/Botswana

Submitted by:

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*Note: This report is a privileged communication, not to be disclosed except for evaluation purposes.*

# PART I:

## Pre-PID Analysis:
## Issues in Basic Education in Botswana

# PRE-PID ANALYSIS:

# ISSUES IN BASIC EDUCATION IN BOTSWANA

USAID/Botswana

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## FOREWORD

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1 Pula (P) = US$ .53

# 1. INTRODUCTION

## 1.1 Purpose

The purpose of this document is to provide information on the education sector to the team responsible for developing the Project Identification Document (PID) for the Botswana Mission of the United States Agency for International Development (USAID). This is not a complete overview of the education sector. It consists of an initial analysis of the major issues in the nation's basic education--that is, the first 9 years of formal school.

There are several critical issue areas not addressed by this paper. Examples include technical education, the National Literacy Programme, preprimary and senior secondary education, and cost recovery at the tertiary level. They are important concerns of the Ministry of Education (MOE) but they are beyond the scope of this paper.

## 1.2 USAID Commitment to the Sector

USAID has been a major contributor to the education and human resources sector since 1972. Currently it is collaborating with Government on three major projects. These are the Primary Education Improvement Project (PEIP), the Junior Secondary Education Improvement Project (JSEIP), and the Improving the Efficiency of Educational Systems (IEES) project. USAID support for PEIP and JSEIP will end in 1991. Much has been accomplished through these three projects, and USAID wishes to consider working further with Government in the education sector in 1991-1997.

This analytic activity is one of the first steps in the process to design the next education project to be considered for joint implementation by USAID/Gaborone and Government. USAID is committed to a collaborative design process involving the range of individuals engaged in the sector and the Agency (representatives of the Ministry of Education, the Ministry of Finance and Development Planning, USAID/Botswana, the Agency for International Development (AID) in Washington, D.C., and other external assistance agencies) and consultants, as appropriate.

The initial work and this analytic activity have been guided by a Reference Group appointed by the Ministry of Education. The members of the Reference Group are listed in annex A. Members of the team preparing this Pre-PID Analysis interviewed a variety of individuals involved in the education sector during the three-week period of its development. These individuals are listed in annex B. Ministry departments prepared submissions for the team. These are listed in annex C, along with the other documents the team consulted.

## 1.3. Economic and Fiscal Context

At independence in 1966, Botswana's situation did not appear promising. The prospects for agricultural production were poor given the predominance of subsistence farming using traditional techniques and the low soil quality. Botswana is drought prone and even in normal rainfall years receives only minimal precipitation. Under these circumstances Botswana is fortunate that its mineral resources have served as a source of public income. Since independence diamonds have been mined and have enabled the government to undertake significant investment in human resources and physical infrastructure.

Botswana has made an excellent start in addressing population issues and there is now evidence that the rate of growth of Botswana's population is beginning to decline -- from a high rate of about 3.7 percent in the early 1980s to an end 1988 estimate of about 3.2 percent. Nonetheless, the current rate of population growth remains extremely high, and if maintained, threatens to undermine the accomplishments of over a decade of strong economic growth and development.

The performance of the economy of Botswana has been significantly better than expected when the Sixth National Development Plan (NDP6) was prepared. The excellent economic performance has been largely due to export revenues from the mining sector (diamonds) and sound economic policies and management. Botswana's strong economic performance is reflected in: (1) the surplus of government budget which has exceeded 15 percent of Gross Domestic Product (GDP) in recent years; (2) foreign exchange reserves larger than GDP; and (3) increasing domestic liquidity. This in turn, has allowed substantial increases in the Government development program and government recurrent expenditures. Consequently, the original scope of many NDP6 projects have been expanded and new projects added to the plan. In allowing recurrent and development expenditures to rise above the NDP6 targets, the government committed additional resources that could be devoted to economic development in the 1990s. The sectoral growth forecast (1985-1990) for NDP6 projected a growth rate of 4.8 percent per annum. In reality it grew at 9.3 percent per annum an increase of 94 percent above the target. The impact of the mineral sector is reflected in a GDP of 61.5 percent above the estimated target for the Plan period.

Budget forecasts prepared for NDP7 estimate that in the 1990s government recurrent expenditures will increase to approximately 20 percent per annum and taper off to about 8 percent per annum in 1996/97. It is expected that development expenditures will increase moderately and level off to about 6 to 7 percent per annum toward the end of the Plan. These growth rates have been calculated in part on the assumption that government takes full advantage of the opportunities to accelerate the pace of development in the industrial and commercial sectors through appropriate policy actions. Government estimates that for every one million Pula of capital investment about P260,000 recurrent

expenditures are required. Revenues during NDP7 are expected to flatten but it is assumed that any deficits which emerge toward the end of the Plan are sustainable. While the overall financial outlook presents no problems over the next Plan period, the dependence of revenues from the diamond market in particular, justifies a cautious approach to investment.

In view of the expected flattening of government revenues attention should be directed to the institution of cost recovery measures. As household incomes rise, government should consider relieving the burden on public sources by charging the beneficiaries of education and training a larger share of the real costs of providing services. This is particularly relevant at post secondary levels because it encourages growth of equity in lower middle income countries such as Botswana where research has indicated that the private rate of return is particularly high.

## 1.4 Overview of the Basic Education System

Botswana's education system is managed from the Ministry's headquarters at Gaborone and from fourteen district and four regional offices. Basic education consists of nine years of school, divided into primary and junior secondary education. In 1989, there were 585 primary and 127 junior secondary schools with 275,525 and 34,110 children enrolled respectively. There were 8,830 primary and 1,365 junior secondary school teachers. Approximately 35 percent of junior secondary teachers are expatriates. All primary school teachers are Batswana.

In 1985 Government began implementation of a policy of free universal access to a nine-year basic education, the end of which is marked by the Junior Certificate (JC) examination. The system consists of seven years of primary education, two of junior secondary, and three of senior secondary (7+2+3). This policy resulted in an unprecedented expansion in enrollments, particularly at the junior secondary level. In 1989, 80 percent of primary school age children and 41 percent of junior secondary school age children were enrolled. This expansion is being implemented while attention is also being paid to the need to improve management and quality throughout the system.

These increases in educational access have been accompanied by major curricular improvements in basic education (primary + junior secondary) and efforts to improve management at the school, district, regional, and national levels. Nevertheless, misunderstanding surrounding the implementation of the new basic education program resulted in sharp public criticism of the Ministry of Education (MOE). Some of this can be appropriately addressed by the Ministry of Education (MOE) and some rests outside of its domain.

Historically, education was a guaranteed route to improving living conditions. Since independence minimum qualifications

for positions have gradually risen. With recent expansion of the system, this has increased at an accelerated rate. At the same time, improved access has raised the expectations of the Batswana with regard to post-school opportunities. Students, school leavers, and community members expect JC leavers to have little difficulty finding formal employment.

The increase in numbers of JC leavers in recent years combined with high unemployment rates in the formal sector (although these are on the decline) has resulted in a highly visible mass of unemployed individuals between 14 and 16 years of age who do not have jobs and who, in any case, cannot be employed by law until age 16. At the same time, implementation of the new basic education policy resulted in communities expecting even more educational services and support from government. This, combined with perceptions of the complicated employment situation, means there is a pressing need to reactivate the spirit of local involvement and self-reliance with regard to the nation's schools.

## 2. DISCUSSION OF ISSUE AREAS

The introduction provided a brief summary of the environment in the education sector which must be taken into account by those responsible for design of a new USAID-supported project. The system has undergone profound changes and these are still evolving. This evolution is stressing the system. It is essential to address this organizational constraint before discussing specific issues related to the new assistance effort because they will affect implementation of any proposed activities.

The MOE has made extraordinary progress in achieving its targets. It has done this because its staff, although few for the tasks at hand, are dedicated, talented, and hard working. The expansion and the resulting changes that were necessitated in curriculum and teacher support have been possible through extra effort extended by a variety of professionals. This success, however, may be difficult to maintain as the expansion continues.

Government has done an excellent job of controlling the growth of the bureaucracy as it has implemented its National Development Plans (NDP). The down side of this is that the MOE has departments with very large work loads and very few professionals and support staff to carry out their responsibilities. This raises the issue of institutional capacity. Manifestations of this constraint can be observed through the issue of counterparts for foreign technical assistants.

Foreign technical assistants often do not have counterparts with whom to work closely because units are so thinly staffed. This has several negative implications. First, useful on-the-job training is not possible. Second, technical assistants sometimes find themselves in the position of making decisions

for MOE. This is not a good precedent for the nation. Third, much of the Ministry's institutional memory rests with individuals who, by definition, will not remain in the country for an extended period of time. As the expansion program continues and important quality issues are addressed by Government this situation is likely to be exacerbated.

The Ministry is committed to decentralize some of its functions from headquarters. It sees this as a way to improve service delivery to schools, teachers, and students, and to address some of the concerns raised by communities about the relevance of basic education. Experience from other countries has shown that while decentralization may offer the advantages sought by the MOE, it could also require increased management capacity, coordination, personnel, and financial resources. If these are insufficient a decentralized system may be less efficient than a centralized one.

These are only two areas where the MOE shows signs of organizational stress. Others include institutional capacity to monitor educational quality and the information system. The concerns raised about institutional capacity, staffing and counterparts, and decentralization are very real. Though they are only summarized very briefly in this document, their potential to influence a new project's implementation negatively should not be minimized.

In this part of the document we present five general issue areas affecting basic education. These are: educational management, educational finance, curriculum, teacher education, and the relationship between school and the world of work. Specific issues are discussed under each of these issue areas.

## 2.1 Issue Area 1: Educational Management

Historically educational management has been primarily at the central level, with policy recommendations, planning, decision making, and implementation coming from the Ministry of Education. The Ministry of Local Government and Lands (MLGL) has always had an important role to play in primary education. These functional links with MLGL means some aspects of primary education such as teacher assignment and facilities maintenance have always been fairly well decentralized.

The MOE lists its responsibilities as follows: overall administrative coordination of all departments, planning, financial services, materials and supplies, services to departments, maintenance and upkeep services, personnel administration, administrative support services, coordination of public relations and external liaison, and developing administrative and managerial capabilities within the Ministry.

Four general issues falling under the rubric of educational management have been selected for amplification. These are discussed below.

## 2.1.1. Structure of the Education System

A quality basic education system demands a coherent structure with the various elements (such as teachers, curriculum and examinations) well integrated. Currently, the nation is in the process of determining the timetable over which the structure of its system will change.

As noted in the first part of this document, the education system is divided into three phases. It is a 7+2+3 system. Plans for a changeover to a 6+3+3 system in 1989 were postponed because system expansion was absorbing all the energies of the Ministry. The change to a 6+3+3 system will occur in the mid 1990s. The exact date cannot be specified because the change over can only occur after consolidation of the present system is in place.

There are several difficult problems that arise out of this lack of definite changeover date. The major ones in which USAID should take an interest are: curriculum development, examinations, relative costs of alternative systems in the long run, and teacher training. Each of these will be summarized immediately below.

There is a need to address the lack of articulation between the junior secondary and primary curricula. Whereas they appear to be well related in some subjects, this is not so in all cases. (Further detail on this may be found under issue area 2.3, curriculum.) Curriculum development or adaptation is expensive both in terms of time and effort. In many instances it has been found necessary to rely on outside technical assistance to contribute to the task.

The junction between the two curricula in terms of the system's structure is particularly important in relation to the existing promotion policy, and it also bears on examinations. In order to assess students' progress through basic education there are three examinations: one each at the end of the fourth (assessment), seventh (the Primary School Leavers Examination, the PSLE), and ninth (JC) years. A change to ~~either~~ a 6+3+3 system will necessitate significant changes in the assessment and examination system further stressing the Research and Testing Center (RTC) which is already fully engaged in the development of a better testing system (based on learning competencies rather than on fact acquisition).

Any change in the system's structure has implications for teacher training, both preservice and inservice. This also relates to curriculum structure and content. As well as adding costs for retraining activities, implementation will be complex. It would also affect facilities. It is probable that there would be a need for extra classrooms in many schools and additional housing in most locations.

### 2.1.2 Decentralization Plan and Strategy

The primary and secondary education system is already partially decentralized. There are Regional and District Education Officers and Field Advisors who work in the districts. Nine of fourteen planned Education Centers are operating as locations for inservice teacher training (primary and secondary). Furthermore, the Ministry of Local Government and Lands (MLGL) is responsible for school facilities and supplies and still plays a role in primary teacher assignments.

There are plans to decentralize further. The MOE's concept of "decentralization" refers to both decisions and services. The Ministry believes it is important to decentralize for several reasons. More decision making needs to occur at the grassroots level. It is seen as a way of addressing some of the criticism leveled at MOE for being far removed from the communities where schools are operating. Decentralization, it is argued, would improve communication links between ministerial management and the schools. It is also viewed as a way to share the work overload that is burdening those at MOE headquarters in Gaborone.

There is need to determine an appropriate design for a decentralized system to ensure that there is not further bureaucratization of the system. It is important for it to be cost effective. Should it be a departmentalized decentralized system? It will be necessary to delimit roles and responsibilities of the headquarters in relation to regional and district offices. Once that has been determined it will be possible to identify staffing needs at district and regional levels, and to cost this out.

Relationships with MLGL also need to be clarified. Under the current system in a nine-year basic education system MLGL will be providing support for selected services to primary schools and MOE and communities to junior secondary schools. It will be important for this to be coordinated to prevent duplication of effort.

Education Centers were designed to provide district-level access to inservice training to primary school teachers and to serve as nodes in a nationwide teacher network. Their mandate has since been increased to include secondary inservice training and support to DNFE, and a variety of additional demands for teaching and other services are being placed on the existing centers. None of these additional roles were foreseen in their original planning, and the facilities are insufficient for the proposed full range of activities. These centers are not viewed as having administrative functions, but where appropriate decentralized MOE offices might be co-located with them. The future roles and functions of these centers should be determined soon so the adequacy of facilities can be assessed and their utilization in a future project considered. USAID may wish to consider building one education center (at Mahalapye) in its next project if this current commitment cannot be completed under JSEIP.

### 2.1.3 Management Capacity

To continue its commitment of universal access to basic education while maintaining quality, management of the system must be strengthened. Support to curriculum and teacher training activities which are critical to quality education are spread over various organizations and projects without sufficient coordination. In part, linkages do not exist because there is not enough time to develop them. It is not always clear who is in charge or how one set of activities or proposals for new activities fit with others in the same area. This leads to the potential for duplication, conflict, and gaps. (Issues related to curriculum and teacher training are discussed in greater detail later in this document.)

Departments have small staffs. If one member is travelling it may be difficult to get a decision on a relatively simple matter. Those who are in posts could benefit from skills training to assist them handle the multitude of tasks they are expected to complete. Staffing is also thin or non-existent at the district level. In many ways the schools are on their own, with insufficient guidance and support from the district or regional level offices. Again, this is a function of a skeletal staff working over great distances and extremely difficult terrain.

Constraints related to staffing structure are not limited to numbers. A lack of opportunities to move up a career ladder permeates the Ministry. (This problem is not unique to MOE.) There is a large gap in grades and steps between department heads and the other members of departments. As a result it is usually not possible for a department member to become the head if his or her supervisor moves on. It is difficult to understand why particular jobs are assigned specific ranks. For example, instructors in teacher training colleges have lower rank (and therefore less pay) than the headteachers they train. Often the best way to move ahead is to change to another ministry or to join the private sector. A recent job evaluation exercise conducted by the Department of Public Service Management (responsible for all public sector personnel) which was designed to begin to address this matter exacerbated the situation and resulted in a major teacher strike. In addition, there are few activities designed to encourage excellence in teaching.

Several items are worth considering with regard to gender issues in basic education. Females are the majority in the student bodies in primary schools (52 percent), teacher training colleges (80 percent), and the Department of Primary Education at the University of Botswana (82 percent). There may still be a minor problem with regard to boys' access to rural primary school because of their traditional work assignment caring for cattle. Females are also in the majority in terms of staffing the primary system with the sole exception of Education Officers (28 percent). The majority of headteachers is male, but the majority of Deputy Heads is female. Assuming Deputy Heads

will become Headteachers, this suggests that the nation is providing the possibility for females to move up the career ladder into management positions. Females are also the majority of junior secondary students (55 percent). There are no precise figures on gender distribution in relation to junior secondary teachers, status, or advisory and supervisory personnel. Most of the senior level posts in the Ministry are filled by males.

This does raise questions about the overall structure of the management of the sector in terms of gender in the long run. Will this continue to be a female dominated sector at the lower levels? This is probably likely as long as the problems associated with the lack of a career ladder as described above continue.

### 2.1.4 Information System

In this paper the term "information system" is defined very broadly. It encompasses the management information system of the Ministry as well as information and feedback channels between all components of the system (MOE, schools, teacher training colleges, district education offices, etc) and educational research.

With coordinated support from IEES and the Peace Corps, the Ministry is continuing to develop its educational management information system (EMIS). Databases are up and running in most departments and the various units are attempting to standardize their information to the extent possible. There is an urgent need for systems and information analysts in the Ministry. Movement toward requesting posts for these positions seems to have slowed at a time when it is critical to make proposals for establishment posts to be included in NDP 7. Training in operating the databases and wordprocessing programs at the most basic level is needed desperately in almost every unit.

In addition to information needed to serve MOE operations, communities require information about education. In the press of time and because of staffing shortages information and requests tend to be conveyed as commands, with little explanation. To improve its effectiveness MOE must develop improved approaches to information sharing. Radio is an example of one tool which might be used to create a better flow of information between MOE and the community at large as well as with the professional educational community.

"Horizontal" communication linkages are problematic as well. Three examples are selected for illustrative purposes. There is little communication between the different teacher training colleges even though they face similar problems and challenges. Organizational issues between the Departments of Curriculum Development and Evaluation, Teacher Education, and Secondary Education with regard to teacher training create ambiguities, which could be resolved or avoided through better interdepartmental communications. In a more functional area, there is little guidance on how primary and junior secondary curricula should be integrated.

Radio education might serve as a catalyst to establish necessary linkages between curriculum development and pre- and inservice training to maximize use of all appropriate resources and channels. Radio and/or cassette technology could link face-to-face inservice training with the best models available through audio-visual technologies supported by print materials. Implementing these activities could garner support for radio education by demonstrating that it can be effectively articulated with other instructional and training activities.

Throughout the system there are not very well established mechanisms for channeling and using feedback. This problem permeates the management information system as well as less formal parts of the "information system." Schools and communities remain very receptive to and supportive of research activities. Research results have been very instructive to policymakers. An example is the work on teacher actions in the classroom and curriculum implementation that has been conducted by JSEIP and the IEES projects. Yet there are few ways to share research results in ways that are meaningful to schools and teachers.

## 2.2 Issue Area 2: Educational Finance

The financing of education and training is largely supported by the central government. Efforts to shift part of the financial burden to the private sector (i.e. vocational education and technical training) has not met with great success because employers are not supporting on-the-job training or sponsoring students in technical institutions to the extent anticipated. Nonetheless, it is expected that during NDP7 efforts will be made to involve the private sector to a greater extent than in the past.

Total government expenditures, capital and recurrent, on education and training have risen from 16.9 percent in 1982/83 to an estimated 18.3 percent in 1990/91. This percentage also includes training in other ministries (Ministry of Agriculture, Ministry of Local Government and Lands, and Ministry of Health, for example). Recurrent expenditures of the Ministry of Education (MOE) as a percentage of government recurrent expenditure have increased from 18.4 percent in 1983/84 to an authorized estimate of 19.8 percent in 1989/90 and an estimated 19.5 percent in 1990/91. Information on projected recurrent MOE expenditures during NDP7 were unavailable at the time of this report's completion but it is suggested that about 50 percent of the increase in government expenditures would be attributable to the increased expansion of the education system. The actual costs to the system will be the result of the effort expended to monitor and control unit costs of education at the various levels. Unit costs for various levels of education are set out below:

Unit Costs of Education

| Level | Cost Per Student (1) (Pula) |
|---|---|
| Primary | 340 |
| Junior Secondary | 1,000 |
| Senior Secondary | 1,600 |
| University | 11,000 |
| Primary Teacher Training | 2,630 |
| Secondary Teacher Training | 4,500 |

(1) 1988 - 89

### 2.2.1. Cost Information

Government should seek to improve the availability and timeliness of cost data in view of the proposed policy changes under consideration which will directly affect the large numbers of students at the junior and senior secondary levels. Due to the dearth of information it is difficult to determine with any high degree of precision the real unit costs, particularly of junior secondary education and teacher training. The large number and variety of inservice teacher training courses raises questions with respect to cost control which should be addressed in the near term.

### 2.2.2. Recurrent Costs

Any project supported by an external assistance agency must be very attentive to the recurrent cost implications of any of its activities. Careful financial analysis should be an important part of any proposals. It appears that historically there has been a lack of rigorous analysis of recurrent cost implications with respect to major investments by external agencies in the education and training sector.

### 2.2.3. Cost Sharing

The expansion of the junior secondary school (JSS) program was originally based on the development of a partnership where communities served by the JSSs are expected to contribute facilities (land and half the housing requirements for teachers). Unfortunately this arrangement has not been efficiently carried out. It would be appropriate to explore ways to reinvolve communities in this effort.

Since government policy is to provide free primary and secondary education, the MOE should perhaps look at possible areas of cost recovery mechanisms in other subsectors. Most of the funding of

Botswana's post secondary institutions comes directly or indirectly from Government. There are three categories: (1) institutions which are fully financed and students receive full tuition, board, food and pocket money; (2) institutions where a large number of privately sponsored students use the facilities. Although employers pay fees for their trainees they do not meet the "full costs" of the training provided and in any case the fees are reclaimed to a large extent in the form of tax allowances for approved training costs; and (3) university which receives a direct government subvention to cover more than half of its expenditures and the rest (fees and other income) is financed primarily through government bursaries. Thus the lion's share of finance for the post secondary sector comes from the public purse. There is a need to explore the role of the private sector as a supplier of education.

## 2.3. Issue Area 3: Curriculum

The curriculum concerns what is taught; its scope and sequence. Curriculum is defined very broadly. It includes material and other kinds of support in addition to substantive content of the subjects. Primary school curriculum consists of the following subjects: English, mathematics, Setswana, religious education, science, and social studies. At the junior secondary level the following subjects are taught: agriculture, English, mathematics, science, Setswana, social studies, and elective subjects (art, home economics, and design and technology). A major goal of NDP7 is the implementation of the basic nine-year curriculum, including supporting instructional materials.

### 2.3.1 Integration of Primary and Junior Secondary Curricula

The Curriculum Development Unit (CDU) of the Department of Curriculum Development and Evaluation (CD&E) is responsible for curriculum development in consultation with the Departments of Primary, Secondary, and Teacher Education. Curricula are developed under a complex set of procedures. At the primary and junior secondary levels subject area panels meet with professionals in the CDU to develop the scope, content, and sequence of the curriculum under consideration. The CDU cooperates with subject area panels for senior secondary education and, the primary and junior secondary teacher training curricula. Thus, there may be several sets of panels for each subject area.

The JSEIP project has provided technical assistance to the CD&E in a range of areas. The agriculture, art, design and technology, English, science, Setswana, and social studies curricula at the junior secondary level have been assisted and are well structured in terms of content expected learning outcomes, and achievement measures. The mathematics curriculum has not received attention from JSEIP. The primary curricula have received extensive attention from local curriculum developers over the past ten years. It is essential, however, that they be reconciled with the junior secondary ones.

Is there a basic education curriculum? Two overall problem areas are evident. The primary and junior secondary curricula have been developed separately and, as a result are not well articulated. And, the primary curricula, the foundation of basic education, will require some attention before any kind of meaningful articulation is possible. The issues related to making this possible are summarized in the next few paragraphs. This discussion assumes the 7+2+3 structure will remain through the NDP7 plan period.

Basic education must be viewed as a single unit with agreement on what is to be contained in the primary portion and how that builds the foundation for what is covered in the junior secondary part. This will not be a simple matter. It may require restructuring the way curricula are developed. It also involves recognizing the role of the Standard 4 assessment and PSLE as "checkpoints" for progress through the basic education cycle. (This links the curriculum to the assessment and examination processes, and this linkage is discussed below).

All of this has serious implications for training the teaching force, and even the structure of teacher preparation. (This latter point is discussed in more detail under Issue Area 4: Teacher Preparation.) At this time teachers see themselves as either primary or junior secondary teachers and not as partners in basic education. The curricula at the PTTCs and the Colleges of Education at Molepolole and Tonota must reflect the needs of the basic education curriculum. At the teacher preparation level several institutions are involved: the teacher training colleges, the University of Botswana, the CD&E, and the Departments of Teacher, Primary, and Secondary Education.

Molding a single, basic education curriculum will be a major challenge, but one that will have the potential to improve the quality of education significantly. The process of going about this will have to be thought through and planned very carefully. Its successful implementation will depend on sensitivity as well as first rate technical work. Without both, the Ministry will run the risk for having it misunderstood.

### 2.3.2 Monitoring the Quality of Basic Education

Investments in curriculum must be measured in some way. This is one of the roles of the Research and Testing Center (RTC) of the CD&E. Through its testing activities (Standard 4 attainment test, PSLE, and JC) it monitors how well students learn. Its research activities can be fairly broad-based although it has not had a lot of opportunity to engage in research.

Currently the PSLE and JC examinations are norm referenced so they do not measure what is learned as an outcome of curriculum innovations. The Department has decided that it is necessary to move to a system of criterion referenced testing. This is where the careful scope and sequencing of subject curricula in terms of learning objectives is critical. A criterion referenced testing system requires clear statements of learning objectives and an agreed-upon set of standards (criteria) that indicate competency in each learning objective at each level

There is a general concern about the importance accorded to examinations. In response, the Ministry has decided it should introduce continuous assessment of students by teachers into the process that determine students' progress. Student assessment must also be linked to very specific learning objectives, and teachers must be trained to work with continuous assessment.

Any program in testing and continuous assessment has to be closely tied to curriculum development. Although the RTC has made excellent progress, it will need assistance to continue these developments. It needs some hardware, and staff need additional training.

The RTC also wants to improve its research capacity which will enable it to improve its testing program. This is the only way it can be proactive rather than reactive in terms of the tests and prevent major testing errors or misunderstandings. Examples of the kinds of research it would like to conduct include validation studies and research on literacy/reading comprehension.

### 2.3.3 Relevance of the Basic Curriculum

There is a great deal of concern both nationally and among education professionals that the current curricula do not prepare students for the world beyond school. Four general areas deserve further attention with regard to this issue area. These are: population education, environmental education, prevocational training, and guidance and counseling. Any actions designed to address this issue must be planned with great caution so as not to raise the population's expectations of education beyond what is feasible.

The last few years have witnessed an enormous shift in attitude toward population education. One reason for this might be that while Botswana has done extremely well on most development indicators it has one of the highest rates of population growth in Sub-Saharan Africa (outstripped only by Cote d'Ivoire, Kenya, and Zimbabwe). There is a willingness to integrate population issues into the curriculum. This could be done in the social studies and science curricula.

Traditionally, the Batswana have understood very well how fragile their environment is. Population increases, coupled with significant economic growth, have contributed to complicating environmental issues. If the nation is to continue to develop it must pay greater attention to environmental issues. Responses could be integrated into the agriculture, science, social studies, and design and technology curricula.

Often school leavers do not have practice in the very skills that are necessary for entrepreneurship. Examples include basic mathematics skills and an understanding of the different components of income (profits and costs). Such concepts could be easily integrated into classroom activities through the mathematics curriculum. this could be done at an elementary level by such activities as "playing shop."

An understanding of the value of work and the variety of work possibilities might best be introduced through support to the guidance and counseling program. The nascent guidance and counseling program should not be overloaded at this time, but it is possible to consider interventions that would provide information for students and teachers about a wide range of work opportunities (such as how to look for a job and steps to become self-employed) through such things as radio programs, video programs, and written materials.

Radio could be very effective in supporting the curriculum and the guidance and counseling program. For example, programs on the environment and on population issues could be prepared for science and social studies, on money problems for mathematics, and on career opportunities for design and technology and the guidance program. Development of support in these subjects would require close collaboration between broadcasters and curriculum developers.

## 2.4 Issue Area 4: Teacher Preparation

Current issues in teacher preparation for basic education in Botswana have been identified by the various deliverers and supervisors of education, training, and support. Preservice and inservice training, the linkages between them, and teacher supply are the major concern.

### 2.4.1 Preservice Training Varies in Kind and Place

To date, the preservice training of primary teachers has been carried out in the Primary Teacher Training Colleges (PTTCs). Through PEIP, the Department of Primary Education (DPE), University of Botswana has developed the capacity to prepare instructors, called tutors, for the PTTCs. This capacity appears to have been institutionalized in the DPE which can continue to provide this preparation of teacher trainers, although supply and demand factors need further study.

Preservice training for junior secondary teachers takes place principally at the Colleges of Education (COE) although some junior secondary teachers have university degrees. It is not clear to what extent the preservice program is tied closely to basic education since the curricula for preservice are developed by subject area panels with involvement of the CDU.

At present, preservice training for primary teachers builds on 9 years of basic education whereas preservice training for junior (or senior) secondary teachers builds on 12 years of general education, that is completion of the Cambridge Certificate.

The MOE is supporting a plan to upgrade preservice preparation of primary teachers through provision of a 3-year diploma program rather than the existing 2-year certificate program. The scheme would ultimately require entrants to have completed 12 years of schooling, thus bringing primary and junior secondary teacher qualifications closer together. Implementation of this plan will require significant changes in the PTTC program, with consequent curriculum revision, and will

demand provision of opportunities for teachers already in service to reach these same qualifications through alternative means. Implementing such a plan, not yet approved by Ministry of Finance, has important implications for the MOE. These are financial, managerial, and substantive.

Financial implications at the simplest level are twofold. First, the proposed new system will increase the costs by increasing the number of student years in both teacher education (formal education prior to receiving teacher training) and preservice training. Second, it will require significant costs in preparing a new PTTC curriculum and associated materials development. There are long-term implications as well. The recurrent costs of diploma holders in the teaching force will be significantly higher than those for certificate holders.

The managerial and substantive issues are much more complex and perplexing. Essentially it is a question of whether it is appropriate to proceed with a new type of PTTC prior to resolution of issues relating to the relationship between teacher education/training and the 9-year curriculum, and the relationship between teacher training and improvements in student learning. If the MOE is committed to a 9-year basic education with an integrated 9-year curriculum, then it follows that policies and strategies for teacher education should be consistent with the 9-year program. In the short-run this involves linkages between the Departments of Curriculum Development and Evaluation, Primary, Secondary, and Teacher Education and the teacher training institutions. In the long-run it raises questions about the wisdom of training two types of teachers. Would it be better for the system to train basic education teachers who either specialize in primary or junior secondary, or who specialize in "up to Standard 4," or "up to PSLE," or "up to JC"? Furthermore, in light of recent research findings it would be desirable for government to consider Cambridge Certificate as an entry requirement combined with two years at a teacher training college as an alternative to the proposed three year diploma program.

### 2.4.2 Inservice Training Occurs Through a Variety of Structures

To date, much of the inservice training for primary teachers has been carried out by staff of the Department of Primary Education, University of Botswana in conjunction with the Primary Department, MOE. There is a desire to decentralize the delivery of inservice training through the venues of the Education Centers and the services of education officers in the field. Before the completion of PEIP, the providers of inservice training will have carried out at least one round of training of trainers. Regional Education Officers will hold workshops for the Headteacher, the Deputy, and one senior teacher from each school. They will in turn hold workshops for their own schools. This could be the pattern for continuing inservice training.

Junior secondary inservice training follows a somewhat similar pattern but under different management. The Secondary Department in collaboration with an inservice training advisor under JSEIP carried out training. In the past training was centralized, but a new decentralized scheme is currently being implemented. Under the plar, a number of Field Education Officer (FEO), at present more than 20, under the administration of Regional Education Officers (not yet appointed) and under professional supervision of the inservice training advisor at MOE will visit junior and senior secondary schools to work directly with teachers and heads of departments. In addition, they will hold workshops in the region.

There are a number of implementation problems in both the primary and secondary schemes. The major one perhaps is how to develop a career ladder for the education officers who, at the moment, hold a rank no higher than Headteacher but usually lower.

Currently, training is delivered in conventional face-to-face sessions. Face-to-face interaction between trainers and clients is most desirable to the extent it is affordable. Alternate delivery systems should be explored if cost is an issue. Cost-efficient media such as radio and cassettes and educationally effective media such as video should be explored to augment and/or replace some face-to-face training. Decentralized delivery through the Education Centers coupled with centralized media intervention could provide an effective means for continuing inservice training.

Whatever revisions are made in preservice training, if any, it is likely that continued inservice training for primary teachers will be desirable and in some cases necessary to equalize the qualifications of teachers. If PEIP meets its targets for training trainers, an infrastructure for continuation of this training will need to be nurtured. If JSEIP successfully implements its system of inservicing, this provides another model which should be monitored for effectiveness.

Inservice training for Headteachers (carried out under PEIP) and Headmasters (supported by the Overseas Development Agency, ODA) should continue as teacher qualifications are raised. Serious leadership problems could arise if teachers are significantly more qualified than their supervisors.

### 2.4.3 Stronger Linkages

The newly created Department of Teacher Education of MOE should assume the responsibility for inservice training and coordination between pre- and inservice training as well as other teacher support. The structure for doing this, however, is not yet in place. Since these services were carried out by other units in the past, it may be some time before the Department of Teacher Education to able to fit all of the pieces together. It should be supported in its effort to do so. Rationalization of preservice and inservice training is necessary. The purposes for pre- and inservice training need to be clarified. This will require established linkages between the Departments of Teacher Education, Primary Education, Secondary Education, PTTCs and COEs. In addition, linkages need

to be strengthened between pre- and inservice training activities and the Curriculum Development Unit.

At present, two very different structures for delivering training exist. Both may have validity, but each requires analysis in terms of cost and effectiveness. With respect to effectiveness, only a start has been made to measure the effect of training on classroom behavior. Systematic assessment of teachers' performance coupled with appropriate training must be coordinated through the Department of Teacher Education.

### 2.4.4 Teacher Supply

Because teachers' salaries account for the majority of the recurrent education budget (about 65 percent), it is important to use the teaching force as efficiently as possible. Three issues deserve considerable attention: deployment, expatriate teachers, and underqualified teachers.

With respect to cost, teachers may be inefficiently deployed. An initial assessment of the distribution of the secondary teaching force in 1989-90 indicates that there may be an oversupply of as many as 800 teachers who are on full salary. Better information is essential for this problem to be fully understood and addressed.

One educational burden (financial, socio-cultural) faced by the MOE is the large number of expatriate teachers. Phasing out these teachers is tied directly to pre- and inservice training. In basic education this is felt only at the junior secondary level. Proposals have been made to reduce the percentage of expatriate teachers at all levels from approximately 50 percent to 5 percent by the end of NDP7.

Many of the expatriate teachers are Peace Corps Volunteers (PCVs). Employing them does not have the same cost implications to MOE as does employing other expatriates. Nevertheless, the PCVs' contribution to education will need to be reassessed and new assignments in other areas identified if the Ministry moves ahead with its localization plans.

Planned reductions in the number of underqualified teachers should result in a reduction from 21 percent unqualified to 1-4 percent by 1994 provided proposed training plans are implemented.

## 2.5 Issue Area 5: Education and the World of Work

Despite impressive economic growth, Botswana faces problems of employment creation as a result of a rapidly growing labor force, the capital intensive nature of the mineral sector, and the constraints in the expansion of manufacturing and agriculture. Within the modern sector the government is the largest employer, about 40 percent, and has shown the greatest growth rate particularly through the expansion of education and other social services. Despite the remarkable growth in formal sector employment, the number of Batswana entering the labor market each year remains significantly above the number of jobs created in the formal sector.

### 2.5.1 Rural/Urban Disparities Continue

About 80 percent of Botswana's population residue in the rural areas and, for the most part, engage in traditional farming and other rural activities on the country's tribal lands. Low and declining agricultural production, not just in relation to Gross Domestic Product (GDP), also indicates that the rural population has not substantially benefitted from Botswana's phenomenal economic growth. The decline in rural productivity has meant that to a large extent, the rural economy has been sustained by transfers from family members working in the modern sector in Botswana or the Republic of South Africa, and Government programs of drought relief and labor intensive public works.

### 2.5.2 Employment Aspirations Outstrip Opportunities

A major issue which Botswana must face is the widening gap between the aspirations of the population for formal sector employment and the number of formal sector jobs being created by the development process aggravated by the upward revision of job qualifications. The unemployment rates are highest among young people between the ages of 12 and 22 especially in urban areas because they lack relevant skills and work experience, aggravated by systematic expansion of successive cohorts of first-time job seekers. This implies that there are two main types of unemployment: structural and deficient demand.

This mismatch has resulted in large-scale visible unemployment which now stands at around 20 percent, mainly in the urban areas and major villages, and underemployment which, though hard to measure, is increasingly observable. These problems would be exacerbated if mineral revenues fell and if net public sector employment increases were thus no longer an option for labor market entrants.

### 2.5.2 Need For Greater Emphasis on Employment Creation

This leads into the policy area of employment creation which should be based on a broad definition of employment -- including productive economic opportunities in the rural and informal sectors as well as formal employment. the gap between the legal age to work (16) and the age of most JC leavers (14) should be addressed because this has a significant effect on measurement of unemployment. Economic expansion and job creation will continue to require foreign investment in Botswana and the introduction of more sophisticated technologies will inevitably mean a continued need for skilled expatriates, along with increasing the demand for more highly skilled and trained local manpower. There is a serious shortage of high and middle level skilled Batswana. The Government has been able to reduce the number of expatriates working in government from 11.9 percent in 1977 to 5.0 percent in 1989. However, there still remains about 7,500 non-citizens largely in the private sector.

### 2.5.4 Increase in JC Leavers Will Aggravate Employment Opportunities and Stress Senior Secondary Access

Another issue which will have serious implications for education and the world of work in Botswana is the sheer increase of grade 9 school leavers and the inevitable pressure on secondary level education. The proposed shift to a 6+3 (basic education) structure envisions a 90 percent promotion rate from Standard 7 to Form 1 by 1995 in order that the shift to 6+3 structure take place in 1996. This will result in an increase in junior secondary enrollment of more than 63 percent with enrollment increasing from 73,500 in 1995 to 119,500 in 1996. This in turn, will place increased pressure to provide universal access to senior secondary education. The Government is presently concerned about the number of junior secondary leavers who will be unable to find jobs in the formal sector or able to get places in senior secondary schools or training institutions.

### 2.5.5 Links Between Education, Training, and Labor Market

Two criticisms heard are the failure of training to match job requirements and that the content of training does not match employers requirements. In part, this perceived "external efficiency" problem appears to be exacerbated due to the lack of coordination among the training institutes.

There is a serious need to obtain a better inventory of skills and labor demand projections in the private sector. There are shortages of workers trained at the artisan level (welders, carpenters, painters, for example). Government's policy of increased access to higher levels of education means that the bulk of school leavers are at junior secondary level. There is a serious need for curriculum reform at this level which should stress skills which are in short supply in both the private and public sectors (for example, bookkeeping). Consequently, there should be an increasing emphasis on skills and attitudes related to self reliance and the dignity of work.

While the formal educational system should focus on instilling general rather than specific skills, the private sector should be encouraged to undertake specific skills training.

Annex A

## GOB/MOE REFERENCE GROUP FOR NETWORK

| | | |
|---|---|---|
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# PART II:

# Project Identification Document

3rd Draft
Revision

**BOTSWANA**
**Project Identification Document**

# ACRONYMS

| | |
|---|---|
| ADB | African Development Bank |
| AID | Agency for International Development |
| CD&E | Curriculum Development and Evaluation |
| CDU | Curriculum Development Unit |
| COE | Colleges of Education |
| COP | Chief-of-Party |
| DTE | Department of Teacher Education |
| EEC | Economic Committee of Cabinet |
| EMIS | Educational Management Information System |
| GOB | Government of Botswana |
| HRDO | Human Resources Development Officer |
| IEES | Improving the Efficiency of Educational Systems |
| JSEIP | Junior Secondary Education Improvement Project |
| LCDSS | Limited Country Development Strategy Statement |
| MOE | Ministry of Education |
| NDP | National Development Plan |
| ODA | Overseas Development Administration (British) |
| PEIP | Primary Education Improvement Project |
| PID | Project Implementation Document |
| PTTC | Primary Teacher Training Colleges |
| RTC | Research and Testing Center |
| SIDA | Swedish International Development Agency |
| SKIP | Sectoral Keynote Issues Paper |
| UB | University of Botswana |
| USAID | United States Agency for International Development |
| WID | Women in Development |

## I. Introduction

The Government of Botswana has made a firm commitment to Education for All through the first nine years and has embarked on an admirable expansion program. The GOB has given highest priority to developing a more effective and higher quality basic curriculum. The education sector is well endowed (-- % of the annual budget) and significant resources are going toward quality improvements. The interest of communities in education is intense and the MOE pays close attention this interest. One of the credos of the GOB is that the provision of free basic education is a fundamental means to ensure that the benefits of growth spread to the rural areas and to the poor.

At the same time, Botswana's economy is at a turning point as diamond revenues peak and government revenues are predicted to taper off. If development in Botswana is to be made sustainable, the non-traditional private sector will need to play a much larger role in the growth of the economy. To encourage growth in economic activity, Botswana needs a more highly educated and better skilled workforce. Problem solving skills, analytical and decision making abilities and an understanding of the world of work on the part of the labor force are needed for a diversifying economy. These needs can only be achieved when changes are achieved in the classrooms. This entails curriculum changes and a focus on school level and school based improvements.

This shifting of emphasis can occur within the context of the 3 themes which currently guide both the MOE and USAID efforts: managing expansion, maintaining quality, and linking education with communities.

The necessary components to address these issues are in place and have been greatly assisted by previous and ongoing USAID projects. The PEIP project has contributed significantly to quality improvements in the delivery of teacher training and JSEIP has aided in the establishment and development of the CDU. Now, to ensure effectiveness and sustainability, it is necessary to incorporate the work and operations of the CDU with other units of the MOE. Based upon extensive analysis and thorough consultation, the GOB has asked USAID to join in this effort as a capstone to USAID's involvement with the Ministry of Education It is appropriate to base a project at the CD&E to effect broader organizational improvements within the MOE. Working within the CDU will provide a venue for getting the curriculum working throughout the subsector and ensuring that it becomes integrated into the teacher education, examination, and research systems.

The focus must be upon capacity building and process systemization. The U.S. has a comparative advantage with the curriculum development and application process and with attempts at making curriculum relevant. The MOE is cognizant of this advantage and has targeted its request to USAID for assistance in this crucial area. A project with this focus will produce the logical culmination of USAID's assistance in education.

Thus, a curriculum based project can serve as the linchpin that will connect changes in the classroom to evolving workforce requirements, (internal and external efficiency) provide a venue for dealing with critical organizational issues within the MOE, and have real people level impact e.g. change in teachers and students in the classrooms.

The education system in Botswana has made admirable progress toward universal basic education and USAID has provided significant inputs to the institutions and systems. To continue to maintain expansion without sacrificing quality and to strengthen the relationship of education to the changing economy, the GOB has asked USAID to join in this effort as a capstone to USAID's involvement with the MOE. Project accomplishments will be to introduce a reconciled and integrated basic education system, develop a more effective curriculum, and help foster a facilitative management system for curriculum development implementation. The beneficiaries will be students who will learn from a better basic curriculum as they move onto higher education; and who will have a better understanding of basic attitudes related to work, enterprise and in such key subjects as environmental education, family health, work related skills, and career development counselling. Longer-term benefits include children, youth who are better equipped to move into the job market and to contribute to the overall development of the country.

Assistance will provide for U.S. advisors posted in-country and several consultancies, a substantial amount of training plus a limited amount of commodities. The total U.S. contribution is $7.88 million. The GOB contribution will be 3% or __ or $ million. This does not include the GOB contribution to construction, equipping and staffing of schools during the period of the project. This GOB contribution will be $ million or times the amount of the AID support to the nine year project.

## II Program Factors

### A. Conformity with Government of Botswana Strategy/Programs

Botswana's vision of a national education system resulted from the deliberations of the 1977 National Commission on Education which are published in the White Paper (1977). That vision was for an expanded and transformed quality education system that is now being instituted. Under the Sixth National Development Plan (NDP6) for 1985-90 implementation of a policy of universal access to junior secondary education (ie. 9 years of basic education) was begun. The Government of Botswana is continuing to implement this plan for an improved and expanded education system.

The Midterm Review of NDP6 acknowledges the problems the expansion has placed on the education sector. It emphasizes the role of education beyond closing the gap between the demand for and supply of skilled manpower. It also stresses the importance of maintaining and improving quality.

As the NDP6 period draws to a close, the GOB is in the process of developing NDP7 (1991-96). The October 1989 Sectoral Keynote Issues Paper (SKIP) for education and training identifies three major policy issues to be addressed during NDP7. These are management capacity, maintaining quality during expansion, and effectiveness of the system. Under these broad issue areas it cites the following as the focus of the Ministry of Education (MOE) with regard to curriculum development and evaluation:

> The major focus of curriculum development during NDP7 will be the development of the 9-year basic education curriculum and supporting instructional materials. Special attention will be given to the 6-3-3 curriculum in preparation for the changeover. Test procedures and assessment systems would be initiatiated for testing the new Jr. Secondary curriculum.

In January 1990, the briefing for the Economic Committee of Cabinet (ECC) argues that the first priority within education must be the provision of universal basic education. This emphasis was reiterated in an April speech by the President, Dr. Quett Masire. The project will contribute directly to the GOB's basic objectives and its goal is consistent with the NDP7 plan for curricular activities. Its emphasis on relevance and the world of work is in line with the approach proposed in the ECC's briefing. Furthermore, by integrating issues surrounding girls' education into the project it reflects GOB policy that "it is important not to regard women in development as a separate, compartmentalized subject" (ECC Briefing, p.3).

The design of the project comes at an opportune time. It melds well with the development of NDP7, making it possible for the MOE to include the project goal, purpose, and activities in its

Plan Submissions. The Mission has developed a consultative strategy for project design. The constraints analysis on the sector, which is appended as annex ___ , was developed collaboratively between USAID and the MOE. Thus, the perception of the problem needing to be addressed by the project is one that has been mutually agreed upon. Final selection of the project focus was the responsibility of MOE. This collaborative process will allow for joint ownership of the project which is important for long-term sustainability of its activities.

B. Relationship to AID Strategy

As stated in the Limited Country Development Strategy Statement (LCDSS) for FY 1991 the overall goal of the USAID country program in Botswana is to help improve the quality of life through broad- based, private sector led, sustainable economic growth which should lead to increased household incomes. State _____ conveyed AID/W concurrance in developing a curriculum development effort. The project will support AID strategy by seeking to raise the level of basic education through the following interventions: (1) support for the develoment of a more effective and integrated quality 9-year curriculum reflecting skills development needs and attitudes appropriate to the world of work; (2) improved management and policy environment both in terms of procedures, formal and informal, organizational infrastructure and policy development and evaluation in the areas of resource allocation and curricular and academic policies as related to the 9 year curriculum; (3) increased community consultation and contribution; and (4) improved and strengthened implementation strategy that prepares communities, schools, and teachers for educational change and acceptance of new technologies for quality education.

The project is also highly consistent with the AID Action Plan for Africa. The Plan spells out the need to continue recognition and support for those countries that have demonstrated strong commitment and performance in delivering quality education and Botswana certainly qualifies; Botswana ranked third among the Plan's highest ranking "performance countries". The Plan specifically addresses two targets. Target 1-3 is to support increased equity and efficiency in the provision of key public services along with the recognition of the importance of formal education to the development of job skills and productivity. It considers Target 3-3 which is concerned with expanded skills and productivity on the job assuring equitable access to skills training.

C. Relationship to Other Donor's Activities

Four other external assistance agencies are providing support to the basic education system. These are the Overseas Development Administration (ODA), the Swedish International Development Agency (SIDA), The World Bank, and the African Development Bank

(ADB). Like USAID, both ODA and SIDA have a long history of participation in the sector. The ODA is beginning another 3-year cycle of assistance to the sector. It provides support to both primary and junior secondary education. The ODA provides expatriate personnel at the basic education level in pre- (12 posts) and inservice (21 posts) teacher education, inservice teacher training workshops (in coollaboration with USAID's Primary Education Improvement Project-- PEIP), books and training. There is excellent cooperation between PEIP and ODA personnel. The SIDA provides funds for the Educational Broadcasting Unit, which is currently part of the Department of Curriculum Development and Evaluation (CD&E) and for teaching aids production. Some assistance is also provided for teacher training in special education. SIDA places strong emphasis on gender issues and supports this through research and assistance to career guidance materials production.

Funds from the Fourth Education Loan from the World Bank have been used to construct primary classrooms and junior secondary schools for the expansion and to underwrite several important studies. A loan from the African Development Bank (ADB) has supported facilities construction for the junior secondary expansion. The Government of Japan may provide audio-visual equipment.

## III. Project Description

### A. Perceived Problem

The key problem addressed by the project is the need to strengthen the capacity of the MOE for developing and implementing an effective and fully integrated well articulated 9-year basic education curriculum. A good curriculum must be developed but it must also be properly implemented in the classroom if there is to be a high quality and efficient basic education system where students learn. A focus on the 9-year basic education curriculum was decided upon after extensive analysis amd in depth consultation with the Ministrty of Education.. The appended constraints and issues analysis resulted in identification of 3 areas in which USAID could assist: curriculum, management or teacher education. After extensive consultation and an assessment of needs and available resources the MOE requested that USAID support its basic education curriculum activities. At the same time, there will me managment and teacher education...related to the curricula.)

As noted in the appended constraints analysis that was prepared for the development of this PID, a great deal has already been accomplished in support of a 9-year basic education curriculum. This is particularly noteworthy in light of the substantial expansion that has also occurred over the same period. kFurther changae and the actual consolidation of the curriculum remains, however, and, to ensure that it is implemented appropriately in classrooms, it is essential that (1) there are quality controls and (2) all components of the sector affecting curriculum implementation are "in step."

Integration needs to occur in two ways. First the primary and junior secondary curricula need to be aligned in each subject, ensuring that each new concept introduced has a sufficient foundation. This will take some rearrangement of the way material is presented and attention to appropriate levels of detail. Second, it is essential that there are effective relationships across subject areas as well, allowing children to understand at an early age the integrative nature of knowledge and knowledge building.

This need for a reassessment of the scope and content of the basic education curriculum provides an excellent opportunity to develop further the capacity of the Curriculum Development Unit (CDU) to introduce knowledge, skills, and attitudes into the curriculum that have not received a great deal of attention to date. Examples include gender issues, career information, and attitudes towards work.

Once the curricula have been aligned, each with specific learning objectives, it will be possible to use a system of quality control which is essential to monitor how well learning is occurring. Two separate, but related, activities need strengthening in this regard. The MOE recommends that the examinations system needs to be improved and a reliable

continuous assessment system introduced. Good examinations and continuous assessment systems will allow assessment of classroom learning and the effectiveness of the curriculum. Completion of these tasks (curriculum reconcilation and quality control systems) will help make it possible for Government to implement its policy decision to change basic education from a 7-2 years to a 6-3 years system from a curricular standpoint.

Examination and assessment data alone are insufficient to monitor progress and costs, both essential inputs to assess educational efficiency. There is a critical need for an accurate and timely system of data collection, storage, and management for the sector. Departments and units require information for daily decisionmaking and this needs to be housed in a central place, preferably the MOE's Planning Unit.

The curriculum development process is dynamic. To be effective both the development and implementation of curricula must involve a range of individuals and organizational units. There is a need to realign relationships in this regard ensuring that the organizational and decisionmaking structure is the most effective for the dynamic processes at work. This realignment must occur at the policy and operational levels. The CD&E needs to clarify and strengthen its linkages with the Primary Teacher Training Colleges (PTTCs), the Colleges of Education (COEs), the University of Botswana (UB), the Department of Teacher Education (DTE), and the Ministry's Planning Unit. An improved management system can improve the CD&E's efficiency, allowing maximal use of available resources.

Both JSEIP and the IEES project have provided assistance essential to addressing the problem described immediately above. A "bridging" effort is now required. One that will take what has been done so far and move it forward into a sustainable system of curriculum development that supports quality education and will be the capstone of USAID assistance to education in Botswana.

## B. Project Goal and Purpose

The goal of this project is to raise the quality of basic education in a well-managed, expanding system that is linked to the communities it serves. The specific purpose of the project is to assist the MOE to develop and further integrate and strengthen an effective, well-managed, 9-year basic edcuation curriculum for all students while ensuring quality.

## C. Expected Achievements/Accomplishments

Attention to 3 critical areas or components is essential to achieve the project purpose. These are: (1) developing a more effective curriculum; (2) introducing a reconciled and integrated basic education system; and (3) fostering a facilitative management system for curriculum development and

implementation. Achievement in each will depend on MOE initiatives assisted by the project. Anticipated project outputs and their contribution to achieving the project's purpose are described below under each of these components.

Component 1: More Effective Curriculum

The following 3 outputs will indicate that the constraints against an improved curriculum have been overcome.

1A. Curriculum is relevant to all students and facilitates their persistence and progression to higher levels of education/training and to the world of work (for example, environmental education, family life education, work-related skills, career development counseling).
1B. Strengthened capacity for research and evaluation on curricular issues (eg. curricular effectiveness, gender concerns, examinations, materials use, and community attitudes)
1C. Improved assessment and feedback mechanism on the effectiveness of the curriculum in relation to student learning

Component 2: Reconciled and Integrated Basic Education Curriculum

Achievement of the following 3 outputs will indicate the constraints that currently hamper an integrated 9-year basic education curriculum have been alleviated.

2A. A clear policy/strategy on curriculum development
2B. Skills and capacity exist in CD&E to manage basic education curriculum development
2C. An integrated 9-year basic education system is in place.

Component 3: Facilitative Management System

Achievement of the following 6 outputs will indicate that the management constraints to an efficient curriculum development system have been addressed successfully.

3A. Improved management environment in CD&E
3B. Improved information system which enables efficient personnel deployment
3C. Assessment and examinations linked to the curriculum
3D. Functional relationships exist between CD&E and teacher development
3E. Improved interactions among all involved in implementing the 9-year curriculum
3F. Recommendations on alternative means to deliver the curriculum to non-traditional learners such as pregnant girls and remote area dwellers

## D. Project Outline and How It Will Work

The project takes a systematic and holistic approach to improve the efficiency of learning by focusing on the nation's basic education curriculum. Although there are 3 distinct project components, the project recognizes they are closely interrelated and must be interactive for the project to succeed. The approach selected is primarily one of capacity building with a commitment to affecting change at the classroom level. The activities that comprise each of the components are described below. These activities will only be successful if MOE staff and USAID representatives share ownership of this project and have a vested interest in all its activities eventually being assumed by Batswana. This description is followed by a summary of the proposed mix of inputs that would allow achievement of the project purpose. A final part addresses the structure of project implementation.

### Activities that contribute to project purpose

For Botswana to develop and implement a more effective, reconciled and integrated basic education curriculum it will be necessary for one department, CD&E, to have prime responsibility for curriculum development and be able to carry out this responsibility. USAID support will assist in developing processes and procedures that facilitate planning and managing the curriculum development task. It will also provide specialists in one or two subject areas (for example, Setswana and social studies) to assist develop capacity and processes for vertical integration within these subjects with an aim to developing abilities to transfer these processes to all other subjects.

There are two general thrusts in defining a more effective curriculum in this project. The first addressses curriculum content as it relates to external efficiency, and the second addresses the capacity to monitor internal efficiency in terms of the relationship between what is learned and the basic education curriculum objectives (quality). USAID support will assist in developing "modules" for or integrating information on topics such as gender concerns, the value of work, and environmental and family life education issues into appropriate subject areas. It will help strengthen the examinations and continuous assessment activities so classroom learning indicators can be monitored. It will also institute an effective applications research capacity by establishing a small grants program for research.

A facilitative management system is essential for the changes necessary to sucessfully complete the activities mentioned above. The project will address the linkages (both curricular and organizational) essential for an efficient curriculum development and implemtation system. This aspect of the project will emphasize improved links to the communities schools serve

and the linkages between the curriculum and teachers (in schools and in the teacher training institutions). It will also develop capacity to implement pilot projects.

Inputs that enable project activities

Proposed inputs for the project are listed below.

1. Technical Assistance -- ($3.99m)

The contractor will provide 4 technical advisors, and one locally hired advisor. One of the technical advisors will serve as Chief-of-Party (COP). The COP will be responsible for directing project work and staff in-country, managing all consultancies to ensure they are timely and appropriately sequenced, and instituting and implementing the small grants program for curricular research. All advisors will work with host-country counterparts.

A curriculum planner will be responsible for ensuring that the skills and knowledge from technical assistance to the "vertical" (reconciliation) and "horizontal" (integration across curricula and introduction of "modules") is institutionalized, assisting MOE with the development of an improved management environment, and developing mechanisms to incorporate research results into the curriculum development process. A test and measurement specialist will be responsible for an enhanced examinations system and developing and instituting a functioning system of continuous assessment. A teacher education specialist will be responsible for assisting develop mechanisms which facilitate the articulation of CD&E with other organizations involved with the curriculum, particulary the teacher training institutions, the University of Botswana, and the Department of Teacher Education. This responsibility includes attention to links to both pre- and inservice teacher training. A locally hired gender specialist will provide technical assistance related to gender issues across all three components.

2. Technical Assistance -- Consultants ($.84m)

The project will rely heavily on short-term consultancies. Sixty person months are anticipated. Consultancies will be provided in the following areas; subject specific, guidance and counseling, "the world of work", testing and evaluation, continuous assessment, materials development, computer systems/programming, applied research, organizational management, information systems, and pilot projects.

3. Training ($.9m)

Training will be an important part of the project. All technical advisors will have a training component included in their scopes of work. This training will be geared to fully develop local capacity. In addition, training will be available both out-of-country and in-country and 40% of all

training will be allocated to women. Approximately 6 masters degrees will be included in the project. Training will include, but not be limited to, the following areas: information systems, curriculum development and planning, subject-specific, materials development, applied research, field operations (for Education Officers, for example), counseling and guidance, gender issues, assessment, environmental education, and program evaluation. (Additional training will be supported by the GOB and ODA.)

4. Commodities ($.35m)

While the bulk of required materials and equipment will be provided by the MOE as part of its contribution to the cost of the project, USAID will provide some commodity support. Commodity support from USAID will include 4 vehicles and computer equipment for the Research and Testing Centre (RTC) and the educational management information system (EMIS). Commodities will be procured by the prime contractor.

5. Other Direct Costs ($.5m)

This item will cover office supplies, equipment, and maintenance; communications; vehicle maintenance; support staff in the project office; and workshop costs not covered under training.

6. Monitoring and Evaluation ($.3m)

Funds will be reserved for direct USAID disbursement for a mid-term and final evaluation.

7. Project Coordination ($1m)

To ensure tight management and timely delivery of products and reports sufficient funds are set aside for project management and internal evaluation. It is essential that the contractor develop, in collaboration with CD&E a managable but serious monitoring and evaluation component that monitors impact on selected indicators. This should be closely linked to the strengthening of the EMIS in the Planning Unit of the MOE.

Structure of Project Implementation

The project will be implemented over a 6 year period. USAID, in collaboration with the MOE, will competitively select a prime contractor capable of managaing all aspects of the project. Because much of the capacity building in substantive areas will depend on short-term technical assistance the contractor will need to be able to demonstrate both depth and commitment to all substantive areas to ensure continuity and consistency in the technical assistance over the life of the project. The contractor will field the team of advisors and consultants, coordinate all training, and procure all commodities. It will also be responsible for setting up the small grants program, which could include local subcontracts. The role of the Peace Corps will be further explored at the PP stage and we anticipate strong involvement.

Gray Amendment: A prime contractor capable of managing all aspects of the proposed package of project assistance is required. While a full and open competition is planned, the PP team will examine the potential for use of a Gray amendment firm.

The primary locus of the project will be in the CD&E, with some of the activities related to developing the EMIS supported in the Planning Unit. Funds for external evaluations and audits will be reserved for direct USAID disbursement. The preliminary budget covers mid- and end-of-project external evaluations. A local audit firm will be contracted for concurrent external

# IV. Factors Affecting Project Selection and Further Development

## A. Social Considerations

### 1. Socio-Cultural Context

The Republic of Botswana is a multi-party politically stable democracy. It is located in Southern Africa and is landlocked. The country is about the size of Texas or France. The population is approximately 1.3 million. The economy grew at about 8.3 per annum during the 1980s, which has contributed to very positive economic development. The population rate, however, stands at 3.2 per annum. Teenage pregnancy is a problem, with 50% of all females aged 19, either pregnant or mothers.

Botswana's rapid development and tremendous social change since Independence in 1966, have contributed to a serious weakening of the traditional systems of social support and familiar cohesion. The out-migration of males for employment in the Republic of South Africa has evidenced the break-up of families and a lack of male role models for children. Women, young adults, and children predominate in the rural areas, where 80% of the population resides and depends on agriculture for its livelihood.

The Tswana tribe which speaks the Setswana language comprises 80% of the ethnic composition in Botswana. The remaining 20% is comprised of minority groups. These groups are not all exposed to Setswana or English, the national and official languages respectively. Overall, the approximately 1.3 million people of Botswana live in a harmonious, minimally corrupt, rapidly expanding society that is striving towards education for all.

Botswana's education system continues to expand in response to this growing and changing society. In 1966, 50% of the school aged children were estimated to be in school, but many dropped out before finishing the primary level. Today, 90% of all school age children complete seven years of primary education. By 1997, 90% of the cohort should go through the nine year basic education system. Further evidence of the MOE's responsiveness to society's needs can be seen by the introduction of Family Life Education into the curriculum; the development of a Guidance and Counseling Unit at CD&E; and the adoption of Agriculture as a core subject for both boys and girls throughout the nine year education scheme. These changes have been related to USAID's ffforts in Population, PEIP, and JSEIP.

### 2. Beneficiaries

The direct beneficiaries of the Project will be all the students who are exposed to the newly integrated nine year basic education curriculum. They will be educated by a curriculum that actively maintains quality in subject areas, and at the same time addresses modern day concerns such as the environment,

population, gender issues, work related skills, career development, and attitudes towards work. Other direct beneficiaries include a strengthened and reorganized CD&E Department; a revitalized Planning Unit; Primary, Junior Secondary, and teachers and students at both the PTTCs and TTCs. Indirect beneficiaries include the communities and employers who will benefit from a stronger and more equipped human resource base, and Senior Secondary schools which will presumably attract a more qualified cadre of applicants.

Three issues of special concern arise with regard to the benefits of basic education. They are access, persistence, and performance. In the case of access, the MOE recently commissioned a report in August 1989 on achieving universal basic education in Botswana. The report, entitled "The Missing Children", found that poverty and remoteness were the main inhibiters to the achievement of universal primary education in Botswana. In short, poor remote area children whose distance both in miles and culture from local schools were identified as the missing 10%. One of the main recommendations of this report was the establishment of small multi-grade classrooms in remote areas. Within the boundaries of this curriculum project, pilot activities to address this problem could include the design of pre and in-service curriculum for multi-grade teaching and cultural awareness; and the establishment of literacy groups specifically for children whose ability in Setswana and English is weak, with special curriculum and training for teachers in this area.

As for access by gender, there has traditionally been higher enrollment rates for females in primary school. This trend seems to be changing, and in 1986, for the first time, more boys than girls enrolled in Standard 1. In 1988, the enrollment of boys and girls differed according to district, but overall the differences were negligible. Careful project monitoring and disaggregation of data by gender and location will enable accurate attention to these concerns.

The next issue of growing concern is that of persistence, or more specifically, teenage pregnancy. The Ministries of Education and Health have been at the forefront in attempting to address this problem. Statistics vary, but some reports go so far as stating that at the Junior Secondary level, the ratio of female to male is 60:40; while at the Senior Secondary level the ratio is 40:60. The dropout rate for girls is three times higher than boys at the Junior Secondary level, and at the Senior Secondary level it is four times higher. The main cause of female dropouts is pregnancy, and the main cause of pregnancy is ignorance. Pregnancy accounts for 75% of all girl dropouts at the Junior Secondary level, and 85% at the Senior Secondary level. The corresponding proportion of teenage boys who dropout of school as a result of causing pregnancy is very low. Most disturbing of all, 3/4 of all pregnant females do not return to school. This can be attributed to Botswana's policy on pregnancy which restricts girls from remaining in school while pregnant and makes it extremely difficult to return.

The resulting socio-economic and health implications of teenage pregnancy are compounded in most cases by the curtailment of female teenagers' education.

The MOE introduced Family Life Education into the primary curriculum in the early 1980s. The syllabus was optional and not examined, and that coupled with most teachers difficulty with the subject matter, resulted in the subject never being taught. At the Junior Secondary level, Family Life Education is taught and examined. During the life of this project, the primary school curriculum is under revision to be fully integrated with the Junior Secondary curriculum. During this process, Family Life Education should influence the nine year curriculum, and special efforts should be made to train teachers in this delicate subject area. Guidance counselors should also be deployed to rural and urban areas. Pilot activities with institutions such as the YWCA which has established a school for pregnant mothers should also be investigated at the PP stage.

With regard to performance, girls and boys leave primary school after seven years of basic education on an equal achievement footing. However, boys significantly outperform girls at the Junior Secondary level. In terms of individual subjects, the greatest disparities are evident in Math and Science. A fund for local research will be available to address these and other gender and location disparities. The curriculum will also be reviewed to eliminate gender bias, so that all students can benefit equally from the curriculum and participate more fully as qualified individuals in the society.

3. Participation

Before Independence, primary education was the responsibility of the Tribal School Committees. After Independence, government began to build schools, but the demand quickly outstripped the supply, and communities began funding and building their own schools. These Community Schools were run by a Board of Governors comprised of community members. Botswana's long tradition of consultation was evidenced with the linkages between the communities and the schools. In 1984, however, with the expansion of the school system, Community Schools were absorbed under the Government's jurisdiction and the linkages between the schools and communities eroded. The reestablishment of these linkages should be seen as a high priority in this project. Community input is vital to the curriculum, especially in regard to Family Life Education and Guidance and Counseling. Identifying and changing social and occupational attitudes can only be accomplished if parents, employers and communities participate.

There has also been significant Batswana participation in the design of this Project. In early 1989, a Reference Group appointed by the MOE was established to guide the discussion of priorities and directions of this education project. During the

PRE-PID and PID analysis, members of the Reference Group met collectively and individually with the team. It was a highly consultative process, and the selection of a curriculum project was the final decision. In order to achieve project effectiveness, the Project Paper team should continue to be responsive to the priorities of the MOE, and continue in this consultative and truly Batswana approach.

4. Impact

Preliminary assessment of the distribution of benefits and costs of the project indicates that the social consequences will be positive. Pilot activities, monies for research, and the establishment of a local hire Gender Specialist position in the CD&E Department will ensure that the project increases access, persistence, and performance within the nine year education system, and at the same time develops links with communities to reinforce these efforts.

B. Economic Considerations

1. Education and Development

In the 1960s Schultz (1961) and Denison (1962) reported that education contributes directly to the growth of national income by improving the skills and productive capacities of the labor force. Further research underscored these findings that supporting education and training, particularly in developing countries, is a desirable strategy for growth. Provision of basic education to a substantial percentage of a nation's population facilitates the attainment of social policy objectives particularly in population control, health and literacy which in turn affect national development and growth. In measuring benefits to education, earnings are generally used. The rate of return to education is generally assessed by observing differences in the earnings of workers with different levels of education and controlling for other differences that exist between the groups and then comparing the adjusted earnings differences with the costs of the education (social rate of return). A survey of rate of return studies (Psacharopoulos 1981) reinforced the conclusions of earlier studies which found that:

(1) returns to primary education (whether social or private) are highest among all educational levels;

(2) private returns are in excess of social returns, particularly at the tertiary level; and

(3) returns to education in developing countries are higher than the corresponding returns in more advanced countries.

In measuring benefits to education earnings are generally used. However, if labor markets are not competitive, then relative wages are not necessarily a valid proxy. A review by Jamison and Lau (1982) found that four years of primary schooling raised the farm productivity of individual farmers 8.7 percent higher than that of a farmer with no education. The dependent economic effect was measured in concrete output (rather than by using wage rates as a proxy for presumed productivity gains). An explanation for this increased productivity is that education increased farmers' allocative efficiency, enabling them to choose among various inputs and to estimate their effects on their overall productivity.

2. Social Development

Analyses of data from household level surveys in Botswana suggest that the cost to households of high fertility are significant. There appears to be a strong linkage between fertility and income with per capita income distribution of families worsening as family size increases. Data exist which support the view that fertility levels fall as female education increases since educated women are more likely to have smaller families and practice modern contraception. Research has also indicated that use of family planning rises steeply with an increasing level of female education from 10 percent among women with no education to 41 percent among women with secondary or higher education. \1 Correspondingly, the Total Fertility Rate (TFR) \2 declines steadily with increasing education levels: women with no education had a TFR of 6.0; those completing primary education was 4.6 and those with secondary or higher 3.3. The effect of fertility trends on the age structure of the Batswana population is important to future development. A fertility decline would cut both the proportions of children and the dependency ratio dramatically. \3 Even though as the population stabilized at lower levels of fertility, mortality and the proportion of elderly persons rises to counterbalance the decline in proportion of children; during the interim, Botswana could have several decades of relatively low dependency ratios and receive higher average per capita income which could provide an opportunity for increasing rates of investment and savings. A rapid population growth puts additional strain on employment and also generates a huge demand for social services;

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\1 World Bank, Population Report p.8. (1989)

\2 TFR - Average number of children born alive to a woman during her lifetime.

\3 The ratio of the economically dependent part of the population to the productive part, arbitrarily defined as the ratio of (under 15 years of age) to the working population (those 15-64 years of age).

specifically, education which focuses heavily on dependent children and is funded almost entirely by government revenues. Consequently, population policy plays a significant role in human resource development in Botswana.

A poor basic education system can jeopardize the entire system of human capital development. The students produced, often at very high unit costs are frequently not sufficiently prepared to participate effectively and successfully in higher levels of the system. This in turn, causes serious inefficiencies through increased costs and results in insufficiently trained parents and managers unable to contribute effectively to productivity and development. While poor quality education exists at many levels of education, the solution to counteract this situation should begin with a strong basic education thus facilitating nationals to manage their own economies through improved analytical skills, and enabling government to place greater reliance on private expertise and institutions.

Botswana has developed a very wide and modern educational system within a relatively short time. It is expected that by 1992 the majority of Batswana children will be attending a full nine year basic education. At the same time, progress is being made in terms of qualitative improvements i.e. teacher training and curriculum revision.

The expansion of free secondary level education should delay youth from entering the labor force for a few years. Nevertheless, more has to be done in the way of employment creation through the provision of appropriate types of education and skills and stimulating the growth of the private sector. If the private sector is to be firmly established it is important that the education system respond in terms of training in management, business techniques and finance. In order to participate in this level of training the curriculum should be conducive to and instill the correct work attitudes and skills.

3. Economic Gains. The project is expected to contribute to growth and development through its impact on the quality of labor and reduced unemployment. These are however, long term benefits that will be directly associated with qualitative improvements to the education system. The existence of high unemployment rates even during currently prosperous times suggests that not all unemployment is due to deficient aggregate demand. Some persons are unemployed not because of a scarcity of jobs but because they do not possess the requisite functional skills to fill available job vacancies. Other economic gains, although difficult to quantify are the results of community involvement in education which should assist the development of local leadership and social cohesion at the community level. These "intangible" benefits are real but do not lend themselves to valuation.

Recurrent expenditure on education as a percentage of the GOB recurrent budget is estimated to be 19.5% in 1990/91. Under NDP

VII it is expected that recurrent expenditures will grow from about P265 million to P575 million (in 90/91 prices), an annual growth rate of 13.8 percent. This growth is expected to support the envisaged increases in education investment. To date, however, there has not been any financial analysis concerning the implications of the government's policy to increase access to senior secondary education and other post secondary institutions. Issues such as cost containment, cost recovery and the sustainability of the system are areas which need to be addressed urgently.

C. Relevant Experience with Similar Projects

Education and skills development is one of the cornerstones of USAID/Botswana's development strategy. USAID is one of the major donors to the sector and Mission efforts began with the Primary Education Improvement Project (PEIP) which commenced in 1981. Phase I of this project established capacity at the University to confer Bachelor of Primary Education degrees and developed capacity to confer two-year Diplomas in Primary Education. In addition the project helped strengthen the capacity of the MOE to organize and implement effective inservice programs for Primary teachers and supervisory staff. Phase II of PEIP continued enlarging and improving preservice and inservice programs and established a Master of Education degree and also improved and revised curriculum used at the Primary Teacher Training Colleges.

In 1984, USAID funded an Education and Human Resources Sector Assessment which was coordinated for the GOB by the Improving the Efficiency of Educational Systems (IEES) Project. This assessment helped the MOE focus on issues of quality and efficiency during the rapid expansion of the 9-year basic education system. From the assessment, the Junior Secondary Education Improvement Project (JSEIP) was formulated. The project has worked to improve the instructional system at the Junior Secondary level, has provided extensive training within the system, and has affected qualitative improvement in education systems planning, management and supervision.

The project identified here will consolidate USAID's previous investment in the sector and will be the culmination of USAID's assistance. It will build upon institutional capacities strengthened under ongoing projects and will address the overarching themes of managing expansion while maintaining quality and the link with communities.

D. Borrower/Grantee or Recipient Country Agency

The Ministry of Finance and Development Planning (MFDP) will sign the bilateral grant agreement, and the Ministry of Education will be the technical ministry for project implementation. The project will be housed in the Department of

Curriculum Development and Evaluation. The MOE will establish and chair a project coordination committee which will include representation of CD&E, the Planning Unit, and other organizations, departments, and units directly affected by the project. This committee will meet quarterly with the project Chief-of-Party and the USAID technical officer to review work plans and project progress, and to provide guidance.

E. AID Support Requirement(s) and Capability

USAID/Botswana has an Human Resource Development Officer who will be responsible for implementing and monitoring the new project. This office has been responsible for the implementation and monitoring of the ongoing PEIP, JSEIP and IEES projects. The office's management responsibilities will be reduced when PEIP and JSEIP terminate simultaneously in December 1991. The HRDO will serve as the Project Manager, acting as principal liaison with the contractor. The HRDO is assisted by an FSN Project Assistant, particularly in the areas of documentation and commodities procurement. USAID's Training Officer will prepare PIO/Ps for all long and short term training.

A formative evaluation is planned at the end of the second year and a final evaluation in year five. These will require personnel from AFR/TR/EHR, REDSO/ESA and/or S&T/ED. Evaluations will include project funded external consultants. Mission management time will be required to provide responses to these evaluations.

F. Estimated Costs and Methods of Financing

The $10 11 million illustrative budget which follows includes $7.88 million of USAID grant inputs and $2.13 million (27%) host country contribution. These estimated costs do not include contingencies or inflation. nor do they include the GOB contribution related to construction, equipping and staffing of schools in the ....9 year curriculum during the project period which is estimated at $.....million. During PP design more accurate cost estimates will need to be prepared based on negotiations with the GOB. The following methods of financing are proposed for consideration during the PP design:

AID Direct Contract: A prime contractor capable of managing all aspects of this project will be competitively selected to field the long term advisors, recruit and support all short term advisors, implement in-country and long-term training, and procure commodities. Mid-term and final evaluations and concurrent audits will be covered through direct AID disbursements.

PPC/WID: Prior to the PP discussions will be held with AID's Office of Women in Development to explore its interest in adding funds to this project on a matching basis to expand its scope of work with regard to gender issues.

BOTSWANA
ILLUSTRATIVE PROJECT BUDGET
(US $000'S OVER 6 YEAR LOP)

| Activity | AID | GOB |
|---|---|---|
| Long term Technical Assistance | | |
| (4) Persons (six years) @ $160 | 3,840 | 180 |
| (1) Person (six years) @ $25 | 150 | 200 |
| Short Term Technical Assistance | | |
| (60) Person months @ $14 | 840 | 200 |
| In-Country Training | | |
| Workshops and Training - (600 person months @ $1 | 600 | 400 |
| External Training | | |
| 6 Persons (2 years) @ $25 | 300 | 200 |
| Commodities | | |
| (Vehicles, computer) | 350 | 100 |
| Other Direct Costs | 500 | 1,000 |
| Monitoring and Evaluation | 300 | 50 |
| Project Coordination | 1,000 | ——— |
| Total | 7,880 | 2,130 |

Peace Corps: At the PP stage a decision will be made regarding an appropriate role for the Peace Corps in this project.

Host Country Contribution: Overall, GOB contribution will be at least 25% of project cost. This cost estimate includes the GOB's in-kind contribution of housing, office space, office equipment and furniture, secretarial and communications support, and vehicle operations support. The salaries of the GOB counterparts are included as in-kind contributions. The cash portion of GOB contributions will include some external training. Conceivably given the current buoyant economy of Botswana, the GOB contribution could rise to about 40%. However, in view of the vigorous plans for expansion in the education sector over NDP7, and the predicted flattening of Government revenues, a contribution higher than 27% to 30% may not be feasible. At the PP stage, discussions will be held with the GOB to consider using some of the Trust Fund money provided to USAID by the Government for specific activites in support of the project. The possibility of using non-project assistance was considered by the PID team. It was decided that it would be an inappropriate mechanism in light of the GOB's financial resources currently available to the sector.

G. Design Strategy

Studies Needed Prior to PP Design

No prior studies are required prior to PP design. Attention to data to enable determination of accurate unit costs and the proposed 3-year teacher diploma program would be desirable. These are discussed under J below.

PP Design Team

The following PP design team composition is recommended. Education project development experience is required for all team members, and Botswana experience is desirable. It is suggested that technical services be contracted for the following positions: educational planner, educational economist, curriculum specialist, and evaluation specialist. Estimated cost for the design activity is $80,000.

| | |
|---|---|
| AID PDO and HRDO | 4 weeks |
| Educational planner | 6 weeks |
| Educational economist | 4 weeks |
| Curriculum specialist | 3 weeks |
| Gender specialist | 3 weeks |
| Evaluation specialist | 2 weeks |
| AID Regional Legal Advisor | 3 days |
| AID Controller | 5 days |
| AID Regional Contracting Officer | 3 days |

The project design will be guided by the USAID Project Committee consisting of:

| | |
|---|---|
| Richard Shortlidge/Barbara Belding | Chairpersons |
| | REDSO Economist |
| | USAID Controller |
| | Regional Legal Adv. |
| | Contracting Officer |

The following is the current project development schedule:

| | |
|---|---|
| Submission of PID to AID/W | 11 May, 1990 |
| AID/W action on PID | May, 1990 |
| Start of PP design | January, 1991 |

H. Recommended Environmental Threshold Decision

This project is recommended for a categorical exclusion from further environmental review. The categorical exclusion is attached to the PID as Appendix B.

I. USAID Policy Issues

Education will be a major development theme for the 1990s. Basic education makes a vital contribution to the development of human capital, sustainable economic growth, health, child survival, nutrition and famil, decision making and welfare. In its FY89 appropriations bill, Congress earmarked 50% or $67.44 million of the DA account in Section 105 (including the DFA) for basic education. Congress also required that USAID use part of the earmarked funds for new basic education initiatives, explicitly requiring 8 new starts over the next 3 years, 5 of which are to be in sub-Saharan Africa. As evidenced by its deliberations over the new legislation, Congress' clear concern is with the poor state of basic education in Africa, particularly regarding issues of educational quality and access for females. The proposed project meets the congressional definition of a basic education project.

In July 1988, the Bureau issued a new strategy statement entitled "The Africa Bureau Action Plan for Basic Education." This Plan reviews the status of basic education in Africa and outlines an agenda for USAID Action in the sector. It provides a decision matrix that ranks countries for investment and suggests appropriate assistance options based on need and policy performance. Botswana is not included among the need countries in the Plan; not at all surprising given its impressive performance in the sector. However, with a rank of 11 (out of 35) under the "performance" category, Botswana is viewed as a particularly good candidate for sector assistance. The plan suggests that Missions in high performance countries have an opportunity to enhance their portfolio's impact across all sectors and to support education activities in policy environments that are conducive to success.

The assistance proposed in this PID is large enough to have direct impact on national education policies and capacities. By addressing issues of educational policy and management at a time when the Government of Botswana is pursuing far reaching sector reforms the project will enable the Mission to engage in policy dialogue with the GOS concerning the future education system. The Mission will also be in a position to facilitate donor coordination in the sector and encourage private provision of education services.

Botswana is the SADCC country responsible for manpower development. While the project is consistent with SADCC's goal of raising education and skill levels to enable greater regional self-sufficiency, the activities proposed are specific to Botswana. The SADCC manpower development strategy targets high level skills training while this project focuses on basic education.

The activities proposed here build on past USAID involvement in the sector and are consistent with recommendations from the mid-term evaluation of the Teacher Training Project. This evaluation, conducted in July 1987, advised, "that future projects emphasize increased efficiency in the use of human and financial resources within the Ministry of Education and the larger educational system through the provision of technical assistance and training, with emphasis on planning, budgeting, financial control, and administrative decentralization.

## I. AID Policy Issues

(Barbara to write this)

## J. Design Issues

There are no major design issues at this time, but there are three issues worthy of consideration which could facilitate project design. These are the project design process, the proposed teacher diploma program, and unit cost analysis. The PID team used a participatory process to develop this document and it is recommended that a similar process be used for the PP as well.

There is a proposal to introduce a 3-year diploma program for primary school teachers. Unfortunately, this has not been costed out, nor have alternative means of improving preservice teacher training been explored and costed. It would make project design easier if a study had been conducted to assist the MOE make a decision. Perhaps, this could be conducted under the PEIP project.

The disparate nature of available data has made it impossible to calculate unit costs accurately. Although this is not essential at this time, it would be desirable to have a better understanding of the unit costs for the various subsectors engaged in basic education. This would make project design easier and would assist the MOE as it considers the implications of its work and prepares its Submission for NDP7. Perhaps this could be supported with project development funds.

During the PP stage effort should be made to quantify the value of qualitiative improvement that will be achieved through project activities. At this time it is not feasible to undertake an internal efficiency analysis nor is it possible to quantify project cost savings from the projected improvements to the education system.