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Opportunities and Options for Human Resource Development in Swaziland for 1989 and Beyond

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**OPPORTUNITIES AND OPTIONS
FOR HUMAN RESOURCES
DEVELOPMENT IN SWAZILAND
FOR 1989 AND BEYOND**

**PREPARED FOR
USAID/SWAZILAND
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CONCEPT PAPER TEAM

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TABLE OF CONTENTS

BACKGROUND	1
SWAZILAND TODAY: THE SOCIO-ECONOMIC CONTEXT	3
1. Swaziland's Labor Economy	3
2. An Educational Profile for Swaziland	5
3. Summary	8
RATIONALE: WHY SHOULD USAID/SWAZILAND SUPPORT HUMAN RESOURCES DEVELOPMENT?	10
1. Importance of Human Resources Development	10
2. AID Policies and Priorities	11
3. Mission Experience and Interests	12
4. Current Opportunities in HRD for USAID/Swaziland	13
5. Summary	16
MEETING JOB-SPECIFIC SKILLS SHORTAGES	17
1. Developing Local Training Institutions	18
A. Department of Accounting and Business Management at UNISWA	
B. Faculty of Science at UNISWA	
2. Meeting Short-term Training Needs	20
INTEGRATING PRACTICAL ORIENTATION INTO PRIMARY SCHOOL	22
NONFORMAL EDUCATION	25
1. Revolving Funds for Seed Capital	26
2. Savings Clubs	28
3. Nonformal Education Service Agency	29
INTERNAL EFFICIENCY	31
1. Restructure and Decentralize the MOE and the REOs	33
2. Upgrading the Management Capabilities of Headmasters	34
3. Revised and Strengthened Financial & Budgetary Procedures	34
4. Policy Analysis and Research Capability of MOE	35
5. Create a Micro-computer Based Management Information System	36
6. Create a System for Guidance, In-school Assessment & Testing	37
RECOMMENDATIONS	40
APPENDIX I	43
1. Methodology	43
2. Rejected Options	44
APPENDIX II - KEY INFORMANTS CONTACTED	52

ABBREVIATIONS, ACRONYMS AND INSTITUTIONS

ABS	Annual Budget Submission
BANFES	Basic and Nonformal Education Systems
CDSS	Country Development Strategy Statement
DEMS	Department of Extramural Studies (the University's extension arm)
EEC	European Economic Community
EPMT	Educational Policy, Management, and Technology
HRD	Human Resource Development
JC	Junior Certificate
IDM	Institute for Development Management
IEES	Improving the Efficiency of Education Systems
ILO	International Labor Organization
MIS	Management Information System
MITC	Manzini Industrial Training Centre (voc. ed. project)
MOC	Ministry of Commerce
MOE	Ministry of Education
MOLP	Ministry of Labour and Public Service
NCC	National Curriculum Centre (located in Manzini at William Pitcher Teacher's College)
NERCOM	National Education Review Commission
PSLE	Primary School Leavers Exam
REO	Regional Education Office
REC's	Rural Education Centres
SAFT	School for Appropriate Farm Technology
SCOT	Swaziland College of Technology
SEBENTA	National Literacy Organization
SEDCO	Swaziland Enterprise Development Company
SIA	Swaziland Institute for Accountants
SIBHAKHO	Chamber of Commerce and Industry
SIDC	Swaziland Industrial Development Corporation
SIMPA	Swaziland Institute of Management and Public Administration
SNAT	Swaziland National Association of Teachers
SSRU	Social Science Research Unit
STEP	Swaziland Training for Entrepreneurs Project (USAID)
SWAMPD	Swaziland Manpower Development Project
TA	Technical Assistant
TEBA	The Employment Bureau of Africa (Mine recruiting organization)
UNDP	United Nations Development Program
UNISWA	University of Swaziland
VOCTIM	Vocational Training College in Matsapha (funded by GTZ & EEC)

BACKGROUND

USAID/Swaziland and the Government of Swaziland have identified a trainable and skilled workforce as a major requirement for national economic growth and development. Mission efforts to address this need have focused on improving the quality of the education system and on developing a skilled workforce. Specific assistance to the education sector began in 1974 and has included two major projects. The first, the Primary Curriculum Project, helped to develop a more practical curriculum and introduce it into the primary schools. This was followed in 1983 by the Teacher Training Project which has upgraded the quality of classroom instruction and increased the country's capacity to produce qualified primary teachers.

USAID/S has proposed a third project in this sector as an essential step towards removing constraints to economic growth and development. In May the Mission included a new education start, Educational Policy, Management, and Technology (EPMT), in its Annual Budget Submission (ABS). The project abstract included in the ABS emphasized the need for improvements in the Ministry of Education's management, and policy analysis and implementation capacity along with the need to upgrade the University's Bachelor of Commerce Degree. The Mission initiated discussions with the Ministry of Education and the University to flesh out the details of the project.

A three step process and timeframe for developing a project design was planned: first, a concept paper would be prepared by a team of education specialists in early November; a PID would then be written in-house and submitted in March, shortly after which a second team would prepare the project paper. This would allow for an obligation in the fourth quarter of Fiscal Year 1989. However a bureau requirement that all PIDs are to be in Washington by the end of January made the above timeline unrealistic for an FY89 obligation. This led to a decision to produce the concept paper in-house during August so that in November a team could prepare the PID to meet the Bureau's deadline.

An in-house draft concept paper, *Education, Employment and Economic Growth in Swaziland*, was prepared in August and reviewed by the Mission in September. The concept paper identified skills shortages and unemployment as critical development problems that were best addressed by interventions to improve the quality and employability of Swaziland's youth. The paper recommended assisting the MOE to increase internal efficiency of the education system and upgrading the University's Bachelor of commerce Program to alleviate the shortage of skilled Swazi managers and accountants. Both recommendations were consistent with the original abstract contained in the ABS.

The Mission's review of the concept paper questioned whether sufficient options had been explored to ensure that the two alternatives proposed in the paper are the best use of

USAID/S resources. A second, related issue raised during the review was whether activities should be designed to produce quick results to support Swaziland's current economic growth.

The questions raised during the concept paper review demonstrated the need to examine more widely the prospects for USAID's involvement in human resource development in Swaziland. Furthermore, expanding the draft concept paper could make an important contribution to the Mission's formulation of its Country Development Strategy Statement (CDSS). A decision was therefore taken to have a team of educators address these questions as an intervening step between the original concept paper and PID.

The Mission directed this team to produce an expanded concept/options paper that could be used as the basis for PID development and that would move the project development process forward towards an obligation in Fiscal Year 1989. The expanded paper was to review the structure and functioning of Swaziland's education system, identify salient issues in human resource development, and recommend project options.

The paper is presented in four Sections. Section one reviews the macroeconomic context for investments in human resource development by examining the supply and demand for labor. Section two reviews the rationale for investment in human resource development, the types of problems Swaziland is facing in its education system, presents Agency policy and priorities, and discusses several general HRD programming opportunities available to USAID/S. Section three provides four projectizable options to address major human resource development problems in Swaziland. Section four answers key questions about USAID/S involvement in human resource development and prioritizes project options.

SECTION I
SWAZILAND TODAY:
THE SOCIO-ECONOMIC CONTEXT

This section examines the prospects for short-term and medium range economic growth, examines the size and shape of the labor market, looks at the supply of educated labor, and suggests ways for providing an educated labor force to support sustained industrial growth in Swaziland.

A brief macroeconomic assessment of Swaziland based on IMF, World Bank, ILO and GOS reports indicates a favorable economic and business climate for Swaziland. In the recent past, GDP grew at 3.5% p.a. (1981-85) but over the past two years GDP has averaged an impressive 8%. This high growth has been due to exceptionally high production volume for sugar and to a lesser degree citrus fruits, cotton, forest products and diamond mining. Such favorable conditions are not likely to last, however, and forecasts say the growth rate will probably stabilize at about 4% for the medium term. With good natural resources, available capital, an abundant supply of labor, and a dynamic private sector, conditions seem ripe for expanding and deepening agro-business links to manufacturing in order to vertically integrate the processing of key Swazi basic materials. Diversifying the industrial sector in the direction of light manufacturing and service industries is also a key to development since the economy is currently overly dependent on agriculture and the agro-manufacturing sectors which account for almost half of the nation's economic growth.

In addition to viable resources, Swaziland is also favorably predisposed to stable exchange and interest rates, strong growth in exports, increasing revenues to expenditures (80% of revenues come from customs, sales tax, personal and corporate taxes), and small government deficits. For these and other reasons, seasonally adjusted economic activity indicators have been rising since 1985.

1. Swaziland's Labor Economy

Swaziland's labor market is highly dualistic with a dynamic modern wage sector and a subsistence-level homestead economy. Twenty four percent of all eligible workers age 15 to 54 work in the modern sector. This wage sector has maintained its share of the total labor force growth over the past six years and within the subsector a gradual shift toward more skilled workers (25% of wage earners in 1977 were skilled, while in 1986 40% had education levels above primary certificates).

- + The Swazi modern sector is dominated by large agro-business and manufacturing firms (44% of employment is in agriculture and manufacturing companies). Swazi earnings average over E 400 (1986) per month, as compared to E 50 in the subsistence sector, which is the reason this is the sector of

choice for those seeking employment. Of total wage jobs in this sector, 66% were classified as unskilled, 20% semi-skilled and skilled, 8% clerical and 6% administration, management, technical, and professional.

- + Migrant labor accounts for over 6% of those between the ages of 15 and 54 most of whom are engaged in wage employment in South African mines. Seasonal in nature, these jobs are essentially contract unskilled wage labor requiring experience and stamina but few schooling skills.

- + The informal urban market comprises less than 4% of eligible workers and consists mainly of full-time, self-employed workers in shoe repair, wood work and construction trades, handicrafts, selling, and hair work occupations. These workers are considered to be in the monetary sector but incomes are considerably lower than in the above sectors. Educational levels vary, with 28% having attained some secondary schooling and another 22% who have never been to school.

- + Thirty-five thousand individuals between the ages of 15 and 54 remain economically inactive while attending school. These young people represent the educational investment in human resources for the nation's modern sector.

- + Finally, the residual containing over half of all 15-54 year-olds consists of family-based, unpaid household labor and inactive unskilled workers living on an estimated 40,000 rural homesteads and principally engaging in small farming with some non-farm handicraft work to supplement income. Little is known about human resources in this sector but surely the education level is low.

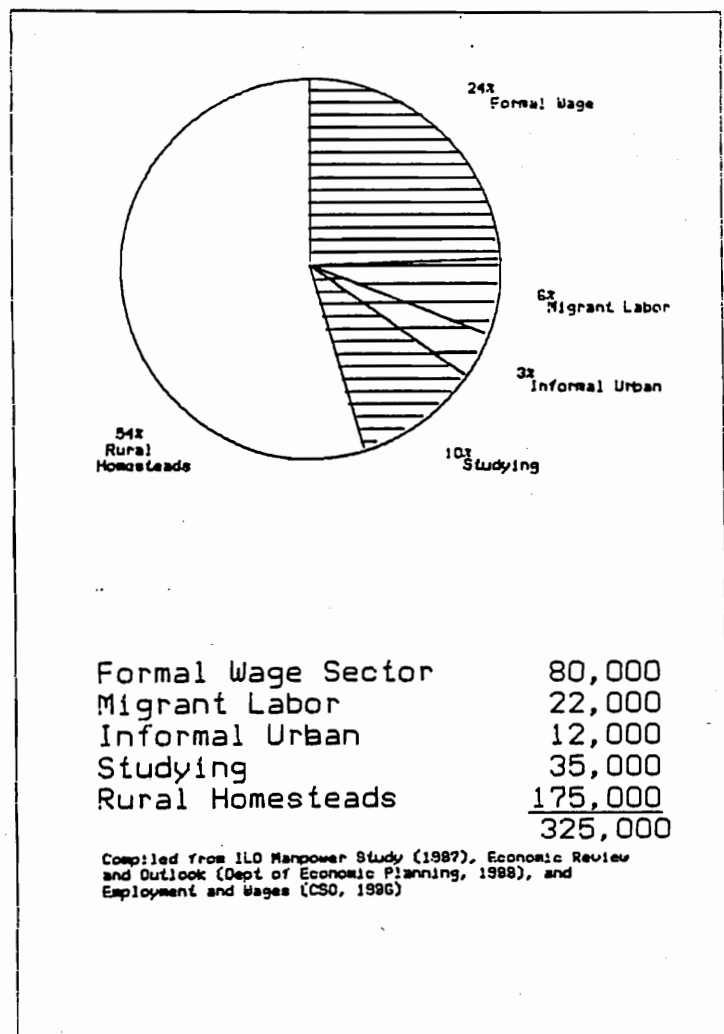


Figure 1 Employment of Working Age Population

The World Bank and ILO studies are in agreement that with 4% annual per capita growth, the modern sector economy can add only 3000 to 4000 new jobs a year of which 35% could require skill levels above the Junior Certificate. If considerable capital investment were directed to light industry, the economy could generate many more jobs. Nevertheless, by itself, the modern wage sector cannot act as the sole engine of job creation. Conditions must be created to foster self employment on the homesteads where farming skills could be useful and where basic literacy could help individuals to escape rural poverty.

2. An Educational Profile for Swaziland

At any given time, the stock of educational qualifications in a society can be calculated by looking at the number of individuals of each age who have attended a particular level of education such as primary secondary or tertiary. The result constitutes a profile of the educational skills embodied in a work force. When we compare Swaziland's stocks of 15 to 54 year

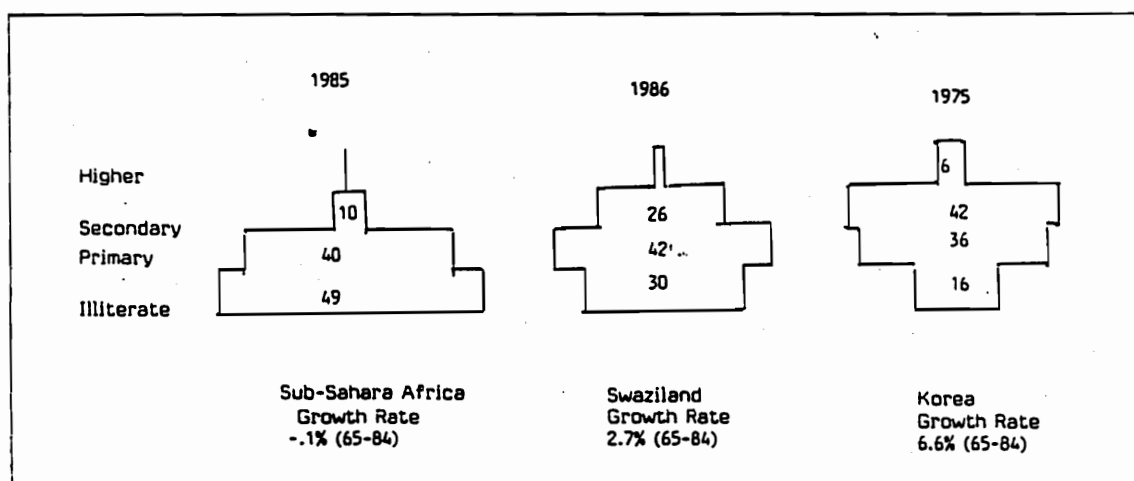


Figure 2 Percentage of Workforce by Educational Level

olds' educational skills with 27 Sub-Saharan countries, we find Swaziland has far fewer illiterates and many more secondary school leavers. Since modern industrialized societies cannot utilize illiterates or employ large numbers of highly educated for which there are no available jobs, a delicate balancing act is demanded of Ministries of Education to provide just enough educated labor of sufficient quality to match the needs of the modern sector.

Compared to Korea just prior to its industrial boom (the ideal prototype for industrial take-off), we see that Swaziland has moved away from the Sub-Saharan pattern and toward successfully copying Korea's skill profile. Swaziland will still require some time before its educational stocks coincide with Korea's, (quantitatively and qualitatively) but Swaziland has significantly altered its skill profile from the one generally

found in Sub-Saharan Africa.

Swaziland's educational pyramid gives an indication of the size and shape of the education system in 1987. First, males and females are represented in the system in the same proportion. Second,

although only a cross sectional snapshot, the pyramid gives some rough indication of the transition rates throughout the system. We can say that in the present Swazi education system, for every 1000 students entering primary school, 600 complete primary and about 330 go on to enter form I. Hence, about 2 of 3 young people will never continue with secondary school studies. Of the 330 students who enter junior secondary, about one half will graduate from Form III. Approximately 95 of these Form III graduates will continue on to Form IV and 65 will complete senior secondary. Of these 65, 45 will pass their "O" level exams.

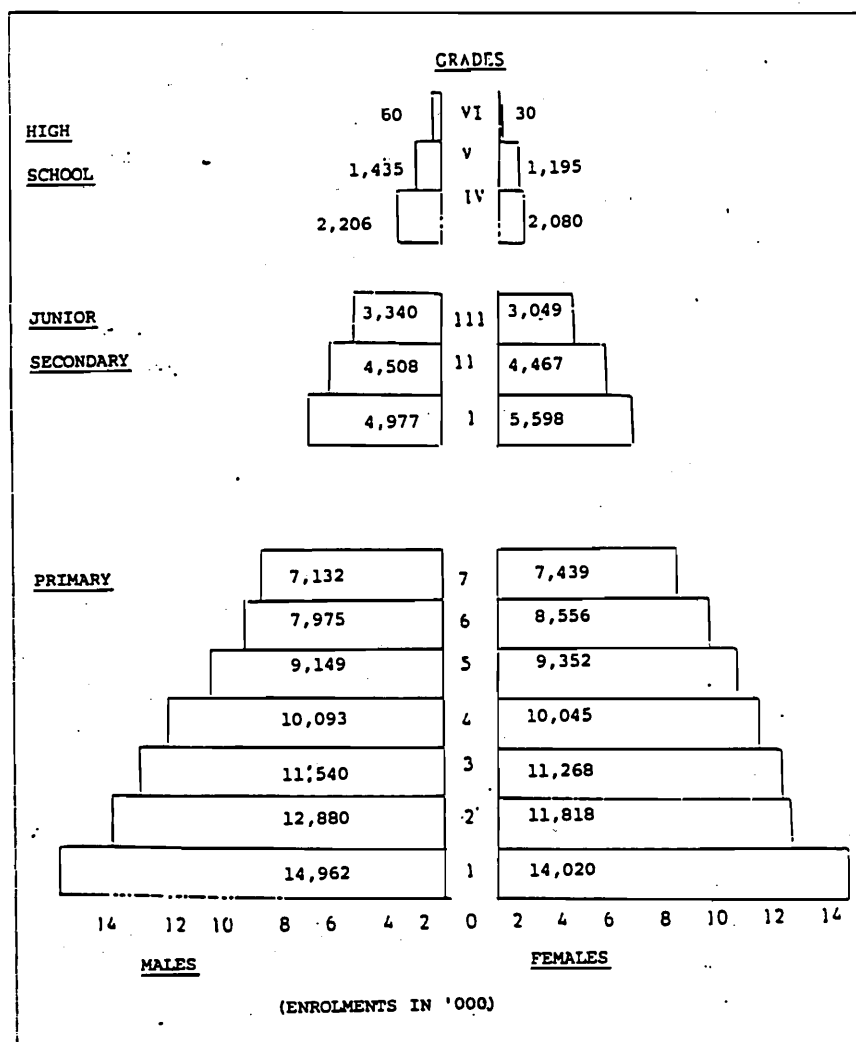


Figure 3 Swaziland's Educational Pyramid for 1987

During the period from 1980 to 1985, primary schools turned out on average 8,500 primary certificate holders per year. Junior secondary schools annually graduated 3,300 school leavers while senior secondary schools annually graduated 2300 "O" level passes during the same time period. The University (UNISWA) in 1985 graduated 148 degree candidates, 140 diplomates and 80 certificate holders. SCOT produced 125 grads from six programs in 1985.

The senior secondary output of 2300 "O" level passes a year, UNISWA's 350 and SCOT's 125 technical degrees together

represent the nation's annual production of high level skilled human resources available for employment. On the demand side, if the modern sector economy grows by 4% a year, and approximately 3500 jobs are generated, 15% of which are high skill jobs, then the annual supply of skilled labor will exceed the demand for the 525 new high skill jobs. Any surplus in graduates, if not too great, allows for a surplus pool of skilled jobs which can be drawn on quickly if the economy grows suddenly. Otherwise, graduates of secondary schools will have to look for self-employment or else take low pay in jobs. At the same time, it should be remembered that social demand for secondary schooling exerts strong pressure to expand the education system for reasons unrelated to labor market needs (i.e., private returns to the individual almost always exceed the lower private costs in a state subsidized system).

Taking two examples of large firms operating in Swaziland, it is possible to see how the process of matching skills to jobs occurs. The Simunye Sugar Company is one of the nation's largest sugar producers. It grows and processes sugar cane which in 1986 and 1987 had record harvests. The labor force at Simunye can be classified into three sub-strata. At the very top are found division heads and board of directors, followed by managers and supervisors. A second tier includes skilled and semi skilled workers. A third level contains unskilled field workers. When Simunye hires unskilled labor, they usually prefer those with experience but no formal level of education is required and no skills in literacy, numeracy, English, etc are deemed critical. According to personnel, there are always plenty of applicants responding to advertisements when applicants refer to the labor pool of primary school drop outs and older illiterate workers. Unskilled workers comprise about 40 percent of the company's workforce. At the second level of the company's work force, experience, reinforced by basic numeracy and literacy skills is sought for all workers. About 50% of the company's work force is found in this stratum. Finally, at the level of manager and supervisor, education above the junior secondary certificate is required. This upper stratum comprises about 9% of the work force.

While many upper level vacancies are filled internally, the company does hire graduates of UNISWA and SCOT. The overall quantity and quality of university graduates is deemed sufficient for entering in-service training at Simunye. Some critical skills shortages in accounting, engineering, shop technology were mentioned and in some cases required short term training abroad.

Generalizing from this and other examples to the agro-industry, employers seem satisfied with the available quantity and quality of unskilled labor but expect semi and skilled labor to be literate and numerate. At the upper levels of the company workforce, some critical skill shortages do exist and have not been met satisfactorily by company in-service programs. Since large agro-business companies employ almost half of all wage earners in the private sector, their skill demand

profile suggests a gradual need for up-grading educational qualifications for the 60% who are not engaged in unskilled work.

A second labor demand example, taken from the financial services sector, demonstrates the narrow range of education skills sought after by employers in a high skill field. Barclay's Bank is a major company operating in Swaziland's banking industry having 8 branches (five of which have been localized) and over 300 employees. The bank is a major employer of skilled labor, accepting no one with educational qualifications below an "O" level class three pass. In addition, Barclay's looks for applicants with strengths in math, English, computer skills, and who have had work experience or knowledge of business and accounting principles. UNISWA graduates are preferred to senior secondary graduates.

Employees at Barclay's include managers, assistant managers, accounting managers, supervisors, check clerks and junior clerks. Seventy-five percent of bank employees fall into the last two categories. Currently, the bank's personnel office finds sufficient numbers of "O" level and above job seekers applying at the bank. In fact, according to Barclay's Bank, a buyers market currently exists. However, a few specific skills are in short supply (e.g., computer programming, and teaching skills for in-house seminars on banking skills for employees seeking to upgrade themselves).

3. Summary

A. The economy is performing well and the modern sector will generate significant wage employment in the future if the country can attract foreign investment for light manufacturing and service industries. However, regardless of slow or rapid economic growth, the modern sector will not be able to absorb all those seeking wage employment; especially the 2 of every 3 unskilled youth who do not continue beyond primary school. The modern sector is experiencing some shortages of specialized skills such as computer operation, accounting, management and supervision skills, and in some cases English language ability. These shortages in the professional and technically skilled

Swazican is a large fruit canning company located in Malkerns and employing 1,600 semi-skilled seasonal workers, 1,200 permanent semi-skilled workers, 120 lower level supervisory staff, 50 upper level management and professional staff. Based on the company's workforce profile, the following relation between educational qualification and job level is:


- * Seasonal workers require no formal education, only farm experience
- * Permanent semi-skilled workers on average possess a primary school certificate
- * Lower level supervisory staff hold JC level certificates and are mainly promoted from within the organization - some management training is desired.
- * Upper level management positions are drawn from "O" level second class and require some math and science background.

Swazi Can mirrors the organizational shape and size of the private modern sector.

Figure 4 Employee Profile of Swazican

areas result from low quality schooling which leaves many graduates unqualified. But, quantitatively, the graduates of secondary and higher education are more than sufficient to meet the skilled needs of industry. In the short term, OJT, short term training, and SWAMDP approaches seem reasonable to meet high level skill shortages which make up only a small fraction of the total job market. Medium term approaches would involve strengthening university faculties, and assisting the Ministry of Education in providing a better product. There is no quick solution to human resource development.

B. For the majority of school leavers who never enter secondary school, wage employment will be difficult to find. Many of these students will stay on homesteads with opportunities only for farming. These youth will need trade and farming skills for self-employment and basic skills which will prepare them to leave the homestead once wage employment can be secured in nonfarm areas.



SECTION II

RATIONALE: WHY SHOULD USAID/SWAZILAND
SUPPORT HUMAN RESOURCES DEVELOPMENT?

1. Importance of Human Resources Development

Since T. W. Schultz's seminal work in the early 60's on the relationship of human capital investment to production, much research with very positive and consistent findings have been carried out on the subject. These studies, by and large based on analytical techniques only recently developed, have not only explained the nature of this relationship, but have shown the benefits of investment in education to be multiple and far-reaching. The clear message of these findings is that provision of education should not be viewed as consumptive of public (or private) resources, but as an investment toward future growth and productivity. The implication of these findings is that supporting education and training, particularly in developing countries, is a very defensible strategy for growth.

One multi-country study found the differences in education levels between the United States and less developed countries was the most important of all factors examined in explaining their differences in per capita incomes. Overall, the direct and indirect effects of basic education were found to explain from 50 - 58% of the differences in per capita incomes. Looking only among developing countries for comparison, a separate study has shown a contribution of education to growth of about 45% when both the direct and indirect benefits are considered. Another study of 48 countries found an increase of 8 - 16% of GDP was associated with a 10% increase in literacy levels.

Careful analyses by several researchers on the direction of the relationship of education to incomes and growth rates have demonstrated that education is an independent contributor to rather than a beneficiary of increased levels of prosperity. Other recent evidence (from industrialized countries) suggests that even when growth of economies has slowed, as during the oil-price down-turn of 1983, education has continued to contribute positively to growth.

Productivity has also been found to increase as a result of increased levels of education of the labor force. A review of 18 studies of farmer productivity in 13 developing countries concluded that farmers who have completed four years of schooling produce, on average, 8% more farm output than their non-educated counterparts. This increases to a 10% advantage when inputs such as improved seed and fertilizer are available. Another study has found that farmers will produce on average 3% more output for each year of basic education which they have received.

The *World Development Report 1980* found that increases in literacy contribute both to increased investment and to increased output per worker. A literate populace is also more productive due to the improved health and nutrition which it enjoys, and women of this group by and large have fewer children who themselves benefit from higher survival rates and improved care.

Education has been shown to play a significant role in the industrialization process and the transfer of technology in developing countries. As discussed in the above section, a necessary condition for industrialization is a literate and trainable workforce. The amount of learning that can occur on the job through experience or OJT has been highly correlated with the amount of prior education of the workers. The success that Korea has enjoyed in its industrialization has been linked to that country's aggressive prior investments in education. Other countries, principally those in South Asia, have also demonstrated this effect. As new technologies are developed, adopted or adapted, and applied in a country, the principal vehicle of this process is an educated and adaptable citizenry.

Several recent studies have looked at the effects of education on the distribution of earnings. Results have again been very favorable: as the educational system expands, access to schooling increases for the rural population, the poor and girls. This in turn gives school graduates more access to higher socio-economic levels through modern sector employment. When the education system expansion practices of Kenya and Tanzania were compared, the former country's more demand driven approach resulted in substantially greater equity in the distribution of earnings and in addition expanded access for girls and rural populations; a particularly enlightening irony given the equity led policies of socialist Tanzania.

2. AID Policies and Priorities

In its FY89 appropriations bill, Congress earmarked 50%, or \$67.44 million of the DA account in Section 105 (including DFA) for basic education, defined as formal primary and secondary education. Congress at the same time required that AID 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, starting with 1 this FY. As evidenced by its deliberations over the new legislation, Congress' clear concern is with the poor state of basic education especially in Africa and parts of Asia and particularly regarding issues of educational quality and access for females.

Over the years, the Agency posture toward education has wavered somewhat. Notwithstanding many early successes in the sector, education has suffered generally declining levels of support within AID in the mid to late 70's and early 80's, due principally to pressures on budgets and the corresponding need to reduce sectors of involvement. Unfortunately, this de-

emphasis was occurring just as the evidence on the positive effects of education to development was emerging, but before the message was having an impact. In 1982 the pendulum started its return with a very positive Agency policy statement on Basic Education and Technical Training, which provided a rationale based on growth, productivity and the efficient use of physical capital.

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 (defined as formal education for 6 - 14 year old youth) in Africa and outlines an agenda for AID Action in the sub-sector. It provides a decision matrix that ranks countries for investment and suggests appropriate assistance options based on need and policy performance.. It places countries into two categories: needs-based countries and performance-based countries. Primary factors considered in making these determinations included the country's educational need, its commitment to supplying quality education to its citizens and its receptivity to educational reform.

The Needs Matrix of the Plan ranks Swaziland number 21 out of the 35 sub-Sahara countries assessed, with the higher rank indicating the higher need for assistance. Thus being among the lower half, Swaziland 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 (again out of 35) under the "performance" category, Swaziland is viewed as a particularly good candidate for sector assistance. For the group of 12 top performance countries, the Plan suggests that missions 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.

3. Mission Experience and Interests

USAID/Swaziland has been actively supporting human resources development since its assistance program started in 1972, recognizing that the most pressing need for a newly independent Swaziland was an improvement in the education and skills levels of its people. Participant training has been aggressively pursued as a quick-fix strategy for filling the most critical need for mid and high level manpower, and for pursuing the government's localization policy. Projects in the Mission portfolio have by and large included human resources development either a direct or indirect focus of the assistance effort. To date USAID has sent about 630 participants for training abroad, the majority for academic degree training and principally in the areas of agriculture, health, education and engineering. Almost one-third of these have been females! The mission can be very proud of its heavy investments in this area. Accounts of the quality and numbers of U.S. trained participants who occupy positions of importance in Swaziland's public and private sector are impressive indeed.

Concurrent with the start of its participant training related activities, USAID/Swaziland also worked to address the HRD problem in other ways, focusing on the formal education system through interventions aimed at institution strengthening and capacity building. Efforts to improve the primary school curriculum (Primary Curriculum Development Project), the education of teachers (Teacher Training Project), and the education and training opportunities of adults (Department of Extra-mural Studies Project) have contributed significantly to advances in these areas. Other donors, most notably the World Bank (in the early years), UNDP, U.K., Canada, Germany, Belgium, Holland and recently the EEC have been involved across the sector, from primary through university support, and including literacy and other nonformal programs. Volunteers from the Peace Corps, Belgium, Canada, U.K. and the Lutheran World Federation have also played an important role in providing staff support to the sector.

As impressive and extensive as assistance to the sector has been, serious human resource problem areas remain. The Mission among others has recognized the symptoms and implications of these needs, and has expressed in its FY90 ABS an intention to assist. The problem areas include the still persistent shortage of skilled manpower at various levels of the public and private sectors, the inability of many school leavers to become productive members of the modern and traditional sectors, and the lack of training and other enriching opportunities for adults, principally those of the traditional sector.

4. Current Opportunities in HRD for USAID/Swaziland

In the past twenty years the education system of Swaziland has undergone a tremendous expansion. Nearly all children are now able to enroll in primary school, and provision of secondary and higher education has increased dramatically. The education budget is impressively high, about 25% of the national recurrent budget. Social pressures to expand and improve the quality of education are strong, particularly at the post-primary level. Rapid growth of the school age population in Swaziland means that past gains in enrollment rates cannot be maintained without budget increases or increases in efficiency. However, current economic reality is such that improvements in the system must come from improved management and efficiency (both internal and external) rather than from budget increases.

Notwithstanding the rapid expansion efforts of the past, and the need to improve efficiency, for reasons of continued growth and modernization, Swaziland must work to structure its workforce with more highly educated and better skilled labor. Illustrating this need is the comparison made previously of the educational attainment of Swaziland's labor force with that of S. Korea. In 1975, at the point of industrial take-off, Korea's working age population averaged an estimated 7 to 8 years of formal education. By contrast, in 1983 Swaziland's working age population had only an estimated 4 years of educa-

tion. Obvious differences in the two countries' social and economic situations require that caution be exercised with such comparisons.

It appears that Swaziland is at an important crossroads in its development, offering the Mission important new opportunities for HRD assistance. The situation is not uncommon, for many other African countries are now faced with the post-expansion issues of quality, efficiency and costs and financing that Swaziland must now address. The problem areas presented below all relate to these second generation issues. Basically the necessary institutions and systems are in place but important adjustments are now necessary. Without further assistance at this juncture of Swaziland's HRD development, many of the gains of the past will be lost due to momentum of uncontrolled expansion, spiraling costs and diminishing efficiency and quality.

Swaziland is in a fortunate position right now to effect the changes which are needed. The MOE understands very clearly the key dilemmas and risks of the choices and is prepared to make the course correction. Also, enjoying relative high growth, the country can presumably bear some of the extra costs necessary to set reforms in motion. USAID/Swaziland, seen by the MOE as an old and trusted friend to education, and the benefactor of previous successful reforms, occupies a privileged position among donors. With the U.S. being able to offer much in the particular areas now deserving attention, such as education management and administration, continuing and adult education, decentralization, and diversified system financing, the Mission can bring relevant expertise to bear to help the MOE overcome its latest institutional hurdle. Being a small and manageable system, compared to others in Africa, a reformed Swaziland education sector conceivably can demonstrate to other sub-sahara countries the manner by which their systems can be rescued.

USAID/Swaziland in preparing for a new CDSS has several opportunities and choices available regarding HRD. The opportunities are presented in Section III below. The choices necessitate that the Mission be clear on its development objectives. A Mission decision on mode of assistance, intended time-frame for impact, and degree of institutional focus will be required in judging which of the presented options should be pursued, and in what manner.

One choice for the Mission is whether to assist the MOE or other implementing agency through a program rather than project mode. The former might involve the commitment of AID funds against agreed upon sector or sub-sector reforms, or against a set of performance-based improvements in programs or operations. In such an assistance mode, the Mission must consider the nature of reforms/improvements required, the capacity of the institution to undertake the changes, and the requirement for external inputs. Although such judgments are difficult, the team's assessment is that program or budget support assistance

is not appropriate at this time.

The only option where a program approach might possibly have made sense is the internal efficiency activity (Section III D). The MOE has a decent vision of its education system of the future and has identified a reasonable set of policy reforms to take it there. Convincing the MOE of needed changes is not an issue. The issue involves planning for the changes in a realistic and cost-effective manner and implementing them accordingly. Much of the constraint in this planning and program implementation capacity involves lack of trained personnel and systems, for example a management information system. Thus AID's role in light of the constraints and required inputs is not to "buy reform," but to support it through involvement. (See the Section III D for more details.)

The option for improving practical and basic skills at primary would be not appropriate for program support since it involves an action and input intensive approach. The problem of addressing skills shortages through training does not by its nature lend itself to program assistance, nor do the suggested nonformal education activities, because of the involvement of various governmental and non-governmental entities.

Another choice facing the Mission is whether to work for quick, short-term payoff in its HRD investments or to continue focusing in the main on medium-term objectives. If there is an HRD opportunity presented with the high economic growth the country is currently enjoying, the Mission wants to take advantage of it. Section III A presents what the team feels is the only reasonable way to meet short-term, modern sector HRD objectives: discretely funded skill-specific training activities conducted either in-country or abroad. (Part of this option involves a institutional strengthening effort, which of course is a longer process.) There are limits as well as benefits to training based interventions which are discussed below.

A choice for the training approach, the team believes, should not be made in lieu of other, more sustainable options. The others focus on institutions' capacities to provide the education and training which is currently needed and will be needed in the future. This represents another important choice for the Mission. As discussed previously, the problems facing MOE are second generation and deserve the USAID's attention. This is a medium-term rather than a long-term undertaking, but the commitment it involves is substantially longer than that for underwriting training events.

A reasonable concern for the Mission is where to provide assistance to the HRD sector vis-a-vis other donor efforts. As mentioned, many donors are involved in the sector. The Mission can choose to get involved where others are not, to complement by expanding on others' efforts, or to leverage donor resources by working to ensure their effectiveness. Each is a legitimate option with advantages and disadvantages, and in each section

below, the case for AID involvement is made with the donor relationship in mind. In the training option, the Mission would work more or less independently of other donor efforts. For the primary education intervention, USAID would be complementing external assistance expected from the EEC. In the nonformal education activities, the work of other donors such as the Kellogg Foundation and ILO would be augmented and expanded. Mission efforts to improve efficiency would make more effective and thus leverage the assistance to be provided by the EEC.

The section which follows presents the team's findings on possible areas for future HRD investment by USAID/Swaziland. Each represents a real problem area, deserving of external assistance and tractable with the type of inputs and expertise that AID can provide. Following the presentation of the options, a recommendations section provides guidance to the Mission in making its decision for the sector.

5. Summary

A. Investment in education leads to higher GDP, increased and more equitably distributed incomes, increases in worker productivity, and facilitates the industrialization and technology transfer process.

B. Congress has mandated that AID become more involved in basic education, especially in Africa. Agency and Africa Bureau policies and priorities support such endeavors, with particular interest in issues of educational management, costs and financing, non-public education and decentralization. The Bureau rates Swaziland in the "performance" category, and thus a good candidate for assistance to the education sector.

C. The education level of Swaziland's workforce needs to be raised to bring its skills profile in line with the needs of a modernizing society. Greater efficiency in the production of this improved workforce is needed, and is feasible.

D. The kinds of problems Swaziland is facing in its education system are second-generation, requiring course corrections more than fundamental changes. The problems, not uncommon in other sub-Saharan countries, in part result from rapid system expansion to achieve reasonable access levels, but now involve the need to keep costs and unemployment in check, in the face of high population growth rates.

E. Related to the choice of HRD problems to be addressed, the Mission must decide on program versus project assistance, short versus medium-term goals, for or against institutional strengthening efforts and its posture with regard to other donors working in the sector. Program support is not recommended, nor should short-term objectives be pursued in lieu of activities with longer-term payoffs.

SECTION IIIA
MEETING JOB-SPECIFIC
SKILLS SHORTAGES

Program Option

Provide training to meet job specific skills shortages.

One important assessment of the efficiency of the education and training system in Swaziland is to find out whether the graduate outputs from the system receive the skills they need to find employment. The various employers in the country in agriculture or forestry, manufacturing or government require certain specific job skills from their employees to enable them to function. Several surveys have been undertaken (most notably by Digby and Colclough in 1977, and ILO in 1986) to determine the demand for manpower in various categories and the supply of such manpower. From the recent ILO manpower report some of the salient findings were :

- a) That many positions for skilled workers were occupied by workers who had lower level skills as a result of the shortage of skilled workers (pg. 8)
- b) That there was a predominance of expatriates in certain occupational groups like accounting, engineering, - architects and surveyors, business managers, and doctors. As a result, there was significant variation in the extent of localization among the various occupational groups. The report indicated that about 86 percent of accountants, 75 percent of engineers, 55 percent of architects and surveyors, 55 percent of doctors, 60 percent of business managers, and 45 percent of engineering technicians employed in the private and parastatal sectors are expatriates, the report explained :

Part of the explanation for the high proportion of expatriates in high level jobs in Swaziland is due to the fact that there are at present insufficient numbers of qualified citizens to perform these jobs. The shortage of qualified citizens is well illustrated by the number of vacant high level skilled posts, particularly in the government sector. (ILO, pg.11)

This shortage of high level and skilled manpower is a problem, as the conference of Principal Secretaries, Deputy Principal Secretaries and Under Secretaries held at Mhlambanyathi in 1985 pointed out. The Principal Secretaries indicated

... there are several challenges facing the Civil Service with respect to Public Service Manpower problems. The major and most crucial problem is that the objectives of the Government's training and localization policy initiated at the time of Independence, more than sixteen years ago, have been hardly realized in terms of the quality of performance and level of productivity in the Public Service. There continues

to persist a serious shortage of requisite substantive skills and capacity in implementing different Government programmes and projects. (Pg. 11)

To supplement the information from these sources, the concept team consulted a few employers - Swaziland Fruit Canning, Simunye Sugar Estates, and Barclays Bank - to check the situation as concerns the supply and demand of workers with high level skills. The findings are similar to those already indicated: the employers find that there is a shortage of skilled and highly trained Swazis for senior level positions, and as a result they have to employ skilled personnel from outside the country to continue operating. All the evidence accumulated then points to the fact that there are job specific skills shortages in Swaziland, and that programs need to be set up to attempt to address these needs if productivity and growth is to be sustained and improved.

1. Developing Local Training Institutions

The first major option considered is to build up local institutions to provide high quality training programs in the areas where there are skills shortages. Institution building will involve strengthening the Department of Accounting and Business Management and the Faculty of Science at the University of Swaziland.

A. Department of Accounting and Business Management at UNISWA

Purpose

The main purpose of this sub-option is to strengthen the Accounting and Business Administration program at UNISWA to enable it to produce the kind of graduates desperately needed by the private and public sector.

Problem Statement

Students entering the labor force with business education degrees have been found to be lacking in many aspects needed by the employers, so the employers continue to hire expatriates in these critical areas. A survey of employers' assessments of UNISWA graduates in this area and the concept team's discussion with the employers revealed that the graduates tended to understand theory, but lacked job experience, managerial skills, problem solving techniques, and the ability to use up-to-date technologies such as computer based data processing which are increasingly common in businesses in Swaziland.

Nature of Activities

Activities would include the following:

- a) Capital expenditure for computer lab, computer, computer software, and related equipment to be

used for trainees in this program.

- b) Technical assistance to help develop local staff in the Dept. and also help devise appropriate curricula to make the program relevant to employer's needs.
- c) Incentives (funds) to employers to encourage them to release their employees to attend the part-time University run certificate and diploma courses in this area.
- d) High level training for local staff who would become the future leaders of this project. (With SWAMDP?)
- e) Funds to find employment for the UNISWA students during vacations to give them the work experience, and to liaise with employers on strengthening the program.

Timeframe for Measurable Impact

The time frame for measurable impact would be about 5 years, as the facilities and equipment, staff and courses would have to be in place first to permit the required instruction. The impact of the project could be assessed when the first graduates of the program joined the labor force.

Size of Intervention

The combination of physical facilities, technical assistance, training, and incentives to employers to release employees, and the need to carry out such a project for at least four years would make this a moderate project activity which would require an investment probably in the range of \$1,000,000.

Case for USAID Involvement

AID's involvement in this aspect would help to fill an important gap in the HRD area in Swaziland as this would enable the private and public sectors to localize the top management positions in both existing and new businesses. Such involvement would also fit AID's current support of the Swaziland Institute for Accountants.

The case for AID's involvement in this area is therefore strong, in that if the job specific skills shortages that exist are allowed to continue, further development and growth of existing enterprises will not be possible, and also, new firms planning to locate in Swaziland will not do so as they will not have the skilled people which they need. Lack of the needed skills could therefore be a great hinderance to further development and growth in the country.

B. Faculty of Science at UNISWA

Purpose

The main purpose of this sub-option is to improve the

teaching and student achievement scores in mathematics and science and to make the curricula more relevant to the needs of local industry.

Problem Statement

Students entering institutions of higher learning in Swaziland lack science and maths skills. When they graduate from UNISWA in these subjects, they lack an understanding of how to apply what they have learned to industry or to the work place. Meanwhile, the demand for these skills is substantial. The 1986 ILO manpower study indicated that in the public sector alone, the vacancy rate among physical scientists was nearly 60% of the available posts. Many other highly skilled occupations, like engineering, medicine, and architecture, are also facing current shortages.

Nature of Activity

The nature of activity would be as follows:

- a) Technical Assistance to the Faculty of Science
- b) Development of course materials and needed science and mathematics equipment
- c) Training for lecturers and laboratory technicians

Size of Intervention

The combination of inputs needed for such an activity would be relatively moderate, perhaps \$1,000,000.

Timeframe for Measurable Impact

The time needed to achieve a measurable impact would be about 3 to 5 years. Trained faculty, facilities, and equipment would have to be in place before improved teaching can be started. The impact would be felt when graduates began to enter the labor market.

Case for USAID Involvement

A shortage of high-level manpower with good skills in math and science has been identified by ILO and others. Swazi graduates with improved skills in these areas would likely be quickly absorbed by industry. However, since other donors like EEC, CIDA and the Netherlands are already engaged in this area, the case for AID's involvement would need to be made on the basis of carefully designed complementarity.

2. Meeting Short-term Training Needs

The second major option for dealing with job specific skill shortages is to provide short-term training at both local and overseas institutions to provide employees with needed skills.

Nature of Activity

The activities in this option would include:

- a) Technical Assistance to conduct short-term training in various skills at available local institutions like IDM, SIMPA, and Mananga. (Provided under SWAMDP-II?)
- b) Continuation of the existing SWAMDP project by providing for short-term and long-term participant training in the US and other countries.
- c) Putting into place an incentive structure that will promote private sector training in the skills which they need. Incentives could include a training levy, additional tax breaks and other support for training.

Size of Intervention

The combination of inputs, added to the number of courses that would be undertaken, and the numbers of students who will be sent overseas for training, could make this a moderate to large investment. The effort could easily be scaled to fit availability of resources and the degree of aggressiveness with which the Mission decides to address the problem.

Timeframe for Measurable Impact

The time needed to achieve a measurable impact would be less than a year in the case of some local short-term training. On average though, impact would be felt in the 3 to 5 year time horizon since students need to complete training and find jobs.

Case for USAID Involvement

This is an important option which will assist Swaziland in filling immediate, specific gaps for senior and high-level skilled manpower in both the private and the public sector. The case for USAID involvement is therefore strong. SWAMDP provides an appropriate vehicle to address these needs.

SECTION IIIB
INTEGRATING
PRACTICAL ORIENTATION
INTO PRIMARY SCHOOL

Purpose

To re-orient the curricula at the primary level to counteract the current non-technical bias and enable school leavers to move more rapidly into employment opportunities which are open to them; and to raise the general quality of education so that primary school leavers can transfer what they learn in the classroom to their post-school real-life situations.

Problem Statement

As shown in Section One, two thirds of Swazi children end their formal education by seventh grade. As secondary education expands and outstrips market demand for graduates, job opportunities for primary school leavers are increasingly unavailable. Most people in this group (ie: the majority of Swazi) will have to make their living farming Swazi Nation Land or working in the rural and urban informal sectors. This indicates the need for a practically oriented education in primary school.

In contrast, the primary curriculum is geared towards academic achievement. Functionally, the system selects the few outstanding students for higher education and future professional roles in the public and private sectors. However, as the system expands and the number of graduates outstrips the demand for professionals, its academic orientation is increasingly dysfunctional. The system continues to filter out the few professionals demanded by government and industry but leaves thousands of other people ill-equipped for either the modern sector (because they failed academically) or the traditional sector (because their education did not teach skills needed for farming or self-employment).

Nature of Activity

The problem outlined above suggests that teaching practical skills in primary school is especially important in Swaziland. The MOE defines practical arts as agricultural, handicrafts, health, and elementary technologies. English language skills are also critical for participation in commerce and the modern sector. All these skills will be useful to elementary school children whether they continue past elementary school or not, and merit priority in the curriculum. Both the Imbogodvo Manifesto and the National Education Review Commission Report, the two guiding documents for education policy, stress the need for practical arts education at the primary level.

This option would seek to strengthen the Ministry of Education's ongoing efforts to diversify the primary school curriculum and eliminate the existing academic bias. Activities would build on the training of teachers in practical arts

supported by the Teacher Training Project, making this a logical follow-on activity for USAID to undertake. The project would have two components.

Component One would continue support for the MOE's efforts to diversify the curriculum through improved teaching methods and the introduction of interactive radio learning for English. Emphasis would be placed on in-service education to train teachers how to (a) integrate practical arts into the primary curriculum and (b) use interactive radio, new texts and materials to diversify the curriculum.

Component Two would strengthen the Ministry of Education's ability to design, produce and distribute learning materials needed to support a diversified curriculum and improved teaching. The MOE already has substantial capability to design texts and teachers guides as evidenced by the ongoing production of primary texts for agriculture, home economics, science and math, English, and industrial arts. USAID support to the National Curriculum Center in the seventies and early eighties is in part responsible for this capability. However, the Ministry lacks the capability to produce radio education programs and inexpensive learning materials, such as worksheets, readers, games, posters and teaching aids or to distribute them. The effective introduction of practical arts will rely in large part on the availability of such educational materials to guide both students and teachers.

Building this capacity in the MOE would require the establishment of a materials development center where cheap, targeted learning materials could be produced, including facilities to record radio education programs. Distribution of materials would also have to be addressed by the project. The beginning of a distribution system has been established through the Teacher Innovation and Distribution Centers (TIDC's). A distribution system for educational materials could also be used to distribute texts to schools. This would require continued attention and assistance to the TIDCs.

Probable Inputs

Inputs would fall into four categories:

1. Training

a) Participant Training: Both long and short term training would be provided in materials development, distribution and radio education.

b) In-Country Training: In-service teacher training in integrating practical arts into the primary curriculum and in the use of new teaching materials would be provided for teachers, teacher trainers and other pertinent ministry officials.

2. Technical Assistance

The project would include a minimum of three technical assistants to advise on the production and distribution of practically oriented classroom materials, radio education, and in-service education.

3. Commodities

Equipment needed for the production of classroom teaching materials and radio programs would be provided. This would include radio production facilities. Facilities to house the materials development center might have to be provided.

Timeframe for Measurable Impact

The combination of learning materials and radio education should begin to produce results within the first year of introduction to classrooms. In-service education over the life of the project would amplify these improvements.

Size of Project

The combination of training, technical assistance and establishment of a materials development center and the need to carry out activities over at least a four year period would require 4 - 7 million dollars.

Case for AID Involvement

The GOS has made integrating practical skills into the primary curriculum a priority reform. USAID support to implement this reform would directly address the problem of non-productive primary school leavers. Work in this area would build directly on the work underway in the Teacher Training Project. That project's mid-term evaluation recommended emphasizing practical skills and led to a re-prioritization of project activities. Therefore, a project focused on practical skills would build on a strong foundation.

The MOE's reform program, which would introduce nine years of basic education and vocational or alternative training for all students, provides a second rationale for investing in practical education. A similar effort in Lesotho that established the Instructional Materials Resource Centre (IMRC) has produced significant benefits for the education system. IMRC's facilities have provided the means for large scale introduction of student-centered materials and interactive radio English into primary schools.

This project would also address an area prioritized by Congress which has directed that the Agency support basic education in Africa, and that fifty percent of section 105 account (including DFA) be used for that purpose.

SECTION IIIC
NONFORMAL EDUCATION

Program Option

Nonformal Adult Education.

Purpose

To strengthen nonformal education programs offering education income generation programs for traditional adults.

Problem Statement

Many primary school leavers do not become productive members of society, and have no access to education and training which could help them improve their lives whilst increasing their contribution to the nation's gross domestic product.

Nature of Activity

In this section we will suggest three levels of possible USAID involvement, including (a) "buy-ins" to existing revolving fund programs, (b) savings clubs for rural women and (c) a nonformal education service agency. The activities outlined below would be necessary preliminary steps for all three levels.

1. Seek out promising nonformal education programs offered by public and private institutions and organizations. The Mission's 1986 survey of PVOs in Swaziland located 25 private organizations involved in human resource development and/or employment-income generation, with beneficiaries totaling more than 38,000. Public sector institutions with extension and/or outreach programs are working with many more people.

To choose the organizations most appropriate for USAID assistance, the Mission should apply criteria such as the following:

- (a) Organizational focus should be on training linked closely to income/employment generation. The above survey found thirteen such organizations among the PVOs, and noted that *there is virtually no one attempting to help people generate income who is not also concerned to some degree with skills training.*
- (b) Targeted beneficiaries should be persons who have not been served by the formal education system, especially those who for reasons of history or culture have least opportunity to find employment or generate income. This group would include but not be limited to women in the traditional sector and in poor urban areas.

- (c) Programs selected should have a short-term focus, with emphasis on immediate application of learning to improvement of the beneficiaries' lives. The program's success should be measured in terms of beneficiaries' changed circumstances.
- (d) The scale of the programs selected should be large or amenable to expansion. Programs whose nature makes it impossible for them to address the needs of more than a few beneficiaries (as is the case with some farmer training programs, for example) should not be selected.
- (e) Cost-effectiveness or benefit-cost measures of selected programs should be high by comparison with results obtained by other programs with similar purposes. (Benefit-cost data can be obtained when beneficiaries realize monetary returns as a result of their involvement in the program.)
- (f) Sustainability of the programs should be assured or at least highly likely. Programs which are completely donor-dependent should not be selected. Sustainable programs include those which are partly or wholly assured of continued GOS funding. SEBENTA, for example, receives approximately 70% of its annual budget from government, which gives it solid assurance of stability. Continuing existence can also be assured through an organization's capability to capture profit-making contracts for services. Examples of this sort of sustainability include organizations which provide materials for recurrent needs of government ministries, enjoy repeat business from international organizations which buy goods or services from the organization, or hold long-term contracts with international organizations for training, materials or evaluation assistance.

2. Negotiate with selected programs to provide inputs which will address bottlenecks, open new opportunities, or allow expansion of programs to serve new populations.

The interventions below are listed in ascending order of complexity and time commitment on the part of the Mission :

1. Revolving Funds for Seed Capital

The 1986 PVO survey identified the need for capital to begin small income generating activities as a serious problem, particularly for rural women. That view is supported by the 1987 ILO report, "Manpower, Education and Training," which links establishment of such funds with nonformal training courses below the craft level for the "large mass" of dropouts

and school leavers with no foreseeable job prospects or access to further schooling.

At least three revolving loan funds are now in operation or due to begin soon. The Women in Development program maintains a fund of E130,000 which enables about 65 women per year to start their own businesses. The Swaziland Farmer Development Foundation has recently initiated a fund which permits its members to purchase tools for common use. The newest effort, signed in October, 1988, is assisted by the Arab Gulf Fund and the ILO. It will include several of the Ministry of Education's skills training programs, which have observed over the years that a large proportion of their graduates have been unable to start production businesses or small enterprises. One of the crippling problems is lack of capital, since most graduates could not secure bank loans because they lack collateral. This project will deposit \$27,000 in the Swazi National Development Bank to be used as a guarantee for loans to graduates approved by a MDE loan review committee.

Probable Inputs

Funding to augment existing successful revolving fund programs would be the basic input under this option. For such cases there would be minimal need for technical assistance. The Mission may, however, want to consider funding new loan programs which could learn from the experience of ongoing schemes, but which would offer assistance to target populations unserved by the current programs. Candidates for such assistance could include Ligcabho Labomake (LL), a regional committee representing and coordinating 51 rural women's Zenzele groups in the Manzini District. The 1986 PVO report recommended consideration of LL for such support, but noted that a "great degree" of institution building would be required to realize LL's potential for widespread impact.

Another possibility for support would be the Home Economics Section of the Ministry of Agriculture and Cooperatives, which has been involved with the Tototo Home Industries training being carried out under the SWAMDP project. Tototo consultants were enthusiastic about such a prospect when questioned informally during their recent visit to Swaziland, and could provide valuable technical assistance for initiation of such a fund.

Size of Intervention

Small, because current revolving funds are very small, incremental funding would need to be sensitive to their absorptive capacity. Total budget for revolving funds would depend on the number of activities involved; adding some technical assistance would still not bring the total to more than \$1,000,000.

Timeframe for Measurable Impact

Adding to existing revolving funds would permit the money to be put to immediate use. Starting new funds would yield measurable results in less than two years because the borrowers need immediate results from their capital in order to survive.

Case for USAID Involvement

The case is strong for at least this minimal level of involvement. It would take advantage of recent Swazi experience in the management of such funds, strengthen local institutional development, and most importantly, it would provide direct support to poor rural women, one of the hardest Congressionally-mandated target groups for the Agency to reach.

2. Savings Clubs

Although the impetus for this recommendation comes from experience with rural women's savings clubs in Zimbabwe, Swaziland has at least one PVO with relevant experience. Africa Cooperating Action Trust (ACAT), described in the 1986 PVO report as having sound programming and capable management, had 30 clubs at the time of the survey, and was aiming to grow to 110 clubs in the next three years.

Savings clubs represent an indigenous method for generating seed capital, and have a history of creating a spirit of self-reliance and initiative which spins off numerous benefits to participating communities.

Probable Inputs

Inputs would be almost entirely incremental funding for ACAT and for other existing organizations, with most provision for technical assistance or exchange visits to other organizations such as the Adult Literacy Organization of Zimbabwe.

Size of Intervention

ACAT's annual budget in 1986 was E70,000, so even tripling or quadrupling its program would still require only modest investment, say \$500,000 over life of project.

Timeframe for Measurable Impact

Adding to an existing well-run program is an effective strategy for achieving short-term impact. Organizing new groups and seeing their results should be possible in less than two years. This intervention would require somewhat more Mission monitoring than simply adding to revolving funds, but the management load should not be onerous.

Case for USAID Involvement

As with revolving funds, the case is strong. Strengthening existing programs implies relatively low risk, and offers a means to provide direct support to one of the Agency's important target groups.

3. Nonformal Education Service Agency

Experience in several countries, the nearest of which is Lesotho, has shown the value of a Service Agency. Service Agencies function in the nonformal education subsector. Service Agencies provide training and materials development assistance to the field workers and extensions of public and private development programs in all sectors, with the aim of helping them improve their effectiveness. Using the principles and techniques of participatory nonformal education has proved to be so rewarding that the Service Agencies enjoy a high rate of return business, as for example in Lesotho, where the MOE-based Service Agency is providing long-term recurrent support to the Ministry of Health's community health education workers, under a World Bank-funded contracting arrangement.

Service Agency assistance is by its nature directed at improving program effectiveness at the grassroots level. A Service Agency's success is measured in the tangible improvements of its client organization's target beneficiaries. In the Lesotho MOH case cited above, success comes in the form of improved health practices and child survival in rural communities.

One possible form for this intervention would be to work with SEBENTA to reformulate its program. The team's visit to SEBENTA revealed a considerable level of experience and capability which would lend itself to becoming an effective service agency. SEBENTA however, would have to be convinced.

Probable Inputs

Funding and technical assistance would be needed to redirect SEBENTA's program towards becoming a nonformal education service agency. It would then contract with public and private organizations to develop teaching materials and train their extension agents or trainers in the use of effective participatory learning. Earnings from such contracts would help assure the sustainability of the effort. Addition of a revolving fund would allow the Service Agency to make seed capital available to a wide variety of beneficiary groups, and should be included in the project design if the Mission moves ahead with this sub-option.

Size of Intervention

Medium, say \$4 million LOP. Major costs would involve staff training in country. Addition of a revolving fund (as is

the case in Lesotho) would require additional funding of perhaps \$500,000.

Timeframe for Measurable Impact

Short to medium. SEBENTA staff could begin putting training into practice soon, but measuring impact of improved training and materials would take time, since it would be preceded by some staff training and marketing of the Service Agency's services.

Case for USAID Involvement

Medium to strong. AID has a unique comparative advantage among international donors; however, SEBENTA's interest has not been checked at all. A Service Agency's assistance is completely directed to local development, so its impact is consistent with AID's mandate. A service agency project would not, however, be classed as basic education under the current Congressional definition.

SECTION IIID INTERNAL EFFICIENCY

Program Option

Improve internal efficiency, decentralize educational decision-making, strengthen financial management, create and expand policy analysis, research and planning capacity, and reform the testing and guidance procedures used in schools.

Purpose

To strengthen the capacity of the MOE and its regional and local staff to formulate policy, plan, implement, and monitor educational development and reform.

Problem Statement

Low internal efficiency in the schools and a need to strengthen management at the regional and central levels of the MOE.

CONTEXT

The internal inefficiencies of the school system are well documented and offer much scope for savings. However, these potential savings cannot be realized without a substantial change in the management capacity at both school and higher levels.

The current policy environment in the MOE is promising for donor involvement. During the past several years a variety of forces have led to the formulation and at least partial commitment to a series of reforms in the structure and content of education in Swaziland. The leadership of the MOE is publicly committed to carrying out many of the reforms articulated in the NERCOM report. In attempting to move forward with these reforms, a number of senior education officials have become aware of the MOE's limited capacity to implement the reforms with the current management structures and resources. They recognize the need to substantially upgrade educational management as a precondition for system reform.

A brief glimpse of the magnitude of the challenge is provided by a list of reform policies which have either been approved or are under serious discussion in the MOE.

- A. Move to 9 year, basic, compulsory education plan.
- B. Revise curriculum for grades 8 & 9 to provide wide introduction to pre-vocational options.
- C. Change to a three-year senior secondary school system.
- D. Create a Pre-vocational streaming system for High school.
- E. Abolish PSLE and the JC examinations.
- F. Begin a continuous in-school assessment system.

- G. Create a professional guidance program, with guidance personnel in each secondary school.
- H. Create an individualized, permanent student record system.
- I. Limit the amount of repetition allowed at all levels.
- J. Eventually expand all JC level institutions to become complete High Schools.
- K. Make curriculum for grades 1 - 9 a coherent whole which forms a basis for either leaving school or entering high school.

Even a cursory look at this list indicates the extensive capacity for analysis, planning and implementation which would be required to carry out these reforms. At the moment there appears to be no systematic plan or capability to produce a plan for implementation of even selected parts of these reforms. Reforms must also be carried out in the context of the heavy daily pressures to manage the existing system and to respond to continued demands for expansion.

Nature of Activities

This option consists of a related set of six activities, all of which combine to improve the quality of the educational experience at the classroom level by making more effective use of existing resources. Linking these activities under one umbrella includes reforms which stretch from the school level all the way up to the central office of the MOE. These activities could be sequenced or phased in a variety of ways, but each is part of an interconnected network of needed improvements.

- 1) Restructure management of MOE at both central and regional offices to increase decentralization of responsibilities.
- 2) Improve recruitment, selection, pre-service and in-service training for headmasters at both primary and secondary schools.
- 3) Revise and strengthen financial management and budgeting procedures for both capital and recurrent budgets.
- 4) Expand and strengthen research, policy analysis and planning capability of the MOE in its planning section.
- 5) Put in place a micro-computer based management information system (MIS) to support planning, policy analysis, and financial management.
- 6) Create and implement a guidance and counseling mechanism in the schools along with revised testing and measurement, supported by appropriate central and regional office staff and training capability.

The sections below outline briefly the need and the nature of the activity which USAID could undertake to assist the GOS in meeting the need.

1. Restructure and Decentralize the MOE and the REO's

Activities in this component have the objective of improving the MOE's capability to make, implement, and enforce policy, both at headquarters and in the Regional offices of the MOE.

The MOE is hampered by management approaches which are inadequate for the current tasks, and an overall structure which severely limits the ability to plan and implement new policies. At headquarters roles and responsibilities are often unclear and in some cases misunderstood. Roles in the central inspectorate overlap those in the regional offices and the NCC, or in some cases would better be located in the regions. GOS has expressed the intention of decentralizing responsibility to the regional offices, but cannot effectively do so until there has been a systematic review of positions, responsibilities, civil service grade levels and overall decision-making at all levels of the system. The MOE currently has a variety of good policies which cannot be effectively implemented because of these structural problems.

Rationalization of the structure will require a GOS initiative, with access to outside experts. Historically three different proposals to reorganize the MOE have been completed, all in the early 1980's. While some of the recommendations have been implemented, most remain on the table as desired and needed reforms. GOS supports many of these recommendations, but has so far been unable to create a process which would lead to their implementation. Reform of decision-making patterns and structure is highly sensitive since it involves power and status of current officers, and hence must be approached with considerable caution, particularly to avoid any feeling that external assistance personnel are making changes which are seen to be GOS prerogatives.

The revision and specification of roles, responsibilities and structure of the MOE is an essential prerequisite for laying out a systematic plan for reassigning staff, up-grading skills, and recruiting new staff. Once such a plan is in place, other initiatives outlined below will have a substantially increased chance for effective implementation.

Timeline: The task of restructuring and decentralization is a longer term challenge. Within two years one could expect a set of agreed upon plans and the beginning of a phased in implementation of them. Three to five years would likely pass before significant changes are actually in place.

2. Upgrading the Management Capabilities of Headmasters

To change the educational environment for pupils and hence improve achievement, and to realize benefits from improved internal efficiency, significant upgrading of the administrative capabilities of headmasters is essential. Problems at the school level include: allocating of personnel resources, fiscal resources, time management to improve in-class, time-on-task for pupils, teacher absenteeism, maintaining a constructive school atmosphere, managing teacher loads, and fiscal management of the school - particularly the use of locally collected school fees. The 1984 Sector report indicates that *there exists a serious administrative weakness at this mid-management (headmaster) level.*

Activities to address this problem would include improved recruitment, selection, and training of incoming headmasters, and a substantial in-service program for upgrading and supporting the current cadre of headmasters. The tasks, responsibilities and policies which headmasters are meant to implement need to be reviewed, clarified, and clearly written down to facilitate accountability and performance monitoring. Success in upgrading the headmasters would change the role of the inspectorate and devolve professional skills to the school level where they can be most effective.

Selecting an institutional location for in-service upgrading of headmasters needs some careful investigation. IDM and SIMPA may be candidates, although both organizations have had a variety of staffing problems. The Faculty of Education at UNISWA might play a role in both pre- and in-service training of headmasters, although there may be good reasons to do the in-service training elsewhere. Once such questions are answered, AID involvement would be a matter of developing courses, materials, capable staff, and implementing the process of training. Ultimately the process needs to be institutionalized so that both pre- and in-service training of headmasters is an ongoing reality.

Timeline: Intensive in-service training of headmasters could have an immediate impact on the efficiency of schools, and could be expected to influence student achievement as well. When coupled with ongoing support and strong monitoring from the RED level, the mid-term effects of headmaster training could also be substantial. Long term effects will depend on creating the institutional capacity to train and certify new headmasters as they enter the system.

3. Revised and Strengthened Financial & Budgetary Procedures

The MOE has had problems with drafting the annual budget, particularly in linkages between the capital and the recurrent budgets, and in accurately estimating recurrent costs. While improvements have resulted from the creation of the Teacher Service Commission, the lack of a computer-based financial planning capability severely limits the ability to plan and

manage finances adequately. The reorganization and decentralization suggested in component one above will need to be closely linked to a parallel decentralization of financial management to the REO level.

Of particular importance is the ability to project future costs based on enrollment estimates and to be able to provide costing for alternate reform scenarios now under consideration. Almost no detailed costing has been done of the policy reforms listed at the beginning of this section. Particularly troubling are the lack of cost estimates for the proposed nine year basic education cycle and for the pre-vocational streams at high school. Realistic policy discussions require reasonable cost estimates so that general feasibility can be determined early in the dialogue.

Management of finances at the school level is a substantial problem. Schools collect upwards of 25% of recurrent costs in the form of various fees from parents. There are no guidelines for the use of these fees, and little accountability for headmasters in how the funds are spent. Not infrequently practical subjects aren't taught because of the lack of supplies, and necessary inputs are not available because fees have been used for other expenditures. Community entrepreneurial spirit and self-help is a valuable resource for expanding and improving education, but fiscally responsible management is essential if this source of revenue is to grow in the future. Reformed financial management must include clear guidelines, auditing capability located at the REO levels, and enforceable accountability for headmasters.

AID activity in this area would be in the form of technical assistance and training, and would in part be incorporated in the training of headmasters outlined in component 2 above.

Timeline: A project should be able to produce significant results within 18 to 24 months in the form of computerized budgets and projected cost estimates for the ongoing school system - especially when coupled with the data from the Teacher Service Commission. On a two to five year time horizon, this activity would provide much improved cost estimates for proposed reforms, and more efficient utilization of allocations to the MOE from central finance.

4. Policy Analysis and Research Capability of MOE

In the past fifteen or so years, many donors have recognized the critical role of the planning section of the MOE and have undertaken to provide TA and Participant Training to create and staff such a section. Some success has been achieved in that a Planning and Research section is officially in existence with established posts. However, continued personnel turnover and chronic under staffing has produced a serious problem now as the MOE is considering wide ranging reforms. At the moment the section consists of one expatriate (funded by EEC through 1991; EEC may also be providing an

additional expatriate), and a statistics officer. Two new officers are being hired (a grade 16 assistant planner, and a grade 18 senior planner) but the current section head is leaving and there is no way of knowing what the experience levels of the new officers will be. There is a strong need for a data analyst who is capable of setting up and managing a computer-based information system and training the staff to use it.

The Planning section lies at the heart of MOE capability to do policy analysis and planning. Drafting budgets, plans and implementation schemes, and compiling statistics to monitor system performance are all tasks which fall to this section. In reality, the section is also used to perform a variety of tasks for other parts of the ministry which do not have staff or capability for various documentation or analysis activities which they need. This section also has major responsibility for assisting donor agencies in the preparation of the myriad documents needed in their project cycles.

Assistance activities for planning would have to be a combination of TA, short and long term participant training, and provision of a computerized data system. (See 5 below) Building linkages to the Social Science Research Unit (SSRU) at UNISWA and other institutions capable of doing supporting research would also be useful. Part of the restructuring of the MOE in section 1 would also involve review of the policy creation and analysis process in the MOE and the linkages between the Planning section and other parts of the MOE.

Timeline: Short-term impact can be achieved in this area with long and short-term technical assistance by putting in place improved analysis and reporting procedures. Medium to long-term will be needed to produce trained Swazi staff and provide them with the experience needed to make them effective members of the planning section.

5. Create a Micro-computer Based Management Information System

At the moment virtually all tabulation of both financial and statistical data within the MOE is done by hand. There are several micro-computers left by previous donors and some terminals linked to the Central Statistics Office, but little use is made of this equipment due to lack of software, training and linkages to the tasks of the MOE. The annual statistics collected from all schools in the country are compiled by secondary school leavers who are temporarily employed for the task. Statistical tables are typed laboriously by hand. As a result the data are rarely helpful in the policy formulation activities of the MOE. Similar problems exist in financial management and budgeting, and in the Teacher Service Commission which keeps track of all teachers and is responsible for keeping their records and authorizing their salary payment (the Teacher Service Unit has recently begun computerizing their records on equipment left by the UNESCO/SIDA project). Inaccurate projections of the numbers of teachers on salary have in the past created serious budget overruns.

Appropriate and usable technology now exists to solve these problems. Relatively modest investments in micro-computers, software, and programming time can produce localized and easily usable systems to handle most of the management information system needs of the MOE. Substantial benefits of both a financial and a policy planning nature would result from such an investment.

Activities to achieve this goal would include purchase of equipment and software, long and short-term technical assistance, and a combination of long and short term training. Parts of the system should be located in the Teacher Service Commission, the Planning Section, and in the Personnel and Accounts Section. These activities must however be linked with the reorganization and decentralization described in activity one. Whatever MIS is put in place must match the new structures and distribution of responsibility, including some MIS capability at the REOs as well.

Timeline: This is an activity which could have a significant impact on management within 18 to 24 months. Benefits would include increased knowledge of expenditures and the ability to identify surpluses and deficits early enough to make more effective use of resources. (An AID project in Zimbabwe had impressive early benefits of this nature.) In the longer run, planning and projections of the effects of various reforms would be more accurate and more realistic. Overall this should be viewed as a three to five year commitment that would have both immediate and longer term benefits.

6. Create a System for Guidance, In-school Assessment & Testing

Swaziland faces a substantial challenge to improve the external efficiency of its educational system. The combination of primarily academic curricula, a pyramid of national achievement tests used for selection into the next level, and a near total absence of any career guidance or counseling, exacerbates the demand for academic education with little relevance to the likely life paths of the majority of students. A reformed testing and guidance process must complement the proposed reforms aimed at vocationalizing the content of education. A more appropriate system would include continuous assessment in schools with end of grade testing, guidance procedures at upper primary and subsequent levels, and a national testing system that combined aptitude and achievement testing as a basis for entrance into the labor force or subsequent levels of study.

Initial activity in this area would involve developing and pilot testing approaches to guidance, training a cadre of already employed teachers to undertake guidance activities, experimenting with an in-school, continuous assessment system, and working toward a time when the PSLE could be phased out in the move to a nine year basic education for all. AID activity would include long and short-term technical assistance, long

and short-term participant training, and the provision of needed equipment and supplies.

The recurrent cost implications of the GOS proposal for this area need further analysis. Lack of any guidance and ongoing assessment now leads to excessive demand for academic education and the resulting external inefficiencies. Setting up a full scale guidance and monitoring system in each school may be too costly for the near to medium term resources available for education, but experimentation with simplified approaches which deal with the worst problems in a cost effective manner is needed.

Timeline: Benefits in this activity are likely to be medium to long term since there is little or no infrastructure in place to support the proposed new system. Donor activity in the first phase should likely emphasize development and testing of pilot approaches and evaluating their cost effectiveness. Larger scale systems could then be planned for implementation in a second phase.

Probable Inputs

Inputs for all the activities contained in the six components of this option would include substantial long and short-term Technical Assistance, complemented by extensive long and short-term Participant Training. Equipment and supplies would be more modest, limited mostly to computers and supporting software and supplies needed for the MIS installations. Modest investments in office equipment, vehicles, and general supplies would also be needed. There would be little investment in buildings or heavy infrastructure.

Size of Intervention

Because this option consists of a set of closely linked sub-options, it would necessarily be a large-scale, long-term effort. Project size could easily reach 5 to 10 million, depending on the speed which the MOE is willing to move in implementing reforms and introducing new management approaches. There would be measurable short-term (18 - 24 month) benefits, but the real benefits in improved efficiency would show up in the medium to long run future.

Case for USAID Involvement

The new Africa Bureau policy in basic education places particularly heavy emphasis on decentralization, improving efficiency, and strengthening management in education. All the activities discussed above speak directly to these goals. In addition, reform in policy analysis and management is essential to the effectiveness of the other options proposed in Section III. The clearly expressed readiness of GOS to proceed with reforms in the education system provide an additional strong argument for USAID's involvement. Without management upgrading the efficiency of all activities in the education sector will

continue to be unacceptably low and will contribute to the continuing decline in quality and efficiency in the face of increased demand and slow growth in resources available to education.

1. Restructuring and Decentralization: The experience of the U.S. educational system which is highly decentralized provides a unique comparative advantage in terms of providing technical assistance in this area. Management and administration capability is also a strong area for US technical assistance. When combined with the absence of other donors working in this key area, the case for AID involvement would seem to be unusually strong.


2. Upgrading Headmasters: A strong case can be made for this on two grounds: a) short-term effects could be substantial with a potentially large effect on the internal efficiency of educational process in schools, and b) improved ability to manage the system makes all investments in education more effective, including the activities of all the donors.

3. Budget and Financial Management: Setting up computer-based financial management systems is an area of expertise which AID has demonstrated in several other countries in Southern Africa. It also makes use of equipment and software developed in the States and our strong capabilities in the area of programming and utilization of computer-based systems.

4. Research and Policy Analysis Capability: This is a major challenge which other donors have worked on over the years. Success will only result from substantial, long-term commitment which is linked to reform of other components of the MOE as well. AID has the resources to make such a commitment. In addition, S&T/Ed's IEES umbrella project (which includes a buy in component) has developed considerable experience which would be directly relevant to assisting in the development of the Planning Section of the Ministry.

5. Micro-computer MIS: AID has considerable experience in Southern Africa in providing this kind of assistance. There are direct similarities to the situation faced by the BANFES project in Lesotho, and by an earlier AID project in Zimbabwe. The experience in these countries could be drawn upon to design and implement appropriate approaches quickly and efficiently. AID would seem to have strong comparative advantage here.

6. Guidance and Testing Reform: This is a new area of donor activity in Swaziland to which AID can bring the experience of the US school system, which provides perhaps the strongest such system in the world. There is a component in Lesotho's BANFES which could be drawn upon for experience. Testing, guidance and selection are key parts of the external efficiency of an educational system.



SECTION IV RECOMMENDATIONS

This section provides recommendations to USAID/Swaziland on the issues and options raised in this report. They represent the team's best judgment on the central question of whether the Mission should continue to support human resources development and, if so, in which areas and in what manner.

1. Should USAID/Swaziland continue to support human resources development?

The report recognizes the important gains made in Swaziland in HRD since independence, but points out where gaps remain. For modernization and industrialization to occur at a reasonable pace, the pushing force of sufficiently educated manpower is required. Comparisons of the educational attainment of Swaziland's current working age population with that of Korea when it was poised for industrial take-off (1975), suggest that Swaziland may be many years behind achieving a similar workforce profile. Economic and social benefits to be expected from a better educated populace include increased levels of per capita GDP and worker productivity, a more favorable climate for industrialization and technology transfer, improved distribution of incomes, higher overall levels of health and nutrition, and declining fertility rates.

Recommendation 1: USAID/Swaziland should continue to support human resources development as part of its development strategy.

2. Should the Mission program its resources differently based on various scenarios for economic growth?

There is not a HRD fast (or slow) track to ride based on economic growth trajectories. There is no doubt that Swaziland is currently enjoying relative high growth, but it is fragile. Externalities could reverse present trends almost overnight. Any formal education system takes time to produce trained manpower; but Swaziland's system could be significantly accelerated through internal efficiency improvements. This should be done. In addition, where specific shortages of skilled manpower in the modern wage sector are identified, training interventions should be developed and delivered to overcome them. The Mission, with its current and planned manpower development projects, is in a position to be responsive to such explicitly identified needs. SWAMDP should be encouraged to implement the program described in the recent assessment of training needs and local institutions.

SWAMDP-II should be designed to be responsive to additional needs as they become known, especially those of businesses and other private sector entities. However, it should be noted that according to the MOE, government preference is for a blend of support to both manpower training and to formal education, but favoring the latter. Past GOS efforts to push

for rapid localization and to alleviate skills shortages through short-term in-service training reportedly have not made significant headway, particularly in the private sector. Although in-service training continues to be an effective stop-gap measure, assistance to formal education is the recommended way to eliminate skills shortages and achieve localization in the long term.

Recommendation 2: USAID/Swaziland should not put additional resources beyond what is planned under SWAMDP-II into general participant training activities, especially if such investment would be at the expense of assistance to the formal or nonformal education system.

3. Should USAID/Swaziland provide budgetary or program support to the education sector?

The MOE has a proper vision for the future of its system and a reasonable set of policies consistent with this vision. However, there are problems with bringing policies to bear on implementation based on solid planning and financial analyses. For the MOE to develop the capacity to undertake the organizational and staff improvements necessary, will require carefully designed and targeted input and a moderate amount of time. A program or sector support grant is not feasible in such circumstances; project support is.

Recommendation 3: USAID/Swaziland should provide assistance to the education sector in a project rather than a program mode.

4. Should USAID/Swaziland strengthen institutions working in HRD?

The Mission has supported institutional strengthening efforts in the past by and large with positive results. For the future, however, the Mission should not take on ground-floor institution development efforts in the HRD sector. The basic institutions needed by the sector are in place. Institutions, like SIMPA, which are at this point experiencing fundamental problems should not receive AID assistance. Others, such as the MOE and UNISWA, which are functioning moderately well, but are faced with second generation problems, e.g. related to efficiency, effectiveness and management, are good candidates for support, especially in the institutions where previous "first-line" AID investments have been made.

Recommendation 4: USAID/Swaziland should take on the development challenge of helping important HRD sector institutions meet their second generation problems, such as streamlining operations, improving efficiency, broadening financial bases and increasing effectiveness.

5. How should USAID/Swaziland program its resources relative to other donors working in the sector?

Each of the choices available to the Mission regarding recommended HRD investments vis-a-vis other donors is viable. The Mission can work independently of other donors through its manpower training efforts, or complementary to them in the other suggested activities. The most important and therefore recommended for serious consideration is the leveraging effect AID resources could have on EEC's planned assistance to the MOE. Mission efforts to improve efficiency and performance of the MOE would make for more effective use and greater impact of EEC funds.

Recommendation 5: USAID/Swaziland should consider the additional positive effects to be gained through an assistance effort which has impact on the way other donor funds get programmed and spent.

6. Which of the suggested project options should USAID/Swaziland pursue?

Each of the four sets of options presented in Section III is of merit, and the team feels comfortable endorsing any of them. They are the survivors from an initial set of about 30 ideas following rigorous analysis and perception checks with key informants. This exercise was not intended to be a design effort, and therefore many important issues must be further explored if the activities move to the design stage. But each appears at this point to be feasible and worthwhile.

Recommendation 6:

a. USAID/Swaziland should consider the description of activity III.D on improving MOE's internal efficiency as a concept paper and approve it as such. Design work on a PID should start as soon as possible in order for a PP to be prepared and obligation to occur this FY.

b. USAID/Swaziland should address skill shortages in the manner suggested in Option 2 of Section III.A (in-country at local institutions), using available resources of SWAMDP. This project should also be used to start the faculty staff training to be required if Option 1 (support to UNISWA) is considered likely for future AID funding, for example under SWAMDP-II.

c. USAID/Swaziland should consider the activities recommended in Section III.B (improving practical skills at primary schools) and Section III.C (nonformal adult education) following the CDSS analyses. If, as a result of the CDSS exercise, a "growth" led strategy emerges, then the primary education project is recommended. If the new strategy includes an "equity" focus, then the NFE option is recommended as well.

1. Methodology

The team collected information from pertinent studies and reports and by interviewing key informants. (A list of informants is attached as Appendix II.) On the first day the team was briefed by the USAID Mission's management who laid out their expectations. The team then produced an outline for the paper and reviewed it with Mission management. This and the Scope of Work provided the framework for further developing the concept paper.

A four step process led from initial identification of educational problems facing Swaziland to final recommendations. Five major human resource development issues/problems were identified: 1) the social demand for secondary education exceeds the market demand for graduates; 2) job-specific skills shortages exist in specific areas; 3) primary school leavers do not contribute significantly to national economic growth; 4) educational opportunities are lacking for adults in the traditional sector; and 5) inefficiency in education wastes public funds and hampers educational quality.

The next step was to suggest general approaches for addressing each of these problems. For each approach a number of potential investment options were identified and examined as to whether or not they appeared to justify USAID involvement. Each option was analysed using the following outline:

1. Purpose
2. Nature of Activity
3. Nature of Inputs
4. Probable Size of Intervention
5. Measurable Timeframe for Impact
6. Case for USAID Involvement

Having identified the major educational problems and a range of possible solutions the team met again with management both in the USAID Mission and at the MOE. This allowed the team to check its findings and identify any gaps or errors in mid-course. The third step narrowed the broad range of potential options into four projectizable options. The Mission's and MOE's comments provided the basis for sifting through the initial options and making final selections.

2. Rejected Options

The rejected options and the reasons for their elimination follow.

Problem: The social demand for higher levels of education exceeds the market demand for graduates.

Purpose: To redirect the social demand for secondary education so that it is in closer balance with market demand.

Nature of Activity:

Policy dialog to re-direct social demand into alternative education and employment paths.

Nature of Inputs: * Intermittent short-term technical assistance including a cost study to show the financial implications of unchecked rapid secondary school expansion.
* Technical assistance to run workshops for MOE policy makers on the need to expand all levels of schooling in such a way that both internal and external efficiency are not compromised.

Probable Size: Small, possibly as add-on to larger MOE project.

Timeframe for Measurable Impact:

5 - 10 years. Changing social demand patterns requires long term changes in attitudes.

Case for AID Involvement:

AID's on-going involvement with the MOE gives credibility to raising policy issues in this area. The MOE is faced with a serious problem and has no way of resolving it. No other donors are actively involved in this area.

Reason for Rejection:

No realistic expectation that the proposed inputs would achieve the purpose.

Problem: The social demand for higher levels of education exceeds the market demand for graduates.

Purpose: To redirect the social demand for secondary education so that it is in closer balance with market demand.

Nature of Activity: To teach values, attitudes and aspirations which are more in line with the nation's development realities. These would include: entrepreneurial skills, work attitudes, and risk taking. Guidance counseling would also play a role in reifying career possibilities for youth.

Nature of Activity: Technical assistance to the National Curriculum Center, teaching materials, funding for training and workshops for teachers and policy makers would be required.

Probable Size: Small, could be an add on to a larger project.

Timeframe for Measurable Impact:

Long-term. Fostering new attitudes is a long term process.

Case for AID Involvement:

This would be a long-term, high risk undertaking. There is insufficient research evidence to support the notion that entrepreneurial skills and risk taking can be successfully inculcated through changes in curriculum. Therefore, the case for AID involvement is weak.

Reason for Rejection: AID should hold off to see whether current MOE plan for revising curriculum is implemented and successful.

Problem: Job-specific skills shortages still exist.

Purpose: To promote private sector training to address job-specific skills shortages.

Nature of Activity: Support development of ILO-style apprenticeship training service which operates on funds from employer payroll taxes. USAID would provide cash to complement EEC and other donors.

Nature of Inputs: Technical Assistance to assist in organizing the scheme, training for administrators of the fund, cash donations.

Probable Size:

Medium. Long and short term technical assistance and cash donations over 3-5 years required to institutionalize scheme would require 3-5 million dollars.

Timeframe for Measureable Impact:

Medium to long. Development of the agency and organization of employers would require a long-term institution building effort.

Case for AID Involvement:

Medium. The US does not have a distinct comparative advantage in this area, but could support technical assistance between LDC's which have such operations and Swaziland.

Reason for Rejection:

This option was dropped because the large employers who would contribute to and benefit from the scheme already have apprenticeship schemes that meet their needs. Also, a national training levy is already in place. Finally, there is a question of whether Swaziland's small size would permit such an organization to operate.

Problem: Job-specific skills shortages exist

Option: Short Term Training at Local Institutions

Purpose: To meet immediate needs for skilled manpower
to sustain and strengthen economic growth.

Nature of Short term courses in management, account
Activity: ing and other areas identified as priori-
ties.

Nature of * Short-term technical assistance to teach
Inputs: classes
* Long-term technical assistance to coor-
dinate training
* Course materials and equipment

Probable Size: 1 - 2 million dollars.

Timeframe for Measurable Impact: 1 - 3 years

Case for AID Involvement:

The case for AID involvement is strong.

Reason for Rejection:

This option is incorporated into Section IIIA,
sub-option 2. The recommendation is that
SWAMPD provides an appropriate vehicle for
these types of activities.

Problem: Job-specific skills shortages exist

Purpose: To alleviate the shortages existing in the fields of accounting and management.

Nature of Activity:

Upgrading the quality of UNISWA's Bachelor's of Commerce Degree.

Nature of * Long Term Technical assistance
Inputs: * Short Term Technical assistance
 * Computer lab
 * Long and short term training

Size of Activity: 1.5 - 2 million dollars

Timeframe for Measurable Impact: 2 - 5 years

Case for AID Involvement:

The case for AID involvement was judged to be strong in light of the skill shortages in this area.

Reason for Rejection: This option was incorporated into the concept paper Section III option A.1.

Problem: Job-specific skills shortages exist

Purpose: To enable the Ministry of education to better match the products of the school system with demands of the labor market.

Nature of Activity:

To expand and strengthen the career and counselling services offered at schools.

Nature of Inputs:

* Long and short term Technical Assistance
* Long and short term training
* Materials and equipment to set up record keeping systems

Size of Activity: 1 million dollars

Timeframe for Measurable Impact: 2 - 5 years.

Case for AID Involvement:

The systems proposed in the Ministry's reform of the education system are similar to educational policies followed in the US. This would give AID a comparative advantage.

Reason for Rejection:

This option was considered more appropriately falling under the problem of internal efficiency. It is dealt with as part of Section IIID.

Problem: Job-specific skills shortages exist.

Purpose: To upgrade the quality of science and math skills.

Nature of Activity:

Improve the teaching of industrial/technical Activity: skills through the in-service training at the secondary level.

Nature of * Long and Short term technical assistance

Inputs: * Training
* Course materials and equipment

Size of Activity: 2 million dollars

Timeframe for Measurable Impact: 2 - 5 years.

Case for AID Involvement:

The case for AID involvement was weak. Other donors already provide substantial assistance in this area. Therefore, AID funds could be used more profitably to complement these efforts.

Reason for Rejection: This option was judged as a low priority for AID at the present time.

Problem: Primary School Leavers Are Not Productive

Purpose: To enable out-of-school youth to become productive members of society by learning and applying productive skills and attitudes.

Nature of Activity:

Expanding/strengthening existing NFE institutions to enable them to better provide skills training to primary school leavers.

Nature of * Long and Short term Technical Assistance.

Inputs: * Training for NFE staff
* Course materials and equipment
* Budgetary support to NFE institutions

Size of Activity: 5 million dollars

Timeframe for Measurable Impact: 3 - 5 years

Case for AID involvement:

The case for AID involvement in supporting facility-based nonformal skills training was judged to be weak. The ILO and Kellogg Foundation are currently supporting pilot projects in this area. Their impact should be evaluated before AID makes a commitment in this area.

Reason for Rejection: Aspects of this option appropriate for AID support are incorporated into Section III.C of the concept paper.

Problem: Primary School Leavers are Not Productive

Purpose: To provide opportunities ofr further formal education for those who have left the school system before completing their COSC.

Nature of Activity:

Expand distance education programs for secondary education.

Nature of * Long and short term technical assistance

Inputs: * Course materials, small scalle printing capability

* Equipment and studieo for production of radio materials

Probable Size of Activity: 2 - 4 million

Timeframe for Measurable Impact: 2 - 5 years

Case for AID Involvement:

The case for AID involvement is weak. This activity would create more demand for secondary education and increase the numbers of graduates at a time when social demand exceeds market demand.

Reason for Rejection:

Incompatible with labor market demand rubric.

Problem: Internal Inefficiency Causes Substantial Waste of Public Funds

Purpose: Increase private sector involvement to increase the financial base of the MOE.

Nature of Establish a fund to match private sector Activity: donations to to education in predetermined areas.

Nature of * short term technical assistance

In-puts: * bugetary support

Size of Activity: 1 - 2 million dollars

Timeframe for Measurable Impact: 1 - 2 years

Case for AID Involvement:

The case for AID involvement was judged to be weak. Such an option would provide assistance in an ad hoc manner. It could make planning more difficult. It does not address systemic issues.

Reason for Rejection: No case for AID involvement.

Problem: Internal Inefficiency Causes Substantial
Waste of Public Funds

Purpose: Increase private sector involvement to
increase the financial base of the MOE.

Nature of Activity:

Provide appropriate educational texts and materials to all Swazi students by strengthening distribution sytsem and student access to materials.

Nature of * short term technical assistance

In-puts: * computers for management and monitoring
* Development of alternate/cheap textbook
production

Size of Activity: 1 - 2 million dollars

Timeframe for Measurable Impact: 1 - 3 years

Case for AID Involvement:

The case for AId involvement was moderate. The private sector does an adequate job of providing texts. However, many students cannot afford to purchase them.

Reason for rejection:

Aspects of this option are incorporated into the practical skills option in Section IIIB. but case could not be made for attempting to supplant ongoing private sector activities.

KEY INFORMANTS CONTACTED

<u>Name</u>	<u>Position</u>	<u>Institute</u>	<u>Date</u>
<u>Vocational Education</u>			
Leonard Lukhele	Principal	SCOT	11/15
Mr. Wineveld	Principal	VOCTIM	11/14
Larry MacDonald	Dir.	MITC	11/9
Sister Judith	Dir.	MITC	11/9
<u>Nonformal Education</u>			
Elliot Ginindza	Insp. Adult Ed.	MOE	11/8-11
D.M. Dlamini	Dir.	Sebenta	11/15
<u>UNISWA</u>			
L. Makhubu	Vice Chancellor	UNISWA	11/2
Mike Matsebula	Professor/Economics		11/16
Prof. J.Y. Ewusi	Professor/Science		11/17
<u>Formal Education</u>			
Musa Nsibandze	PS	MOE	11/1-18
Solomon Simelane	Director	MOE	11/1-18
Maria Mbelu	Planning Officer	MOE	11/1-18
Elphas Dlamini	Statistician	MOE	11/9-18
Peter Hundsorfer	Planner	MOE	11/9-15
J.V. Dlamini	Chief Insp.	MOE	11/18
A. Hlatshwayo	Undersecretary	MOE	11/18
Annie Mnyeni	Guidance Officer	MOE	11/11,15
Ben Dlamini	Head, Exam Coun.	MOE	11/15
<u>Manpower Development</u>			
<u>A. Government</u>			
Ken Mbuli	PS	MOLP	11/10
Augrey Mkhonta	Tr. Officer	MOLP	11/9
Chris Adams	Economist	MOLP	11/11
David Lukhele	Director	Central Stats.	11/15
Elliot Bhembe	Acting PS	DEPS	11/5,8
<u>B. Private Sector</u>			
Peter Dodds	Dir	Fed of Employers	11/09
Joe Shilubane	Tr. Dir.	Simunye Estate	11/15
John Oliver	Dir.	TEBA	11/2
M. Forsythe Thompson	Pers. Dir.	Swazi Can	11/9
A.B. Ginindza	Chairman	Sibakho	11/14
Mr. S. Banks		Sibakho	11/14
Africa Twala	Personnel	Barclays Bank	11/14

Swaziland Institute of Accountants

Robert Reed	Professor	SIA	11/18
David Price	Registrar	SIA	11/17

Donors

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Leon Muffett	Training Dir.	SWAMPD	11/9,14
Donald Knox	COP	TT Project	11/10
Irma Allen	Teacher Trainer	TT Project	11/15/

USAID

Alberto Ruiz deGamboa	Regional Economist	USAID	11/10,14,18
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US Peace Corps

Jennet Robinson	Director	PC	11/10
Rhoda Knute	REC Coord	PC/MOE	11/11