

NON-CAPITAL PROJECT PAPER (PROP)

University of Botswana, Lesotho and Swaziland

TABLE OF CONTENTS

	<u>Page</u>
A. Summary, Including Tabulation of Planned Inputs .	2,4
B. Setting or Environment	6
C. Strategy	24
D. Planned Targets, Results, and Outputs	26
E. Course of Action	
 Appendices:	
A - Extracts from Stevens Commission Report	38
B - Project Funding Requirements (Non Capital)	39

A. Summary

Now that the countries of Botswana, Lesotho and Swaziland have achieved an independent status they are endeavoring to demonstrate to their neighbor, the Republic of South Africa and other African nations how peoples of different cultures and backgrounds can live and develop together without the imposition of special relationships. They all share one common need: The development of their human, natural, and material resources, and their primary aim is to become economically viable.

It is generally considered a fundamental imperative that before developing countries can achieve the social and economic goals to which they aspire, a high priority must be given to the development of their human resources. The aim of this project is to make an effective contribution to the creation of a regional university of high quality and capable of meeting a major portion of the high and middle level manpower required by the three countries.

A major objective of this proposal is to help the University increase its effectiveness and capabilities in the fields of education and agriculture and in the planning and administering of higher education. Through the assistance provided, it is anticipated that the University's contribution to the three countries which support it, will be a significant factor in helping them expand and improve their educational and agricultural conditions. The end result would be a notable increase in the numbers of trained teachers and a marked improvement in the course of instruction in soil conservation and utilization of natural resources.

The requisite minimum input and achievement, on which U.S. participation in the development of UBLS is conditioned, are: that the three countries (Botswana, Lesotho, and Swaziland) continue to provide a significant portion of the budgetary support for the University; that UBLS will intensify its efforts to develop adequate indigenous leadership to serve in positions of responsibility at the University; and that the output of UBLS will continue to be geared to the manpower needs of the three countries. Another condition that would seem appropriate would be that UBLS develop an acceptable master plan to guide its future development.

This proposal covers the priority areas in which UBLS needs assistance. It is recognized, however, that the financial limitations confronting A.I.D. will preclude the possibility of helping with all of the areas at once. It is recommended, therefore, that the elements proposed for assistance as set forth below be phased according to the following priorities.

PHASE I

- (a) Education - Four teacher training staff members for pre-service and in-service training.
- (b) Agriculture - Two specialists in irrigation and soil conservation.

BEST AVAILABLE COPY

(c) Demonstration equipment and library books.

(d) Training of U.S. staff replacements.

PHASE II

Agricultural College (SACUC)

(a) One specialist in soil conservation and surveying.

(b) Three lecturers for the academic curriculum: Science, mathematics, and English.

(c) Demonstration equipment.

(d) Training of U.S. staff replacements.

The technical assistance specified in this project will be provided through a contract with a U.S. institution or agency concerned with higher education. Since the University is dependent on external assistance for capital and recurrent costs and since the positions are both advisory and operational, they will be fully financed with U.S. funds.

External donors provide substantial support to the University. The UK has agreed to make available approximately \$1,630,000 for capital development for a three year period starting in 1967; some of this has already been used. The Agricultural College received considerable aid from Oxfam and Freedom from Hunger and FAC. Canada has provided staff and commodities for the University's extension program.

AID has granted funds for regional scholarships since 1964 and the Carnegie Corporation is presently supplying two education technicians for a period of two years.

In June 1969 the UNDP will provide assistance with the training and up-grading of science and mathematics teachers at the proposed Science Center to be located in Swaziland through the provision of five teacher trainers, some demonstration equipment and participant training.

Despite these significant inputs it is generally recognized that much remains to be done to establish UBLS as a quality institution capable of making an effective contribution to the development of the three countries.

EDUCATIONAL PROJECT FUNDING (CLASSIFICATION IN \$000)

Table 1

Sheet 1 of 2

PROP. DATE 11/15/

Original

Country: East/South Africa Regional Project Title: University of Botswana, Lesotho and Swaziland Research No.

Project No.

Fiscal Years	AP	RI	Total	Personnel Serv.			Participants		Commodities		Other Costs	
				APP	FASA	CONT	U.S.	CONT	Dir	CONT	Dir &	CONT
						Agencies	U.S. Ag.	U.S. Ag.				
Prior through Act. FY		400										
Coor.												
62			250.6		210.0		0		13.0			27.6
70			409.9		315.0		36.0		20.5			38.4
71			536.2		420.0		54.0		13.0			49.2
72			518.2		420.0		36.0		13.0			49.2
ALL subs equal yrs.			1,727.2		1,435.0		18.0		16.0			258.2
Total life			3,442.1		2,800.0		144.0		75.5			422.6

BEST AVAILABLE COPY

Table 1
Page 2 of 2

Exchange rate \$/£

Fiscal Year:	AID-controlled Local Currency		Other Cash Contribution Cooperating Country <u>4/</u>	Other Donor Funds <u>5/</u> (\$ Equiv.)	Food for Freedom Commodities		
	U.S. owned	Country- owned			Metric Tons (000)	CCC Value & Freight (\$000)	World Market Price (\$000)
Order through Act FY 68			840 - B.L.S.	1.750 - U.K. 143.8 - Carnegie 850 - Oxfam 100 ⁶ - Canada			
Open. FY							
Endg. FY 69			340 - ELS	1.680 - U.K. 100 - Canada			
B + 1 FY 70			840 - B.L.S.	300 - Canada			
B + 2 FY 71				300 - Canada			
B + 3 FY 72				300 - Canada			
All Subs							
Total 1170			2.520	5.523.8			

BEST AVAILABLE COPY

B. Setting or Environment

1. The University (UBLS)

The University of Botswana, Lesotho and Swaziland came into being in January 1964 when its predecessor Pius XII College (started in 1945) ceased to exist. During the later 1950's Pius XII College began to experience difficulties concerning both finance and its relations with the Union of South Africa which threatened its future existence. The changeover came at a time when the three High Commission territories (as they were then) had been cut off from their traditional sources of higher education in the Republic of South Africa. All concerned hoped that this new University would provide a free institution of higher education and learning not only for the three territories but for the wider region of South Africa.

The British Government, the British Inter-University Council for Higher Education, the Overseas African Liaison Committee of the American Council on Education, the Carnegie Corporation and the Ford Foundation all played significant roles in the formation of the new University. It was assumed from the beginning that outside support would be needed and forthcoming for some time to come.

In the first year of its existence the University had 31 academic staff members and 188 students. Besides the original temporary houses and classrooms, the physical plant consisted of residences which could accommodate one hundred men and seventy-five women students, some twenty staff houses or flats, a modern science block, a kitchen and refectory block, administrative buildings, workshops, garages and a power plant. A beginning had also been made in the construction of a permanent library.

The University has three principal aims: 1) to produce men and women qualified for senior positions in education, government, law, and the public services, 2) to produce graduates capable of developing the material resources, and 3) to raise the standard of education throughout the territories of the three countries, which the University, primarily, is obligated to serve.

Inevitably, but nonetheless wisely, the University started as a small institution with only 180 students. The enrollment has already increased to 303, and at present serious consideration is being given to its future growth.

TABLE I
Enrollment as of August 28, 1967

	<u>New Students</u>	<u>Existing Students</u>	<u>TOTAL</u>
Botswana	8	30	38
Lesotho	38	82	120
Swaziland	21	42	63
Republic of South Africa	4	15	19
Rhodesia	1	51	52
Malawi	-	6	6
Kenya	-	1	1
Zambia	-	3	3
U.K.	<u>1</u>	<u>1</u>	<u>2</u>
	73	231	304
PART-TIME			
Canada	1	-	1
Lesotho	1	1	2
UNISA (Lesotho)	-	1	1
	<u>75</u>	<u>233</u>	<u>308</u>

In August 1966, a distinguished group of high-level persons, under the leadership of Sir Roger Stevens, studied the University with a view to its future development.

The Commission's report which has now been accepted in principle by the three countries, made a number of valuable proposals some of which are presently being implemented.

On the academic side, the University offers a Bachelor's degree in Arts, Science, Law and Education, and Diplomas of various kinds. As a result of a recent amendment to the charter it can now also offer post-graduate degrees. Consideration is now being given to the kinds of post-graduate courses which can be usefully developed by the various faculties.

In order to avoid the well known danger of narrow or excessive departmentalization, Schools of Studies have been established. At the main campus in Roma, Lesotho, courses are taught at the degree level and useful and relevant research is conducted. In the other two countries, adult education is fostered through the Extension Department and help is being given in organizing training programs and courses. Subjects are taught at whatever level is believed to be appropriate to the national needs. For example, the School of Education which offers a Bachelor's degree in Education; will undertake not only research, but schemes of teacher training and teacher improvement in the three countries as comprehensive as its resources permit.

The first degree course is a four year one, based completely on an "O" level entrance qualification or its equivalent. Years one and two consist mostly of basic studies designed to provide a foundation for further study, and also to help students to comprehend the significance of science and technology in a rapidly changing world. Studies in years three and four involve concentration on not more than two majors. The Part I Examination, taken at the end of the ^{second} year should qualify students to seek admission in other universities if they wish to pursue more specialized courses such as medicine, engineering which are not available at UBLS.

It is frustrating that whenever one considers the future of an enterprise in Botswana, Lesotho and Swaziland one consistently comes up against the brick wall of financial limitations. It would be naive not to recognize these limitations, or to appreciate that there is not likely to any radical change in the near future. However, if the University is to develop along the lines hoped for, it will require further strong support from outside sources. At present it has to operate with very limited finances and the staff often have to make great sacrifices which they would not have to face at older and better endowed universities.

The University was founded with some high ideals - ideals that will be difficult to live up to. In accordance with its Charter and Statute it is a "free" and open university, and admission shall be denied to no one on the grounds of race, sexes, nationality. In this it reflects the ideals and standards that are followed in the three countries that it is principally designed to serve.

It is important to stress the connection between the University and the three countries, two of which (Lesotho and Botswana) were recently granted independence and the third (Swaziland) which will achieve full independence in September 1968. All three countries have very basic needs for trained local manpower and are unlikely to make a real success of their independence unless this trained manpower becomes available before too long in the fields in which it is so desperately needed. There is, therefore, a heavy responsibility on the staff and students to insure that they serve these countries

in the best possible way. The University must be not only a teaching university but also a resource center; not only a place where students are trained to enter professions, trade, industry, and government service, but also a place from which the three countries may derive skills, expertise, and informed knowledge which will assist their governments and peoples in facing the challenge of social, economic, and cultural development. At present there is an overwhelming need for educators, lawyers, doctors, scientists, engineers, businessmen, agriculturists and trained men and women in all fields.

It has been a natural criticism of the University that it has been centered too much in Lesotho and has been of less relevance than it should have been to the other two countries. Hence, the principal administrative objective in planning for the future is to extend its presence to Botswana and Swaziland. For a long time to come, it is unlikely that any of these countries will be able to contemplate establishing its own university. The costs would be prohibitive. However, it does seem that they can support a joint university, and so the question of the development and dispersement of existing university resources arises. It is important to convey the university to the peoples of all three countries so that it may be meaningful, as well as useful, throughout.

The Stevens Report to which reference was made previously recommends that the University should continue as one University, serving the needs of higher education in Botswana, Lesotho, and Swaziland. But it particularly recommends the deployment of the University into Botswana and Swaziland, and the University has agreed to do this. The establishment of a working relationship between the College of Agriculture in Swaziland (SACUC) and the University marks a significant step in this direction. The University is now developing this relationship by seeking ways to reinforce the staff at the Agriculture College and the University Center. At the same time the University is giving consideration to academic developments in Botswana, and plans are currently being made to establish a University Center in Gaborone which may be along the lines of the one in Swaziland.

2. Assets and Liabilities of Botswana, Lesotho, and Swaziland

The countries which support the University, and which in turn are served by it, have assets and liabilities in varying degrees. In general their common needs may be summarized as follows:

- (a) All three territories, suffer from a lack of finances, trained manpower, and an adequate water supply.
- (b) Educational opportunities at all levels are at a premium, especially at the secondary level, and the number of qualified teachers is in extremely short supply.
- (c) All require an intensified hydrological survey. Irrigation cultivation could be greatly increased if money were available.

- (d) Soil conservation is an urgent necessity, especially in Lesotho.
- (e) Botswana and Lesotho need improved communications.
- (f) Improvement in health services, both human and animal, are badly needed.
- (g) Pressure for agricultural land is greatest in Lesotho where erosion is at its worst.
- (h) There is an overwhelming need for research which must be directed to the real needs of the countries.

All three territories have only recently entered the transition from traditional tribal government to Western patterns, taken from the English model. Even by African standards, two of the countries, Botswana and Lesotho, are near the bottom rung on the development ladder.

3. Botswana

Botswana, a country with an area of 275,000 square miles has a population of about 500,000 (1964) of whom as many as 35,000 have been employed outside the country. The problems of Botswana have been described as manifold, colossal and daunting. Poor in manpower, the country has only 45 citizens with a BA degree and in 1966 only 16 secondary school students qualified for university entrance - eight of whom entered the UELS.

Infrastructure

The problems of infrastructure are five-fold:

- (a) The lack of government investment in roads, water, and power discourages private investment.
- (b) The lack of adequate data inhibits the prudent development of infrastructure and the efficient expenditures of program funds. A three man central office of statistics was first established in 1966. So few statistics were available that the Transitional Development Plan (1966-68) could only present the magnitude of needs in terms of "more secondary education, more agricultural demonstrations, improved water supplies, new industries and so forth".
- (c) An extremely low population density of 2.6 per cent square mile requires an administrative super-structure, costing vastly more in per capita terms than that of most countries.
- (d) The shortage of qualified persons in administration. Approximately 370 government posts require a university degree and only 45 Botswana

citizens qualify in this respect. About 88 per cent of the key posts are vacant or are held by expatriates. In comparison, Uganda's key posts were 50 per cent filled by locals at Independence in 1962.

Economic Situation

The most basic economic problem is the shortage of recurrent and development capital. Botswana balances 55 per cent of the FY 67-68 recurrent budget with UK grants-in-aid. Domestic revenues are able to meet only 45 per cent of the recurrent budget and none of the development budget. The United Nations Development Program is so impressed with Botswana's poverty that no counterpart contributions are required for UNDP programs.

The shortage of capital impedes the exploitation of raw materials. Recent announcements confirm the presence of 30 million tons of high grade copper and nickel, and unofficial estimates confirm one hundred million tons. While these minerals will not likely bring significant revenues to Botswana before 1975, they could precipitate a radical change in the country's financial position.

Over 90 per cent of the working population are engaged in agriculture. Cattle and cattle products account for 85 per cent of the total exports. Most of the people depend on subsistence crops.

Education

The educational system is totally inadequate. A major obstacle to the country's development is the shortage of secondary graduates. The quality of primary education is declining. The majority of primary school teachers lack any post primary training, and each year the number of qualified teachers decreases. Despite the 70,000 students in primary school, only 1,500 passed the primary school leaving examination in 1966 - the lowest number in three years. Of this number, only one third can be admitted into secondary schools due to a shortage of facilities. In 1965, the secondary system produced only 16 students who could qualify for a higher education. In Botswana, there is no groundswell of Education for Self-Reliance, no "Harambee". The legacy of a government uninterested in development, is a people largely in pursuit of the traditional life. The explosion of primary school enrollments and the extraordinary dropout rate reflect more of a faith in the form of education than a belief in the substance of education.

4. Lesotho

Lesotho like Botswana is a poor country, but it has some resources which put it ahead of the former. It is about the size of Maryland (11,716 square miles) with a resident population in 1966 of 859,000 and another 117,000 absentees working in Republic of South Africa. The only town with a population over 10,000 is the capital, Maseru.

Infrastructure

Up to October 1967 when Lesotho Airlines was formed, air links were non-existent except by charter flights by small aircraft, internally and externally. Telecommunications are entirely inadequate and, except in Maseru, the equipment is obsolete. Radio links appear impossible owing to the mountainous nature of the country, and postal services are extremely slow and unreliable due to the inadequacy of the road system.

Economic Situation

There are about 900,000 acres of arable land available in the lowland and deeper mountain valleys. The crops are chiefly maize and sorghum, which for the most part are consumed by the producers. Crop yields are generally very poor and the standard of cultivation is very low, with little being done to improve the fertility of the soil. Research is urgently needed to increase productivity.

The animal population is about 400,000 cattle, 82,000 horses, 1½ million sheep, ½ million goats and 50,000 donkeys. Animal husbandry is chiefly concerned with the production of wool, mohair, which provides 60 per cent of the exports, but some cattle are exported on the hoof.

Soil conservation is the major requirement of the country as a whole. Gross overgrazing and excessive trampling have led to an exposure of bare soil which is subject to long periods of sheet erosion during the dry period and to gully erosion during the rains. A land-use survey is required so the government can plan for the future.

With independence, Lesotho inherited an economy that is still based on subsistence farming. Efforts to get the country on its feet economically are hampered by years of neglect. Problems which stand in the way of progress include:

- (a) Massive dependence on outside aid. The national income, valued at market prices and including remittances by Basotho working outside the territory, was estimated to be 565.5 million dollars in 1965/66. National expenditure was 22.4 million dollars higher during the same period.
- (b) Low capital formation. In 1965/66 Lesotho's gross capital formation was estimated at \$6.2 million, an increase of about \$2.9 million over the 1964 figure, or roughly five per cent of the national income. If this figure is maintained, it is estimated that production can be expected to rise by about two per cent per year - less than the estimated 2½ per cent year increase in the population.

- (c) A huge balance of payments problems. Exports from Lesotho in 1965 totalled \$6,566,000; imports during the same year were \$24,535,000.
- (d) The land tenure system. All land in Lesotho is held in trust for the nation by the king (with the exception of certain urban areas designated as reserved). There is no individual ownership of land, although holdings for agricultural purposes are granted to each individual family by the district chiefs. This traditional system of land tenure has retarded agricultural production and has led to wasteful, and sometimes harmful, agricultural practices. The country is slowly progressing toward a cash economy.
- (e) An apparent disregard for the economic future of the Basotho during the British rule. Development can be summed up by a three-mile stretch of tar road, a capital town which may be the most unprepossessing in Africa, some attempt at soil conservation and better stock breeding, and a basic education system that provides primary schooling for about 75% of the children.
- (f) Extreme difficulties in communications. Roads generally are poor, and transportation in the mountainous areas is limited mainly to four-wheel-drive vehicles or to aircraft, bringing the cost of goods to astronomical heights at times. To get a bag of cement to some villages can cost as much as \$11.50.
- (g) A lack of natural resources. So far, only diamonds have been found in anything like payable quantities, and even these are usually small by international standards. Exports totalled about \$840,000 last year.

These are basic problems which must be solved before any real progress can be made - but the solutions overlap and intertwine, so that it is difficult to find a modest starting point.

Education

More than 70 per cent of the population is Christian, and the influence of the Mission societies on the country has been of great importance. It is estimated that the literacy rate is above 60 per cent, one of the highest in Africa.

The majority of the schools in Lesotho are under the management of the three main churches (Lesotho Evangelical Church, the Roman Catholic Church, and the Anglican Church) under the direction of the Ministry of Education. Several minor missions have also established schools.

Throughout the 1964/66 triennium expenditures on education by voluntary agencies have been about 22% of the amount spent by the Ministry of Education.

The figures for this period are as follows:

TABLE II

Year	Ministry of Education	Voluntary Agencies	Percentage
1964	\$1,834,261	\$ 424,904	23%
1965	1,847,605	359,302	20%
1966	2,044,987	467,814	23%

Before Lesotho and Botswana became independent, the United Kingdom made good any deficit in the recurrent expenditure. Starting with the 1967/68 financial year, however, this will become the responsibility of the Governments of Lesotho, Botswana and Swaziland; and Lesotho's expenditure on Education will, therefore, increase considerably. In 1965/66 U.K. Colonial Development and Welfare (C.D.W.) funds were spent as shown in TABLE III.

TABLE III

Description	Provision		Provision	
	Capital	Recurrent	Capital	Recurrent
Improvement of Schools	\$ 5,920	\$ -	\$ 420	\$ -
Expansion of Trade Training Facilities at Lelotaleng	2,695	-	1,400	-
Education Staff	17,352	30,058	12,678	23,303
Improvements L.A.T.C.	1,400	13,975	1,352	13,675
Science Lab. B.H.S.	1,856	-	1,271	-
Buildings, Maseru Day Jr. Secondary School	42,000	-	3,042	-
Architects' Fees	-	3,360	-	-
Science Laboratories at High Schools	112,266	8,778	826	9,335
TOTAL	\$183,489	\$56,171	\$20,989	\$46,316
GRAND TOTAL		<u>\$239,660</u>		<u>\$67,305</u>

It is interesting to note the large discrepancy between the amount provided and the amount expended. This may be due primarily to shortage of trained personnel - middle and high level.

Even though Lesotho has one of the highest literacy rates in Africa, the quality of education leaves much to be desired. This is largely the result of poorly trained and unqualified teachers, and the high pupil teacher ratio at the primary level. For example the ratios in 1964, 1965, and 1966 were 68:1, 57:1 and 60:1 respectively.

The following table shows that the proportion of untrained to trained teachers remains high.

TABLE IV

Teachers	1964	1965	1966
Trained	1,530	1,723	1,731
Partially trained or untrained.	1,141	1,220	1,096
TOTAL	2,671	2,943	2,827

The effect of poor teaching has had a marked effect on the percentage of primary pupils who were able to pass the Primary School Leaving Examination. The results shown below in TABLE V indicate that the examination results deteriorated over the past three years.

TABLE V

Results of Primary School
Leaving Examination

Year	Entries	1st cl.	2nd cl.	3rd cl.	Fail	Percentage Pass
1964	3,513	16	582	1,574	1,341	62%
1965	3,815	13	444	1,742	1,616	56%
1966	4,299	14	283	2,022	1,960	54%

TABLE VI

Results in the UBLS Junior
Certificate Examination (U.S. Grade 11)

Year	Entries	1st cl.	2nd cl.	3rd cl.	Total Passes	Percentage Pass
1964	464	6	119	193	318	69%
1965	501	10	139	113	262	52%
1966	555	8	164	229	387	59%

As for the results in the Cambridge School Certificate Examination (U.S. Grade-13) the number of passers is far too low for a student body that has survived such a vigorous selection process.

TABLE VII

Results of Cambridge School
Certificate Examination

Year	Entries	Passes	Percentage of Passes	Number Qualifying for UBLS Entry	Percentage of Magries Qualifying
1964	131	88	67%	27	21%
1965	145	102	70%	45	31%
1966	160	104	65%	46	29%

It is also very obvious that there is considerable wastage of the comparatively few highly selected students who have the potential for qualifying for a higher education. This situation may be due either to an inadequate selection mechanism or low quality teaching.

A country with such limited human resources as Lesotho cannot afford this kind of wastage in its educational system.

5. Swaziland

In comparison with the other two countries, Swaziland is better off from the standpoint of finances, human and natural resources, and water supply. Like Lesotho and Botswana, however, it is entirely landlocked. The country covers 6,704 square miles (almost the size of Mass.) and has a population of approximately 395,000 people of which 381,586 are Africans, 9,157 are Europeans and 4,395 are other non-Africans. About 43% of the adult

Africans hold traditional beliefs, the rest of the adult population is Christian.

Infrastructure

Swaziland's infrastructure is more developed than either Botswana's or Lesotho's. The country normally has an abundance of water, but there have been periods of severe drought. This condition has resulted in the creation of seven government-operated water supply schemes. Among the most important of Swaziland's resources are its rivers since some of South Africa's best rivers traverse the Territory. Hydrological surveys for water development are continually in process. With the opening of the Edwaleni Hydro-electric Power Station, the electricity consumption increased from 11 million units in 1964 to 30 million units in 1965. There are approximately 40 miles of tarred roads supplemented with good gravel roads. Telecommunications by land lines and radio links are adequate and rapidly expanding. Postal services are by road only and are much better than in either of the other two countries, but still they are rather slow.

Economic Situation

Salary and wage earners make up more than 45% of the men and more than 11% of the women (age groups 15 to 64 in both cases). About 20% of the African male workers are at a given time, employed outside the territory, mostly in the South African gold mines. Approximately 75% of the total African employees in Swaziland are engaged in manual labor mainly on farms, mines, forests, and public works.

Almost 600,000 acres are under cultivation of which the greater part is devoted to dry land crops. The Swazi farmers grow maize, sorghum, millet, sweet potatoes, potatoes, fruits, and cotton. A large proportion is grown at a subsistence level. Cash crops are cotton, pineapples, citrus and small amounts of tobacco and avocado. The irrigated areas amount to more than 65,000 acres with sugar, rice, and citrus the principal crops.

Nearly 3½ million acres, or 73% of the total land, consists of permanent grazing, and at present the animal population is 545,000 cattle; 250,000 goats; 40,000 sheep; and 16,000 donkeys. Of the 50,000 cattle slaughtered each year about 14,000 are exported. Forestry is one of the principal industries and the forests are the largest man-made in Africa.

The Hovelock asbestos mine is one of the largest in the world and until three years ago was the source of the largest export revenue. (It is now fourth and produces over \$7 million per year. Iron, coal, and gold are also produced and exported. Iron exports alone amounted to \$11 million per year.)

Education

The educational scene in Swaziland may be described as fair and improving although it does not reflect the level of literacy reached in Lesotho. The economic growth of the country is bound to push educational development ahead at a faster pace than the other two territories.

Literacy is almost universal among Europeans and Coloureds and is increasing rapidly among Africans, especially young townfolk: 65% of the Africans over nine years of age who reside in urban areas are literate, as against 28% of the rural Africans. The Swaziland Sebenta Society has made a marked contribution to the growth in literacy since it was organized in 1962.

The standard of education reached by Swaziland may be summarized as follows:

- (a) University graduates - 450 (Europeans-380; Africans-60; Coloureds-10).
- (b) Graduates of Secondary schools - (Form V, or US Grade 12) - 2,410 adults over 21 years of age: (Europeans, 1,960; Africans-400; Coloureds-50).
- (c) Junior Certificate Graduates (Form III, or US Grade 11) - 5,120 adults (Europeans-3,290; Africans-1,650; Coloureds-180).
- (d) Primary School Graduates - 14,200 (Africans-9,380; Europeans-4,250; Coloureds-570).

Primary Education - The 55,000 school pupils in 1966 constituted about 50% of all children, ages 5 to 14, a better record than can be found in most African countries. Seven years previously 43% of the children in this age group were receiving an education. In 38 of the primary schools (out of a total of 340) pupils are taught through the medium of English with the help of a variety of teaching aids and equipment. With a grant of \$15,000 from the Carnegie Corporation, the English scheme has been extended. There has been a demand for its general introduction to all primary schools but this is not yet possible due to a lack of qualified teachers and adequate finances.

Only 75% of the 2,610 candidates passed the primary school leaving examination. With an improvement in the quality of teaching, and the up-grading of teachers themselves, this attainment could be substantially improved.

Secondary Education - The number of Africans in secondary classes increased from 2,285 in 1964 to 2,383 in 1965. The upper secondary (Form IV and V, or US Grades 12 and 13) had a total enrollment of 113 pupils of which 72 were Africans. This was the largest figure Swaziland has ever had at this

level of education, and is the result of the government's policy of curbing the secondary "dropout" to insure increased Swazi participation in the country's rapid development.

In 1967 there were 192 pupils who took the C.S.C. "O" level examination of which 150 received passes. Only 69% or 34% of the total received passes which would qualify them for university entrance. At the Junior Certificate level (Form III - US Grade 11) 393 of the 631 or 60% who took the exam passed. The failure rate at this level is poor enough to warrant remedial measures (e.g., improved teaching, better teachers, etc.) in order to get greater returns on the country's investment in education.

Since the start of the University of Botswana, Lesotho, and Swaziland in 1964, all students qualifying for higher education are required to matriculate at the University unless courses in their field of specialisation cannot be provided.

6. School of Education - UBIS

The School of Education has been in operation from the time the new University was organized in 1964. It attempts to combine the functions of a University Department of Education and also an Institute of Education.

It is intended to serve the education systems of the three countries in the following ways:

- (a) By providing full time courses for the initial training of post-primary teachers and the further qualifications of practicing teachers.
- (b) By giving assistance to those who are engaged in the education of teachers at other institutions.
- (c) By providing in-service education for practicing teachers.
- (d) By providing advice and undertaking research on educational matters.
- (e) By helping to meet the needs of the educational systems of the three countries in any other way which might be appropriate.

Pre-Service Courses

In its departmental role, the School offers three main programs of study. The first leads to a Post-graduate Certificate in Education, taken with a B.A. or a B.Sc (Education). The second program permits the student to complete both his degree and his teaching qualification in four years, instead of the five which are required by the Post-graduate Certificate in Education following a degree program, but it does require work during the long vacations.

The third program of study leads, by course work and a thesis, to a degree which, following South African practice is called the Bachelor of Education.

The Post-graduate Certificate in Education and B.Ed. are both offered to practicing teachers by part-time as well as full time study and there are currently about fifteen students taking the part-time course.

In planning these education courses the school is influenced by the very international nature of its student body. The fact that its students come from South Africa, Rhodesia, Zambia and Malawi, as well as from Botswana, Lesotho and Swaziland is of great assistance in the comparative study of educational systems, but makes the organization and supervision of local school teaching practice during the long vacations a very difficult task.

In its Institute work also, the School of Education is influenced by its international function. It tries to meet the needs of Botswana, Lesotho and Swaziland, countries which are separated from each other by five hundred miles of South African territory. Moreover, Botswana is a vast and sparsely populated country with difficult and inadequate communications while Lesotho, though smaller, is mountainous and its interior very difficult of access.

All three countries are still on a deficit budget, though two of them are fully independent and the third (Swaziland) will have its independence in September 1968. All three are poor and under-schooled, as is so often the case in developing countries, and many teachers are unqualified; approximately one half in Botswana and a third in Lesotho. In Botswana there are only five Botswana graduates working in the country's secondary schools; in Lesotho the primary pupil/teacher ratio is currently 73:1. In all three countries, the situation is one of acute educational deprivation.

In-Service Courses

Since its inception, the School of Education has been committed to the provision of courses for the in-service training of teachers at primary and secondary level and of tutors in Colleges of Education. In 1965 the Carnegie Corporation of New York gave a generous grant of \$93,800 to the School of Education to enable it to maintain its contact with Botswana and Swaziland and to provide courses for secondary school teachers and college of education tutors. During the two years from August 1965 to July 1967 just over sixty courses of this nature were provided. The second two year period of the Carnegie financed program is now in operation. The School of Education has also provided courses of upgrading for Primary School teachers, especially in Lesotho where it is engaged on a series of three year part-time courses which are intended to raise unqualified teachers to qualified teacher status.

A School of Education which aims to serve three countries, widely separated geographically and very different from each other, encounters immense difficulties. To reach the nearest point of access to Botswana requires a drive of 400 miles all but 20 of which are through the Republic of South Africa with frontier formalities at both ends of the journey. Moreover

Botswana is a vast country with an inadequate road system. Even to visit the two teacher training colleges requires a round journey of 1,500 miles from the University. Swaziland is much smaller in size, but nevertheless a journey from the University to the capital, Mbabane, requires a round journey of one thousand miles. It is, however, of the greatest importance to give an equal amount of attention to the educational priorities of all three countries. This presents a difficult task to the staff of the School of Education, who, as well as their duties in connection with the teaching of the full time students of the University and the conducting of short courses in all three countries, have to spend a considerable amount of their time in traveling.

The happier side of the picture, however, is that in all three countries the teachers at all levels are most anxious to make progress, but it is not easy for the School of Education to meet the demands which are made on it.

School of Education Staff

At present the established staff of the School of Education is as follows:

Professor J. D. Turner, Director of the School
Dr. A. P. Hunter, Senior Lecturer in Education
Mr. T. S. Thelejane, Senior Lecturer in Science Education
Dr. B. S. Waagen, Senior Lecturer in Education

The Stevens Commission Report recommended twelve additional staff members for the School of Education as follows:

- (a) Two posts in Botswana and two in Swaziland, one to be a science specialist and the other to have more general duties.
- (b) An additional science expert and a technician for a science teaching center.
- (c) Six additional lecturers in Education with special responsibilities for the School of Education. Of these six additional lecturers, two were to be specialists in primary education and assigned to conduct short courses for primary school headmasters.

Even when these posts have been filled there will still be an over-all shortage of staff especially in methods of teaching particular school subjects at the primary, secondary and teachers college levels. This shortage is accentuated by the fact that the Ministries of Education of the three countries are not in a position to maintain their own staff of primary and secondary subject supervisors. In view of the very severe

shortage of recurrent funds for the maintenance of the University, it is necessary that funds should be sought elsewhere in order to establish new centers in Botswana and Swaziland as soon as possible. It may then become possible eventually to provide local staff to carry on the work thus started with the assistance of external sources.

7. Association Between UBLS and Swaziland Agricultural College and University Center (SACUC)

The UBLS sponsors a three year Diploma in Agriculture course at SACUC which at present consists of 8 students from Botswana, 5 from Lesotho and 6 from Swaziland. It is anticipated that these numbers will double in 1968 and treble in 1969. In addition the College runs a wide variety of other courses, agricultural and non-agricultural.

UBLS is organically linked with the College through a Compact of Association under which the Principal of SACUC sits on the University Council and is able to attend meetings of the Senate, and the Diploma Course in Agriculture is conducted by a Board of Studies whose membership includes the Principals of the Agricultural Colleges in Botswana, Lesotho and Swaziland, the Directors of Agriculture in all three countries and representatives of the University. The University has already invested capital to the order of some \$56,000 plus \$28,000 recurrent per annum and intends in the near future to invest a further \$140,000 in Swaziland.

The report of the Steven's Commission on Higher Education in Botswana, Lesotho and Swaziland recommended a considerable expansion in University activities in Swaziland and Botswana and the Swaziland Government has already indicated in correspondence with the American Consul its desire to give high priority to a strengthening of the UBLS Diploma in Agriculture Course at SACUC.

8. Summary of Educational Needs

It is quite evident from the foregoing brief descriptions of the educational situations in each of the three countries that there are vital needs to be met, if the development is to proceed at a rate commensurate with the growth of their aspirations. Most of the hopes and plans are dependant upon an improved financial situation. But without sufficient trained human resources there can only be limited development of their natural resources, and an economic potential.

It may be assumed, from an over-all assessment that the following conditions require careful attention before the countries reach a reasonable take-off point for economic development:

- (1) An improvement in the quality of education is needed in order to reduce the wastage at primary and secondary education. This means more and better programs of in-service training for the large number of unqualified teachers.
- (2) The expansion of educational opportunities at the secondary and post secondary levels is imperative if the middle and higher level manpower needs are to be met.
- (3) Improvements in the Agriculture sector, on which all three countries are greatly dependent, are essential if the GNP is to substantially increase.

C. Strategy

Two of the territories, Botswana and Lesotho, are fully independent countries and the third, Swaziland will have achieved this status in September 1968. They are endeavoring to demonstrate to their neighbor, the Republic of South Africa, as well as the rest of Africa, how peoples of different cultures and backgrounds can live and develop together without the imposition of special relationships. Basically, they aim also to become, sooner or later, viable countries on their own. They all share one common need, viz., the development of their human, natural and material resources. While they are not endowed equally with the same type or amount of resources, they all have a growth potential which is challenging, but far from being fully realized.

As undeveloped countries with a short history of independence, they have a special need for improved social, economic, and political institutions, and it is through education that much of this improvement will take place. Although there has been almost total reliance on the U.K. for assistance with their development so far, it is in the interest of the free-world nations to give supporting aid to the extent, they are capable. It would appear, therefore, that it is in the U.S. interest to help the three territories demonstrate to other African countries how these three territories can become self-reliant through their own initiative and in situations where peoples of different ethnic groups work and learn together.

One of the most promising institutions concerned with the development of the three countries is the UBIS. Its founding coincides with the time of independence for the countries and the interests and welfare of its University and the governments are intertwined. Without trained manpower, especially at the middle and higher levels, the development schemes would be nothing more than hopes without substance. And without the unrelenting support of the three countries, the goals and aspirations of the University could not be brought to fruition.

Since 1964, AID has been committed to assisting the University through a program of regional scholarships. Each year up to FY 1967, a grant of \$100,000 has been given for this purpose. Coincidental with the change of AID's policy on regional scholarships, (from direct grants to institutions, to the AHEP Program) and the shift of emphasis from bilateral to regional programs, there has been an awareness of the need for a type of assistance to the University which would be in harmony with AID's new policies. The proposal set forth in the following sections of this paper is aimed at continuing AID's support of the University along the lines suggested in the Korry report and the new educational guidelines.

The development and improved effectiveness of the economic and social situations in each of the three countries are the long term objectives of the U.S. efforts proposed in this project. Support of the University will contribute to the realization of these goals by providing assistance with the production of the high and middle level manpower required for constructive and effective leadership in social, political and economic institutions in both the public and private sectors. Without trained manpower the needs and aspirations of the countries cannot be met.

Essentially the training of manpower becomes the responsibility of education. A requisite to the conduct of this training is an adequate supply of qualified teachers; and as the supply of trained teachers increases, the opportunities for producing trained personnel also increases.

One of the principal responsibilities of the University is to prepare new teachers and up-grade those already in service. The results of these efforts should reflect a marked reduction in the wastage of students as they proceed upward on the educational ladder. In addition, an adequate supply of trained teachers make possible the expansion of opportunities for training larger numbers of students at the Secondary, post-secondary and university levels. At present the demand for graduates at these levels far exceeds the supply.

Since agriculture is the principal source of revenue of the all three countries the much needed improvements and developments required in this sector are of the highest priority. Effective and efficient production of cattle and crops, and the development and preservation of natural resources are all dependent on trained manpower and an ample body of practical knowledge acquired through research.

The Agriculture College in Swaziland, an integral part of the University, faces the challenge of providing sufficient numbers of trained personnel to serve the three countries. Our objective in this project is to provide the necessary assistance, as part of a multi-donor effort, to help the college become more effective in serving the needs of the three countries through research and trained manpower.

In summary, AID support of the University through the provision of expert staff and the training of their replacements will have a salutary effect on the development of the three countries which support it. Moreover, development of UBLS into a first class university is vital to all sectors, public and private, in these countries and the aid provided to the institution will be in those areas which have direct effect on social and economic development.

D. Planned Targets, Results, and Outputs

The purpose of this project is to help the University increase its effectiveness and capabilities in the field of education, agriculture and the administrations of higher education. Through the assistance provided by AID, it is anticipated that the University's contribution to Botswana, Lesotho and Swaziland will be a significant factor in helping these countries develop and improve their educational and agricultural resources in their effort to become economically viable. The end result should be a notable increase in the numbers of trained persons at the middle and higher manpower levels and a marked improvement in the conservation and utilization of their natural resources.

Targets for the assistance to be provided in the areas of education and agriculture are given below.

I. Education

- (a) To reduce the number of unqualified teachers in the primary and secondary schools through in-service training programs specifically designed for this purpose.

One of the most significant features of the primary school educational system of all three countries is the number of unqualified teachers in the service.

In Botswana and Lesotho approximately 50% of the teachers are sub-standard. The number of such teachers are shown in TABLE VIII.

TABLE VIII

Unqualified Primary School Teachers 1966

	Qualified	Unqualified	Total
Botswana	947	726	1,679
Lesotho	1,731	1,096	2,827
Swaziland	1,074	394	1,468

In Botswana a grant has been obtained from UNICEF and from the Swedish Government to build a Teacher Short Course Center (in Francistown) to conduct in-service courses on a year around basis. The intention is to bring unqualified teachers into the College for periods of six weeks of instruction on three separate occasions. These teachers will probably

be drawn from one area, and the schools in that area will be closed during the period of residential training. Assignments, some of them in programmed form, and practice teaching will play an important part in their training. They will be supervised by the staff of the Short Course Center.

The number of teachers in the upper primary grades (5, 6 and 7) in need of in-service training have been identified (TABLE IX) and it is assumed that attention will be given to up-grading them at the earliest opportunity since the students they teach will be qualifying for entrance to secondary schools in due time.

TABLE IX
Teachers Needing In-Service Training

	Higher Primary Teachers (Grades 6 & 7)	Secondary Science Teachers
Botswana	195	25 (est)
Lesotho	367	46
Swaziland	251	90 (est)
Total	813	161

Since the headmasters of the primary schools are considered to be the educational leaders responsible for bringing about improvements in teaching methods and materials, it is considered highly essential that up-grading courses be provided for this group on a priority basis. The University plans to establish a special course for primary headmasters in Botswana which will be run on a continuous basis. Each course will consist of 30 headmasters, ten from each of the participating countries.

All of the Ministries of Education consider the establishment of a course of this nature to be of great importance. In addition they are offering courses for the up-grading of unqualified primary teachers who, when they return to their schools from the training program, need considerable support and assistance. If such teachers return to an unfavorable environment they may well lose any benefit which they have gained from their up-grading course. In particular, a headmaster, who himself feels a lack of competence in new methods of primary education, may easily discourage a teacher who has been introduced to such methods in his training program. It would,

therefore, seem essential to enable the headmasters to become leaders in primary education and to give them sufficient self-confidence so they would be able to play a leading role in the retraining of teachers in their schools and in the introduction of new educational techniques. In this connection it should also be added that each country has recently adopted a new primary school syllabus, which depends for its success upon the adoption of new methods of teaching in the primary schools.

- (b) To provide more and better teachers to meet the increasing needs for education.

Expansion of the school system at the primary and secondary levels will not be possible unless the supply of qualified teachers is increased.

TABLES X and XI shows the projected needs for primary school teachers from 1967 to 1972.

TABLE X

Projections of Primary School Teachers

	1967	1968	1969	1970	1971	1972
Botswana	1,854	2,157	2,417	2,582	2,732	2,850
Lesotho	2,800	2,800	2,800	2,800	2,800	2,800
Swaziland	1,480	1,530	1,575	1,725	1,775	1,900
Total	6,134	6,487	6,792	7,107	7,307	7,550

TABLE XI

Projection of Secondary School Teachers

	1967	1968	1969	1970	1971	1972
Botswana	112	120	120	129	137	140
Lesotho	135	141	146	154	180	190
Swaziland	231	277	300	350	369	400
Total	478	538	566	633	686	730

The effectiveness of teachers new to the service is dependent on the quality of the pre-service programs provided by the training colleges and the School of Education at UBES.

It is expected that the U.S. specialists provided to the School of Education through this project will have a marked effect on teacher training programs and curriculum improvement activities. The numbers of students presently in training and the numbers to be trained in future years is shown in TABLES XII and XIII.

TABLE XII

Numbers of Students in Training in
Primary Teacher Training Courses - 1966

	Lower Course	Higher Course	ATC	Domestic Science	Total
Botswana	271	22	5	-	298
Lesotho	493	116	5	-	614
Swaziland	103	60	-	15	178
Total	867	198	10	15	1,090

TABLE XIII

Projected Numbers of Students in
Primary Teacher Training Courses

	1967	1968	1969	1970	1971	1972
Botswana	310	360	420	480	480	480
Lesotho			Not yet available			
Swaziland			Not yet available			

The target for the School of Education is to train 820 graduates, post-graduate and certificate teachers between 1968 and 1972. The projections by years are shown in TABLE XIV.

TABLE XIV

Projected Enrollments in School of Education

	1967	1968	1969	1970	1971	1972
Concurrent Certificate	43	45	60	65	85	110
B.Sc. (Ed.)	6	16	33	41	81	110
P.C.E. (Including part-time students)	3	5	5	5	5	5
B.Ed.	13	25	25	30	30	30
B.A.	-	-	3	5	5	6
Total	65	91	126	146	206	261

BEST AVAILABLE COPY

The aim of the School of Education is to attempt to locate all those resources which are available for teacher education in the three countries, whether these are the resources of the Ministries and Departments of Education, of the Teacher Colleges, of the Schools, of University, or whether they belong to voluntary organizations such as the VSO and Peace Corps, and to integrate these into a coherent forward movement. It is essential that provision be made to insure as far as possible that this movement is maintained over a period of years rather than being separated into a number of disparate elements. It is only by making certain that each effort is integrated into the pattern of a total plan that any worthwhile progress in education can be maintained in countries which are as poor as Botswana, Lesotho, and Swaziland.

- (c) To improve the curriculum and develop appropriate teaching and learning materials.

All three countries have been working on a new primary school courses of study for some years, but it is only recently that Lesotho and Swaziland published their new syllabuses.

Two difficulties have so far been inherent in syllabus revision at both primary and secondary level. The first is that the new syllabuses have been created by inspectors and Ministries of Education (and at secondary level by the UBLS Examinations Council) and have been imposed from above rather than developed and evolved in the schools themselves. While they undoubtedly are an improvement on the syllabuses they replace, it is impossible to regard them as definitive. Rather they provide a breathing space during which extensive school based trials can be carried out leading to the introduction of more satisfactory syllabuses. The second difficulty is caused by the realization that it is impossible to reform teaching by issuing a new syllabus. Reformed teaching can only result from reformed teaching methods. In other words, every new syllabus must be accompanied by intensive retraining of teachers. In Lesotho, the headquarters and field staff of the Ministry of Education have already held a number of joint seminars with the staff of the School of Education, and conferences involving the staffs of teacher training colleges have been planned at which detailed plans will be made for a continuous program of primary teacher education, closely linked with the introduction of the new syllabus. Preliminary seminars are also being planned for the inspectorates of Botswana and Swaziland at which this problem will be among the subjects discussed. At secondary level, too, syllabus revision has been prominent in the activities of the School of Education - UBLS.

- (d) To develop a capability for planning the academic and capital development of the University.

Although UBLS is young and vigorous it is essential that adequate attention be given to plans for future growth. This will enable the institution to make the best use of the limited resources presently available or likely to be available in the future. The immediate need is for planning the institution's academic and capital programs.

The Stevens Committee recommended that the University undertake a capital development program of the order of \$4,200,000 to meet the needs described in its report. A major contributor to this expansion will be the U.K. who has indicated it will provide \$560,000 per year over a three year period. A significant part of the expansion will take place in Botswana and Lesotho although Swaziland will share in the program since it is the University's aim to extend its presence beyond Lesotho to the other two countries. Since the University intends to increase its enrollment from 308 to 500 by 1970, consideration will have to be given to the most economical and effective ways to accomplish this goal. The planning function will play an important role in this process.

- (e) To improve the agricultural resources of the three countries through the development of an effective instructional and research program at the Agricultural College (SACUC).

After careful consideration of the present program and the existing and prospective staff requirements for the College it is apparent that the greatest single need at SACUC is for the strengthening of the Department of Land Use and Irrigation and the College's academic curriculum. SACUC's goal is to increase the number of students in the diploma course and eventually to install a degree program. The speed with which this is accomplished will depend on the output of the secondary schools. At present the diploma course has 19 students (Botswana - 8, Lesotho - 5, and Swaziland - 6). It is anticipated that the number will double in 1968 and treble in 1969.

2. Summary

The achievement of the basic objective of assisting the UBLS in the production of middle and high level manpower requires the continual upgrading of colleges and departments capable of training adequate numbers of students in such specific disciplines as education and agriculture and the creation of a strong and effective central administration to carry out sound management policies and long range academic and capital development plans. The success of this process is dependent upon, among other things, a well timed transfer of responsibility from/expatriates to/citizens of the three countries.

E. Course of Action

The course of action set forth below is aimed at assisting the University with the expansion of two of its most important programs in order to meet, more effectively the needs of the three countries in the fields of education and agriculture. This should result in an eventual alleviation of the serious manpower shortages which now exists through the provision of trained Africans who are qualified to serve in professional and sub-professional posts in the private and public sectors.

The University is unlikely in the foreseeable future to secure more than a minimum of recurrent revenue from the three governments it serves. Since its educational program is mainly concentrated in Lesotho, the development of its physical presence in Botswana and Swaziland becomes a top priority.

The services which UBLS can and should offer in Botswana and Swaziland should be relevant and practical. The development of professional services must, therefore, come first. Hence, priority should be given to: (1) the improvement of teacher education; (2) the improvement and expansion of Agriculture training; (3) the improvement of the academic curriculum at the Agricultural College (SACOC).

On the basis of the recommendations set forth in the Stevens Report and an analysis of the needs expressed by UBLS, it is proposed that AID assist the University in its efforts to serve the three governments more extensively and effectively. This assistance would be phased and would consist of the following elements:

1. Technical Assistance - Phase I

Education

Technicians:

- (a) Two specialists in primary education, both would live and work in Botswana.
- (b) One lecturer in New Education Media (audio-visual methods, radio education, programmed learning, etc.). This specialist would play a vital role in the pre-service training of teachers, and would assist with the primary up-grading courses which are being held in each of the three countries. At present there is no resident specialist in this subject either in the University itself or in the Ministry of Education in any of the three countries. The New Media specialist would cooperate closely with all three governments in their up-grading programs.
- (c) One lecturer in Education with special responsibility for up-grading schemes and part-time students. The School of Education is already committed to assisting in up-grading programs in Lesotho and Botswana, and a similar program will be developed in Swaziland. At present, however, there is no one on the staff of the School of Education with expertise in primary education, a lack which greatly handicaps the departments operation. It is envisaged that this lecturer would work very closely with his two colleagues in Botswana, who would be running the Primary Head Teachers Course, though he could not give more than their assistance.

of the Ministries of Education, at the primary school level in the areas of educational supervision (leadership) and syllabus revision. He would also assume responsibility for the part-time students in the School of Education.

Agriculture

Two technicians in agricultural engineering would be provided in the following specialties:

- a - Soil conservation
- b - Irrigation

They would teach courses in the Department of Land Use and Irrigation related to the Diploma in Agriculture, Certificate in Agriculture, and Certificate in Forestry.

Technical Assistance - Phase II

Agriculture

A specialist is needed at the Agricultural College who would teach surveying and other courses which are preparatory to specialized instruction in the Department of Land Use and Irrigation.

In order to bolster the academic curriculum at the Agriculture College and University Center, staff assistance in the following fields will be needed:

- (a) Applied Sciences (chemistry and biology)
- (b) Mathematics
- (c) English

These are basic subjects in which all students are expected to qualify. Examination results show them to be the weakest from the standpoint of student performance.

Provision of Staff

The personnel required for this project will be provided through a contract with a State College system or university or a recruitment agency. There are advantages to be had from both arrangements. The comparative benefits will be studied and a decision made at a later date.

2. Logistical Support

Support for the proposed technical assistance includes important logistical elements which are requisites to its success. These include housing, transportation, supplies and equipment and the training of staff replacements.

Staff Housing

The biggest problem facing the University at present is the lack of housing

(2) lack of staff quarters. This situation may be alleviated in time through funds provided by the U.K. for capital development. Unless the University is able to make accommodations available for the three teacher educators to be stationed at Roma, Lesotho the chances of utilizing the technical assistance requested are small. In Botswana, there may be quarters that can be rented to house the two teacher trainers. Their availability will depend on the amount of lead time that is provided the Government to make preparations.

The shortage of housing in Swaziland is also critical. The Agricultural College has only enough housing at present to accommodate its own staff. However, there may be houses that can be rented in Mbabane.

The UNDP recognizes the seriousness of this problem and is making provision for the construction of houses or flats for the five technicians they are planning to provide UBLS.

Travel

In order for the University to extend its physical presence to Botswana and Swaziland two factors must be taken into consideration: (1) the need for the development of a university center in each of the two countries and (2) desirability of having the staff members visit these countries for the conduct of courses, research and consultation. It is anticipated that the education staff and the University Planning Advisor to be provided by AED will need to do a large amount of traveling in order to share their specialized services with all the countries supporting the University.

Adequate means will have to be provided to lessen the travel burden on the University and the staff. Sufficient funds should be made available to allow for travel by airplane, or where road transport is deemed advisable to purchase an appropriate vehicle.

It is difficult to comprehend the distance to be negotiated in traveling from Lesotho to the other two countries. To reach the nearest point of access to Botswana from Lesotho requires a drive of 400 miles all but 20 of which are through the Republic of South Africa. Furthermore, Botswana is a vast country with an inadequate road system. To visit the two teacher training colleges requires a round trip of 1,500 miles from UBLS. Swaziland is smaller in size but, a journey from the University to the Capital, Mbabane, requires a trip of one thousand miles. Since there will be many short courses offered in each of the countries the staff will have to spend a considerable amount of their time in traveling.

Commodities

The commodities to be provided in this proposal include demonstration equipment for irrigation and soil conservation as well as educational materials, books, audio-visual devices and related items. These are necessary if the technicians are to fulfill their professional responsibilities and achieve project goals.

Participants

A corollary to the provision of staff for the University is the training of local staff who will eventually replace them. The number scheduled for training

unforeseen circumstances.

3. External Sources of Assistance to UBLS

UBLS has been the recipient of assistance from several external sources from its inception in 1964. Without this help, the institution would not have been able to come into being or continue its existence. As stated in the Stevens Report, "It was assumed from the beginning of the University that outside support would be needed and forthcoming for some time to come". This assumption is still valid.

As far as can be determined the countries or agencies listed below have provided or expect to provide financial assistance in the amounts indicated.

1. U.K. - From the beginning the University has depended on the financial beneficence of the U.K. Approximately \$644,000 has been provided since it started, and \$560,000 was made available in capital funds () for 1967/68, subject to the approval of detailed building plans. A further \$1,120,000 has been offered for 1968/69 and 1969/70 contingent on a confirmation that an appeal would be made to other external sources for assistance.

The three territories have agreed that each will provide the University about \$240,000 per year through 1970. Actually most of this commitment will be assured by U.K. grants. Hence, the basic recurring costs have been guaranteed.

The U.K. will probably continue its support beyond 1970, but no commitment to that effect has been made.

2. US AID - After the U.K. the next largest external donor to the University is AID. From 1964 to 1968 a total of \$400,000 has been granted (\$100,000 each year) in conjunction with the Regional Scholarship Program and \$65,000 was provided in 1968. Since AIDSP has superseded the Scholarship Program, future of assistance to UBLS in this area will require further attention.

3. Carnegie - Carnegie Corporation of New York has been generous in its assistance to the University and has given two grants to the School of Education. The first was given in 1965 and amounted to \$93,800. This enabled the University to maintain its contact with Botswana and Swaziland and to provide courses for secondary school teachers and training college tutors. During the two years from August 1965 to July 1967, just over 60 courses of this nature were provided. The second two year period of the Carnegie assistance started in 1967 with a grant of \$50,000 to provide two teacher training specialists for the conduct of up-grading courses for primary teachers, especially in Lesotho where a series of three year part-time courses are being offered to raise unqualified teachers to a qualified status. The grant for this activity will extend through 1969.

4. United Nations Development Program (Special Fund) - The UNDP is presently providing a Senior Lecturer in Science Education. In 1967, the University requested further assistance from this organization in the fields of education and public administration. The proposal for education has been finally submitted but the public administration request is still under consideration.

In January 1969, the Governing Council is scheduled to meet.

Science Teacher Training Program of the University which will involve a Special Fund Contribution of \$469,500 and cover two and one half years. Five experts will be provided along with some equipment and training fellowships.

The University will make a counterpart contribution to the project in the form of professional and administrative service staff, classroom buildings and recurrent costs for the project.

5. Other Donors - The Agriculture College in Swaziland has been the recipient of gifts from two major donors, Oxfam and Freedom From Hunger, amounting to approximately \$854,000 primarily for constructing and equipping the institution.

FAO contributed \$6,000 for the library which will also serve the UBLS Short Course Center at SACUC.

The Canadian Government has been providing four specialists for the Extension Department of the University since 1964 at a cost of \$100,000 per year. It is presently considering giving UBLS about \$300,000 per year for the next three years but there are no firm plans at present in regard to the type of assistance.

The University intends to ask the Swedish International Development Authority for the full counterpart costs of the UNDP Project together with a capital sum for the building of the Science Center.

Recently (Nov. 1968), The University received a gift of \$168,000 from the Anglo American Corporation and De Beers Consolidated Mines. The money will be made available to the University over the next six years. The University Council has decided to use the grant to build the first stage of the University Arts Block, which is to be called "Oppenheimer Hall". The Arts bloc has been at the top of the list of priorities for construction at the University because the Arts faculty (English, African Languages, History, Education etc.) has its members scattered around the campus in buildings devoted to other faculties and other purposes.

6. Contribution by Botswana, Lesotho and Swaziland - Pursuant to the recommendations contained in the Stevens' Report, the proportionate contributions being made by the three governments to the recurrent budget of the University for the period starting in 1967 are as follows:

Botswana	-	18%
Lesotho	-	46%
Swaziland	-	36%

It is assumed that the three governments will contribute the following amounts which are prescribed in the Porter Reports:

1967-68	-	\$ 949,000
1968-69	-	987,000
1969-70	-	1,012,000
1970-71	-	<u>1,050,000</u>

4,008,000

The UELI estimate of recurrent needs for the period 1967-72 amounts to \$6,113,800, after allowance has been made for income from fees and scholarships.

1967-68	-	\$1,054,200
1968-69	-	1,156,200
1969-70	-	1,192,400
1970-71	-	1,263,000
1971-72	-	<u>1,400,000</u>
		\$6,113,800

It has been estimated by the Steven's Commission that the gap between the five year targets for capital and recurrent expenditures combined, and estimated income will amount to \$6,440,000. They recommend that "this should be made the subject of an appeal by UELI to outside sources, whether international agencies, governments, foundations and other public and private bodies and individuals".

BEST AVAILABLE COPY

- 30 -

APPENDIX A

Some extracts from the Stevens Commission Report dealing with education.

1. "One point on which there was unanimity in the three countries was the need for more and better teachers, especially for the secondary schools and most especially in the sciences, mathematics and English. Expansion of the secondary systems will not be possible unless the supply of good teachers is increased, and this is a field in which the facilities for higher education have a vital role to play."

(Page 4)

2. "We suggest that the broader role of U.B.E.S. can be regarded as consisting of four main elements, and we think that it would be appropriate to refer to these in greater detail at this stage.

"First and foremost among these is its role through the School of Education in raising the level and fertilising the quality of the whole educational system in each of the three territories. The School of Education of the U.B.E.S. has already considerable achievements to its credit in its short courses for primary teachers and in its teacher training programmes without which there would be no hopeful future for the development of secondary school teaching, and for which no other institution could provide a substitute of comparable value. Work on school curricula, and through the Schools Examination Council which now operates under the wing of the University, must be adjudged of equal importance."

(Page 13)

3. "This brings us to the work of the School of Education, to which we have already paid tribute, and to the needs of the three countries for qualified teachers. The School already offers a number of courses and qualifications which are designed to draw people into teaching in a variety of ways, as well as a wide range of short courses, conferences and seminars...."

AGENCY FOR INTERNATIONAL DEVELOPMENT (A.I.D.)

PROJECT AUTHORIZATION

1. PROJECT NUMBER 690-11-690-004	3. COUNTRY Regional - SARAC	4. AUTHORIZATION NUMBER 0116
2. PROJECT TITLE University of Botswana, Lesotho and Swaziland		5. AUTHORIZATION DATE July 17, 1970
		6. PROP DATED December 1968

7. LIFE OF PROJECT

a. Number of Years of Funding: 10
Starting FY 1969; Terminal FY 1978

b. Estimated Duration of Physical Work
After Last Year of Funding (in Months): 4

FUNDING BY FISCAL YEAR (in U.S. \$ or \$ equivalent)	DOLLARS		P.L. 480 CCC + FREIGHT	LOCAL CURRENCY Exchange Rate: \$1 = R0. 714			
	GRANT	LOAN		U.S. OWNED		HOST COUNTRY	
				GRANT	LOAN	JOINTLY PROGRAMMED	OTHER
Prior through Actual FY	363						1,500
Operational FY	270						1,500
Budget FY	280						1,500
B + 1 FY	350						1,600
B + 2 FY	350						1,600
B + 3 FY	300						1,700
All Subsequent FY's	587						N/A
TOTAL	2,500						-

9. DESCRIBE SPECIAL FUNDING CONDITIONS OR RECOMMENDATIONS FOR IMPLEMENTATION, AND LIST KINDS AND QUANTITIES OF ANY P.L. 480 COMMODITIES

10. CONDITIONS OF APPROVAL OF PROJECT

This Project Authorization and attached PROP may be amended depending on the outcome of a full scale project review to be undertaken prior to the end of CY 1970 or thereafter.

BEST AVAILABLE COPY

(Use continuation sheet if necessary)

11. Approved in substance for the life of the project as described in the PROP, subject to the conditions cited in Block 10 above, and the availability of funds. Detailed planning with cooperating country and drafting of implementation documents is authorized.

This authorization is contingent upon timely completion of the self-help and other conditions listed in the PROP or attached thereto.

This authorization will be reviewed at such time as the objectives, scope and nature of the project and/or the magnitudes and scheduling of any inputs or outputs deviate so significantly from the project as originally authorized as to warrant submission of a new or revised PROP.

A.I.D. APPROVAL	CLEARANCES	DATE
Dr. Samuel C. Adams, Jr. <i>[Signature]</i> SIGNATURE AA/AFR TITLE 7/17/70 DATE	AFR/ESA, Jerry Knoll <i>[Signature]</i>	7/17/70
	AFR/DP, David Shear <i>[Signature]</i>	7/15/70
	AA/AFR, Philip Birnbaum <i>[Signature]</i>	7/17/70
	A/CONT	

AA/AFR, Dr. Samuel C. Adams, Jr.

July 8, 1970

THRU : AFR/DP: Mr. David Shear ✓
AFR/ESA, Jerry Knoll

Request Life-of-Project Authorization: University of Botswana,
Lesotho and Swaziland (UBLS)

Problem: To consider formal FROP approval

Comment: The attached FROP was submitted to and approved by the Acting AA/AFR Robert S. Smith on January 27, 1969 together with IAD 69-67-2. However, we are resubmitting it because the Project Authorization form, also attached, was not used at that time nor was standard distribution made.

The data presented on UBLS in the FY 1971 Congressional Presentation conforms in all essential respects with the FROP except that assistance over a ten year period is estimated at about \$2.5 million.

Funding to date totals \$363,000 approved by the Acting AA/AFR in FY 1969 to initiate the project. Subsequently, on August 21, 1969, a two year contract was concluded with the California State Polytechnic College. Field implementation began in September and October of 1969 with the arrival of all six U.S. faculty members as prescribed in the contract.

Before any FY 1971 funds are provided to extend the contract, a full project review will be conducted as called for in the FROAG of March 8, 1969. We expect to complete such a review by the end of the calendar year, in time to prepare for the FY 1972 Congressional Presentation, and the FROP may be revised at that time.

Recommendation: That you approve the FROP and sign the Project Authorization.

AFR/ESA:ETrethaway_____

AFR/ESA:J.R. Ellis:lj