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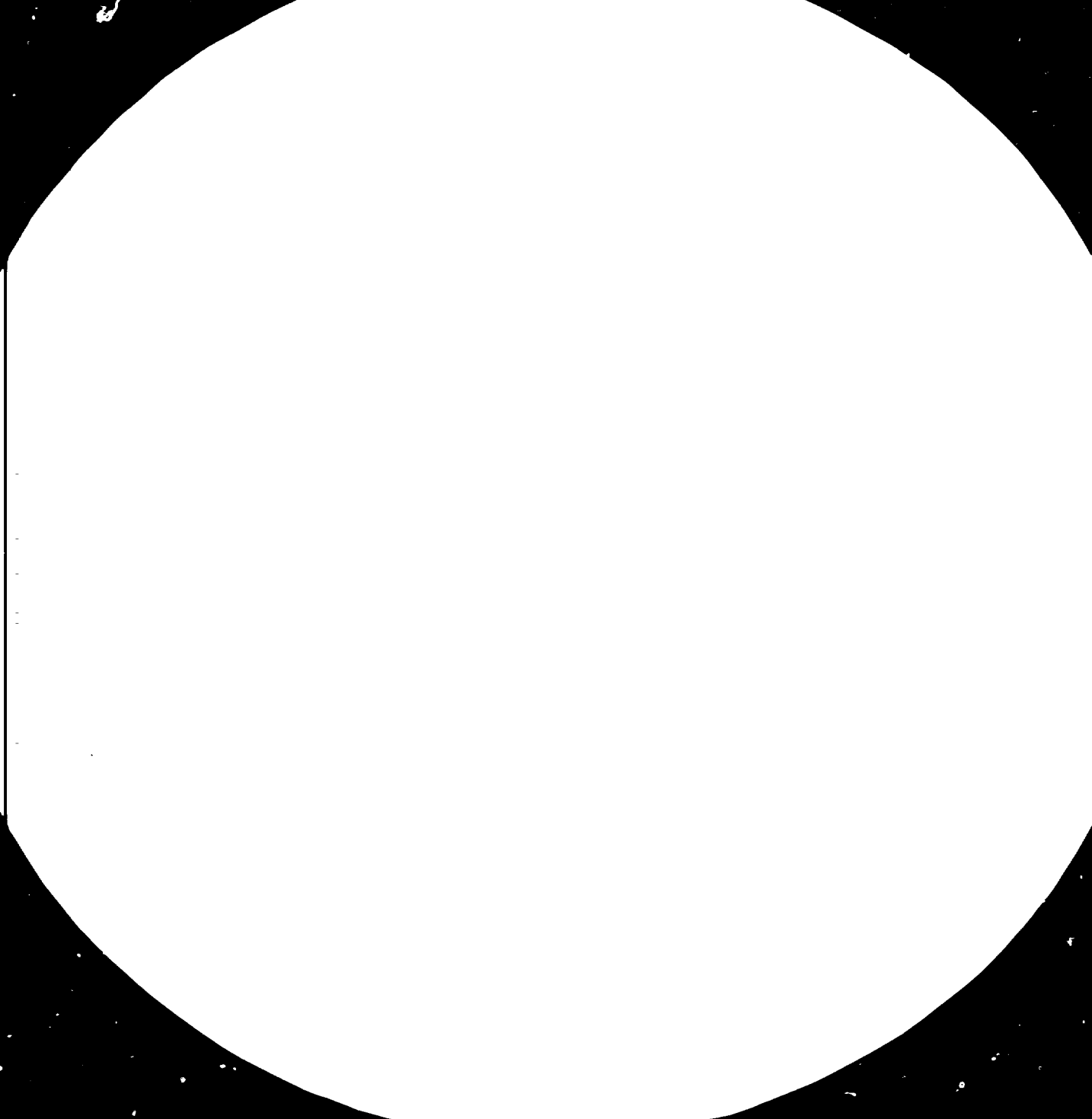
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SOLIDARITY MEETING OF MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO .

PROJECT PROFILES\*

Maseru, Lesotho, 7-11 June 1982

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V.81-33420

COUNTRY BRIEF

Introduction

The Kingdom of Lesotho, which became independent in 1966 after nearly a century of British rule, is a small country entirely surrounded by the Republic of South Africa. It is the country of Basotho people, who were brought together under the leadership of Moshoeshe, the Great in the early part of the nineteenth century. It came under British rule in 1868. Lesotho then known as Basotholand Protectorate lasted until 1966 when independence was achieved. During the time of the British rule little effort was made to develop Lesotho's infrastructure and Lesotho was left to become the labour pool of the Republic of South Africa (RSA) for the mines and industries.

The country rises from a plain at an altitude of some 5,000 feet in the west to mountains of up to 11,000 feet in the east, where the land drops steeply into Republic of South Africa. As a result of its mountainous feature, much of Lesotho's area of 30,350 square kilometers is of little use agriculturally. A large part of the agricultural land is subject to erosion (severe in places) leaving only 13% of the total land area suitable for crop cultivation.

The few natural resources of the country comprising water and minerals are yet to be exploited to their full potential. Water in particular, is one of the basic resources of Lesotho and investigations made so far indicate that its economically exploitable potential is considerable. With regard to mineral resources, Lesotho's geological structure gives reason to hope that some of the mineral wealth that exists in South Africa is also present. So far, very little mineral resources have been discovered apart from diamonds, clay and stone, all of which are commercially extracted to some extent. Investigations on the other mineral resources are continuing.

The 1976 Population Census reported a total (dejure) population for the country of 1,216,816 and a resident (defacto) population of 1,064,162, with 152,654 Basotho employed in the Republic of South Africa. Females constituted 52 per cent and 57 per cent of the total and resident population respectively. There is a relatively high annual population growth rate (2.3 per cent). Efforts through health services and education have not been able to slow down the rate of growth resulting in increased rural poverty, further migration and additional rural unemployment. It is quite difficult to accommodate the ever-growing school-age population (6-15 years) in the existing education system and the increasing burden on health services is causing a decline in the quality of health.

#### Economic Setting

Agriculture is the most important economic sector in Lesotho in terms of its size and as a generator of domestic employment. The sector, together with mining employment in RSA, provides the main source of income for about 90 per cent of the population. In the foreseeable future the domestic economy will continue to be dominated by the agricultural sector, although a relative decline of agriculture's contribution to the GDP has been witnessed over the past few years. This decline can be partly attributed to the faster growth of other sectors of the economy, especially construction, commerce, including catering, mining and transport. The contribution of agriculture to GDP (at factor cost) has fluctuated between 43 per cent (1976) and 37 per cent (1978). These fluctuations are largely caused by adverse conditions facing agriculture, generally the poor quality of technology employed and the small size of agricultural holdings.

Construction has shown rapid growth over the past years, reaching about 10 per cent of GDP. In the light of planned construction work in roads, water based works and associated buildings, the fast rate of expansion of the sector can be expected to continue.

Tourism has increased rapidly following the construction and expansion of facilities. In 1978/79 tourism accounted for about 8 per cent of GDP and provided employment for nearly 1,500. Tourism has given impetus to the handicraft industry. In turn Lesotho's distinctive artifacts displayed at trade and tourism fairs in Africa and Europe are expected to promote further interest in Lesotho as a tourist attraction.

Mining got a substantial boost when a private enterprise in which the Government has a 25 per cent share of equity began operating the country's first modern diamond mine in the north east of the country (Letseng-la-Terai). This mine represents an investment of about M37 million, and provides jobs for 890 workers. Other diamond deposits are to be developed on co-operative basis following a successful experiment at Kao diamond mine. Surveys have revealed sizeable deposits of clays suitable for ceramics, bricks and tiles. Indications of uranium have also been revealed. Mineral exploration is continuing.

Manufacturing is still at a very early stage of development accounting for only 2 per cent of GDP and 8 per cent of wage employment. Manufacturing consists largely of processing of agricultural and mineral products such as milling, canning, mohair spinning and brickworks. Further more, there is also an assembly and processing of imported components and materials such as umbrellas and textiles. An export designed abattoir is under construction. The construction and building sector has a great potential.

Water and Energy . As already indicated earlier, water is the most important natural resource of Lesotho which, for financial reasons, remains virtually untapped. A study of water resources had confirmed that the economic exploitation of water resources could benefit the country enormously and lessen her dependence on imported sources of energy.

### Gross National Product

The latest available national accounts data are for 1974/1975. Estimates were made for 1977/78 showing that the GNP amounted to M295 million, at market prices. This implies an average annual real growth rate of about 9 per cent from 1974/75. The most prominent contributors to this expansion are migrant labour remittances, the public sector and construction. The commercial sector is beginning to show signs of modest growth, while agricultural output has relatively stagnated as a result of the persistent problems of inadequate cultivation, soil erosion, over-stocking and adverse weather conditions. Despite these problems, Lesotho's domestic economy continues to be heavily dependent on the performance of agriculture. The gross domestic product (GDP) in real terms has been increasing at a rate of about 5 per cent since the mid seventies. GDP (in current prices) expressed as a percentage of GNP shows a considerable decline over the past decade. While GDP/GNP in 1970/71 was about 70 per cent, ten years later its proportion had fallen to slightly more than 60 per cent, mainly due to the large expansion in migrant remittances and other transfers.

### Balance of Payments

Lesotho suffers from a chronic imbalance in its merchandise trade. Due to the small productive base in Lesotho, most products are imported. Imports have grown from about M1,16 million in 1975/76 to M256 million in 1979/80. In real terms imports increased by about 13% per year on average. Most of the imports are manufactured goods followed by agricultural products and animals, and oil and petroleum products. Merchandise imports which in 1975/76 accounted for 56% of GNP reached 61% of GNP in 1978/79. With the major thrust in the development programme and major increase in the household income, the rapid expansion in imports is likely to continue.



The trade balance has always been in deficit. This deficit increased from M116.4 million in 1975/76 to M256.3 million in 1979/80. It has been financed mainly by remittances from Lesotho j miners in the Republic of South Africa and through official transfers and grants-in-aid. Remittances increased from M98.0 million in 1975/76 to M154.1 million in 1979/80 (amounting to 60% of trade deficits), and official transfers increased from M14.7 million to M74.6 million over the same period.

### Growth and Development Achieved During the 1970s

#### First Five Year Development Plan (1970/71 to 1974/75)

At the beginning of the seventies, Lesotho prepared its First Five Year Development Plan (1970/71 to 1974/75) which retrospectively can be characterized as a plan that was to a large extent exploratory and preparatory, primarily concentrating on public investment. Public investment was realized as the main vehicle for economic development. Another important feature of the First Plan was to concentrate on the annual increase in the absorption of labour as it was realized already at its outset that emigration of able bodied men to RSA was the single most serious obstacle to the development of the various domestic economic sectors. The overall objective of the First Plan was to lay the foundation for economic independence. The major development targets which were related to the overall objective were inter alia the following:

- (a) to attain an annual GPS growth rate of 5 per cent;
- (b) to increase agricultural productivity;
- (c) to promote non-agricultural productivity;
- (d) to create 10,000-15,000 new employment opportunities, mainly in non-agricultural activities; and
- (e) to end the dependence of the Government recurrent budget on external aid.

The planned increase in agricultural production was not achieved: the time space was too short and the projects initiated affected too limited an area to show a major impact upon the national agricultural production. During the Plan period 6,000 new employment opportunities were created, of which more than half were in manufacturing and construction. Government revenues increased more rapidly than projected and so did local and customs receipts. The projected public capital expenditure amounted to M28.8 million, which was about 17 per cent below the Plan target. One of the main reasons for the shortfall was that the time necessary for the formulation of development projects negotiations of agreements with donors on financing, and their subsequent implementation was often underestimated.

In general, a review of Lesotho's First Five Year Development Plan indicates that its aims were pursued with considerable success and that its overall objectives were fairly well achieved.

Second Five Year Development Plan  
(1975/76 - 1979/80)

The Second Five Year Plan (1975/76 - 1979/80) built on the accomplishments of the previous plan and provided a set of guidelines for the Government's national development efforts. The second plan was designed to ensure that the limited human, physical and financial resources available to the nation would be purposefully and effectively utilized. The national aims remained unchanged from the First Plan: emphasizing economic growth, social justice, maximum domestic employment and economic independence.

To achieve those aims, the following major specific objectives were defined for the plan period:

- (i) to increase total output by 46 per cent (GDP at factor cost);
- (ii) to expand non-agricultural output with emphasis on development of indigenous industries;

- (iii) to encourage private investment;
- (iv) to improve transport;
- (v) to foster economic independence, diversify sources of external assistance and to participate actively in international organisations.

In order to meet these objectives the Second Five Year Plan contained a public investment programme of M112 million and a technical assistance input of not less than M47 million. Political developments in Southern Africa during 1976 caused a fundamental revision of the Plan's strategies and priorities. The major shift was towards infrastructure and services for the rural population and measures to reduce dependence on South African transport facilities, health services, electricity supply and food.

Job creation in the modern sector was rather slow and fell substantially short of the Plan target. Some of the measures aiming at achieving the plan objectives were not realized.

The plan became a measure of the complexity of the problems that were faced by Lesotho and the country's vulnerability to external pressures. Accordingly, more resolutely than before, the Third Five Year Development Plan (1980/81 - 1984/85) emphasises the need to reduce vulnerability to external developments by increasing domestic employment through exploitation of natural resources and by developing the agricultural and manufacturing sectors.

#### Development Goals and Strategies for the 1980s

##### Macro-development objectives

The overall objective of the Third Five-Year Development Plan 1980/81 - 1984/85 continues to aim towards a greater self-reliant economy with particular emphasis on the reduction of external economic and political vulnerability, increasing domestic employment opportunities, promoting equitable distribution of income, protecting the land and water resources base and increasing the effective

participation of the community in the national development.

With respect to economic and political vulnerability, it must be pointed out that Lesotho is particularly affected as it is a least developed and landlocked country surrounded by a single economically powerful but politically and ideologically unfriendly country.

### Main Sectoral Objectives

In order to ensure that the nation's resources are utilized effectively in the attainment of its broad aims, specific sectoral objectives have been identified.

Agriculture aims at increasing production and profitability, improving the nutritional level of the people, and generating as much farm employment as possible. The strategy for the realization of this objective revolves around the gradual transition into a system of village-based cooperatives. The role of Government will then be to provide advice and infrastructural services. Specific objectives in the crops subsector are to achieve self-sufficiency in basic foodstuffs and to generate remunerative employment. In the livestock sector, the objective is to create and consolidate awareness of livestock farming for generating income and to reduce overstocking.

Commerce and Industry. This sector appears to offer the best hope for considerable growth, contributing to national income and creating domestic employment thus assisting to reduce the country's dependence on migrant labour. The objective in this sector is therefore to create an industrial climate conducive to the promotion and operation of viable enterprises with maximum employment potential. The use of available domestic raw materials is being promoted as much as possible and special attention is being paid to the development of labour intensive, small scale industries. An educational programme for improving industrial skill and industrial relations will be embarked upon.

Water Development potential for this sector is considerable. Lesotho can no longer afford under-utilisation of a resource that offers such promising potential. The objectives in this sector are therefore to complete the feasibility and design studies on some of the schemes that have been initiated. In this respect, the Highland Water Scheme, a very large scheme within the economic context of Lesotho, will be of fundamental importance for the long-term economic development of the country. In view of recurrent drought conditions, ground water investigation and exploitation will be intensified.

Mining: The aim is to extend and intensify mineral exploration and, where feasible, prepare detailed feasibility studies for the development of any mineral deposits of economic interest. In the case of diamonds, cooperative digging will be encouraged.

Tourism. Tourism development is closely related to the improvement of the communications system. It is therefore expected that the achievement of the objectives in communications will have considerable impact on tourism. In order to aid the expected development in this sector, development and improvement of marketing facilities needs to be undertaken and an aggressive marketing campaign will be undertaken along with increased participation in tourism fairs and contact with tour organisations.

Education. Measures will be undertaken to make education more relevant to the social and economic development needs of the country. Curricular, instructional materials, teacher training and other physical facilities will be developed. Emphasis will be placed on non-formal education. Finally, the aim will be to complete the programme of expansion, improvement and, as much as possible the localization programme of the National University of Lesotho.

Social Services. The emphasis in this sector will be to achieve coverage of primary health care. Maternal and child health services, family planning, immunization, sanitation services and curative services need to be implemented to achieve primary health care objectives.

Finance. From the macro plan and the sectoral objectives, it is evident that the programme of objectives will require massive domestic and external finance. In so far as domestic resources are concerned, financial objectives will emphasize measures that would enhance their mobilization. With respect to external financing, the objective will be to create a favourable climate for capital inflows both public and private.

### Industry

At the time of independence, the country's industrial sector was rudimentary. In the manufacturing sector, there were only 16 establishments of a small-scale nature. The lack of industrial development prior to independence is mainly a direct result of Lesotho's colonial status and the predominant role of South Africa's relatively well developed industry.

During the seventies, the Government made considerable efforts to stimulate industrial activity and to create more employment in the manufacturing sector. The target set for the industrial sector comprising industry, commerce and tourism was about 7,000 new employment opportunities during the Second Plan; of this, the target for manufacturing industry alone was 4,500. The revised Second Plan envisaged around M42 million or about 10 per cent of the total investment resources for industry, commerce and tourism. The Government's policy was to leave the development of manufacturing to the private sector, but with the understanding that suitable sites, buildings, and initial finance could be provided by the Government. The actual industrial progress during the Second Plan in terms of new employment opportunities and investment was rather modest, namely about 25 per cent of the set target for employment and some 40 per cent for planned investment. Large scale industries were still hampered by the size of the market and competition with similar industries in the Republic of South Africa.

Although the market size in Lesotho is rather small, Lesotho has access to the EEC market through the Lome Convention and to the South Africa, Botswana and Swaziland

markets through South African Customs Union. To further facilitate industrial development, the Government imposes no restrictions on movement of capital, profit and interest, has no local ownership requirements and has designed other investment incentives. The latter include tax holidays of up to six years, training grants, and provision of loan and equity finance.

The Government encourages manufacturing industries which are labour intensive, have high value added, and use local raw materials if possible. Emphasis is put on the ability of the industry to achieve long term financial viability. Special attention is given to import substitution and export oriented industries

The chief agencies for implementing the adopted policy are the Lesotho National Development Corporation (LNDC) and Basotho Enterprise Development Corporation (BEDCO). LNDC provides long-term loans and equity participation to large and medium scale enterprises, while BEDCO assists in the establishment and growth of small scale Basotho enterprises through loans, training facilities and so on.

LNDC is participating in companies in manufacturing, trading/distribution, and the handicraft sector. The manufacturing includes furniture, candle-making, tannery, knitwear and quarrying. It is estimated that four-fifths of the country's industrial output is produced by LNDC assisted enterprises. By and large enterprises are small to medium scale.

Currently, 13 projects are under construction and negotiations are proceeding to establish manufacturing facilities for carbonless copy paper, bakery products, food packing, wool and mohair processing, footwear, leather tanning, electrical equipment and household products as well as some projects in the construction and service sectors.

The Government intends to continue to emphasize the industrial sector expansion since it provides one of the best potential sources of export and labour absorption. To

that end, substantial resources are dedicated to promotion activities to seek outside financial investors and LNDC will continue to expand and assist in project financing.

Basotho Enterprise Development Corporation (BEDCO) was initially established as a subsidiary to LNDC with the specific purpose of promoting and developing Basotho owned and managed small-scale enterprises. BEDCO concentrates much of its activity on the Sebaboleng Trade and Industrial Centre in Maseru. Among the industrial activities and services at Sebaboleng are a number of small manufacturing firms which produce wooden articles, garments, leather products, shoes, tapestries and other woven products, solar heating units and steel products. Repair services are available for radios, television sets, watches, machinery, refrigeration, and domestic appliances. The entrepreneurs are assisted by BEDCO in marketing, supply, costing, bookkeeping, and on-the-job training. BEDCO has an appropriate technology unit to assist entrepreneurs in production methods.

Lesotho's industry is in a very early stage of development, the oldest manufacturing enterprises having started production in 1969. Consequently, it has not been possible for an adequate number of Basotho to accumulate that kind of long-term experience so essential for profitable industrial production and for industrial growth. There is a shortage of Basotho managers and supervisors, and top management in the larger enterprises is mainly foreigners.

Production efficiency and profitability in many firms are rather low. Industrial discipline, the feeling for good product quality, and the understanding of the importance of good maintenance result from a long-term process of industrialization. Moreover, established enterprises work in isolation from each other, which means no linkages between enterprises.

One other problem is that the established industrial enterprises are rather small. The volume of the domestic market is also very small. One other characteristic retarding industrial development is the geographical position of Lesotho. The dualistic economy in Southern Africa whereby regional centres of industrial growth have been concentrated in a few



regions, in South Africa, has resulted in the industrialization of Lesotho as being a peripheral development. Hence the difficulty to attract foreign investors.

There are other constraints: domestic raw materials are limited, and consequently production to a great extent has to be based on imported materials, there is no real labour market, transport is complicated and expensive, the supply of electricity is not stable, and communication by telephone sometimes unstable.

#### Economic Infrastructure

Effective long-term development can only be achieved in agriculture, industry and other economic sectors if sufficient economic infrastructure facilities are provided. In the absence of country-wide rail communications, Lesotho is heavily dependent on road transport for passengers and freight movements. In general, the road network is not yet well developed, although substantial improvements since independence have been achieved. The Government has realized the importance of linking roads in the outlying areas to the centre which will give access to markets, stimulate agricultural production and make industrial development possible. Developments planned for other sectors, notably tourism, will also be highly related to road improvements throughout the country.

The internal airfields, which provide vital links and easy access to otherwise inaccessible areas, need to be upgraded, maintained and additional ones need to be constructed. The transport sector with its road and public work branch offers a great scope for labour-intensive employment. While the main roads in the lowlands are relatively well developed, the mountain areas do not have a network of adequate all-weather roads. The mountain access track and bridle path construction programme of the Ministry of Rural Development and the new access and feeder roads programme of Basic Agricultural Services Project open up vast possibilities for labour utilization.

A continuous need to retain and absorb all the migrants within its economy or the ever present fear that these migrants may suddenly return in large numbers are some of the forceful reasons why a policy of labour-intensiveness must be adopted in Lesotho. The selection of an appropriate technology in public infrastructural investments and in organizing large-scale programmes of labour-intensive works is a crucial policy issue in Lesotho's long-term development strategy. Under the Labour-Intensive Construction Unit (LCU), road construction projects have been started and it appears that labour intensive construction was efficient and only slightly more expensive than capital intensive works. The Government is fully convinced that labour intensive public works, trying to expand wage employment, is not only consistent with the short and long term requirements for rural employment expansion, but will also contribute to the country's internal stability.

Schemes for public works are to be developed in agricultural roads construction and maintenance, and in improvement and maintenance of airstrips. Soil conservation including afforestation activities are probably the main field for absorbing labour in agricultural related infrastructure. Those activities embrace a variety of measures such as the establishment of terraces, construction of drainage ways, ditches, planting of trees and construction of small dams. Woodlots present additional employment possibilities and their establishment in critical areas is a major soil conservation measure. These are important for stabilization of catchment areas as well as for provision of fuel and building materials. Since Lesotho's road system is still far from adequate, road construction offers a great scope for labour-intensive employment creation especially in the mountain areas where a basic network of all-weather roads needs to be developed.

Summary of Major Constraints to Economic Development

The growth in labour force now requires over 10,000 additional employment opportunities a year which is substantially above what the additional 5,000 forecast to be generated annually in the near term. This gap can be closed only by a major thrust in new investment coupled with an emphasis of labour intensive production techniques and an effort on the part of the Government to restrict population growth. Furthermore the various training programmes will have to be reviewed to assure a correlation between supply and demand for the different skills.

In addition the quality of manpower continues to be a major constraint in Lesotho, especially as regards the managerial, professional and technical skills. This coupled with a rapid expansion of the economy in the 1970s and an underestimation of skilled manpower and training in the First Plan are still eminent and shall continue to persist beyond the Third Plan period. The rapid economic growth and the demand of skilled manpower led to a heavy reliance on expatriate personnel and further inflows are currently been inhibited by shortage of housing.

About one quarter of Lesotho's labour force is engaged in mining in the Republic of South Africa and this work force generates about one third of Lesotho's GNP. Should this segment of the labour force be reduced significantly in the near future, a major economic and social dislocation could ensue. An emergency programme has to be devised to deal with such eventuality. This issue further highlights the necessity to narrow the gap between supply and demand for labour within the domestic economy thus allowing some absorption of the migrant labour force and a reduced level of dependence on the Republic of South Africa.

Agriculture in Lesotho, traditionally the main source of employment has been stagnating in recent years due to a multitude of reasons including soil erosion and over-grazing,

poor cultivation methods, improper marketing practices and land tenure system which provided stability in the past have become barriers to progress. Erratic climatic conditions and lack of proper irrigation system have exacerbated the plight of agriculture.

Although various starts have been made (notably the Basic Agricultural Service Programme) the sector is still lacking in both management and technology. Given the efficient state of development of agriculture in the Republic of South Africa and the free flow of goods among Customs Union Members, Lesotho's farmers can hardly compete in the market-place in both prices and quality. The higher remuneration in other sectors causes dwindling of agricultural labour ranks, which in turn causes further deterioration in the role of the sector in the economy. To improve the situation, emphasis should be put on increasing agricultural productivity; that is, more secure land tenure, reduction in overgrazing, better irrigation and improved management and marketing efforts. Only when the returns to the farmer will rise substantially can the sector assume its previous role in the economy and the dependence on South African imports of food be reduced.

Industry, despite recent growth, is still in its very early stages of development. Most enterprises are small and many suffer financial losses partly as a result of market limitation and partly because of lack of managerial and financial capabilities. Better training of manpower and better planning of labour requirements of industry, are urgently needed. Capital requirements of the sector are vast and could not be supported only by Government parastatals. Therefore, major infusion of external capital should be sought and encouraged via promotional activities. Domestic raw materials are limited, and consequently, production to a great extent has to be based on imported materials, there is no real labour market, transport is complicated and expensive, the supply of electricity is not stable, and communication by telephone is sometimes unstable.

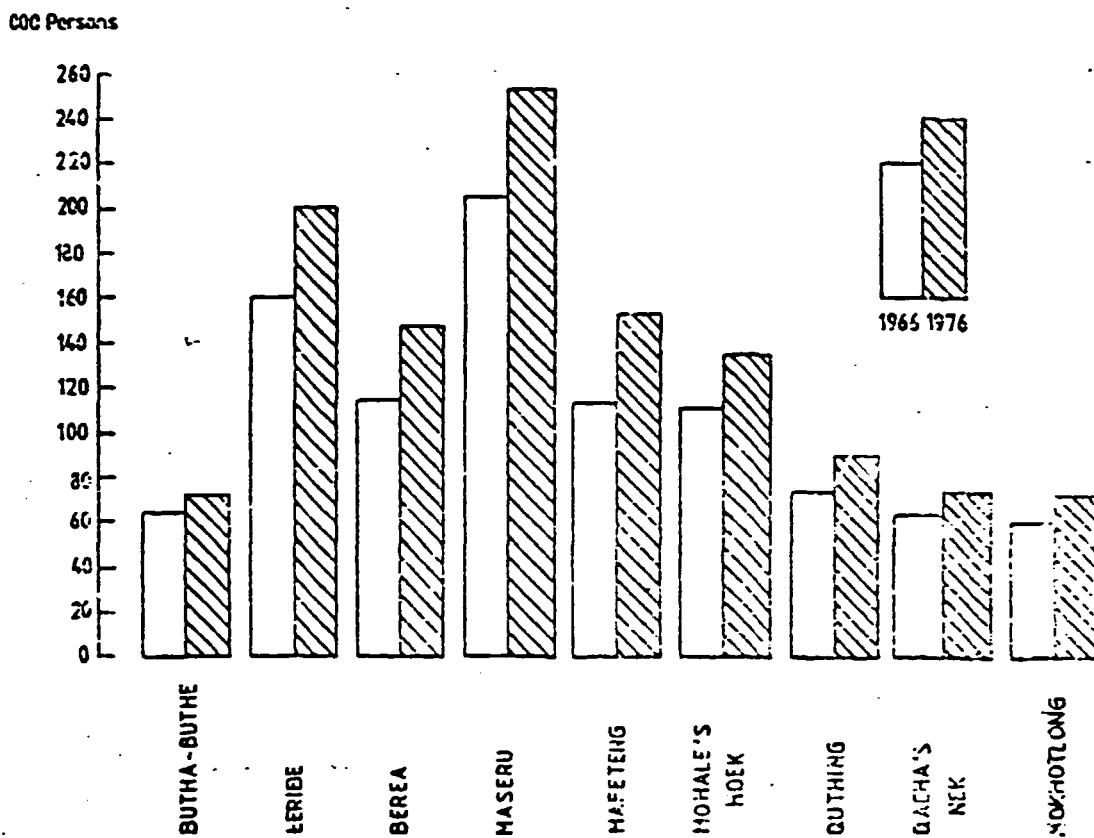
The geographical position of Lesotho and the low level of its telecommunications infrastructure make communications to the outside world difficult mainly because it is connected to the infrastructure in South Africa. Transport and communications present a special problem in Lesotho because of the country's sparseness of population and rugged terrain.

The road network is largely undeveloped and the cost of distribution of goods is high. Some population centres are connected only via the domestic air system and, where a road link exists, some roads are seasonally not passable. It is clear that a continuing major effort is needed to improve the road network. This will allow an increase in agricultural production, reduction in prices paid by the consumer, and less dependence on South African imports.

Further economic development, coupled with the continuing need of above average growth of the transport sector, implies increased demand for energy. Lesotho is currently totally dependent on the Republic of South Africa for imports of oil and electrical energy. This has proved costly in the past as the Republic of South Africa is dependent on spot oil market prices. Furthermore, inability to obtain oil in the market on the Republic of South Africa's part could cause major economic disruption in Lesotho. To alleviate the situation the country's water resources should be tapped to produce electrical energy, potentially fulfilling all domestic needs. These water resources could also be used as a new major export industry and reduce the large current account deficit and the reliance on migrant labour for capital transfers to offset such deficits.

The increase in industry, construction, and the public sector has resulted in turn substantial new urban infrastructure. Further major effort will unquestionably be needed in development of urban roads, streets, water supply and sewerage, and related infrastructure. Without this, it is hard to envision major expansion in industry and services in the country.

1. POPULATION (DE JURE), BY DISTRICT, 1966, 1976

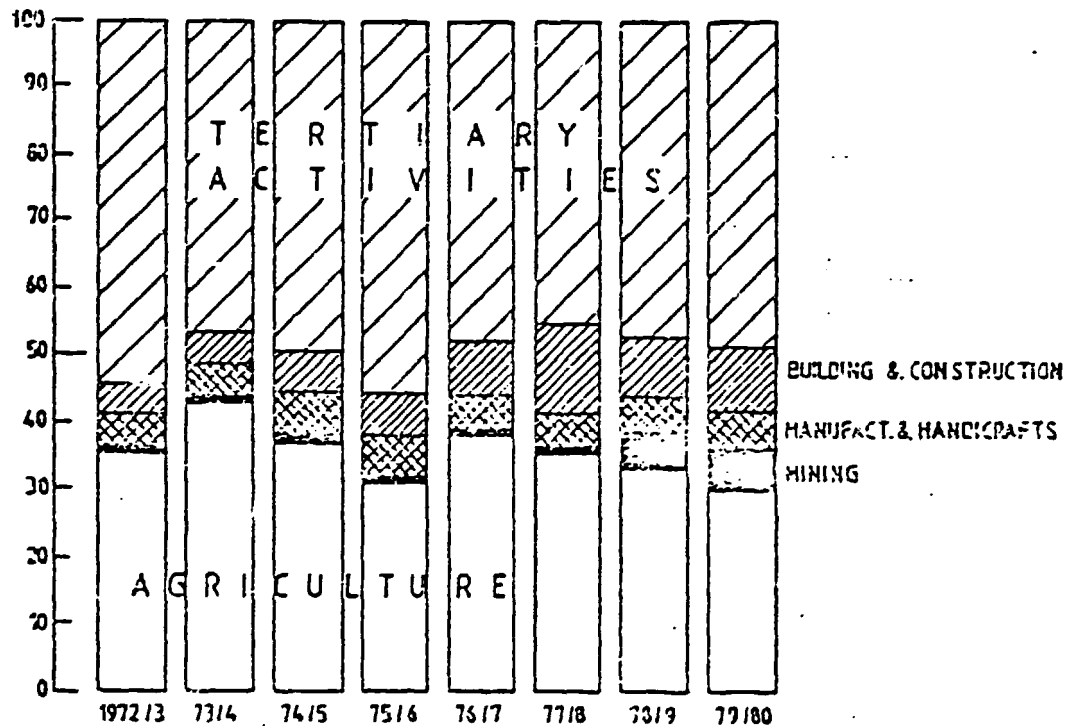


- 1000 Persons

District	1966	1976
Butha-Butha	63,2	77,2
Leribe	160,9	203,3
Berea	116,3	146,1
Maseru	203,9	257,3
Mafeteng	115,5	151,3
Mohale's Hoek	113,4	136,3
Cuthing	74,3	88,5
Qacha's Nek	62,0	76,5
Mokhotlong	60,1	73,5
TOTAL LESOTHO	969,5	1,216,8

### 8. STRUCTURE OF THE ECONOMY OF LESOTHO

Percent  
Total GDP = 100

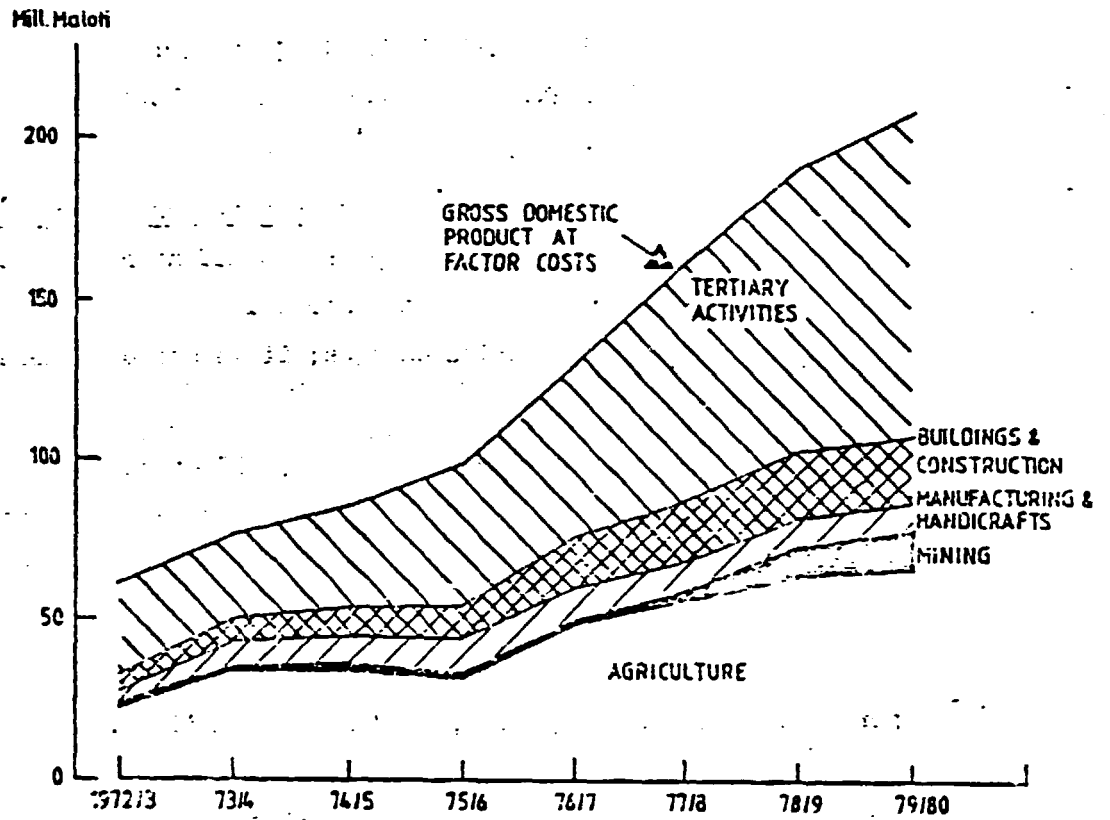


- in percentage

	Gross domestic product at factor costs	Agriculture	Mining	Manufacturing & handicrafts	Building & Construction	Tertiary Activities
1972/73	100	35,5	0,3*	4,8	4,5	54,3
1973/74	100	42,5	0,3	5,0	4,7	46,7
1974/75	100	37,8	1,1	5,7	5,7	48,7
1975/76	100	31,7	0,5	5,7	6,1	55,2
1976/77	100	38,6	0,3	4,9	7,5	48,3
1977/78	100	34,1	0,8	4,5	13,9	46,7
1978/79	100	32,8	5,6	4,1	10,1	46,8
1979/80*	100	30,6	6,1	4,7	9,2	48,3

\* - indicates preliminary estimates

### 7 INDUSTRIAL ORIGIN OF GROSS DOMESTIC PRODUCT AT FACTOR COSTS



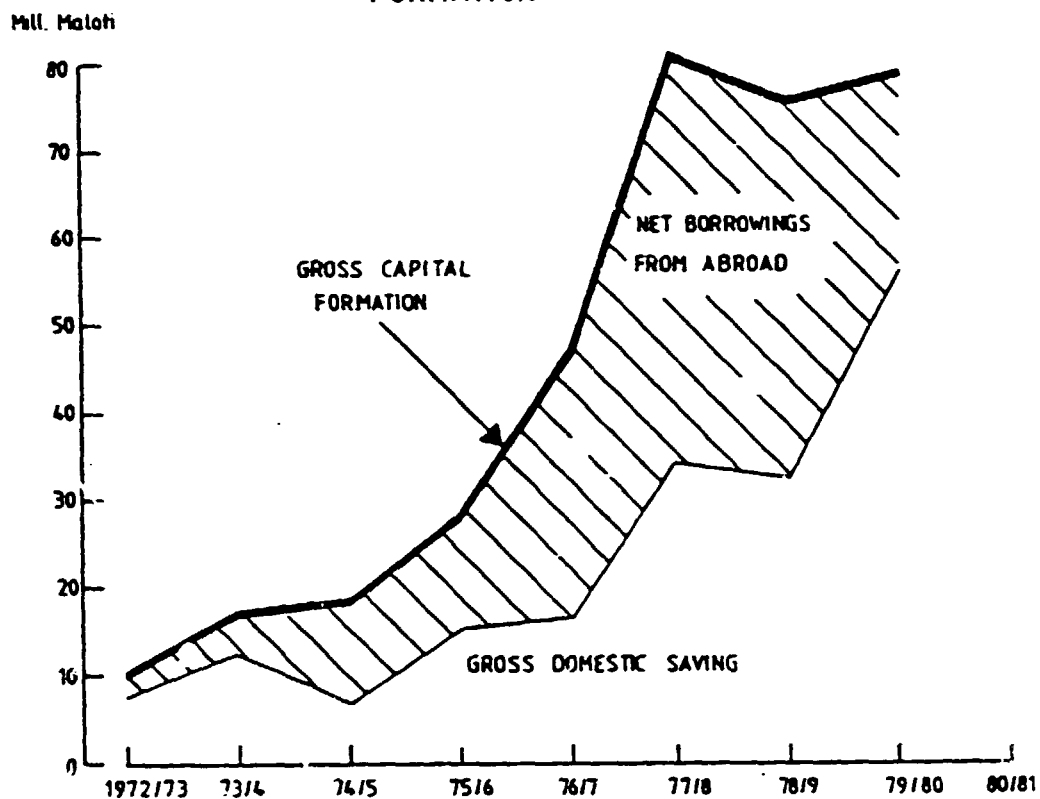
- Mill. Maloti

Year	Gross domestic product at factor costs	Agriculture	Mining	Manufacturing & Handicrafts	Building & Construction	Tertiary activities
1972/73	59,2	21,0	0,2	2,8	2,6	32,1
1973/74	76,8	32,7	0,3	3,9	3,6	35,9
1974/75	84,0	31,7	0,9	4,8	4,8	41,0
1975/76	98,1	31,1	0,5	5,6	6,0	54,1
1976/77	128,6	49,6	0,5	6,2	9,7	62,1
1977/78	159,8	54,5	1,2	7,1	22,2	73,1
1978/79	195,3	63,0	11,0	8,0	19,7	91,4
1979/80	210,6	64,5	12,7	10,0	19,4	101,8

\* \* indicates preliminary estimates



Figure 5 FINANCING OF GROSS CAPITAL FORMATION



- Mill. Maloti

Year	Gross fixed capital formation	Plus: change in stocks	Gross capital formation	Source of financing	
				Gross domestic saving	Net borrowings from abroad
1972/73	9.9	1.2	9.9	7.0	2.9
1973/74	16.3	5.6	16.3	12.9	3.4
1974/75	17.3	2.8	17.3	6.9	10.4
1975/76	27.3	3.8	27.3	15.8	11.5
1976/77	46.7	8.5	46.7	16.3	30.4
1977/78	80.2	12.2	80.2	34.4	45.8
1978/79	75.4	15.8	75.4	32.7	42.7
1979/80*	78.1	14.5	78.1	50.4	27.7

\* = indicates preliminary estimates

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 1

PROJECT TITLE: Establishment of an Industrial Development Fund

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 6 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of Lesotho,  
Maseru

UNIDO CONTRIBUTION: Convertible US\$8,170,400

GOVERNMENT CONTRIBUTION: Counterpart staff and office facilities

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$8,170,400

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODF: 30.9.Z

PROPOSAL SUBMITTED BY: Ministry of Industries, Government of Lesotho,  
Maseru

DATE OF SUBMISSION: 6 November 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Industrial Development Fund

Background:

Lesotho, one of the 21 least developed countries of Africa, is a small country with a limited national income and which is land-locked by South Africa. It's socio-economic problems are largely a result of the country's geo-political position. Due to its mountainous feature, much of Lesotho's area of 30,350 sq. kilometres are of little use agriculturally. A large part of the agricultural land is subject to erosion (severe in some places) leaving only 13 per cent of the total land area suitable for crop cultivation. Despite this, agriculture is the most important economic sector in Lesotho in terms of its size and as a generator of domestic employment. This sector, together with mining employment in the Republic of South Africa, provides the main source of income for about 90 per cent of the population. In the foreseeable future, the domestic economy will continue to be dominated by the agricultural sector, although a relative decline of agriculture's contribution to the GDP has been witnessed over the past few years. This decline can be partly attributed to the faster growth of other sectors of the economy, especially construction, commerce including catering, mining and transport. The contribution of agriculture to GDP (at factor cost) has fluctuated between 43 per cent (1976) and 37 per cent (1978). These fluctuations are largely caused by adverse conditions facing agriculture, generally the poor quality of technology employed and the small size of agricultural holdings.

Construction has shown rapid growth over the past few years, reaching about 10 per cent of GDP. A fast rate of expansion of the sector can be expected to continue.

Tourism has increased rapidly following the construction and expansion of facilities. It accounted for about 8 per cent of the GDP and provided employment to nearly 1,500 people in 1978/1979. Tourism has given impetus to the handicraft industry.

Mining got a substantial boost when a private enterprise in which the Government has a 25 per cent share of equity began operating the country's first modern diamond mine in the Northeast of the country (Letseng-La Terai).

Manufacturing is still at a very early stage of development, accounting for only 2 per cent of GDP and 8 per cent of wage employment. Manufacturing consists largely of processing of agricultural and mineral products such as milling, canning, mohair spinning and brick works. Furthermore, there are facilities for assembly and processing of imported components and materials such as umbrellas and textiles.

Foreign assistance - financial and technical - is a crucial and substantial element in Lesotho's development plans and programmes. Over the II Plan period, assistance increased from \$16 million in 1975/76 to \$37 million in 1979/80.

The First Five-Year Plan (1970/71 to 1974/75) was largely exploratory and preparatory, primarily concentrating on public investment. Public investment was considered as the main instrument for economic development. In other words, the First Plan laid the foundation for economic independence.

The Second Five-Year Plan (1975/76 to 1979/80) built on the accomplishments of the First Plan, provided guidelines to the Government's development efforts. The major shift was towards infrastructure and services for the rural population and measures to reduce dependence on South Africa's transport facilities, health services, electricity supply and food.

The Third Five-Year Plan (1980/81 to 1984/85) aims to reduce vulnerability to external developments by increasing domestic employment through exploitation of natural resources and development of the agricultural and manufacturing sectors. Its aim, therefore, is towards building a greater self-reliant economy.

#### Industrial Development

The industrial sector appears to offer the best hope for considerable growth. The objective, therefore, is to create an industrial climate conducive to the foundation of viable enterprises with maximum employment potential. The Government plans to promote the use of domestic raw materials as much as possible with special attention towards the development of labour intensive, small-scale industries. The Government's policy is to leave the development of manufacturing to the private sector, but

with the understanding that suitable sites, buildings and initial finances would be provided by the Government. To further facilitate industrial development, the Government imposes no restrictions on repatriation of capital, profit and interest, has no local ownership requirement and has designed other investment incentives such as tax holidays up to six years, training grants, and provision of loans and equity finance. The Government, therefore, encourages manufacturing industries which are labour intensive, have high domestic value added, and use local raw materials whenever possible. Emphasis is placed on the ability of the industrial undertakings to achieve long-term financial viability.

Since the industries in Lesotho are in their very early stage of development, many enterprises are small and may suffer financial losses partly as a result of market limitations and partly because of lack of managerial and financial capabilities. Better training of manpower and better planning of industrial labour requirements are urgently needed. Capital requirements of the sector are vast and could not be supported only by Government Parastatals. Therefore, major infusion of external capital needs to be sought and encouraged through promotional activities.

#### Need for Industrial Development Fund

The financial institutions in Lesotho are mainly commercial banks, except two Government-owned Agricultural Development Banks and the Building Finance Corporation. Capital for industry is essentially provided through shareholder's equity and loans provided by the Lesotho National Development Corporation (LNDC) out of Government Funds. Available bank loans are usually of a short-term nature and thus, inappropriate for the financing of industrial development. Government itself relies heavily on loans from international organizations (and friendly countries) which it on-lend to the corporation at reduced rates. The capacity of the Government to finance industrial development is limited by the Government's own small resource base and the myriad demands for Government funds in other areas of public responsibility. The Government, therefore, feels the need to establish an Industrial Development Fund.

The purpose of the Fund would be to finance on a revolving loan basis the industrial projects set-up by small-scale industrial entrepreneurs. This would act as a growth stimulant and induce the small entrepreneurs to develop the small-scale industries in the rural sector in order to scatter the germs of growth. Industrial development would thereby be fostered through the initiatives of small private enterprises. Further, it is anticipated that more industrial projects would be forthcoming as a result of the operations of the Industrial Development Centre scheduled to be established either with the help of UNIDO or Donor Countries in 1982. Some of the projects would be screened and operated on a joint-venture basis with foreign investors while some projects would have to be financed entirely for the limited local financial requirements.

The Third Five-Year Plan emphasizes the need: -

- 1) To promote the profitable participation of Lesotho nationals (Basothos) in industrial and commercial activities;
- 2) To foster industrial and commercial development in small towns and rural areas;
- 3) To make full use of the locally available raw materials.

In the light of the above given facts and considering ways and means to foster industrial development, the Fund could play the following role:

- a) Provide the Basothos (Lesotho nationals) with funds to support expansion of their on-going projects and assist the trained skilled labour to carry on establishing manufacturing units themselves in the different districts. Successful training programmes in three training centres (schools) in Maseru, Leribe and Quthing provide carpentry, masonry, mechanics and metal ware courses. In one of the schools, namely, Leloaleng Trades School, there is a possibility of qualifying: -

- 36 skilled labour in carpentry
- 36 skilled labour in mechanics
- 30 skilled labour in leather ware
- 45 skilled labour in masonry

This trained labour will naturally seek capital to set-up workshops of their own. Comprehensive action has to be taken to provide these youths with financial facilities to purchase tools, machines and equipment. The average cost incurred to train one skilled individual ranges from \$3,500 and \$5,500 for 3 years. This investment and the efforts made become a loss to the nation whenever some of the trained people are offered jobs outside Lesotho.

- b) Provide the Basothos (nationals of Lesotho) to run their workshops at BEDCO premises since they are very keen to get additional funds to increase the supply of raw materials. On field visits, it was a pleasure to see this urge specially where Basotho products are marketed in the R.S.A. to Basotho migrants. (For example, the knitted wear and clothings are sold at comparatively challenging prices in Basotho inhabited areas). Moreover, small private Basotho entrepreneurs can get substantial support by establishing new manufacturing units or expanding their production capacity.
- c) Provide training facilities to Basothos in the technical units in remote areas like Thaba-Tseka, since these areas have proved their capability to attract many Basothos for training courses in different skills. Funding is still a problem to encourage these units and the trained labour to continue expansion programmes and improvements. (A small slaughter unit and a rural tanning unit in Maseru lack running capital to proceed with the planned capacities). Because of the limited funding, the project provides training facilities for only 10 persons in different areas. Funds are required to supply the Rural Technical Units (RTU) with materials such as: iron bars, sheets, angles, rods, nuts, metal tubes, wires, etc. for metal works; wood for wood manufacture; chemicals and hides for the tanning unit.

The Industrial Development Fund could assure a full and current supply of raw materials and intermediate goods, the prices of which are rising steeply. Field observations proved the necessity for most of the existing handicrafts and branches of industries, to be supplied with materials and intermediates at current and stabilized prices. The Lesotho Sheepskin Factory, the Craft Centres in Thaba-Tseka, Thabana-Li-'Mele, Leribe and Tabane Yela are all facing this problem. If wages have to be regularly paid, regular funding of the supply of raw materials and intermediate goods becomes more and more critical.

The proposed Industrial Development Fund would be administered jointly by the Ministry of Commerce and Industries and the Lesotho National Bank. The funding operations will be strictly scrutinized by the UNIDO Industrial Adviser, assisted by two associate experts in the evaluation and follow-up of the funding. Together with the Lesotho Bank, the Ministry of Commerce and Industries could play the role of a main legalizing authority of the Fund. It is evident that the Ministry has to deal with such a role in order to cover the following functions: -

- A - Production constraints resulting from lack of funding could, therefore, be easily identified and financially supported.
- B - A priority policy of using the funds can be laid down at the Ministry according to special measures such as: -
  - I - How far the investment profile of the project is evaluated to achieve favoured economic performance? The methodology of evaluation is complex as it comprises multiple measurements.
  - 2 - How far the required fund is able to create or develop sectoral inter-linkage?
  - 3 - How far the proposed project fits in with previously licensed projects in terms of size and site of project, sectoral and district level?

In the context of the above background and needs, the Ministry of Industries desires to seek the assistance of potential donor countries for establishing an Industrial Development Fund.

Size of the Fund:

The size of the Fund shall be about US\$8.2 million covering the needs for a period of 3 years. It would be in the form of grants or loans or partly grants and partly loans.

A - <u>Foreign Inputs</u>	m/m	<u>In Convertible Currency</u>	
		<u>US Dollars</u>	
1 - Revolving fund (by grants from donor countries)		\$4,000,000	
2 - Long-term loans (soft loan 0.5% interest with a grace period of 10 to 15 years)		3,000,000	
3 - Associated expert to work together with the Industrial Adviser for follow-up and evaluation programmes	12 m/m	50,400	
4 - Equipment: expendable equipment and supplies		1,000,000	
: non-expendable equipment and supplies		120,000	
<b>Total Foreign Inputs</b>		<u>\$8,170,400</u>	



B - Local Inputs (Government of Lesotho Contribution)

- Counterpart staff
- Offices
- Vehicles

It is, therefore, requested that the potential donor countries participating in the Solidarity Ministerial Meeting in Lesotho may consider this project as a key project, particularly since the Government wishes to disperse service facilities to reach a larger number of people in the rural sector in order to avoid rural-urban migration and to develop growth centres by providing short-term loans to rural entrepreneurs.

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 2

PROJECT TITLE: Establishment of Two Industrial Estates  
(agro-based) in Lesotho

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF  
OFFICIAL REQUEST:

GOVERNMENT COUNTERPART AGENCY: Ministry of Commerce and Industries,  
Government of Lesotho

UNIDO CONTRIBUTION:

GOVERNMENT CONTRIBUTION: \$300,000

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible \$9,840,000

UNIDO SUBSTANTIVE  
BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Commerce and Industries,  
Government of Lesotho, Maseru

DATE OF SUBMISSION: 6 November 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Establishment of Five Industrial Estates (agro-based) in Lesotho

Project Costs: \$32.275 million

Project Scope:

For giving a help to the growth of agro-based industries, it is desirable to establish a chain of agro-oriented industrial estates in Lesotho. The scope of the present project is limited to the establishment of five such estates at Khubetsoane, Butha-Buthe, Mafeteng, Quthing and Leribe.

Project Duration: Five years

Project Inputs:

Establishment of industrial estates will involve identification of sites, development of infrastructure facilities, provision of common facility support, provision of industrial sites and sheds, selection and training of entrepreneurs, managerial assistance to new enterprises and training of counterpart personnel. Principal inputs aside from land will be: -

- A. Technical assistance for identification, planning and establishment of industrial estates
- B. Provision of infrastructure facilities
- C. Provision of industrial sheds
- D. Provision of common facility support
- E. Provision of transport facilities
- F. Provision of training opportunities

Project Costs: In Foreign Exchange

A. Project planning and implementation office

1. Technical Assistance (Expenditure on expatriate experts)

a) Team leader (Industrial Projects Planner)	
ea. \$70,000 per annum	\$350,000
b) Financial Controller	
ea. \$60,000 per annum	300,000
c) Civil Engineer	
ea. \$60,000 per annum	300,000
d) Estate Managers, Five - one for each estate	
ea. \$48,000 per annum	1,200,000
	<hr/>
Total	\$2,150,000

2. Local Contribution

Counterpart staff ea. 10 persons

ea. \$15,000 per annum	\$750,000
	<hr/>

Total Cost of Planning and Implementation Office \$2,900,000

B. Industrial infrastructure support excluding cost of land.

(Infrastructure support has to be handed by donor agencies for Lesotho)

Site development

Provisional roads and sewage drains

Water supply

Sewerage and sewerage treatment

Electricity supply

ea. \$4,000,000 for each estate	\$20,000,000
	<hr/>
Total	\$20,000,000

C. Industrial Sheds

ea. \$1,200,000 for each estate	\$6,000,000
	<hr/>
Total	\$6,000,000

D. Common facility support	
1. Common facility support complex	
ea. \$250,000 for each estate	\$1,250,000
2. Common facility workshop equipment	
ea. \$300,000 for each estate	1,500,000
	<hr/>
Total	\$2,750,000
E. Transport support	
Light duty trucks and station wagons	
ea. \$125,000 per project	\$625,000
	<hr/>
Total	\$625,000
F. Training of entrepreneurs and counterpart staff	
ea. \$40,000 per estate per annum	\$1,000,000
	<hr/>
Total	\$1,000,000
TOTAL PROJECT COST	\$33.275 Million
Foreign Exchange required for 5 Industrial Estates	<u>\$30.375 Million</u>

Special Features:

The income to be derived from the estates can form the capital base for the establishment of additional estates in the future and the experience gained by local staff will enable them to plan and establish new estates on their own.

Appendix:

Appendix I - Indicates the projects costs in case only two estates are taken in hand in the beginning.

Comment by I.O.D. Expert: Mr. K. Zerezghi

Mr. Zerezghi is not in favour of building up 5 costly industrial estates for a small country. He gives emphasis on Training rather than investment in buildings. On the basis of his comment, the project is amended (see Appendix I) for 2 estates only. The total cost will be for 2 estates-----\$9,840,000.

Appendix I

Estimated project costs for two industrial estates (at Butha-Buthe and Mafeteng):

A. Central Planning and Implementation Office	
1. Expatriate Experts (3 years)	\$1,290,000
2. Counterpart staff (5 years)	300,000
	<hr/>
Total	\$1,590,000
B. Industrial Infrastructure Support	4,000,000
C. Industrial sheds	1,500,000
D. Common facility support	1,100,000
E. Transport support	250,000
F. Training	1,400,000
	<hr/>
GRAND TOTAL	<u>\$9,840,000</u>

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 3

PROJECT TITLE: BEDCO's Industrial Perspective Planning Unit

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 25 October 1981

GOVERNMENT COUNTERPART AGENCY: Besotho Enterprises Development Corporation,  
Ministry of Industries, Government of  
Lesotho, Maseru

UNIDO CONTRIBUTION:

GOVERNMENT CONTRIBUTION: \$71,900

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible \$824,400

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: Besotho Enterprises Development Corporation  
(BEDCO)

DATE OF SUBMISSION: 25 October 1981

SOLEADARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Establishment of an Industrial Perspective Planning Unit

Introduction:

The Basotho Enterprises Development Corporation (BEDCO) has received a new mandate under the Basotho Enterprises Development Corporation Act 1980. The Act envisages that BEDCO which has been elevated to the status of a statutory corporation by the Act, shall be responsible for the promotion and development of Basotho-owned enterprises and of indigenous entrepreneurial skills. For this purpose, the corporation is enjoined to investigate, formulate, initiate, facilitate and encourage the establishment of Basotho business undertakings and their expansion.

Objectives:

The objectives of this project will be to identify: -

1. The potential growth centres which will constitute focal point for improving and developing the operating nature of Basotho-owned enterprises in Lesotho;
2. The candidate projects which can be taken up for implementation, support or sponsorship by the corporation at various growth centres;
3. The potential entrepreneurs who can be encouraged to set-up small-scale enterprises in various growth centres as said above;
4. The incentives and facilities which will have to be provided to encourage development of Basotho entrepreneurship at each growth centre;
5. The agencies, institutions, organizations whose co-operation will be needed for implementing the development programme of the corporation and the extent of their involvement;
6. The projects which can be sponsored for assistance from Donor Agencies;
7. To establish within BEDCO necessary expertise for the conduct of industrial potential surveys and perspective planning.

Methodology

In the initial stages, the international team will identify potential growth centres which will constitute focal point for improving and developing the operating nature of Basotho-owned enterprises, conduct industrial potential surveys, feasibility studies and prepare perspective plans for identified growth centres. The team will also train the counterpart staff so that by the time the project is completed, the counterpart staff is in a position to undertake further work on its own on a continuous basis.



Project Inputs and Budget

Three years.

I. Inputs:

A. International Staff

1. Project Adviser	Team Leader: Techno-managerial expertise (R54,600 x 3 = R163,800)	\$261,000
2. Marketing survey Specialist	Undertake marketing surveys to determine demand potential (R46,800 x 3 = R140,400)	\$242,400
3. Industrial Engineer	Provide technological inputs (R46,800 x 3 = R140,400)	\$242,400

A Total-----\$745,800

B. National Staff

1. Manager, Perspective Planning	Senior National Staff \$7,596 x 3 = \$22,788
2. Project Officer	Undertake field studies \$5,964 x 3 = \$17,892
3. Project Officer	Undertake field studies \$5,964 x 3 = \$17,892
4. Secretary	\$1,920 x 3 = \$5,760
5. Drawing Officer	\$2,508 x 3 = \$7,524

B Total-----\$71,856 = \$71,900

A + B Total-----\$817,700

C. Training

Three short-term fellowships (study tours)  
for its national staff, namely, manager  
Perspective Planning, two Project Officers

C Total-----\$36,000

D. Equipment and Miscellaneous

Office equipment	\$3,000
Typewriter	1,300
Filing Cabinet	200
Drawing Equipment	2,000

Accommodation	\$18,000
(Rental Expenses \$500/m x 12 x 3)	
Stationery	4,000
Books	500
Repair and Maintenance	3,000
Pick-up Van	7,000
Contingencies	3,600
D Total	<u>\$42,600</u>

II. Project Budget:

Item I A (Foreign exchange required)	\$745,600
Item I B (BEDCO's contribution)	71,900
Item I C (Foreign exchange required)	36,000
Item I D (Foreign exchange required)	42,600
GRAND TOTAL	<u>\$896,300</u>
Foreign Exchange required (Item A+B+D)	\$824,400
Government Counterpart Contribution	<u>71,900</u>
	<u>\$896,300</u>

Comment by I.O.D. Expert: Mr. Shimada  
A

Cleared.

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 4

PROJECT TITLE: Establishment of an Industrial Development  
Centre to be located in the Ministry of  
Commerce and Industries

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 5 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Commerce and Industries,  
Government of Lesotho, Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: -

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible \$789,800

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: Ministry of Commerce and Industries,  
Government of Lesotho, Maseru

DATE OF SUBMISSION: 5 November 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

PART A

COUNTRY           LESOTHO

PROJECT TITLE    Establishment of an Industrial Development Centre to  
                  be located in the Ministry of Commerce and Industry.

PART B

Narrative

1. Background and Justification

A comprehensive study of Lesotho's industry and industrial development institutions and a survey of existing and planned industrial development activities has recently been undertaken with a view to identify new investment opportunities.

Lesotho's industry is still at an early stage of development and has not yet reached the level of stability and growth.

The Government has the intention to increase its support to industrial enterprises by increasing the capacity and capability of the Development Institutions: The Ministry of Commerce and Industry, LNDC and BEDCO. It is also the intention of the Government to review the procedures of project preparation and project implementation in order to increase the implementation capacity.

2. Special Considerations

Limited by a meagre base, a rapidly growing population, and the constraints imposed by its proximity to the highly developed industry of South Africa, the Government of Lesotho is seeking in its Development Plan to improve the industrial potentials aiming at self-sufficiency and economic independence.

3. Objectives

(a) Development Objectives

The long-term development objective is to enhance the industrialization programme in Lesotho in compliance with the Second Five Year Development Plan.

(b) Immediate objectives

To establish an Industrial Development Centre within the Ministry of Commerce and Industry with a view to increasing the capacity and capability of the Industrial Section in the Ministry and make it possible for the Ministry to effectively direct the industrial development and coordinate all industrial development activities in the country.

4. Project Outputs

The project will fill a gap in the existing institutional set up and make it possible for the industrial enterprises to get the guidance and support so urgently needed.

5. Project Activities

The Industrial Development Centre will work directly under the Permanent Secretary with the following scope of activity:-

- (1) to establish a line of action for the industrial development in Lesotho;
- (2) to prepare an outline of a 10 year industrial development plan;
- (3) to formulate (short-term) objectives, policies and strategies for the short-term development of Lesotho's industry;
- (4) to carry out project appraisal and project evaluation studies;
- (5) to coordinate industrial development activities in Development Institutions and industrial enterprises;
- (b) to initiate actions aiming at strengthening the capacity of existing enterprises and improvement of their productive efficiency;

- (7) to be responsible for the contacts with donors for all technical and economic matters;
- (8) to investigate the needs for the establishment of a Bureau of standards and quality control;
- (9) to train Basotho staff for the Ministry and other Government Agencies;
- (10) to investigate the need for the establishment of an Industrial Management Centre, and to initiate consultancy and training courses.

6. Project Inputs

The specified tasks will be carried out by a team of experts consisting of an Industrial Engineer, a Production Engineer and an Industrial Economist - specialist in marketing and market research. Duration of their stay will be 3 years. The group of experts will work under a Project Manager, who will be responsible to the Permanent Secretary for industry.

7. Project Budget \*

		<u>US Dollars</u>
Project Manager (Financial Analyst)	36 m/m	242,400
Commercial and Economic Project - Evaluation Expert	24 m/m	159,600
Industrial Economist (Market Researcher)	24 m/m	159,600
Industrial Engineer/Management Consultant	24 m/m	159,600
Expert in Blanket Manufacture	4 m/m	25,600
Expert in Textile/Garments Marketing and Manufacture	4 m/m	25,600
Travel costs within the country		17,400
		<hr/>
Total Cost in Foreign Exchange-----		<u>\$789,800</u>

\* As per UNDP Proforma Cost for 1982, 1983 and 1984.

The Ministry of Industry and Commerce will provide the officials and the Government employees as national staff according to the staffing schedule in the work plan to be prepared at the start of the Project.

Furthermore, the Ministry of Industry and Commerce will be expected to provide the international and national staff with office space, equipment and supplies including typing facilities and funds and other facilities including local transportation, indispensable to the performance of their duties provided in the respective job descriptions.

Cleared by I.O.D. Expert: Mr. Shimada, 30.11.81

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 5

PROJECT TITLE: Technical Assistance to BEDCO Training Section

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF  
OFFICIAL REQUEST: 25 October 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of Lesotho,  
Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: -

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$143,040

UNIDO SUBSTANTIVE  
BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: Besotho Enterprises Development Corporation  
(BEDCO)

DATE OF SUBMISSION: 25 November 1981



SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Basotho Enterprises Development Corporation Proposed Technical Assistance to BEDCO Training Section

Introduction:

Besotho Enterprises Development Corporation is a para-stratal organization which looks after the development of small-scale industries of Lesotho.

The BEDCO has done a very good work so far and it required technical assistance for the various services.

The following proposals for technical assistance for training and expertise is requested by BEDCO from the potential donor countries.

The total cost will be about US\$143,000.

Training Item:

Cost: US\$

1) Administration

The establishment of two or more industrial estates

(Mohale's Hoek and Leribe) will require 2 Estate

Managers who will require training in Estate Management 10,100

2) Business Extension Services

This new department has had no training for Business

Counsellors, Managers and Director

- 4 Business Counsellors 38,500

- 1 Manager Extension Services 8,900

- 1 Director 8,900

- 1 Training Manager 8,900

- 2 Work Study Practitioners 5,000

<u>Training Item:</u>	<u>Cost: US\$</u>
3) <u>Finance</u>	
There is need to train the counterpart Financial Controller and Accounting staff in view of the corporation growth.	
- 1 Financial Controller Counterpart	8,900
- 2 Accounting Staff	5,000
4) <u>Marketing</u>	
The Marketing Manager and Sales Staff will require training in Marketing.	
- 1 Marketing Manager	8,900
- 2 Sales Staff	5,000
5) <u>Project Development</u>	
Require training in Project Management, Project Appraisal, and Project Implementation.	
- 1 Project Manager	5,500
- 2 Project Identification Officers	10,100
- 1 Project Implementation Officers	5,500
6) <u>Study Tours</u>	
The study tours will benefit both BEDCO Officers and Industrialists as well. These will help officers and Industrialists acquire experience on how other similar organizations operate.	10.000
7) <u>Subsidiaries</u>	
The subsidiary companies struggle for survival due to lack of trained managers. In this regard, we would like to have our subsidiaries and associated companies managed by trained staff.	
These companies are: Lesotho Foto Labs, Mohakare Heavyclay, Berea Knitwear, Arum Lily, Sebaboleng Auto Centre, Maseru Broom Co.	3,840
TOTAL COST-----	<u>\$143,040</u>

Comment by I.O.D. Expert: Ms. I. Lorenzo (Training Section)

Cleared, 26.11.81

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 6

PROJECT TITLE: Sandstone Cutting and Shaping Centres  
for Masonry Development

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 6 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of  
Lesotho, Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: -

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): For one unit \$386,000, for 6 units:  
6 x \$386,000 = US\$1,316,000 (convertible)

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation  
among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Industries, Government of Lesotho  
Maseru

DATE OF SUBMISSION: 6 November 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Sand Stone Cutting and Shaping Centres for Masonry Development

Introduction:

Although in the past sandstone has been a favorite building material and has contributed to the character of major cities, sandstone has lagged behind the technological developments in other stone materials and is only sporadically quarried throughout the world.

Sandstones varieties commercially used include arkose, bluestone, brownstone and greywacks. Quartzites, often derived from sandstone, are more endurated and harder to work. Sandstones can be used for almost any constructional or ornamental purposes including in the manufacture of monumentals.

The porosity of sandstone, together with its abrasiveness, may have contributed to its decline in use. Other reasons which contributed to lost favour are: lateral changes in deposits, the use of inferior qualities, incorrect fixing in buildings, improper cleaning and restoration methods, all which have caused rapid decay. Quarrying facilities and availability rather than quality selection were factors in establishing the intensive commercial distribution of some of the better known varieties throughout the world in the past.

However, quality control and proper application of technology can restore its use along with other stones as a loadbearing building material. This entails correct details in building design and fixing of the stone. Proper application of simple damp-proofing precautions are sufficient. The need to waterproof the stone is only exceptionally required. Cavity wall construction is preferable in predominant rain orientations as cooling of joints is not always reliable where heavy continuous rainfall prevails.

In countries with major sandstone outcrops, the use of this material is logical, especially if limestone and energy resources are scarce. In the latter case, other type of building materials, even based on local rock resources, would be comparative costly to manufacture. Compared with hard igneous and carbonate rocks, sandstone is comparatively easy to quarry and to dress.

In Lesotho, the stone materials, including large sandstone outcrops, form the largest visible mineral resources. Nevertheless, the R125,000 worth of buildingstones imported in 1973 increased to R239,000 during January-June 1974.

Project Objectives:

In addition to the survey of suitable sandstone resources, the viability to extract and process sandstone on an industrial scale was investigated, with industrialization to escalate according to market requirement, both local and export. The need to provide for low cost housing received special attention. Any new industry will contribute towards the solution of the "immigrant labour system" typical of the region, besides improving the general economy, saving of foreign currency and creating employment opportunities.

Application of simple techniques with hand-operated mechanical devices preserves labour intensivity required and can cut down production costs and time considerably. This was part of the general emphasis on practical demonstrations to stress increase of present production rather than elaborate evaluations.

The use of local material in outlying districts is of special importance due to limited haulage facilities. The optimum replacement of building materials, at present mainly imported, by local materials is aimed at. At the same time, attention was paid to related materials other than sandstone.

One result of Government's effort in creating employment opportunities in the country is to increase activity in the building industry. An increasing number of buildings are coming up all over the country, both in the public sector, as well as by the private sector, but the availability of building materials is not keeping pace with the requirements.

The Project:

The project intends to establish a semi-mechanized sandstone building blocks plant aimed at fulfilling the following objectives:

- 1) The utilization of local raw materials for the production of a locally required building material.
- 2) Creation of additional jobs in the labour intensive manufacturing process to solve the migration of labour into the Republic.
- 3) The provision of low cost housing through the availability of building materials.

A comprehensive plan for spreading sandstone quarries where the stone is to be cut and dressed will create forward and backward linkages which effects the economies of the highland areas.

In October 1975, a United Nations consultant reported on the availability of sandstone deposits and quarrying techniques. In his report, the consultant reviewed the following: -

- 1) "Ample local sandstone resources can be used rationally with simple technical improvements on present practice and at competitive cost<sup>1</sup>
- 2) To demonstrate the techniques, basic equipment should be ordered without delay<sup>1</sup>
- 3) Present stone prices compare favourable with equivalent materials and should become less costly with improved production<sup>1</sup>"

Recommendation:

The Government feels that it is advisable to establish both mechanized sandstone quarrying and dressing projects, as well as labour intensive sandstone cutting and dressing projects.

- 1) Establishing six mechanized sandstone manufacture plants as follows: -
  - 2 in Maseru
  - 2 in the Southern districts (Mafeteng, Mophale's Hoek or Quthing)
  - 2 in the Northern districts (Leribe, Butha-Buthe or Mokhotlong)
- 2) Establishing quarrying, cutting and shaping sandstone centres in each district as follows: -
  - 2 in Maseru
  - 1 in each of the other 10 districts

---

1 See Sandstone Industrial Project - Lesotho - LES/75/025

Estimated Cost:

1) Foreign Inputs	<u>m/m</u>	<u>US Dollars</u>
Stone cutting, shaping and dressing technicians (6 technicians for 6 months)	36	36,000
Tools and equipment		100,000
Machinery (plant and quarry)		100,000
Buildings and infrastructure		80,000
Transport equipment		30,000
Working capital		30,000
Miscellaneous		10,000
Total Foreign Exchange needed for each unit		<u>\$386,000</u>
For 6 units: 6 x \$386,000		<u>\$1,316,000</u>

Comment by I.O.D.

Mr. Biering: Cleared 23.11.81

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 7

PROJECT TITLE: Expansion of Mohokare Heavy Clay Products  
(Pty.) Ltd.

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 6 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of Lesotho,  
Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: -

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible \$134,000

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: Basotho Enterprises Development Corporation  
(BEDCO)

PROPOSAL SUBMITTED BY: 20 October 1981

DATE OF SUBMISSION:



SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Expansion of Mohokare Heavy Clay Products (Pty) Ltd.

Introduction:

The Mohokare Heavy Clay Products (Pty) Ltd. is under the supervision of the Besotho Development Corporation. Unfortunately, due to limited funds, the factory is not able to cater to the demand of the country. The BEDCO has therefore prescribed the following profile for consideration at the Solidarity Ministerial Meeting in order to expand the activities of the Mohokare Heavy Clay Products (Pty) Ltd.

Objective:

- 1) To relocate and expand Mohokare Heavy Clay Products.
- 2) To take advantage of short supply situation in market and good acceptance of Mohokare Brick which has resulted in demand it cannot satisfy.
- 3) To improve quality mix and enhance pricing.

Process:

It is proposed to retain the present method of clamp firing. Quality and production improvements will be obtained by installing: -

- 1) A pan mixer to process clay from stockpile to achieve correct physical characteristics and correct mix between differing clays and duff.
- 2) A de-airing extruder with mixing knives capable of 7,000 bricks per hour.
- 3) Covered and concrete-based, back lines to accommodate 500,000 bricks. These will provide more even and faster drying and will reduce deformation and damage, pre-firing.

Costs:

The following costs are based on a range of costs supplied by equipment suppliers for re-conditioned (used) equipment. They should be considered approximate (i.e. + 20%) for individual items while the total should be in a range of + 10%.

	<u>US DOLLARS</u>
1) Pan mixer	US\$22,000
2) De-airing extruder, knives, conveyer	62,000
3) Nack lines (covered, for 500,000 units)	16,000
4) Relocation incl. electrics	11,000
5) New extruder shed	8,000
6) Wheel barrows	3,000
	<hr/>
Total	\$122,000
Contingency	12,000
	<hr/>
	<u>\$134,000</u>

Location of Project:

On site identified off Leabua Highway (Khubetsoana) or alternative site under evaluation in Thetsane II.

Staff and Labour:

Management will consist of the following:

General Manager	US\$750	Already hired
Production Manager	\$300	Already in training
4 Foremen	\$150	Already hired
Accountant	\$500	To be hired
Bookkeeper	\$200	To be hired
Typist	\$100	Already hired
Clerk	\$100	To be hired

Labour:

Due to increased hardness and lighter weight of brick from extruder, larger barrow loads and rougher handling can be employed to and from the hack lines and at clamp setting. The increase in direct labour is, therefore, slightly less than 100 per cent despite volume increase of 700 per cent.

Training of additional labour is not seen as a problem since the cadre will consist of four trained foreman and 50 per cent of the work force will be experienced at the outset. For most jobs, a new employee can be brought up to work standard within the first week on the job, according to the General Manager.

Management:

The expanded company will need urgently a competent accountant to attend to the general accounting function and, additionally, to ensure that production records are established and kept current so that meaningful cost and performance data can be secured. The incumbent general manager is a well experienced brick maker but would benefit greatly from the services of a financial colleague.

Assumptions:

The assumptions on which the proformas are based are as follows:

- 1) That the extruder will be capable of sustained production of 5,000 bricks per hour for 7 hours a day, 22 days per week for a monthly production total of 770,000 bricks.
- 2) That total loss from back line and firing will be 5 per cent (i.e. 38,500 pm)
- 3) That quality mix in first year will be:

70 per cent	# 1
15 per cent	# 2
15 per cent	# 3
- 4) That pricing can be enhanced to 1 -M75m 2M68/m 3M60/m.
- 5) That 4,000 tons of raw material needs to be dug.
- 6) That total production of 8,778,000 units can be absorbed by the Maseru market under current demand level.
- 7) That accounts receivable will average 30 days (i.e. a mix between cash sales, 30 and 60 day terms).

- 8) That accounts payable will average 30 days.
- 9) That old facility will continue to operate "in situ" until extruding begins in new location.
- 10) TOTAL "DOWN TIME" will equal 20 working days.
- 11) That 15T QTR SALES WILL SHORTFALL 33 per cent.

Requirement:

The costs of equipment and relocation expense as detailed earlier under costs in foreign exchange totals US\$134,000.

Comment by I.O.D.

Mr. Biering: Cleared 23.11.81

PROFIT AND LOSS PROFORMA - YEAR ONE

MOHGKARE EXPANSION

	1 MO START UP	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR ONE
UNIT SALES (MS)	-					
# 1	-	1014	1536	1536	1536	5622
# 2	-	217	329	329	329	1204
# 3	-	217	329	329	329	1204
<b>TOTAL</b>	-	<b>1448</b>	<b>2194</b>	<b>2194</b>	<b>2194</b>	<b>2030</b>
REVENUE Maloti						
# 1		76050	115200	115200	115200	421650
# 2		14756	22372	22372	22372	81872
# 3		13020	19740	19740	19740	72240
<b>TOTAL</b>		<b>103826</b>	<b>157312</b>	<b>157312</b>	<b>157312</b>	<b>575762</b>
COST OF SALES						
EQUIP RENTAL	4800	14400	14400	14400	14400	52400
DUFF & NUGGET	3300	19800	19800	19800	19800	82500
DIRECT WAGES	5280	15840	15840	15840	15840	68640
ELECTRICITY	1000	3000	3000	3000	3000	13000
<b>TOTAL COST OF SALES</b>	<b>14380</b>	<b>53040</b>	<b>53040</b>	<b>53040</b>	<b>53040</b>	<b>225540</b>
GROSS PROFIT						<u>349222</u>
EXPENSES						
SALARIES	2550	7650	7650	7650	7650	33150
DEPRECIATION	-	5800	5800	5800	5800	23200
BEDCO LOAN INT	-	1244	1244	1244	1244	4976
MAINTENANCE	-	6766	6766	6766	6766	27064
TEL & TEL	-	392	392	392	392	1568
OFFICE EXPENSES	-	300	300	300	300	1200
SELLING EXPENSE	-	2076	3146	3146	3146	11514
BAD DEBTS		1400	1450	1450	1450	5750
DIR FEES		250	250	250	250	1000
<b>TOTAL EXPENSES</b>	<b>2550</b>	<b>25878</b>	<b>26998</b>	<b>26998</b>	<b>26998</b>	<b>109422</b>
NET PROFIT						<u>Maloti 229800</u>

1 US Dollar = .87Maloti

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 8

PROJECT TITLE: Ceramic Ware Manufacturing

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: November 6, 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of Lesotho, Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: \$1,000,000

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$2,550,000

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Industries, Government of Lesotho, Maseru

DATE OF SUBMISSION: 6 November 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Ceramic Ware

Introduction:

The Ministry of Industries proposes to establish a ceramic plant in the Mafeteng area. This location is deemed suitable mainly because of its proximity to the clay deposits and as a result a saving on transportation costs.

A feasibility study on the above has been prompted by a report - Report DP/LES/74/023 on clays in the Mafeteng area. W. Buchanan, author of the above referenced report, sees a possibility of extracting clay in the said area suitable for ceramic ware. The study which is financed by the European Investment Bank is underway and the results are expected by February 1982.

The consultants engaged in the study have also indicated a high possibility of suitable clays for a ceramic industry.

Product:

Pending the results of the feasibility study, the likely products to be processed from the clays would be sanitary ware, table ware and wall/floor tiles. Clay forms the bulk of raw materials required, however, other raw materials necessary for the above products will be imported.

Market:

Initially, the target market would be Lesotho, Botswana, Swaziland, Malawi and Mozambique. Already ceramic plants are not coping with the demand within the Union itself. After a few years of operation, assuming that by then, the Lesotho plant will be producing quality that will be competitive in world markets, 70 per cent of production will be exported to EEC countries to earn foreign exchange.

Total Project Cost:

The cost of buildings, machinery and equipment, expertise, etc. is tentatively estimated at \$3.5 million.

Building and infrastructure (local contribution)	\$1,000,000
Machinery and equipment	1,800,000
Expertise (expatriates)	750,000
	<hr/>
Total cost of project	<u>US\$3,550,000</u>
	<hr/>
Foreign Exchange required	<u>US\$2,550,000</u>

Comment by I.O.D.

Mr. Biering: The project is premature. We must wait for the feasibility  
23.11.81 study including a market study covering the EEC.



SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 9

PROJECT TITLE: Project for the Manufacture of Agricultural  
and Farm Implements (3 Units)

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF  
OFFICIAL REQUEST: 26 October 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Agriculture, Government of  
Lesotho, Maseru

UNIDO CONTRIBUTION:

GOVERNMENT CONTRIBUTION: \$32,750

CURRENCY REQUIRED FROM DONOR  
COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$53,875

UNIDO SUBSTANTIVE  
BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Agriculture, Government of  
Lesotho, Maseru

DATE OF SUBMISSION: 26 October 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Agricultural Tools and Farm Implements

Introduction:

Agriculture is the primary occupation of Lesotho which contributes to 43 per cent of the GNP at Factor Cost. Lack of agricultural implements have been responsible for the slow growth of this sector. The Ministry of Agriculture of the Government of Lesotho desires to establish a plant to produce simple agricultural hand tools and animal drawn implements on a commercial - profitability oriented basis.

Products and Market:

The Volume Market for hand tools consists of digging/weeding hoes, spades, sickles and others like picks and axes, and digging forks. The types of animal drawn implements that are currently and historically used in Lesotho is limited to items like mould board ploughs, spike tooth harrows, row crop planters, inter row cultivators and trailers.

The above implements are presently supplied by manufacturers in the Republic of South Africa (RSA).

The following are the total units of sales by wholesalers in 1979, supplied by manufacturers in the Republic of South Africa: -

Digging/Weeding Hoes	8,810
Spades	5,220
Sickles	4,100

Animal-drawn Implements:

Ploughs	1,700
Spike tooth harrow	730
Single row planter	1,100
Inter row cultivator	790

Product:

Agricultural implements such as: ploughs, pickasies, shovels, mummetti, sledge hammer, kodawals, khurpas, hoes and weeders.

Users:

Small farmers holding less than 2 ha. or gardeners.

Method of Sales:

Can be sold directly to farmers or through wholesale distributors

Requirement of Feasibility Study:

May not be necessary.

Expert Assistance:

May be required if modern machinery is used. Expert advice on heat treatment can improve on product quality.

Joint Venture:

Not recommended.

Linkage with Other Industries:

Woodworking industries or local carpenters.

Detailed Information:

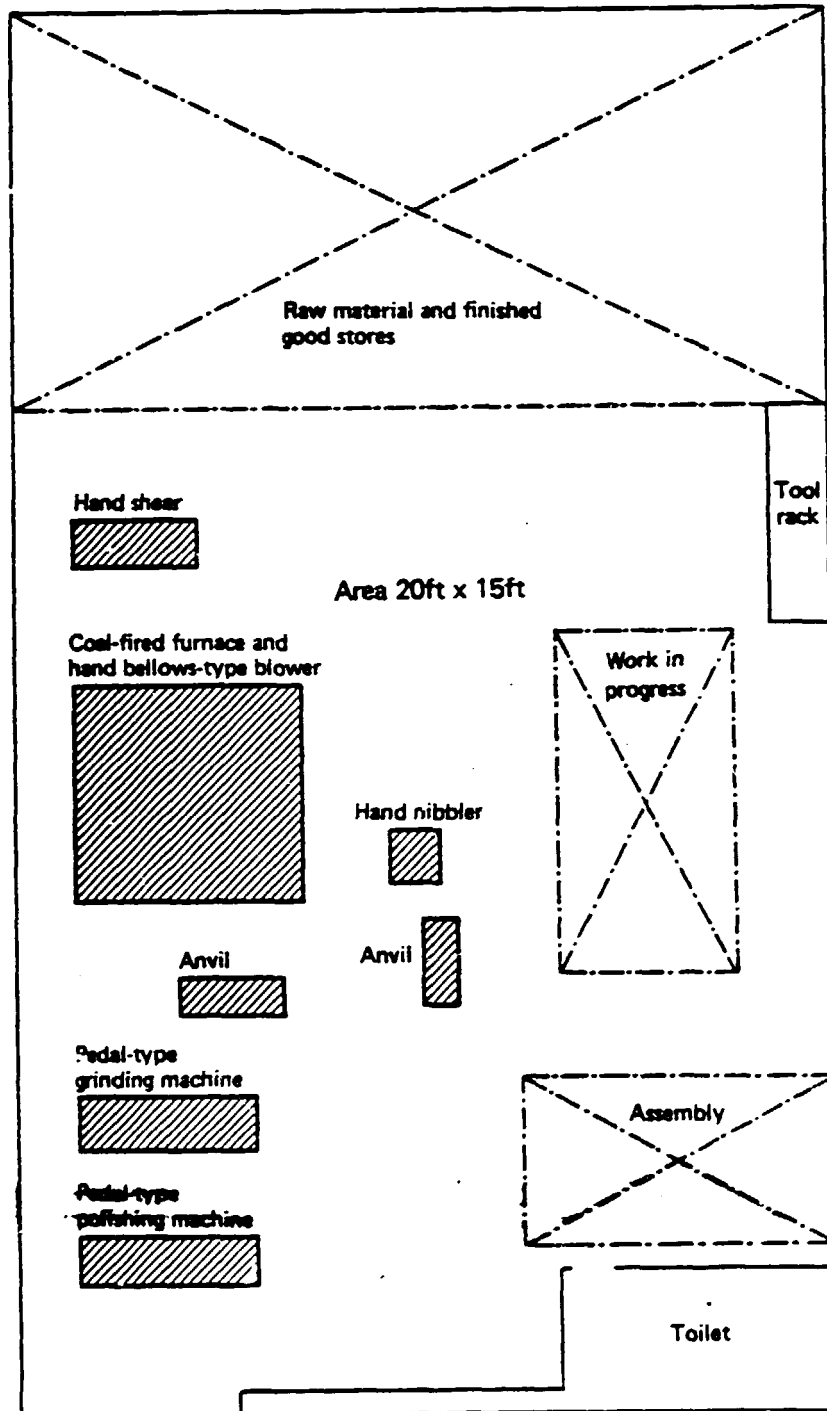
The following tables contain basic information on the manufacture of agricultural hand tools at handicrafts level for a shop without electricity and a shop with a 30 kW, 50 Hz, single phase, 220/240 V current supply.

Table 1. Product Specifications (Four Selected Products)

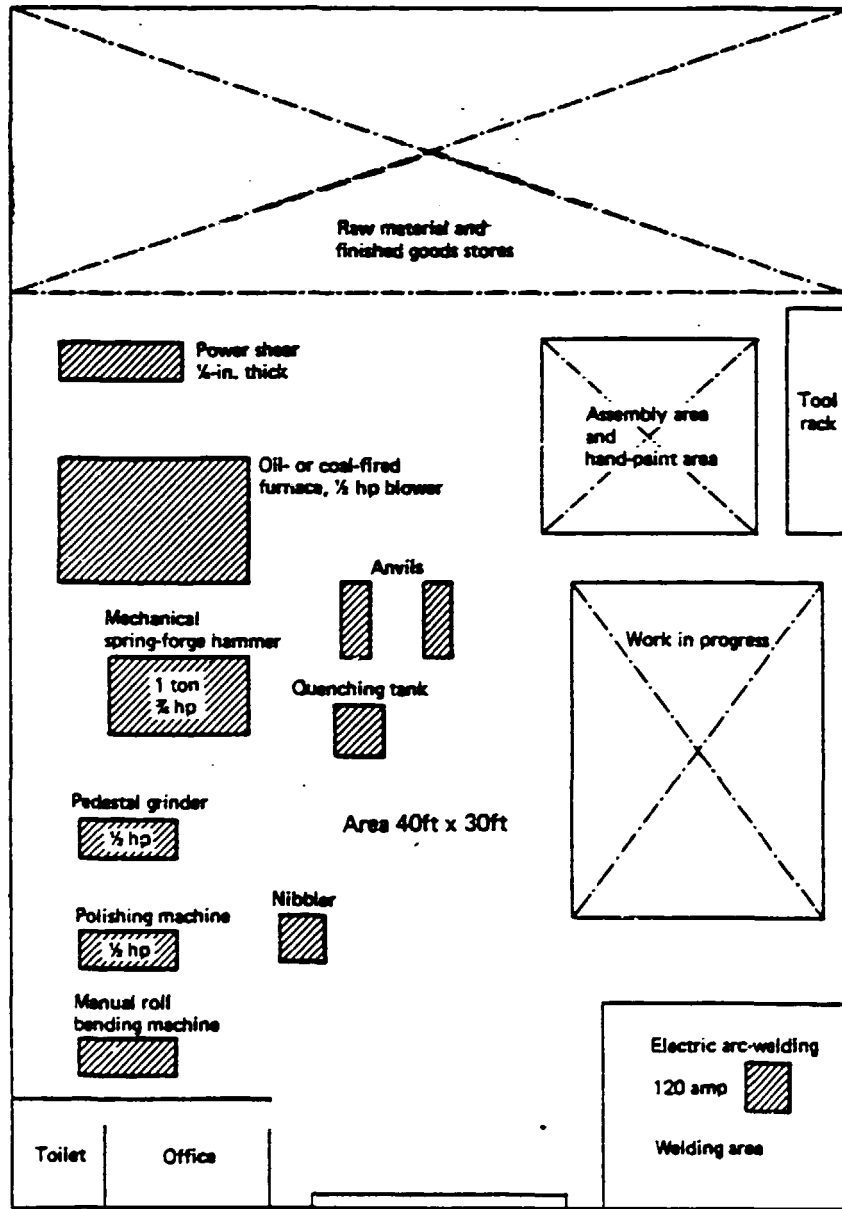
<i>Product</i>	<i>Specifications</i>
Spade	Blade and shank size, overall length 20 in.; blade size 8 in. x 6 in.; weight 1.5 kg
Hoe (tined)	Maximum length of tine 10 in.; width 6 in.; tine diameter 1/2 in.; weight 1 kg
Fork	Weeding fork, 3 prongs, length 14 in.; width 7 in.; diameter of prong 3/8 in.; tang bore diameter 1 1/4 in. (minimum) to 2 1/4 in. (maximum); weight 2 kg
Sickle	Length 9 in., maximum width 1 in.; handle 5 in.; weight 1/2 kg

*Material specifications*

Material specifications for hand tools are SAE 1078, carbon 0.72%-0.85%, manganese 0.30%-0.60%. The material is suitable for forge and heat treatment.



Layout of village blacksmith shop for production of agricultural hand tools (without electricity supply).



Layout of blacksmith shop for production of agricultural hand tools at handicrafts level (with electricity supply).

TABLE 2. PRODUCTION VOLUME

Product	Shop without electricity		Shop with electricity	
	Daily production	Annual production <sup>a</sup>	Daily production	Annual production
Spade	4	1 000	12	3 000
Hoe	4	1 000	12	3 000
Fork	4	1 000	12	3 000
Sickle	4	1 000	12	3 000
Total	16	4 000	48	12 000

<sup>a</sup> Based on 250 working days and an 8-h shift.

TABLE 3. MANPOWER REQUIREMENTS

Category	Shop without electricity	Shop with electricity
Direct labour		
Skilled	3 (including owner)	5 (including owner)
Semi-skilled	—	2
Unskilled	1	1
Indirect labour		
Skilled	—	1 (accounts clerk)
Semi-skilled	—	—
Unskilled	—	—
Total	4	9

**Floor area**

The required floor area is 300 ft<sup>2</sup> (20 ft × 15 ft) for a shop without electricity, 1,200 ft<sup>2</sup> (40 ft × 30 ft) for a shop with electricity. See figures XI and XII for layout plan.

TABLE 4. ESTIMATED COST OF MACHINERY AND EQUIPMENT

Hand-operated machine tools			Electrically operated machine tools		
Description	Quantity	Estimated cost (dollars)	Description	Quantity	Estimated cost (dollars)
Hand shear, 12 in.	1	200	Power shear, ¼ in.	1	500
Coal-fired furnace with hand-blower-type blower, 24 in. × 24 in. × 18 in.	1	2 200	Oil-fired or coal-fired furnace, ½ hp, 24 in. × 24 in. × 18 in.	1	5 000
Anvil with pedestal, 200 kg	2	200	Mechanical spring forge hammer, 1 t, ¼ hp	1	4 000
Quenching tank, 24 in. × 24 in. × 24 in.	1	300	Quenching tank, 36 in. × 36 in. × 36 in.	1	500

TABLE 4 (continued)

Hand-operated machine tools			Electrically operated machine tools		
Description	Quantity	Estimated cost (dollars)	Description	Quantity	Estimated cost (dollars)
Pedal-type grinding machine, 12-in. wheel	1	100	Anvils with pedestal, 200 kg	2	200
Pedal-type polishing machine	1	100	Double-ended pedestal grinder, ½ hp, 12-in. wheel	1	400
Hand nibbler, ¼ in.	1	200	Double-ended polishing machine, ½ hp	1	400
Blacksmith's tools and conventional tools	1 set	600	Manual roll bending machine	1	200
Miscellaneous		300	Electric arc welding machine, 120 A	1	200
			Blacksmith's tool set, ¼ in. portable drill, paint can and brushes	1 set	600
			Miscellaneous		500
<b>Total</b>		<b>4 200</b>			<b>12 500</b>

TABLE 5. INVESTMENT REQUIREMENT

(Dollars)

Basic investment	Shop without electricity	Shop with electricity
<i>Fixed capital</i>		
Land	-	-
Building	-	-
300 ft <sup>2</sup> at \$5	1 500	-
200 ft <sup>2</sup> at \$5	-	6 000
Furniture, fittings, racks etc.	300	600
Machinery and equipment	4 600	12 500
Electrical installation		1 000
Building	50	300
Transport (cart or trolley)	100	500
Contingencies	150	300
<b>Total fixed capital</b>	<b>6 100</b>	<b>21 200</b>
<i>Working capital</i>		
Direct material (3 months)	815	2 370
Labour (3 months)	950	2 875
Indirect costs	300	600
Training costs	-	500
Contingencies	35	155
<b>Total working capital</b>	<b>2 100</b>	<b>6 500</b>
<b>Total investment *</b>	<b>8 200</b>	<b>27 700</b>

\* Excluding cost of land.

TABLE 6. ANNUAL DIRECT MATERIAL COST

Item	Weight of blade (kg)	Price of raw material or unit (\$/unit)	Shop without electricity			Shop with electricity		
			Annual production (units)	Total raw material (kg)	Cost (units)	Annual production (kg)	Total raw material (\$)	Cost (\$)
Spade <sup>a</sup>	1.5	0.30	1 000	1 500	450	3 000	4 500	1 350
Hoe <sup>a</sup>	1.0	0.30	1 000	1 000	330	3 000	3 000	900
Fork <sup>a</sup>	2.0	0.30	1 000	2 000	600	3 000	6 000	1 800
Sickle <sup>a</sup>	0.5	0.30	1 000	500	150	3 000	1 500	450
Subtotal			4 000	5 000	1 530	12 000	15 000	4 500
		(\$/unit)						
Wooden handle <sup>b</sup>		0.40	3 000		1 200	9 000		3 600
Handle (sickle) <sup>b</sup>		0.10	1 000		100	3 000		300
Nails and ferrules <sup>b</sup>					200			400
15% scrap for steel					237			675
Total					3 210			9 475

<sup>a</sup> Manufactured in own shop.<sup>b</sup> Bought finished.TABLE 7. ANNUAL INDIRECT MATERIAL COST  
(L-shillars)

Item	For 4 000 units	For 12 000 units
Lubricants, coolants etc.	30	50
Maintenance and spare parts	200	1 000
Paints, office supplies	200	500
Total	430	1 550

TABLE 8. ANNUAL COST OF ELECTRICITY, FUEL AND WATER  
(Dollars)

Item	Shop without electricity	Shop with electricity
Electricity, 60,000 kWh		2 500
Fuel, coal and oil	550	1 000
Water	50	100
Total	600	3 600

TABLE 9. ANNUAL LABOUR COST

Category	Shop without electricity			Shop with electricity		
	Number of persons	Annual wage rate (\$)	Total (\$)	Number of persons	Annual wage rate (\$)	Total (\$)
<i>Direct labour</i>						
Skilled	3	1 000	3 000	5	1 500	7 500
Semi-skilled				2	1 000	2 000
Unskilled	1	800	800	1	800	800
Subtotal	4		3 800	8		10 300
<i>Indirect labour</i>				1	1 200	1 200
Total	4		3 800	9		11 500



TABLE 10. SUMMARY OF ANNUAL MANUFACTURING COST  
(Dollars)

<i>Item</i>	<i>Shop without electricity</i>	<i>Shop with electricity</i>
Direct material	3 260	9 475
Indirect material	430	1 550
Power, fuel, water	600	3 600
Transport	200	500
Labour	3 800	11 500
Total	8 290	26 625

TABLE 11. ANNUAL SALES

<i>Product</i>	<i>Unit selling price (\$)</i>	<i>Shop without electricity</i>		<i>Shop with electricity</i>	
		<i>Annual production (units)</i>	<i>Annual sales (\$)</i>	<i>Annual production (units)</i>	<i>Annual sales (\$)</i>
Spade	2.50	1 000	2 500	3 000	7 500
Hoe	3.00	1 000	3 000	3 000	9 000
Fork	3.00	1 000	3 000	3 000	9 000
Sickle	1.50	1 000	1 500	3 000	4 500
Total		4 000	10 000	12 000	30 000

TABLE 12. TOTAL ANNUAL COST  
(Dollars)

<i>Item</i>	<i>Shop without electricity</i>	<i>Shop with electricity</i>
Manufacturing cost	8 290	26 625
Sales cost	200	1 000
Depreciation of fixed capital (10 per cent)	400	1 250
Total	8 890	28 875

TABLE 13. PROFIT  
(Dollars)

<i>Item</i>	<i>Shop without electricity</i>	<i>Shop with electricity</i>
Annual sales	10 000	30 000
Total annual cost	8 890	28 875
Profit (before tax)	1 110	1 125

Total Cost for each unit (shop with electricity)	<u>\$28,875</u>
Foreign exchange required for machinery (electrically operated)	\$12,500
Direct Material	2,370
Electrical Installations	1,500
Indirect Costs	600
Training	500
Contingencies	455
	<hr/>
	<u>\$17,925</u> for each unit

Total cost for 1 unit	\$28,875	
Total for 3 units, 3 x 28,875		<u>\$86,625</u>
Foreign exchange for 1 unit	\$17,925	
Foreign exchange for 3 units 3 x 17,925		<u>\$53,875</u>

Local contribution \$11,250 for each unit		
For 3 units, 3 x 11,250		<u>\$32,750</u>

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 10

PROJECT TITLE: Establishment of a Demonstration and Display  
Centre for Industrial Tools, Machinery and  
Technical Appliances in Lesotho.

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 5 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of Lesotho,  
Maseru

UNIDO CONTRIBUTION: Convertible US\$5,100,000

GOVERNMENT CONTRIBUTION: -

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$5,100,000

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Industries, Government of Lesotho

DATE OF SUBMISSION: 5 November 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: The Establishment of a Demonstration and Display Centre for Industrial Tools, Machinery and Technical Appliances in Lesotho.

Introduction:

The flow of labour seeking jobs outside Lesotho is a common phenomenon. Although job creation in the Five-Year Plan is considered as one of the main objectives, but still the policy of job creation has not emphasized all ways and means which attract trained and skilled labour for setting in their country. The current of trained skilled industrial labour (either training has found its ground in Lesotho or has taken place where the Basotho migrants in the RSA found habitation) is exceeding the number of jobs created as planned. The Five-Year Plan states that due to declining migration and a growing labour force, Lesotho is rapidly becoming a labour surplus nation. The problem is acute and will become more so, for males in particular. The third Five-Year Plan observes that modern sector growth, even at 6 per cent yearly will provide only 13 per cent of the required jobs. Even if no migrants return, the modern sector is not likely to absorb more than 20 per cent of the job seekers. Therefore, it is felt necessary to find applicable methods to attract skilled people to display their skill by establishing possible channels for supplying capital, material and workshop centres for them.

The aim, therefore, is to establish a project as a corner stone which is not only regarded as one of the concepts for technical and know-how transfer media between the African and developing countries, but as a show area and supplier of tools, instruments, machines and equipment produced or developed by some of the developing countries. The Industrial Adviser feels that the project under discussion could open a new era in the solidarity and transfer of technology between the developing countries. We can summarize the benefits on international level of such project in the following: -

- a - opening direct markets in developing countries for capital goods produced in other developing countries;
- b - limiting the flow of similar goods from the industrialized to the developing countries;
- c - creating possible means for justifying local available materials in the developing countries to be processed by the use of tools, instruments, machines developed or produced by other developing countries;
- d - expand and support the use of tools, instruments developed at the appropriate technology units in developing countries;
- e - establish competitive basis for further development of the aforementioned goods between the producers in the developing countries;
- f - opening a new dialogue between the developing countries which could lead to solidarity actions to support, subsidise or offering preferential trade facilities to the flow of these goods between the developing countries;
- g - to materialize the policies and strategies for self-sustaining development and diversification and collective self-reliance between the developing countries.

On the local level, the suggested project is expected to handle the following aspects: -

- 1 - Attract the Basotho nationals to demonstrate their build up in their homeland and stop the flow of skilled labour outside Maseru;
- 2 - Creating job opportunities;
- 3 - Developing the remote areas;
- 4 - Increasing the utilization of local resources;
- 5 - Support the policy of import substitution;
- 6 - Develop the role of BEDCO in other districts than Maseru where industrial estates are planned to be established.

#### Participation by Developing Countries:

It could be established that the developing countries where a degree of industrial build up has taken place shall participate in the supply of local made tools, implements and machinery to be displayed and be under the disposal of local or expatriate who lives in Lesotho and intend to run industrial activities. The goods could be sold to the nationals. The

industrial development fund could plan a role to supply the national with credits under pre conditions, whereby, their supply with the required tools, instruments, etc. from the displaying and supplying units could be assured.

A list of recommended implements, tools and machinery is attached for the developing countries interested in the project.

Top priority could be given to display and supply of instruments, implements, etc. in the following branches of handicraft and small-scale industries: -

- simplified dairy equipments;
- simplified rural tanning equipments;
- tools for leather work;
- instruments, tools and equipments used for wool and mohair scouring, spinning and weaving (possibly manual for rural and remote areas where power supply is not available as well as machines and equipment which use electric power in urban areas);
- wood work machines;
- stone cutting, shaping and dressing tools and machines;
- equipment for small milling units for rural areas;
- modified small backing implements to suit the rural and remote areas;
- implements and equipments used in small oil extracting units (sunflower and maize);
- machinery for small-sized canning units;
- agricultural tools, implements and machinery;
- others (such as implements, tools, etc. developed by the appropriate technology units for agricultural, household, cottage and small-scale industry purposes).

The displaying and supplying units have to provide the necessary technical training and display the use of the instruments supplied. Also construction facilities have to be provided.

Examining the list of recommended projects, there are about 37 industrial branches within the group of food manufacture. Within the leather manufacture, there could be 20 small and big industrial operations successfully developed.

Spinning and weaving of mohair and wool are still in the embryo stage, where about 30 small and big industrial operations could be developed successfully.

Instruments for metal works, handicrafts, and industrial services could also be displayed and supplied.

Size of Project and Investments Required:

There is no doubt that mobilising the display and supplying unit(s) in Lesotho will create a demand for tools, implements, equipments and machinery as production tools. This demand will respectively increase the possible supply of these materials through the participating countries.

Although the size of the demand and the supply is hard to be estimated, especially if it is thought to handle all required industrial operations and processing, a cut-down estimation of the investment required could be illustrated as follows: -

In Foreign Exchange

Tools, implements and machinery

- Tools for handicraft purposes	\$1,000,000
- Implements (for building, agricultural and industrial purposes)	1,500,000
- Machinery	<u>2,000,000</u>
Total	\$4,500,000

Technicians 6 man-months

200,000

Estimated costs for installation of machines

400,000

TOTAL FOREIGN EXCHANGE REQUIRED FROM DONOR COUNTRIES---\$5,100,000

Discussed with Mr. Swamy-Rao, I.O.D. Expert.

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 11

PROJECT TITLE: Hammermill Project by Co-op Lesotho

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 6 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Rural Development, Government of Lesotho, Maseru

UNIDO CONTRIBUTION:

GOVERNMENT CONTRIBUTION:

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$730,000

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Rural Development, Government of Lesotho, Maseru

DATE OF SUBMISSION: 6 November 1981



SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Hammermill Project by Co-op Lesotho

Introduction:

The Ministry of Rural Development, Government of Lesotho at Maseru, desires to place the following project proposal before the donor countries for consideration at the Solidarity Meeting for Lesotho to be held in June 1982.

In view of the importance given to the least developed countries by the United Nations, the Ministry feels that though small the project, it is worth the exercise.

Basis: Twenty-five mills to be installed in various areas in Lesotho.

Project Cost for One Mill:

<u>Capital Cost:</u>	<u>In Foreign Exchange \$</u>
Buildings at \$6,000	6,000
Hammermill complete at \$9,000	9,000
Installation of mills	1,500
Other accessories (sieves, etc.)	500
Spare parts for one year	300
	<hr/>
Total Capital Cost-----	<u>\$17,300</u>

Operating Cost:

Diesel (250,000 litres)	5,000
Repairs and maintenance	600
Depreciation	1,800
Labour: (1 Supervisor) (for 1 mill) (2 workers)	4,000
Others (licences, cons, stores, insurances, and incidental expenses, etc.)	500
	<hr/>
Total Operating Cost-----	<u>\$11,900</u>

Milling Cost:

Capacity of Machine

16 bags/hr. x 7 hrs/day x 260 days x 1 = 29,120 bags  
Less 15% (stoppages, etc.) 485

Milling capacity per year 29,605 bags

Available Crop for milling

(maize, wheat, malt and other grains) 250,000 bags

Total Operating Costs for each mill-----\$11,900

For 25 mills = 29,200 x 25 = \$730,000 in Foreign Exchange

Discussed with Mr. Swamy-Rao, I.O.D. Expert.

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 12

PROJECT TITLE: Establishment of Rural Tanning Units (10)

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 6 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of Lesotho  
Maseru, Lesotho

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: Buildings, accommodation, transportation

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$778,780

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation  
among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Industries, Government of Lesotho

DATE OF SUBMISSION: 6 October 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Rural Tanning Units

Background:

The development of leather industry in Lesotho stands as of the first priorities in the foreseen implemented industrial projects within the third Five-Year Plan. The future of the world's leather demand, the probable market price increase of leather products, as well as the possible supply of hides for the rural areas and the Maseru Abattoir encourage to speed up the process of industrialization in the leather product's field in Lesotho.

The tannery industry in Lesotho is by the fact that livestock farming is practised widely in most areas of Lesotho. The absence of sound tannery industry in Lesotho has resulted in a loss to the economy. This has been the case because the hides and skins originating from the butcheries and villages are often poorly prepared and treated for sale. Poor road transport has also resulted in hides and skins being lost and uncollected. The absence of organized slaughterhouses in the rural areas has also contributed to the problem.

Technical and Economic Facts:

- 1) The Five-Year Industrial Plan in Lesotho aims at cutting down the imports of leather and leather products by the end of the plan (the imports of leather, leather products and footwear valued R7,366,000, in 1976, R7,191,000 in 1977 and R10,492,000 in 1978).
- 2) From a field study done by the UNIDO Industrial Adviser of Lesotho in the Thaba Tseka district, it was found that a probable salvage of about 20-30 per cent of the total hides could be gained in the highlands and that part of rural-produced hides in Lesotho is estimated to be lost or uncollected, owing to poor road transportation.

- 3) From the technical point of view, the rural tanneries will lead to improved caring and semi-processing where current wastage due to putriferactive damage of hides and skins is usually expected.
- 4) Vegetable tanning can be used for skins of inferior quality and can particularly supply the local markets with its products.
- 5) Leather workshops which are being developed (manufacturing saddleries and particular leather products) can get use of the vegetable tanned leather.
- 6) Light tanning can also be combined - later in a retanning process for some specific purpose.
- 7) The excess of tanned skins (better qualities) could be sold to the Maseru central tanning factory once they have been graded and preserved.
- 8) It should be borne in mind that the Lesotho tanned leather could provide supply to the main two branches of leather manufacture, i.e. footwear and saddles including saddlery items. These items will continue to be in demand for a considerable time. We might draw the attention, that the shoe factory in Maputsoe (in the north region) depends fully on imported intermediate goods including leather and plastics (the factory started its operation early in June 1979. It is foreseen to reach an output of 700 pairs/day where 600 pairs are now produced daily.)

It is therefore proposed to set up 16 rural tanneries in the districts as follows: -

In the capital Maseru - 3 units

- one unit at Roma in collaboration with the Roma Valley co-operation
- one unit at Thabana-Li-'Mele

Three units in Leribe district out of which one at Maputsoe industrial area.

Two units in each of the districts of Berea, Mafeteng and Mohale's Hoek.

One unit in each of the districts of Butha-Buthe, Guthing, Qacha's Nek,

Mokhotlong and Thaba Tseka.

Capacity:

The processing capacity of each rural tannery is estimated at 400 skins and 200 hides monthly.

Labour Requirements:

It is estimated that one labourer could handle 2 hides and 4 skins a day. Thus, a labour force of 5 men per tannery could handle about 200 hides and 400 skins per 20 days working month.

In their report, the ILO and UNIDO missions (1975) and Goodwin and Rimer (UNIDO), 25 April 1979, the emphasis is on the establishment of small units to produce leather to be used for non-industrial leather goods (handicrafts) operating in conjunction with the tanneries and for export. An alternative outlet for first grade hides and skins would be the proposed Maseru industrial tannery.

Estimated required costs for a rural tannery unit:

1) Foreign Inputs

a - Tools

Pits for soaking, liming and tanning, defleshing beams, tables, beams, large plastic rats, frames, weighing scales, knives, slickers, hammers and pliers-- \$2,500

b - Machinery

Drums, paddle, fleshing machines, heater and boiler machines, machines for salting and unhairing rotary machines, sammying machines, shaving machine, bluffing machine, glazing machine--\$26,000  
Contingency-----\$ 4,175

c - Leather manufacturing m/m

Expert 6 month 6 \$25,200  
Leather technicians 6 \$20,000

Total for One Unit-----\$77,875

Total required funds for 16 units-----\$1,246,600

2) Local Inputs (local government)

Accommodation facilities

Transport

Buildings (units similar to those developed by the Thaba-Tseka project.

Comment by I.O.D. Expert: M. Westvold feels that instead of 16 units, it would be better to start with say 10 units. Since these units are set up in rural areas, there is no justification to have units at Maseru (the capital).

The cost for 10 units would be: 10 x \$77,875 = \$778,750

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 13

PROJECT TITLE: Wool Scouring Plant (Two Units)

SCHEDULED START/COMPLETION:

ORIGIN A. DATE OF OFFICIAL REQUEST: 4 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of Lesotho,  
Maseru

UNIDO CONTRIBUTION: Convertible US\$980,000

GOVERNMENT CONTRIBUTION: US\$260,000

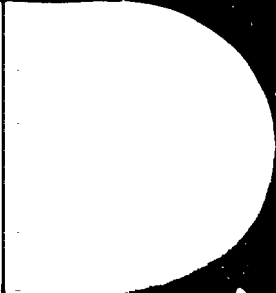
CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$980,000

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: Ministry of Industries, Government of Lesotho

DATE OF SUBMISSION: 5 November 1981





SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Wool Scouring Plant

Introduction:

World production of wool is estimated at 2,700 million kilograms (1951). Lesotho produces about 3 million kilograms.

Until 1976, Lesotho's wool and mohair were marketed via the South African Wool Board (SAWB) and the South African Mohair Board (SAMB) respectively.

In 1976, the mohair was marketed through a company jointly owned by Lesotho and foreign interests named Lesotho Mohair Industries (PTY) Ltd. (L.M.I.). The report indicated that there is a weight of 1.75m kilogram of wool in Lesotho which is suitable of woollen processing and it would seem, therefore, that consideration should be given to the scouring of this part of the clip.

The scouring of wool is not a difficult task but a high standard of technical control is of prime importance since any fault created at this stage remain and cannot be rectified in later processing.

A report prepared by G. H. Oxtoby and A. Iredale, aimed to examine alternative ways in which Lesotho's wool and mohair might be marketed and to investigate domestic processing of these fibres.<sup>1</sup>

The report emphasises the emulsion system which is by far the most common system used throughout the world.

Technical and Economical Aspects for Emulsion Scouring:

The technical and economical aspects which have to be considered when establishing such a plant could be summarized in the following: -

Site: The project must be adjacent to appropriate transport facilities.

If a total of 1.75mkg. of wool were to be scoured annually, this

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1 The marketing and further processing of wool and mohair in the Kingdom of Lesotho, October 1976.

would mean some 35 tons of greasy wool be brought to the site weekly and approximately half of this amount of scoured wool would be taken away, the remainder (effluent) has to be removed.

Water: According to the Water and Sewerage Department in Maseru, the amount of water (approximately 3 gallons per kilo) is available, the water hardness (4 degrees) is also from the technical point of view acceptable.

Labour: Although wool scouring is not a labour intensive operation and relatively few workers would be required, job for auxiliary labour (for collection and transport from the areas in the highlands to the lowlands where the plant would be suitable for erection) could be created.

Technical Supervision: It is advisable to seek the experience of a company which could also supply the experience needed in selling the scoured wool.

Effluent Disposal: It is understood that scouring effluents are highly polluting. Lesotho has no direct pass to the sea where the scouring effluent could be directed. It could be then suggested to seek other possibilities where the scouring mill should be well away from normal habitation as the aroma association with wool scouring liquors is most unpleasant. The liquor could be allowed to stand in large lakes to evaporate.

Marketing: The project has to seek through some arrangement with foreign organization ways of marketing the scoured wool.

Investment Costs:

A new machinery is generally more complex than used ones (the new ones have numerous electric drives and motors, the old have very few), the second-hand machinery has the advantage in that it is simpler and requires less capital.

In Foreign Exchange, 1976 prices: -

One scouring unit (capacity 1m kg. annually)	
Plant and Equipment	
(re-conditioned machines, one shift operation)	360,000 \$
Operating Capital	
(depreciation, labour, materials, running expenses)	130,000 \$
	<hr/>
Total Foreign Exchange cost for one unit-----	<u>490,000 \$</u>

Local Contribution: -

Building	180,000 \$
Offices and machinery	40,000 \$
Transport	40,000 \$
	<hr/>
Total Local Contribution	<u>260,000 \$</u>

Total Cost for Each Unit:

Foreign Exchange	490,000 \$
Local Contribution	<u>260,000 \$</u>
	750,000 \$

TOTAL PROJECT COST (2 Units) 1,500,000 \$

Total Foreign Exchange required for 2 units:

US\$490,000 x 2 \$980,000

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 14

PROJECT TITLE: Expansion of the Botsabelo Milk Plant

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 6 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Agriculture, Government of Lesotho, Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: US\$49,608

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$456,768

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Agriculture, Government of Lesotho, Maseru

DATE OF SUBMISSION: 20 October 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Expansion of the Botsabelo Milk Plant

Background and Justification:

There is considerable demand for milk in the Maseru town and its surroundings. At present, this demand is, to a large extent, being satisfied with expensive and hygienically unsafe milk imported from the Republic of South Africa. On the other hand, there are a great number of small dairy farmers in and around Maseru township who sell the surplus milk direct to local customers. Only a small amount of this milk is received daily at the Botsabelo milk plant due to its insufficient processing capacity. It is assumed that the milk intake would considerably rise if the throughput capacity of the plant is expanded. However, the fresh milk supplies from local small farmers are not likely to meet the demand in the Maseru urban area for many years to come. Furthermore, it is probable that the supply of imported liquid milk greatly diminishes when the new milk regulations come into force. Therefore, it appears justified to introduce to the market recombined milk products to fill the gap until the local milk production is able to cope with the demand.

Objectives:

- 1) To provide local small farmers with an outlet for milk surpluses and thus, expand domestic milk production.
- 2) To alleviate the dependency on imports of liquid milk in Maseru area.
- 3) To improve the economic viability of the milk plant and ensure availability of milk through recombination in case of reductions in imported milk supplies and seasonal fluctuations.
- 4) To promote the domestic milk production and dairy through funds generated from the sales of recombined milk products.
- 5) To improve the nutritional status of the local population by providing free or low-priced milk to vulnerable groups, e.g. schools, hospitals, etc.

Description:

The processing facilities of the milk plant will be improved to process daily 4,500 litres of pasteurized milk in one shift or 9,000 litres in two shifts. A new cold store will be set up to match these quantities. Milk recombination equipment will be installed in the existing plant building.

Toned milk and recombined liquid milk products with a standardized composition will be manufactured in quantities up to 9,000 l/d over 4 1/2 years, as suggested in the present report. Processed milk will be sold to various institutions and through retail shops in the Maseru town area.

The funds realized from the sales will be utilized for specified purposes with the aim of developing dairy production and industry in Lesotho.

The project will provide the services of an expatriate dairy technology expert for running the plant and training the staff, and two fellowships for dairy diploma level training. Also provide training of four plant supervisors at FAO Dairy Training Centre, Naivasha, Kenya, on dairy processing course. This training is free of charge, except for a small registration fee payable by the GOL.

The following quantities of raw materials are proposed to be allocated by the World Food Programme: -

Raw materials for processing 4 1/2 years

	<u>Foreign</u>	<u>Local</u>	<u>Total</u>
	US\$	US\$	US\$
1) Skim milk powder, 566 metric tons	463,554	-	463,554
2) Butter oil, 148 metric tons	311,688	-	311,688
Sub-total-----	\$775,242	-	\$775,242

Hence, the Government seeks assistance only for the expansion to the tune of US\$456,768 in foreign exchange. The details are as follows: -

Estimated costs:

	<u>Foreign</u>	<u>Local</u>	<u>Total</u>
	US\$	US\$	US\$
<u>Expansion of milk plant</u>			
1) Improvement of processing facilities	35,100	-	35,100
2) Chilled water plant	46,800	-	46,800
3) Cold store	14,508	23,400	37,908
4) Recombination equipment	17,550	-	17,550
5) Civil works	-	26,208	26,208
<u>Milk collection and distribution</u>			
1) 200 milk cans	14,040	-	14,040
2) Two pick-ups	33,930	-	33,930
<u>Staff</u>			
1) One dairy technology expert for three years	210,600	-	210,600
2) Fellowships - Two, dairy diploma level, 3 years	84,240	-	84,240
Sub-total-----	<u>\$456,768</u>	<u>\$49,608</u>	<u>\$506,376</u>
Total Foreign Exchange required as per above-----	<u>\$456,768</u>		
Local Contribution-----		<u>\$ 49,608</u>	
Grand Total of quantities of raw materials proposed to be allocated by the World Food Programme	\$1,232,010	\$49,608	\$1,281,618

Comment by I.O.D.

Mr. K. Sepic says that the project may get through.

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 15

PROJECT TITLE: Meat Processing Pilot Plant

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 6 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Agriculture, Government of Lesotho, Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: \$43,290

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$272,610

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: Ministry of Agriculture, Government of Lesotho Maseru

DATE OF SUBMISSION: 20 October 1981



SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Meat Processing Pilot Plant

Background:

The Lesotho Ministry of Agriculture, in conjunction with various aid agencies, has developed an ambitious scheme to increase production from livestock and to: -

- improve income of farmers
- reduce overgrazing and soil erosion, thereby improving the productivity of the land
- contribute to the aims of self-sufficiency in food production and help correct the imbalance of trade
- provide job opportunities within Lesotho
- reduce dependence on South Africa when the scheme is full introduced

One part of this scheme is the development of the meat industry in Lesotho.

Objectives:

A significant number of animals are expected to be aged and of low manufacturing quality. Accordingly, a proportion of meat produced at the new abattoir will be best suited for processing into sausages and canned products. As the Lesotho butchers have no experience in meat processing, installation of a pilot meat processing plant is suggested.

The principal benefits of the project are: -

- to develop meat products preferable to the Lesotho domestic market and for export
- to train technical staff for the national abattoir
- to give practical teaching to college studying meat technology.

Estimated Costs:

Foreign Exchange Requirement:

Pilot meat plant, machinery and equipment	70,200 \$
Expertise (3 years)	164,970 \$
Consultancy for pilot meat planning 4 man-months	23,400 \$
Training 2 years (meat technologist)	14,040 \$
	<hr/>
Total Foreign Exchange Requirement-----	<u>272,610 \$</u>

Local Contribution:

Building	29,250 \$
Training local components	14,040
	<hr/>
Total Local Contribution-----	<u>43,290 \$</u>

TOTAL PROJECT COST----- 315,900 \$

Comment by I.O.D.

Mr. K. Sepic: Recommends feasibility study 3 m/m \$30,000

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 16

PROJECT TITLE: Blanket Manufacturing

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 2 November 1981

GOVERNMENT COUNTERPART AGENCY: L.N.D.C., Ministry of Industries,  
Government of Lesotho, Maseru

UNIDO CONTRIBUTION:

GOVERNMENT CONTRIBUTION: \$1,000,000

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$5,000,000\*

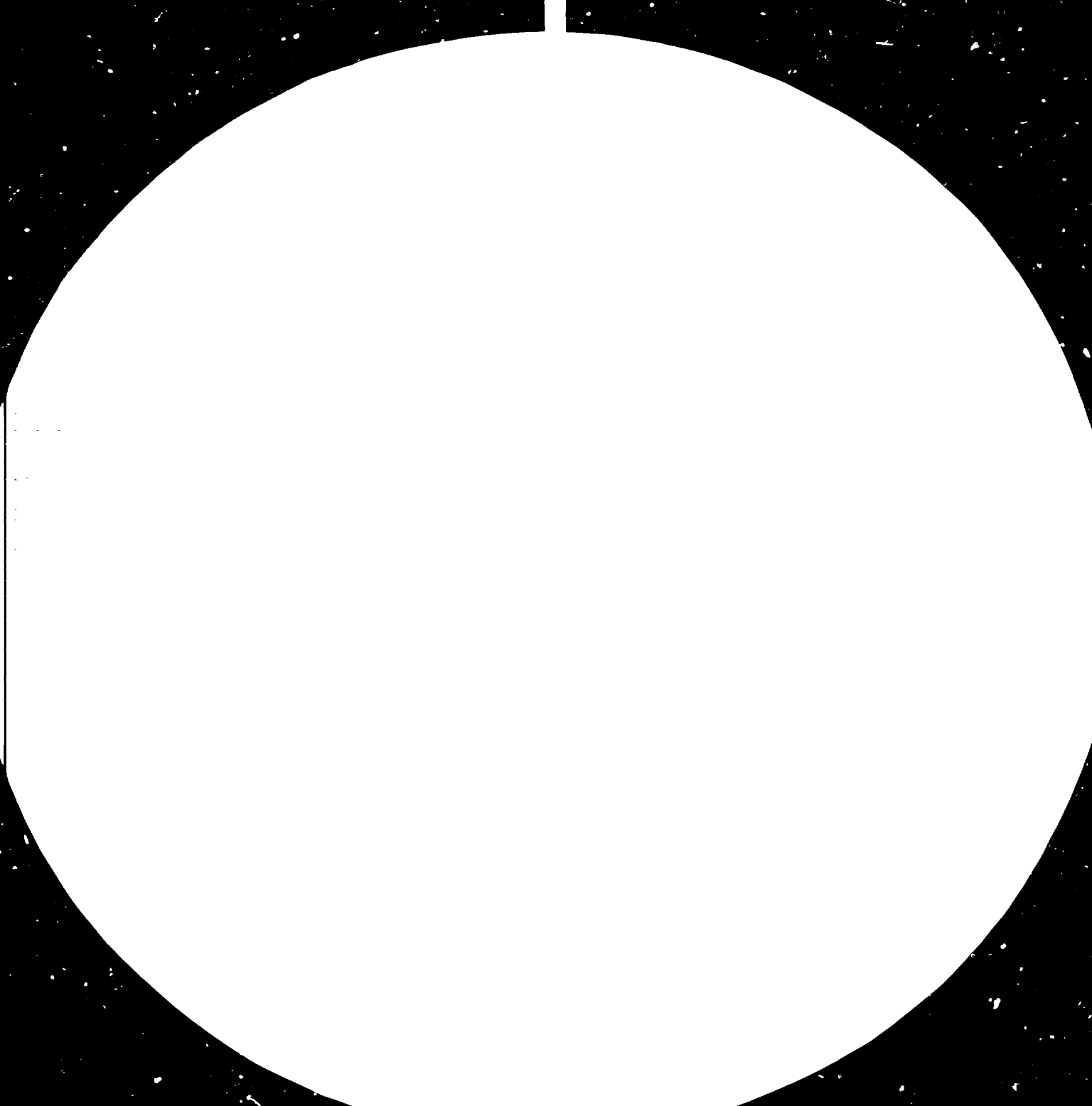
UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among  
Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: L.N.D.C., Ministry of Industries,  
Government of Lesotho, Maseru

DATE OF SUBMISSION: 2 November 1981

\* IOD Expert recommends updating the feasibility study for 6 months US\$60,000.





2.8



3.2



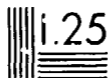
3.6



4.0



4.5



Resolution Test Chart (NBS 1963-A) showing patterns of vertical and horizontal lines with numerical labels (1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0, 4.5).

Resolution Test Chart (NBS 1963-A) showing patterns of vertical and horizontal lines with numerical labels (1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0, 4.5).

Resolution Test Chart (NBS 1963-A) showing patterns of vertical and horizontal lines with numerical labels (1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0, 4.5).

Resolution Test Chart (NBS 1963-A) showing patterns of vertical and horizontal lines with numerical labels (1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0, 4.5).

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Blanket Manufacturing in Lesotho

Introduction:

The Kingdom of Lesotho is a small country of about 30,000 square kilometres. Lesotho is a poor country - the per capita GNP is about 150 Maloti (i.e. about \$175). About 1/4 of the country lying to the west is low land at a height of about 1,500 metres above sea-level. The remainder comprise of foothills and mountains rising in the east to around 3,500 metres. Although Lesotho is only about 800 kilometres from the tropic of cancer, the climate is highly influenced by the altitude and tends to be extreme. In the low lands, the temperature vary from a maximum of 90 degrees Fahrenheit or more in summer to a minimum of 20 degrees Fahrenheit in winter. In the high land, the temperature range is considerably wider and temperatures as low as 3 degrees Fahrenheit are common in winter. Frost has been known in every month of the year.

Population:

The total population is currently estimated at about 2 million. About one-half of the resident population lives in the low lands, 1/4 in the foothills and the remainder in the mountainous region in the east. Because of the sufficient job opportunities, large members of Basotho migrate and seek employment in other countries. About 60 per cent of the Kingdom's active male labour force is employed outside Lesotho.

Communications:

Communications in the country have improved fairly in the last decade, but, in many parts still remain difficult. There are good-metalled roads joining the towns of the northern and eastern low lands and connecting these towns to other neighbouring countries.

No Trade Barriers:

There are generally no barriers to trade between members of the town and they use the Maloties or Rands as their common currency.

Need for the Project:

The annual consumption of blankets range from 650 and 750,000. In money terms, the annual value of this quantity of blankets would be about 5.5 million Maloties (i.e. about 6 million US\$). Hence, it is felt that it would be worthwhile to establish a blanket manufacturing unit in Maseru where all facilities are available. The production of blankets in Lesotho will add to the total supply of blankets to the country.

A mill in Lesotho will have to limit its range of products and sell more of its output in the domestic market and the balance in other countries as there is a large market for blankets outside Lesotho as well.

Site:

Tentatively Mophale's Hoek.

Raw Materials:

Wool and Mohair is available in plenty in Lesotho. The following tables give the details of the production of wool in Lesotho.

Table 1 below gives details of the production of wool in Lesotho in recent years and Table 2 shows the production by district in 1972/73:

Table 1: Wool Production in Lesotho

Year	Bales Number	Weight kg	Sales value M Rand	Average price c/kg	Clean yield %
1959/60	20,628	3,207,000	1.61	50.2	38.0
1964/65	26,130	3,760,000	1.61	41.9	37.7
1969/70	31,295	4,583,000	1.62	35.4	35.0
1970/71	27,761	4,157,000	0.96	23.1	n.a.
1971/72	23,904	3,675,000	3.53	96.2	n.a.
1973/74 <sup>1</sup>	21,858	3,060,000 <sup>2</sup>	2.85 <sup>3</sup>	93.2	38.7

Source: Wool Board, SACU

Table 2: Wool Production by District - 1972/1973

District	Weight kg	%
Mafeteng	192,000	5.2
Maseru	1,045,000	28.4
Mohaleshoek	214,000	5.8
Quthing	217,000	5.9
Quachas Nek	544,000	14.8
Leribe	567,000	10.0
Buthe-buthe	377,000	10.3
Moshotlong	220,000	6.0
Unallocated	498,000	13.6
	3,675,000	100.0

Source: Wool Board, SACU

The Wool Board have produced a 'type list' for the 1974/75 season. Table 3 is derived from this list and shows the quantities of the different types of wool which may be expected from the forthcoming clip.

Table 3: Estimate of Types of Wool - 1974/1975 Season

Type of wool	Weight kg	%
Top making group	283,801	9.3
Fleece wool	1,161,542	38.0
Lollies, pieces, locks	775,542	25.3
Coarse and coloured	838,015	27.4
	3,058,571	100.0

Source: Wool Board, SACU

Table 4 gives some revised estimates, taking into account these new developments, and is based on a total clip of 4.0 M kg. greasy wool a year.



Table 4: Estimate of Types of Wool by End-Use - 1974/1975 Season

Type of wool by end use	Greasy M kg	% of Greasy Weight	% Yield	Clean M kg	% of Clean Weight
For top making	0.84	21	42.5	0.36	25
For fine woollen yarns	1.96	49	34.6	0.66	47
For coarse woollen yarns	1.20	30	33.3	0.40	28
	4.00	100	36.0	1.42	100

Source: Estimates made by the Livestock Marketing Board and the Wool Board.

Capacity:

The project aims at establishing a mill designed to produce 600,000 blankets a year on the basis of three shifts working in the main departments.

The machinery consists of two carding machines, 360 sewing spindles and 48 looms, plus associated equipment for preparation and finishing. The machinery chosen is labour-intensive and is easy and simple to maintain. Only in cases where considerations of quality are important (eg. in carding where the latest equipments are needed). Modern machines are no more difficult to operate than the older types.

Employment:

Total employment will be approximately 240 persons.

Floor Space:

6,500 square metres of floor space will be required and the mill will require air-conditioning.

Cost Structure:

Capital cost US Dollars	3.5 million
Expertise (machinery and auxillary equip.)	1.5 million
Buildings and infrastructure (local)	<u>1.5 million</u>
TOTAL	6.5 million

Based on the feasibility report submitted by UNIDO experts in 1974. The figures have been recast giving margin to the inflation and increase in cost of equipment, etc. since then.

Request:

The project requires a 6 man-month expertise for revising and updating the feasibility study prepared in 1974. In the light of the fresh study the project if found feasible, should get through.

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 17

PROJECT TITLE: Assistance to strengthen the on-going  
Seed Multiplication Plant

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 25 October 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Agriculture, Government of  
Lesotho, Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: (FAO Contribution \$220,000)

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible \$192,784

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation  
among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.2

PROPOSAL SUBMITTED BY: Ministry of Agriculture, Government of  
Lesotho, Maseru

DATE OF SUBMISSION: 25 October 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Assistance to Strengthen the already on-going  
Seed-Multiplication Plant

Location: Maseru and Thaba-Tseka Districts

Description/Objectives:

One of the constraints in the development of the Agricultural Sector has been the limited use of quality seed and the frequent non-availability of seed of improved wheat, maize, beans. The Government then aims to make the country self-sufficient in quality seed supplies. The quality seed to be produced are from suitable winter and spring wheat, and beans. Another objective of the project is to lay a foundation for the IFAD-financed seed production programme, and also the foundation for the National Seed Programme which would be a follow-up to the Seed Multiplication Project.

Project Finances:

FAO: In this connection, it may be stressed that the FAC has committed itself to the tune of US\$220,000 towards financing. But the Ministry feels that in order to meet the expenses of improved machinery, steel work, electric installation, etc., the Government desires to seek help from the potential donor countries to the tune of US\$192,784. The following details will give a picture of the commitment of FAO and the assistance needed from the potential donor countries.

Personnel services	\$62,000
General operating expenses	11,000
Supplies and materials	22,000
Equipment	125,000
Total	<u>US\$220,000</u>

Assistance Required from UNIDO or the potential donor countries:

Drying Plant

Excavation, concrete work and blockwork	\$21,500
Supply and erect steelwork and cladding	50,200
Electrical installation	27,800
Attendance on Kongskilde	850
Electrical, water and telephone connection	20,000
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	\$120,350
Contingencies 5%	6,000
	<hr/>
	\$126,350
Professional fees 15%	16,950
	<hr/>
Total	US\$145,300

Seed Testing Laboratory

Building cost	\$39,290
Contingencies 5%	2,000
	<hr/>
	\$41,290
Professional fees 15%	6,194
	<hr/>
Total	US\$47,484

Grand Total of Assistance from UNIDO/potential donor countries: US\$145,300

47,484

FOREIGN EXCHANGE REQUIRED----- US\$192,784

Comment by I.O.D. Expert:

Mr. Koenig           Cleared, 24.11.81

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 18

PROJECT TITLE: Maseru Maize and Feed Mill  
Mafeteng Maize and Feed Mill

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 6 November 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Industries, Government of Lesotho, Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: \$2,714,000

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$6,134,000

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: LNDC (Lesotho Milling Development Corporation)

DATE OF SUBMISSION: 26 October 1981

Project: Maseru Maize and Feed Mill at Maseru and Mafeteng (2 Units)

Background:

Maize meal is a staple food of the Basotho people. At the moment, maize is milled commercially in Maputsoe, a town 86 km. north of Maseru, the capital of Lesotho. It is proposed that a new maize mill and feed mill should be constructed in Maseru and Mafeteng.

Demand:

It is estimated that the major portion of commercially milled maize sold in Lesotho's main areas, namely Butha-Buthe, Teyateyaneng, Maseru, Mafeteng, Mohale's Hoek and Quthing is supplied by the following: (1979 figures)

	<u>Tons</u>
Maize meal from the Maputsoe Mill	6,000
Imports	17,100

The Lesotho market for feed rations was estimated to have been about 10,000 tons in 1979.

The new mill will replace these imports.

Location:

It is proposed that the new mill will be located on the site of Maseru Roller Mills in the Maseru Industrial Area. Maseru Roller Mills is a major importer and distributor of maize meal.

Capacity:

The maize mill will have a capacity of 4.5 tons per hour and the feed mill will have a capacity of 10 tons per hour.

Cost:

As follows:	<u>US Dollars</u>
<u>Civils:</u> Silos	151,000
Mill and warehouse	376,000
Rail siding	107,000
Other	<u>732,000</u>
Total Civil Work-----	<u>\$1,357,000</u>
<u>Mechanical:</u> Silo machinery	115,000
Feed mill machinery	60,000
Maize mill machinery	368,000
Other	<u>627,000</u>
Total Mechanical Work-----	<u>\$1,170,000</u>
Vehicles	90,000
Total fixed investment	2,617,000
Working capital	<u>450,000</u>
Total foreign exchange component for each mill-----	<u>\$3,067,000</u>
TOTAL for 2 mills-----	<u><u>\$6,134,000</u></u>

Comment by I.O.D. Expert: Mr. Koenig 24.11.81

The project submitted by LNDC with the cost structure shows that it is not clear whether they require 2 maize mills and 2 feed mills. The analysis of cost seems very shoddy. Hence, the IOD expert recommends only a feasibility study for 6 months. Cost \$60,000



SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 19

PROJECT TITLE: Sunflower Seed Production Project

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 25 October 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Agriculture, Government of Lesotho, Maseru

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: -

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$30,000 (for techno-economic survey - 3 months)

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: Ministry of Agriculture, Government of Lesotho Maseru

DATE OF SUBMISSION: 25 October 1981

SUNFLOWER SEED PRODUCTION PROJECT

1. BACKGROUND INFORMATION

Agriculture is the backbone of the economy of Lesotho. It contributes about 50% to Gross Domestic Product and supplies the bulk of the country's export.

Productivity in the agricultural section has been quite low hence leading on to low incomes. This has been the result of shortage of inputs, soil erosion, poor cultivation practices, lack of resources and technical knowledge etc. The traditional crops have been maize, sorghum, wheat, beans and peas. Maize and Sorghum in particular have been cultivated on subsistence basis and only recently have wheat, beans and peas been produced for cash income.

Even though possibilities exist for improving yields, a number of programmes have been adopted for this purpose by the Lesotho government, yet a substantial area for improvement lies in the introduction and promotion of new higher-yielding and more profitable crops. One such crop which has already been identified and tested, amongst others, is sunflower seed.

Sunflower seed production trials have been carried out in the past with research still being carried out at the Ministry's Agricultural Research Station. Results are quite encouraging. Moreover, in 1974/75 a mission by the Canadian Saskatchewan Wheat Pool, reviewed "The Potential for Oil Seed Production, Processing and Marketing in the Kingdom of Lesotho" and came to the conclusion that Lesotho had good prospects for embarking on successful and remunerative production of sunflower seed and when production reached an adequate level, about 12,000 tons, industrial processing could be embarked upon both for oil and animal meal extraction. Needless to say, the information is a bit outdated and studies have to be conducted (these will be included in the project document).

LOCATION: To be decided.

PROJECT OBJECTIVES & DESCRIPTION

- a) to introduce a new more remunerative cash crop which together with the subsistence crops will be able to increase incomes of the rural population.
- b) to contribute to the country's industrialisation based on processing of locally produced raw materials.
- c) to reinforce the crops division of the Ministry of Agriculture in its campaign to promote cash crops.
- d) to introduce a crop, whose by-products can be used, inter alia, as feeding stuff for animals.
- e) to generate employment both through the intensive nature of sunflower cultivation and its industrial processing.
- g) to satisfy the country's growing needs in vegetable oil and to substitute imports of such oils thereby saving on "foreign exchange" and "capital outflows"
- h) to contribute to the country's exports initially in the form of Sunflower Seed and subsequently in the form of Sunflower Seed Oil.

The first phase of the project will produce a target yield of about 12,000 tons of sunflower seed over three years. The second phase: Sunflower Seed Oil and Protein Meal Extraction would be able to process about 50 tons (45 tonnes) of clean sunflower seed per day for over 200 days per year. This would be capable of producing 4,000 tons of oil, 4,000 tons of protein meal, 2 000 tons of hull and 1,000 tons of dockage or clean out.

Request:

One Expert to undertake Feasibility Study

Comment by I.O.D. Expert: Mr. Koenig

Recommend one expert to undertake techno-economic survey US\$30,000  
(3 months)

SOLIDARITY MEETING OF THE MINISTERS OF INDUSTRIES  
FOR CO-OPERATION IN THE INDUSTRIAL DEVELOPMENT OF LESOTHO

JUNE 1982

PROJECT PROPOSAL

PART A - BASIC DATA

COUNTRY: Lesotho

PROJECT NUMBER: 20

PROJECT TITLE: Vegetable Oil Extraction from Sunflower Seed

SCHEDULED START/COMPLETION:

ORIGIN AND DATE OF OFFICIAL REQUEST: 25 October 1981

GOVERNMENT COUNTERPART AGENCY: Ministry of Agriculture, Government of Lesotho

UNIDO CONTRIBUTION: -

GOVERNMENT CONTRIBUTION: \$381,000

CURRENCY REQUIRED FROM DONOR COUNTRIES (IN FOREIGN EXCHANGE): Convertible US\$555,000

UNIDO SUBSTANTIVE BACKSTOPPING SECTION: Section for Economic Co-operation among Developing Countries

PROGRAMME COMPONENT CODE: 30.9.Z

PROPOSAL SUBMITTED BY: Ministry of Agriculture, Government of Lesotho, Maseru

DATE OF SUBMISSION: 25 November 1981

SOLIDARITY MINISTERIAL MEETING

PROJECT PROFILE

Project: Vegetable Oil Extraction

Introduction:

Sunflower cultivation is recommended as the most suitable amongst vegetable oil crops in the climatic conditions of Lesotho.

Sunflower oil extraction project involves possibilities for satisfying a part of the country's vegetable oil needs through processing. Jobs for about 20-30 (direct) labours could be created. The project can supply highly useful by-products: protein meal or cake needed for feedlot development and hulls pressed into logs for fire wood. The following figures show the trend of oil imports, vegetable oils, oils and fats into Lesotho.

<u>Year</u>	<u>Value in Dollars</u>
1974	580,000
1975	420,000
1976	898,000
1977	800,000
1978	164,200

It is therefore proposed to proceed with a processing plant which would produce 4,000 tons of oil and that corresponds to about 1/5 of the estimated Lesotho vegetable oil consumption. The sunflower protein meal to be produced (4,000 tons) should be used for local feedlot development.

A Canadian mission recommended the restrictions of sunflower production to 11,000 tons, but this would occupy the plant only 200 days per year and will entail relatively higher unit cost. Consideration should therefore be given to a bigger production (say 15,000 tons) which would utilize the plant's capacity to the fullest.<sup>1</sup>

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1 See the technical and economic feasibility of sunflower production and processing in Lesotho - Nicos Vassilion - Lesotho, 14 July 1976.

A detailed techno-economic feasibility will be required in due course for the processing operations.

Investment Costs:

In foreign exchange 1979 prices: -

Feasibility study for techno/economic operations, 4 man-months	20,000 \$
Machinery and equipment	500,000 \$
Raw materials (imported seeds and solvents)	35,000 \$
<u>Total Foreign Exchange</u>	<u>555,000 \$</u>

Local Contribution: -

Building	300,000 \$
Raw materials (local)	15,000 \$
Contingencies, Building 150,000 Machinery 500,000	65,000 \$
<u>Total local contribution</u>	<u>381,000 \$</u>

TOTAL PROJECT COST 1,384,200 \$

Comment by I.O.D. Expert:

Mr. Koenig            According to Mr. Koenig (IOD) the above details given by the Ministry of Agriculture are not realistic and hence cannot be relied upon. Therefore, he recommends a techno-economic feasibility study only for 6 months amounting to \$60,000.

SOLIDARITY MEETING FOR LESOTHO  
PROJECT PROFILES

NAME OF PROJECT	TOTAL COST	FOREIGN EXCHANGE COMPONENT	RECOMMENDATIONS	TOTAL FOREIGN EXCHANGE REQUIRED AFTER IOD CLEARANCE AND RECOMMENDATIONS CONVERTIBLE US DOLLARS
1. Establishment of Industrial Development Fund	\$8,170,400	\$8,170,400	Cleared.	\$8,170,400
2. Establishment of Five Industrial Estates (agro-based) in Lesotho	\$33,275,000	\$30,375,000	Recommended the establishment of only 2 industrial estates.	\$9,840,000
3. BEDCO's Industrial Perspective Planning Unit	\$896,300	\$824,400	Cleared.	\$824,400
4. Establishment of an Industrial Development Centre	\$789,800	\$789,800	Cleared.	\$789,800
5. Technical Assistance to BEDCO's Training Section	\$143,040	\$143,040	Cleared.	\$143,040
6. Sand Stone Cutting and Shaping Centres for Masonry Development (6 units)	\$1,316,000	\$1,316,000	Cleared.	\$1,316,000
7. Expansion of Mohokare Heavy Clay Products (Pty.) Ltd.	\$134,000	\$134,000	Cleared.	\$134,000
8. Ceramic Ware Manufacturing	\$3,550,000	\$2,550,000	The project should wait for the results of the feasibility study already going-on including a market study covering the EEC. May be considered by the donor countries pending the release of the feasibility study.	-----

SOLIDARITY MEETING FOR LESOTHO  
PROJECT PROFILES

NAME OF PROJECT	TOTAL COST	FOREIGN EXCHANGE COMPONENT	RECOMMENDATIONS	TOTAL FOREIGN EXCHANGE REQUIRED AFTER IOD CLEARANCE AND RECOMMENDATIONS CONVERTIBLE US DOLLARS
9. Project for the Manufacture of Agricultural Tools and Farm Implements (3 units)	\$86,625	\$52,875		\$52,875
10. Establishment of a Demonstration and Display Centre for Industrial Tools, Machinery and Technical Appliances	\$5,100,000	\$5,100,000		\$5,100,000
11. Hammermill Project (25 mills)	\$730,000 (\$29,200 for each mill)	\$730,000		\$730,000
12. Establishment of Rural Tanning Units	\$1,246,600 (\$77,875 for one unit)	\$1,246,600	Recommended only 10 units	\$778,750
13. Wool Scouring Plant (2 units)	\$1,500,000 (\$750,000 each)	\$980,000		\$980,000
14. Expansion of the Botsabelo Milk Plant	\$605,376	\$456,768		\$456,768
15. Meat Processing Pilot Plant	\$315,900	\$272,610	Recommended a feasibility study 3 m/m.	\$30,000
16. Blanket Manufacturing	\$65,000,000	\$4,000,000	Recommended to update the feasibility study prepared by UNIDO team in 1974, 6 m/m.	\$60,000



SOLIDARITY MEETING FOR LESOTHO  
PROJECT PROFILES

NAME OF PROJECT	TOTAL COST	FOREIGN EXCHANGE COMPONENT	RECOMMENDATIONS	TOTAL FOREIGN EXCHANGE REQUIRED AFTER IOD CLEARANCE AND RECOMMENDATIONS CONVERTIBLE US DOLLARS
17. Assistance to strengthen the on-going Seed Multiplication Plant	\$192,784	\$192,784		\$192,784
18. Maseru Maize and Feed Mill Mafeteng Maize and Feed Mill	\$6,134,000	\$6,134,000	Recommended a feasibility study for 6 months	\$60,000
19. Sunflower Seed Production Project	\$30,000	\$30,000	Recommended a techno-economic survey, 3 months	\$30,000
20. Vegetable Oil Extraction from Sunflower Seed	\$1,384,200	\$555,000	Recommended feasibility study for 6 months	\$60,000
				<hr/> <u>\$29,748,818</u>

