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Report No. P3714-LSO

REPORT AND RECOMMENDATION
OF THE
PRESIDENT OF THE
INTERNATIONAL DEVELOPMENT ASSOCIATION
ON A
PROPOSED CREDIT OF SDR 14.3 MILLION
TO THE
KINGDOM OF LESOTHO
FOR A
FOURTH HIGHWAY PROJECT

May 7, 1984

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CURRENCY EQUIVALENTS

Currency Unit	=	Maloti (M) ^{1/}
US \$ 0.83	=	M 1.00
US \$ 1.00	=	M 1.20

WEIGHTS AND MEASURES

1 meter (m)	=	3.28 feet (ft)
1 kilometer (km)	=	0.62 miles (mi)
1 square kilometer (sq km)	=	0.386 square miles (sq mi)

ACRONYMS AND ABBREVIATIONS

AfDF	=	African Development Fund
CIDA	=	Canadian International Development Agency
EEC	=	European Economic Community
KfW	=	Kreditanstalt fur Wiederaufbau
LCU	=	Labor-Intensive Construction Unit
LNBS	=	Lesotho National Bus Service
ODM	=	Overseas Development Ministry, United Kingdom
PVPS	=	Plant and Vehicle Pool Services
RSA	=	Republic of South Africa
RTB	=	Road Transportation Board
vpd	=	vehicles per day

KINGDOM OF LESOTHO

FISCAL YEAR

April 1 - March 31

KINGDOM OF LESOTHO

FOURTH HIGHWAY PROJECT

CREDIT AND PROJECT SUMMARY

Borrower: Kingdom of Lesotho

Amount: SDR 14.3 million
(US\$15.2 million equivalent)

Terms: Standard

Project Description: The proposed project aims to improve existing roads and strengthen institutions in the transport sector. It would include: rehabilitation of two paved road sections; regravelling of 360 km of gravel roads, upgrading of 42 km of earth roads to gravel standard, and improvement of drainage of 123 km of gravel roads; traffic counters and weighbridges; and technical assistance and training.

Road rehabilitation and improvement would lower transport costs, protect past investments and increase accessibility of rural areas. Technical assistance and training would improve the operational capability of the Roads Branch and the Plant and Vehicle Pool Services. In addition, assistance for the Labor-intensive Construction Unit would enhance the Government's efforts to increase domestic employment opportunities. The project risks relate to the scarcity of qualified local technical and managerial staff and the drain of qualified local staff to South Africa. The project, therefore, includes a high level of staff training and a substantial technical assistance component.

Estimated Cost

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	-----US\$ Million-----		
Rehabilitation of Paved Roads	2.9	11.6	14.5
Improvement of Gravel and Earth Roads	2.9	2.7	5.5
Traffic Counters and Weighbridges	-	0.2	0.2
Consultants and Technical Assistance	0.3	1.5	1.8
Training and Fellowships	0.2	1.2	1.4
Total Base Cost	<u>6.3</u>	<u>17.1</u>	<u>23.5</u>
Physical Contingencies	0.3	1.1	1.3
Price Contingencies	1.2	2.5	3.7
Extra Contingencies	<u>0.3</u>	<u>1.1</u>	<u>1.4</u>
Total	<u>8.1</u>	<u>21.8</u>	<u>29.9</u>
(Of which taxes)	(1.7)		(1.7)

Financing Plan:

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	-----US\$ 000-----		
IDA	1.8	13.4	15.2
African Development Fund	0.3	8.3	8.6
Government of Lesotho	<u>6.1</u>	<u>-</u>	<u>6.1</u>
Total	<u>8.2</u>	<u>21.7</u>	<u>29.9</u>

Estimated Disbursements of IDA Credit:

IDA FY	<u>85</u>	<u>86</u>	<u>87</u>	<u>88</u>
	-----US\$ Million-----			
Annual	5.0	4.0	3.5	2.7
Cumulative	5.0	9.0	12.5	15.2

Rate of Return: 16.4 to 24.2 percent on paved road rehabilitation and bridges.
15.8 percent on road regravelling and 16.2 percent on upgrading from earth to gravel standard (minimum estimate for first year of program).

Appraisal Report: Report No. 4883-LES, dated April 24, 1984.

Map: No. IBRD 17433R.

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS
ON A PROPOSED CREDIT
TO THE KINGDOM OF LESOTHO
FOR A FOURTH HIGHWAY PROJECT

1. I submit the following report and recommendation on a proposed development credit for SDR 14.3 million (US\$15.2 million equivalent) on standard terms to the Kingdom of Lesotho to help finance a Fourth Highway Project. The African Development Fund (AfDF) will provide parallel financing of about US\$8.6 million equivalent.

PART I - THE ECONOMY

2. The most recent Economic Memorandum on Lesotho (No.4415-LSO) was distributed to the Executive Directors in October 1983. Country data are presented in Annex I.

3. Lesotho is a small, landlocked country surrounded by the Republic of South Africa with which it has ideological differences but with which it must co-exist. It is mountainous, and other than abundant water and small diamond deposits, it possesses few natural resources. About 13 percent of its 30,400 sq km is suitable for crop farming, but only 0.4 percent is considered as having high potential. Productivity in crop farming is low due to poor land quality and inappropriate technological packages. Livestock raising is the country's principal agricultural activity, but overstocking and inadequate herd management has led to overgrazing, widespread soil erosion and limited production. Agriculture is still the leading sector of the economy, however, providing employment and livelihood for nearly 85 percent of the resident population. Development of a modern industrial sector is limited by (a) the smallness of the domestic market, (b) the proximity of the highly industrialized South African economy, which supplies Lesotho with most of the goods and services it requires, (c) a shortage of skilled entrepreneurial, managerial and technical manpower, and (d) the necessity of importing nearly all raw materials and intermediate goods. Consequently, manufacturing is a small sector of the economy.

4. The most significant characteristic of Lesotho's economy is its heavy dependence on South Africa where more than 90 percent of its imports originate, as do all of its electricity and most of its foreign investment

and tourism. Its only outlets to the sea are via South Africa's transport facilities and ports. About one-half of the male labor force depends upon employment in South Africa, (mainly in mining) and remittances of migrant workers constitute over 40 percent of Lesotho's GNP; and over 70 percent of Government revenues are derived from receipts from the Southern Africa Customs Union under which South Africa levies, collects and redistributes customs duties and taxes on behalf of the member countries (Botswana, Lesotho, South Africa and Swaziland). In addition, Lesotho is a member of the Rand Monetary Area (RMA). While this arrangement guarantees payment of Lesotho's foreign financial commitments, it limits its use of monetary policy instruments. On balance, however, given Lesotho's size, location and resource constraints, the gains from membership in the Customs Union and the RMA far outweigh its costs.

5. Despite constraints on its development, Lesotho's economy grew rapidly in the 1970s. Real GDP rose by about 7 percent per annum since the mid-1970s, and as a result of increasing employment and wages for Basotho in South Africa, real GNP expanded by about nine percent per annum. The gains in domestic output were the result primarily of large increases in public investment and in the provision of government services. Tourism and mining also contributed significantly to economic growth, the former owing to an increasing number of visitors from South Africa and the latter resulting from the opening of a new diamond mine. The industrial and agricultural sectors, on the other hand, expanded only modestly since the mid-1970s.

6. The strong growth in public expenditure in recent years was made possible by increased external assistance, and by a large rise in receipts from the customs union. These revenues enabled the authorities to maintain investment at 25 percent of GDP during the period without relying excessively on domestic or foreign borrowing. The receipt of external grants, Customs Union transfers and workers remittances permitted a level of imports sufficient for the needs of the domestic economy, and Lesotho's balance of payments registered a small yearly surplus throughout the late 1970s.

7. Lesotho's economic prospects for the 1980s are at best uncertain. Receipts from the Customs Union are expected to decline as a result of declining imports, as is external development assistance, which will require a cutback in public investment. No significant surge in private investment is foreseen, given the resource constraints in agriculture, industry and mining. At the same time, the outlook for Basotho employment in South Africa is bleak. The number of Basotho workers in South Africa mines declined from about 130,000 in 1977/78 to 120,000 in 1981/82, and the downward trend is likely to continue due to South Africa's policy of increasing employment of domestic labor, the depressed prices of metals and increased mechanization of the mines, thus lowering the demand for unskilled, and hence new recruits from Lesotho. Consequently, migrant workers' remittances are expected to decline rapidly in 1980s. Another factor contributing to slow economic growth in the 1980s is the closure (in 1982) of the Letseng-la-Terai diamond mine.

8. As a result of the Government's expansionary fiscal policy in the early 1980s, consumption rose from 96 percent of GNP in 1977/78 to 106 percent in 1981/82 and the recurrent account budget moved from a surplus to a deficit and the overall deficit rose from 8.0 percent of GDP in 1975/76 to 23.4 percent in 1981/82. Much of the deficit was financed by short-term loans which led to a sharp rise in debt service payments.

9. The Government now recognizes the seriousness of the crisis and its causes. Consequently, since fiscal year 1982/83, it has instituted measures to tighten financial management by monitoring more carefully the fiscal performance of operating ministries, freezing employment in the civil service and cutting back on the capital budget. As a result, the deficit was reduced to M 72.5 million (9.5 percent of GNP) that year. In addition, the Government is actively pursuing measures to increase revenues by improving the administration of existing taxes and finding new sources of revenue such as the sales tax, which was introduced in December 1982, and is expected to yield about M 12-15 million in 1983/84.

10. Lesotho faces the difficult task of providing domestic employment and income opportunities for the rapidly growing labor force. Of the 500,000 domestic labor force in 1980, only 41,000, or eight percent were employed in the wage sector. An estimated 18,000 persons will enter the labor force each year in the 1980s, most with little in the way of education or skills. With the modern sector expected to provide jobs for only a small number of the new entrants to the labor force during this decade, the agricultural sector will have to absorb the balance, notwithstanding its own limitations.

11. In order to achieve its objective of building a more self-reliant economy, the Government must strengthen economic and financial management; increase domestic savings; make agriculture more productive; raise employment and income earning opportunities; develop human resources; control population growth; rehabilitate its transport infrastructure; and develop its most abundant natural resource -- water.

12. Some progress has been made in economic and financial management (para. 9). In addition, the Government is reviewing its development planning institutions with a view to reorganizing and improving them. In the agricultural sector, research results so far seem to have proved the viability of growing high-value crops for export. However, further studies are needed to determine appropriate marketing arrangements. In livestock, the problem of overgrazing and over-stocking needs to be properly addressed. The industrial sector is not likely to contribute significantly to income and employment generation, given the competition from the RSA and the small domestic market. However, limited prospects exist for export-oriented manufactures which have yet to be fully explored. In other areas, the Bank Group is assisting or planning to assist improvements in the existing highway and rural road network, basic education and technical and vocational training, and delivery of basic health services and family planning.

13. By far the most promising development prospect in Lesotho's economy is the exploitation of its abundant water resources, both for the sale of water to South Africa and for hydro-electricity generation for domestic consumption. In order to tap this resource, Lesotho has proposed a Highlands Water Project on which feasibility studies are currently underway. The project is estimated to cost about US\$1.4 billion in 1980 prices. Although the feasibility studies are not yet completed, preliminary indications are that Lesotho may earn more than double its present export earnings (excluding migrant workers' remittances) from the sale of water. About 212 gwh of electricity per year may be generated at prices substantially cheaper than the present cost of imported electricity. Other benefits of the project would be employment for about 2,000 workers during the construction period and possible use of the water for irrigated agriculture. The first phase of the project is expected to be completed in 1995 and the second and final phase in 2006.

14. As a "least developed country", with limited potential for generating domestic revenues, Lesotho depends almost entirely on external assistance to finance its development program. Grants, mainly from bilateral sources, constitute about 60 percent of total external capital assistance and the balance consists of loans on soft terms. IDA is the largest single source of multilateral assistance. As of December 1982, of the US\$140 million total external public debt disbursed and outstanding, US\$40 million, or 29 percent, were IDA credits. However, service payments on IDA credits totalled only US\$0.3 million, or four percent of Lesotho's total service payments of US\$8 million on medium and long-term debt.

PART II -- BANK GROUP OPERATIONS IN LESOTHO

15. The Bank Group's first operation in Lesotho -- a US\$4.1 million credit for a highway construction project -- was approved in 1966, two years before the country (then known as Basutoland) became an independent kingdom. To-date, IDA has made 12 credits, totalling US\$70 million, which have financed three projects in highways, two in agriculture, three in education, two in industrial development and one each in water supply and urban development. In addition, the Bank is acting as executing agency for UNDP-financed technical assistance for strengthening the Government's development planning organization and for assisting the Government to supervise preparation of the proposed Highlands Water Project (para. 13). Also, IDA is supervising an agricultural marketing project on behalf of the International Fund for Agricultural Development (IFAD). IFC has made one investment of US\$330,000 in a quarrying operation. Summary statements on IDA credits and IFC investments are provided in Annex II.

16. Lesotho's performance in implementing IDA-assisted projects has been mixed. While, until recently, highway and education projects have had relatively few problems, projects in other sectors, particularly in agriculture, have encountered serious problems due to ineffective

coordination within Government and delays in appointing project staff. In addition, the disbursement rate on IDA credits, which hitherto had been significantly higher than the Eastern Africa Regional and Bank-wide averages (e.g., in FY78, 41 percent for Lesotho and 23 percent for the Eastern Africa Region, and 21 percent Bank-wide), has slowed down considerably since FY79 because of a shortage of budgetary funds which is making it difficult for the Government to prefinance project expenditures which are reimbursed subsequently by IDA. As a result, from FY79 to FY82 the disbursement rate on credits to Lesotho averaged about 15 percent per annum compared with 20 percent for the Eastern African Region and 22 percent Bank-wide. The Government has instituted measures to resolve the budget crisis by tightening financial management in the public sector (para. 9). In IDA-assisted projects, technical assistance is being provided and local staff trained to strengthen project implementing agencies and also, where appropriate, revolving funds are being established to obviate the need for prefinancing by the Government of local expenditures financed by IDA.

17. During the next five years or so, the Bank Group expects to continue to support the Government's development objectives of expanding domestic employment opportunities, increasing and diversifying agricultural production, developing human resources through training and provision of basic health services and control of population growth, and developing the country's water resources. To this end, the Bank Group plans to lend for projects in agriculture, basic education and technical/vocational training, health and family planning, industrial development and for the proposed Highlands Water Project. The Bank's macro-economic and sector work program is designed to support this lending strategy.

PART III - THE TRANSPORT SECTOR

The Transport System

18. Lesotho depends almost entirely on road and air transport for internal travel. The country has no navigable rivers and no railway, except for a short (1 km) rail spur, operated by South African Railways, connecting Maseru to the South African system. Domestic air transport, connecting 12 airports, is quite well developed. The density and standard of the road network reflects the population distribution. Most of the network, including most paved roads, are located in the western part of the country where the majority of the population lives. A small part of the network, consisting mainly of lower class roads and trails negotiable only by four-wheel drive vehicles, is located in the eastern mountain region which is thinly populated. At present, the pressing need of the transport sector is to rehabilitate the main paved roads, built over a decade ago, and to maintain properly and improve the remainder of the road network. For external travel, Lesotho depends entirely on South Africa's well developed road and rail network and on Jan Smuts International Airport at

Johannesburg for international flight connections. Because of the large number of Basotho migrant workers in South Africa and low level of marketed domestic production, demand for passenger transport is relatively high.

Air Transport

19. Lesotho has 31 airfields and airstrips, of which 12 are used for domestic scheduled air transport. Only two are paved, while the rest have gravel or grass surfaces. The Government-owned Lesotho Airways, which at present operates at a loss because of low occupancy rates and aircraft utilization, provides scheduled domestic air services and operates regional flights to South Africa, Mozambique and Swaziland. Facilities at Maseru Airport, the country's international airport, are inadequate for the larger planes needed for longer distance international flights. Consequently, international traffic to and from Lesotho must transit through the RSA. To decrease this reliance on RSA facilities, Government, in 1983, started construction of an international airport near Maseru which is expected to be completed by mid-1985.

Road Transport

20. The road network totals about 5,000 km, of which about 400 km are paved, 1,600 km are gravel roads, and the remainder are earth roads and tracks. Generally, the layout and density of the network is adequate for current traffic volumes. Road maintenance has considerably improved over the last four years, but budget allocations in recent years have fallen short of requirements and need to be raised (para. 31).

21. Transport and traffic regulations, such as axle load limits, are generally satisfactory, but are not strictly enforced because of lack of trained staff. According to a 1980 survey, over-loading is a problem. The vehicle fleet in 1982 consisted of about 21,000 vehicles, or one vehicle per 70 inhabitants (compared with Malawi's 29,000 vehicles, or one per 220 inhabitants). The annual growth of the vehicle fleet over the last decade was 12 percent. Statistics on Lesotho's transport industry are incomplete because no records are kept of South African-owned trucks which ply regularly between the two countries. In 1980, Lesotho-registered public transport vehicles numbered 1,400 trucks and 340 buses, mostly privately owned. The Government owns one trucking company (Lesotho Freight Services Corporation) which operates 38 trucks, and one bus company (Lesotho National Bus Service) which owns 24 buses.

Transport Policy, Planning and Coordination

22. In the sixties and early seventies, the principal focus of the Government's transport policy was on serving the main population and production centers along the north-south lowland corridor along the western border. Since the mid-seventies, however, the Government has also emphasized a second objective: providing all-weather road links to and in the country's eastern mountain areas so as to develop their full social and economic potential and promote the country's political and administrative integration. The latter objective is reflected, inter alia, by the

construction of the St. Michaels-Thaba Tseka road in the Second Highway Project (para. 32) and the feasibility and detailed engineering of the Oxbow-Mokhotlong road in the Third Highway Project (para. 33).

23. Two other objectives have influenced Lesotho's transport policy, namely, to increase employment generation and reduce dependence on South Africa. The Labor-Intensive Construction Unit (LCU), established with IDA assistance under the Second Highway Project to create employment opportunities for Basotho migrant workers returning from South Africa, supports both these objectives, while the construction of a new international airport (para. 19), although not justified on economic grounds, reflects Lesotho's desire to reduce dependence on South Africa for external air communications. In recent years, about 25 percent of the Government's budget has been devoted to investments in the transport sector.

24. IDA has supported the Government's policy in the highway subsector since 1966, through three projects (paras. 32 and 33). The proposed project would continue this support. The Government plans soon to start preparing its Third Development Plan (1986-90). Priority areas for future investments in the sector include: continued road improvement and maintenance of existing roads; strengthening sectoral institutions; and developing the domestic construction industry. The Government would consult with IDA in preparing the transport section of the next development plan (draft Development Credit, Section 3.06).

25. The Central Planning and Development Office (CPDO) of the Ministry of Planning, Employment and Economic Affairs, is responsible for overall policy and planning in Lesotho and for ensuring inter-sectoral coordination. It reviews transport policy and planning proposals put forward by the Ministries of Transport and Communications and of Works. Coordination among the transport modes is not a major issue, given the lack of internal rail and water transport and the complementary functions of air and road transport.

Road Administration, Training and Financing

26. The Ministry of Works is responsible for the 2,386 km of classified roads; the Ministry of Cooperatives and Rural Development, using labor employed under the Food for Work Program, is in charge of constructing and maintaining most earth tracks in the mountainous areas; and the Ministry of Agriculture and Marketing has responsibility for the construction of about 200 km of feeder roads under the Basic Agricultural Services Program (Credit 795-LSO), which is assisted by a US\$6.0 million IDA credit.

27. The Roads Branch of the Ministry of Works is in charge of planning, design, maintenance and construction of roads under the Ministry's jurisdiction. It also maintains some airfields on behalf of the Civil Aviation Department. The Roads Branch has centralized services at Maseru for planning, design and construction, while its regional offices in Leribe, Maseru's Hoek and Mokhotlong are responsible for all routine and

periodic maintenance. To permit the Roads Branch to operate efficiently over the entire country, its administrative structure was reorganized and strengthened under the Third Highway Project. The Plant and Vehicle Pool Services (PVPS), is in charge of equipment procurement, maintenance and repair and provides equipment for hire to other Government agencies; when time permits, PVPS also maintains vehicles of these agencies. Most of PVPS plant, some 95 percent, is being used by the Roads Branch.

28. A major constraint on the Road Branch's operations is the shortage of qualified staff due to the scarcity of trained Basotho and the departure of skilled local personnel to South Africa which pays substantially higher salaries. PVPS operations are also seriously hampered by an overall shortage of qualified staff, particularly at managerial and technical levels, which results in operational inefficiencies and high costs. Well-trained mechanics and equipment operators are in short supply. To improve the situation, a five-man team of consultants, financed under the Third Highway Project, was engaged in 1983 to manage PVPS operations. Improvements are noticeable but a lot more remains to be done to make the agency more effective.

29. As mentioned earlier, the shortage of skilled local personnel at all levels in the Roads Branch and PVPS impedes efficient operations and makes foreign technical assistance indispensable. In the absence of an engineering faculty at the National University of Lesotho, professional engineers are trained overseas or in neighboring countries. Many fellowships have been granted by bilateral and multi-lateral donors to the Roads Branch and PVPS for this purpose, but a severe shortage of senior management staff still remains. At the middle management level, there is a shortage of technicians and other supervisory staff. Training of technicians is done by the Technician Training School of the Lerotholi Polytechnic, but the output is small and the course content is too theoretical to suit the immediate needs of the employers. Skilled workers are trained at the Lerotholi Technical Institute which, together with two regional technical institutes, produces annually about 100-120 graduates in mechanical, electrical and building trades. As in the case of technicians, these graduates are not readily operational and are trained on-the-job in PVPS and the Roads Branch before independent job assignments can be given to them. The proposed project would provide fellowships for professional, sub-professional and managerial training abroad, and also improve on-the-job training within the country (para. 41).

Maintenance

30. The Roads Branch, through its Maintenance Division, is responsible for the maintenance of classified roads (para. 26). The Maintenance Division is divided into four regions (north, central, east and south), each headed by a regional roads engineer. Road improvement and periodic maintenance (resealing and regravelling) is carried out by separate units directly responsible to the Roads Branch. As a result of institutional improvements under the Third Highway Project, routine maintenance of both paved and unpaved roads has been improved considerably and the regravelling backlog reduced substantially by the regravelling

brigades established under the same project. The paved roads are maintained reasonably well, but some sections are approaching the end of their economic life and are deformed beyond restoration by regular maintenance and require immediate rehabilitation.

31. Revenues generated from road user charges (mainly duties and taxes on vehicles and fuel) amounted to some M 16.0 million in 1980, well in excess of annual road maintenance expenditures of about M 3.0 million over the last five years. Road user charges, therefore, not only cover maintenance expenditures, but also contribute substantially to the Government's general revenues. Maintenance expenditures in real terms have increased by nearly 30 percent between 1977 and 1984, while capital expenditures on roads, financed largely from external sources, have more than trebled. The present level of maintenance expenditures is inadequate to keep the road network in a reasonably good condition, notwithstanding the institutional improvements noted above. It is estimated that in Lesotho's current financial year (1984/85), about M 4.4 million is required for road maintenance. Accordingly, assurance was obtained at negotiations that this amount would be budgeted in 1984/85 and that the allocation would be maintained at this level in real terms in subsequent years (draft Development Credit Agreement, Section 4.02(b)).

Bank Group Assistance

32. The Bank Group has financed three highway projects in Lesotho. The first project, for which a US\$4.1 million credit (No.82-BL) was approved in 1966, was executed between 1967 and 1969 and included the construction of 107 km of the main north-south road from Leribe to the Masianokeng Turnoff, and a 27 km gravel road between Leribe and Pitseng. The work was completed satisfactorily and for less than the estimated cost. The Second Highway Project (Credit 619-LSO of US\$5.5 million, approved in 1976) provided for construction to all-weather gravel standard of a 147 km section of the main west-east road linking St. Michaels with Thaba Tseka in the eastern mountain area. The project also assisted in establishing the Labor-Intensive Construction Unit (LCU) on a pilot basis to prepare Lesotho to provide economic employment for any sudden repatriation of Basotho migrant workers from South Africa. Projects suitable for labor-intensive work methods were identified and on-the-job training was provided for local staff who would form the nucleus of an administrative set-up if expansion should become necessary. A recently prepared Project Completion Report concluded that the project had only been partly successful: road construction was delayed, while the growth of traffic and agricultural development in the area traversed by the road remained well below expectations, resulting in a lower economic return than expected. The LCU as a pilot project, on the other hand, was successful in establishing an alternative work method more suitable for low traffic roads.

33. The ongoing Third Highway Project (Credit 884-LSO, US\$9.0 million, approved in 1979) provides for: paving of the 24 km St. Michaels-Molimo Nthuse section of the St. Michaels-Thaba Tseka road; improvement of gravel and earth roads through establishment of one

equipment-intensive and two labor-intensive regravelling brigades; construction and equipping of the Roads Branch's regional offices and the PVPS regional workshops; technical assistance and fellowships for the Roads Branch and PVPS; and feasibility study and (if justified) detailed engineering of the Oxbow-Mokhotlong road (120 km) in the eastern part of the country. Road paving was satisfactorily completed in 1983 and maintenance was reorganized and strengthened by technical assistance staff. The improvement of existing roads is progressing reasonably well and the regravelling backlog has been reduced substantially. The two labor-based intensive brigades, employing about 200 workers each, are facing serious staffing problems (technical and managerial) resulting in lower output (in terms of quantity and quality) and higher costs than originally anticipated. Good progress is being made in reorganizing and strengthening the Roads Branch and PVPS with the technical assistance provided under the project. Also, a good start has been made in training staff for the two agencies. The detailed engineering of the Oxbow-Mokhotlong road was satisfactorily completed in late 1982.

34. In the proposed project, an attempt is made to reflect the lessons learned from the previous projects. For example, particular attention is paid to technical assistance to PVPS, training and fellowships to strengthen the staff of the Roads Branch and implementation of traffic count and axle load limit enforcement programs.

PART IV - THE PROJECT

35. The project was prepared by the Government with the assistance of consultants and the Bank Group. It was appraised jointly with the African Development Fund in September/October 1983. A report entitled "Staff Appraisal Report: Fourth Highway Project, Kingdom of Lesotho" (No. 4883-LES, dated April 24, 1984) is being distributed separately. Negotiations were held in Washington from March 5 to 8, 1984. The Lesotho delegation was led by Mr. Sejanamane, Acting Permanent Secretary, Ministry of Planning, Employment and Economic Affairs. Annex III provides supplementary project data.

Project Objectives and Description

36. The project aims to support the Government's transport objectives of lowering transport costs, increasing accessibility of rural areas and assisting institution-building efforts in the sector. In addition, it supports the Government's general policy objective of employment generation. Specifically, the project comprises:

- i) rehabilitation of two paved road sections: one rural section from Leribe to a point 6 km north of Maseru (88 km) and one urban/suburban section from the above 6 km point via Maseru to Masianokeng (19.5 km) plus construction of two bridges on the Masianokeng-Mafeteng road;

- ii) regravelling of 360 km of gravel roads, upgrading of 42 km of earth roads to gravel standards and improvement of drainage of about 123 km of gravel roads;
- iii) procurement of traffic counters and weighbridges; and
- iv) technical assistance, training and fellowships.

37. Rehabilitation of Paved Roads - The most important bitumen paved roads in Lesotho are: (a) the 170 km main road parallel with and close to the western border with South Africa between Leribe in the north via Maseru and Masianokeng to Mafeteng in the south; and (b) a 20 km road section connecting Masianokeng with Roma where the national university is located. A 1981 Ministry of Works survey found that several sections of these roads, constructed some 10 to 15 years ago, were deformed and damaged to the extent that routine maintenance could not restore them any longer. To protect its capital investment, and to avoid heavy and more expensive reconstruction in the future, the Government has decided to rehabilitate these vital roads by surface dressing of sections with a reasonably good existing pavement and by strengthening the existing pavement with an overlay or, where necessary, by reconstructing both base course and pavement. In 1983, the Ministry of Works engaged the consulting firm of Louis Berger International, Inc. (USA) which carried out economic and engineering studies for the rehabilitation of the above roads. Based on these studies, financed by an IDA Project Preparation Facility advance, and taking into account financial constraints, the rehabilitation component of the proposed project has been divided in the two sections -- the 88 km rural section from Leribe to 6 km north of Maseru, and the 19.5 km section north and south of Maseru plus two bridges. (These road sections were first paved under the First Highway Project (para. 32)). This component accounts for about 65 percent of the total project cost.

38. Improvement of Gravel and Earth Roads. To reduce the regravelling backlog, one equipment and two labor-intensive, regravelling brigades were established and financed under the Third Highway Project (para. 33). In addition, one equipment-intensive brigade was established with the Government's own resources. Since the establishment of these four brigades in 1980/81, about 600 km of roads have been regravelled. The Ministry of Works is using the brigades to reduce the regravelling backlog and to upgrade some earth roads to gravel standards. This work requires a minimal amount of engineering, such as simple sketches and specifications which can be provided by the Roads Branch staff. The proposed project would assist in implementing the Branch's three-year regravelling and upgrading program (1984/85-1986/87) by providing additional equipment, two existing brigades (one equipment and one labor-intensive) for three years. It would also provide equipment for establishing a small culverting brigade, as well as operating costs for all the three brigades. Effective 1985/86, updated annual programs would be submitted to IDA for approval at least three months before the beginning of each financial year (Development Credit Agreement, Section 3.07(b)). This project component accounts for about 22 percent of the total project cost.

39. Procurement of Traffic Counters and Weighbridges. The Government recognizes the importance of regular and reliable traffic counts for planning purposes, and enforcement of axle load limits to preserve the existing pavement against overloading. The Ministry of Works has prepared a detailed work program for traffic counting. Also, coordination between the Ministry of Works, Ministry of Transport and Communications (MOTC), and the traffic police has improved and MOTC has outlined a program for enforcement of axle load limits for which staff has been trained under the Third Highway Project. The proposed project includes procurement of traffic counters and mobile and permanent weighbridges. This component accounts for less than one percent of total project costs.

40. Technical Assistance. Given the continued lack of qualified local personnel, the project would include technical assistance to fill key positions in the Roads Branch and the PVPS. A total of 21.5 man-years would be provided for this purpose. This technical assistance would consist of two engineers for three years each and four mechanics for 2-1/2 years each for PVPS; and one engineer for 2-1/2 years and one field engineer for three years for the Roads Branch. Also, the Government is considering taking action to encourage the development of the local construction industry. At present, local contractors are capable of executing only minor works, but have the potential to play a more active role in handling maintenance and small construction jobs in remote areas which are not likely to appeal to foreign contractors who now dominate the construction industry. Five staff-months of consultants' services would be included in the project to review the industry, determine constraints to its development and recommend remedial action. The study, whose terms of reference have been agreed with Government, would be completed by December 31, 1985 (draft Development Credit Agreement, Section 3.08). The technical assistance component accounts for nearly seven percent of total project costs.

41. Training. As indicated in paras. 27-29, there is need for training at all staff levels within PVPS and the Roads Branch. Engineering training through fellowships abroad would be provided as follows: road engineering and transport planning (84 staff-months); short-term training in road engineering and supervision (45 staff-months); long-term training in mechanical engineering and managerial training (108 staff-months); short-term training in mechanical workshop supervision and management (152 staff-months); and a study tour for senior management staff (3 staff-months). With respect to in-country training, the Roads Branch's existing training center would be strengthened in order to expand its activities to include practical field training for existing staff. For this purpose, the project would provide financing for: training materials and field training equipment; spare parts and fuel for three years for operating the training equipment; and mobile accommodation for a field training unit. In addition, the project would support a proposed apprenticeship training program for PVPS for mechanics with equipment and technical assistance. The program would be conducted in cooperation with the Lerotholi Technical Institute and the Technical/Vocational Education Adviser of the Ministry of Education. The training component constitutes just over five percent of total project costs.

Project Cost and Financing

42. Total project costs are estimated at US\$29.9 million equivalent (including taxes and duties of US\$1.7 million), of which the foreign exchange costs are about US\$21.8 million. Physical contingencies of 10 percent have been allowed for the rehabilitation works to be carried out by contractors; price contingencies have been calculated for foreign costs at 7.5 percent for 1984, 7 percent for 1985 and 6 percent annually thereafter; and price contingencies for local costs have been calculated at 13.5 percent for 1984, 13 percent for FY85 and 12 percent annually thereafter. In addition, a special contingency of 20 percent has been included in the cost estimates for the component to be financed by AfDF to reflect AfDF's procurement restrictions which exclude South Africa. Of the 258 staff-months of long-term consultants' services (para. 40), 66 staff-months would be recruited individually and the rest provided by consulting firms.

43. The proposed IDA credit of SDR 14.3 million (US\$15.2 million equivalent) would finance about 54 percent of total project costs net of taxes and duties. The African Development Fund (AfDF) has approved a loan of about US\$8.6 million (about 30 percent of net project cost) for parallel financing of the rehabilitation of the road Section from Leribe to 6 km north of Maseru (see para. 36(1)). External financing would cover 84 percent of total net costs, or 100 percent of foreign and 30 percent of local costs. The Government would finance the remaining 16 percent (US\$4.5 million) of net costs plus US\$1.8 in taxes and duties. Fulfillment of condition(s) of effectiveness of the AfDF loan would be a condition of effectiveness of the IDA credit (draft Development Credit Agreement, Section 6.01(b)).

Organization and Implementation

44. The Ministry of Works would execute all project components, except the enforcement of axle load limits which is the responsibility of the traffic police and the Ministry of Transport and Communications. Rehabilitation of the Maseru-Leribe-Masianokeng road would be carried out by contractors supervised by consultants and would take 30 months to complete. Improvement of the existing gravel and earth roads would be carried out by force account by the Ministry of Works. Road improvement would be based on a three-year program prepared by the Government which would start in mid-1984 and be updated annually with IDA approval (para. 38). Technical assistance would be used to fill key positions in the Roads Branch and the PVPS, as well as to train local staff, and to carry out the study of the domestic construction industry. The project is expected to be completed by December 31, 1987. A US\$300,000 advance from the Project Preparation Facility was approved in April 1983 to finance

preparation of detailed engineering designs and tender documents for road rehabilitation. The work has been completed and US\$285,000 has been disbursed from the advance.

Procurement and Disbursement

45. The road rehabilitation works to be financed by IDA would be carried out under unit price contract(s) through international competitive bidding (ICB) in accordance with Guidelines for Procurement under World Bank Loans and IDA Credits; and rehabilitation works to be financed by AfDF will be carried in accordance with AfDF procurement regulations. Major equipment financed by IDA would also be purchased through ICB. Teaching aids and small miscellaneous equipment would be procured through local competitive bidding (LCB) procedures acceptable to IDA, or, for items of less than US\$5,000, but not more than US\$30,000 in aggregate, by local shopping with at least three price quotations. To maintain continuity, the same firm which prepared the design, cost estimates and tender documents would supervise the rehabilitation works. Similarly, technical assistance to PVPS would be provided by the same firm which is providing it already under the Third Highway Project. Other technical assistance would be procured in accordance with Bank/IDA guidelines. Fuel, spare parts and materials, would be procured through normal commercial channels. Procurement arrangements are summarized in the table below.

Procurement Methods

<u>Project Element</u>	<u>ICB</u>	<u>LCB</u>	<u>Force Acct.</u>	<u>Other</u>	<u>Total</u>
A. <u>Civil Works</u>					
1. Rehabilitation of Paved Roads					
- Detailed Engineering				0.3 ¹	0.3
- Construction	18.2 (10.0)				18.2 (10.0)
- Supervision				0.9 ² (0.4)	0.9 (0.4)
2. Road Improvements					
- Operating expenses of brigades			5.9		5.9
B. Equipment					
- For Brigades	0.7				0.7
- Weighbridges and Traffic Counters	0.2				0.2
C. Technical Assistance					
				2.0 ³	2.0
D. Training					
TOTAL	<u>19.1</u>	<u>0.6</u>	<u>5.9</u>	<u>4.2</u>	<u>29.9</u>

¹ Financed under PFF

² Same consultants who did the detailed engineering

³ Consulting firm already engaged under Third Highway Project

Note: Figures in parenthesis refer to items to be financed by AfDF

46. The credit would be disbursed on the following basis:

- (a) 100 percent of foreign expenditures and 25 percent of local expenditures for the rehabilitation of the 19.5 km Masianokeng-Maseru road and two bridges;
- (b) 100 percent of foreign expenditures and 90 percent of local expenditures for equipment;
- (c) 75 percent of local expenditures in 1984/85, 50 percent in 1985/86 and 25 percent thereafter for operating costs for improvement of gravel and earth roads carried out by force account.
- (d) 100 percent of total expenditures for consultants, technical assistance services, training and fellowships; and

e) US\$300,000 to refund the PPF advance.

47. All disbursements would be fully documented except for expenditures under force account which would be on the basis of statements of expenditure. The disbursement schedule is a little shorter than the profile for highway projects in Lesotho for the following reasons: (a) expected early start of project implementation because bids for the main project component (road rehabilitation) were evaluated prior to Board presentation; and (b) disbursements for most of the remaining components would be concentrated in the first two years of project implementation.

Environmental Impact

48. The project would have no adverse environmental effects. Road rehabilitation is expected to result in reduced fuel consumption and noxious fumes, and thereby improve air quality. Improved gravel and earth roads should also reduce fuel consumption and also dust formation. Also, by providing adequate drainage, soil erosion -- a serious problem in Lesotho -- would be reduced.

Benefits and Risks

49. The major benefit accruing from the main project component -- the rehabilitation of 108 km of Lesotho's principal road arteries plus construction of two bridges -- would be lower transport costs and prices of goods and services. In addition, if the rehabilitation were postponed, it would cost much more later. Thus, the reduction in future road maintenance and/or rehabilitation costs would free Government resources for other high priority investments. The benefits from improved gravel and earth roads would be mainly in the form of transport cost savings resulting from improved driving conditions. Improved rural roads also would stimulate agricultural production and improve accessibility of health facilities, schools and administrative services to the rural population. Of the remaining project components, technical assistance and training would provide the qualified staff critically needed to strengthen the Ministry of Works; and traffic counters and weighbridges would contribute to better transport planning and support control of vehicle overloading to prevent premature deterioration of the road network.

50. The economic evaluation in quantitative terms is limited to the rehabilitation (including two bridges) and improvement components of the project which together account for some 90 percent of total project costs. No attempt has been made to quantify the impact of technical assistance, training, or traffic counters and weighbridges. The economic rate of return of the 19.5 km rehabilitation works to be financed by IDA is 16 percent; and the 88 km to be financed by AfDF yields a return of 23 percent. The two bridges to be financed by IDA yield a return of 24 percent. A sensitivity analysis, assuming a cost increase of 20 percent, indicates that the return would be 3-4 percentage points lower. A two percent decline in traffic growth would result in a 2-3 percentage point decrease in the rate of return. The traffic volume (in the first year) that justifies the road improvement (a rate of return of some 12 percent)

is between 30 and 35 vehicles per day. As all roads included in the first year of the Government's road improvement program at present carry at least 35 vehicles a day, the proposed improvements are, economically justified. A 30 percent increase in cost would require a break-even traffic volume of between 30 and 35 vehicles a day which would still justify improvement of the roads included in the first year of program.

51. Because of the scarcity of qualified local staff in Lesotho, the most risky project components are those requiring a substantial number of local technical and managerial staff -- road improvement, particularly the labor-intensive operation, and the traffic count and axle load limitation programs -- which have also created problems in the past. The technical assistance and training of local staff provided in the project should minimize this risk. To minimize uncertainty about cost estimates for road rehabilitation, bids were received before Board presentation and preliminary evaluation indicates that the amounts are within the appraisal cost estimates.

PART V -- LEGAL INSTRUMENTS AND AUTHORITY

52. The draft Development Credit Agreement between the Kingdom of Lesotho and the Association and the recommendation of the Committee provided for in Article V, Section 1(d) of the Articles of Agreement of the Association are being distributed separately.

53. Special conditions of the credit are listed in Section III of Annex III. Fulfillment of condition(s) precedent to the effectiveness of the AfDF loan would be a condition of effectiveness of the IDA credit (para. 43).

54. I am satisfied that the proposed credit would comply with the Articles of Agreement of the Association.

55. I recommend that the Executive Directors approve the proposed credit.

A.W. Clausen
President

Attachments

Washington, D.C.
May 7, 1984

T A B L E 3A

LESOTHO LESOTHO	- SOCIAL INDICATORS DATA SHEET				
				REFERENCE GROUPS (WEIGHTED AVERAGES) /a	
	1960 ^{/b}	1970 ^{/b}	MOST RECENT ESTIMATE ^{/b}	MIDDLE INCOME AFRICA S. OF SAHARA	MIDDLE INCOME N. AFRICA & MID EAST
AREA (THOUSAND SQ. KM)					
TOTAL	30.4	30.4	30.4	.	.
AGRICULTURAL	27.8	24.2	22.9	.	.
GNP PER CAPITA (US\$)	50.0	120.0	540.0	1147.9	1340.0
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF COAL EQUIVALENT)	..	..	..	724.2	810.4
POPULATION AND VITAL STATISTICS					
POPULATION, MID-YEAR (THOUSANDS)	869.0	1061.0	1372.0	.	.
URBAN POPULATION (% OF TOTAL)	1.5	2.6	12.1	28.5	47.4
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILL.)			2.4	.	.
STATIONARY POPULATION (MILL.)			7.0	.	.
YEAR STATIONARY POP. REACHED			2130	.	.
POPULATION DENSITY					
PER SQ. KM.	28.6	35.0	44.2	56.5	36.0
PER SQ. KM. AGRI. LAND	31.3	43.8	58.5	131.8	449.0
POPULATION AGE STRUCTURE (%)					
0-14 YRS	38.8	40.0	41.1	45.9	43.9
15-64 YRS	56.9	55.7	54.8	51.2	52.8
65 AND ABOVE	4.3	4.3	4.1	2.8	3.3
POPULATION GROWTH RATE (%)					
TOTAL	1.5	2.0	2.3	2.8	2.9
URBAN	7.1	7.5	16.1	5.3	4.6
CRUDE BIRTH RATE (PER THOUS)	42.4	42.4	42.4	47.6	42.5
CRUDE DEATH RATE (PER THOUS)	23.1	18.7	14.7	15.2	12.0
GROSS REPRODUCTION RATE	2.8	2.8	2.8	3.2	3.0
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUS)	..	..	..	.	.
USERS (% OF MARRIED WOMEN)	..	..	..	..	..
FOOD AND NUTRITION					
INDEX OF FOOD PROD. PER CAPITA (1969-71=100)	104.0	94.0	90.0	95.7	97.5
PER CAPITA SUPPLY OF					
CALORIES (% OF REQUIREMENTS)	95.0	90.0	107.0	97.1	102.3
PROTEINS (GRAMS PER DAY)	66.0	62.0	72.0	56.0	72.0
OF WHICH ANIMAL AND PULSE	15.0	13.0	14.0 ^{/c}	17.2	17.8
CHILD (AGES 1-4) DEATH RATE	30.9	27.2	22.2	23.6	15.2
HEALTH					
LIFE EXPECT. AT BIRTH (YEARS)	41.6	46.5	52.2	51.9	57.2
INFANT MORT. RATE (PER THOUS)	144.0	130.9	113.3	117.6	104.2
ACCESS TO SAFE WATER (%POP)					
TOTAL	..	3.0	17.0 ^{/d}	25.4	59.3
URBAN	..	100.0	65.0 ^{/d}	70.5	84.9
RURAL	..	1.0	14.0 ^{/d}	12.3	37.5
ACCESS TO EXCRETA DISPOSAL (% OF POPULATION)					
TOTAL	..	11.0	13.0 ^{/d}	..	..
URBAN	..	44.0	51.0 ^{/d}	..	..
RURAL	..	10.0	12.0 ^{/d}	..	..
POPULATION PER PHYSICIAN	23490.0	30310.0	18640.0 ^{/c}	12181.6	3536.0
POP. PER NURSING PERSON	6540.0 ^{/e}	3010.0	4330.0 ^{/d}	2292.0	1820.7
POP. PER HOSPITAL BED					
TOTAL	690.0	570.0	490.0 ^{/c}	1075.4	643.3
URBAN	70.0 ^{/e}	100.0	200.0 ^{/c}	402.3	545.0
RURAL	980.0 ^{/e}	730.0	580.0 ^{/c}	3926.7	2462.0
ADMISSIONS PER HOSPITAL BED	..	..	20.0 ^{/c}	..	26.4
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	..	..	3.9 ^{/c}	..	..
URBAN	..	..	4.2 ^{/c}	..	..
RURAL	..	..	3.9 ^{/c}	..	..
AVERAGE NO. OF PERSONS/ROOM					
TOTAL	..	..	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..
ACCESS TO ELECT. (% OF DWELLINGS)					
TOTAL	..	..	..	..	46.2
URBAN	..	..	..	..	77.6
RURAL	..	..	..	..	16.1

T A B L E 3A

LESOTHO		- SOCIAL INDICATORS DATA SHEET				
LESOTHO		REFERENCE GROUPS (WEIGHTED AVERAGES) /a				
		MOST RECENT ESTIMATE /b			(MOST RECENT ESTIMATE) /b	
					MIDDLE INCOME	MIDDLE INCOME
					AFRICA S. OF SAHARA	N. AFRICA & MID EAST
1960 /b	1970 /b	ESTIMATE /b				
EDUCATION						
ADJUSTED ENROLLMENT RATIOS						
PRIMARY: TOTAL	83.0	90.0	104.0	97.2	89.6	
MALE	63.0	71.0	84.0	103.1	104.8	
FEMALE	102.0	109.0	123.0	88.5	72.4	
SECONDARY: TOTAL	3.0	7.0	17.0	17.2	41.7	
MALE	3.0	6.0	13.0	23.5	52.8	
FEMALE	4.0	7.0	20.0	14.2	31.2	
VOCATIONAL (% OF SECONDARY)	22.6	8.4	5.1	5.2	10.3	
PUPIL-TEACHER RATIO						
PRIMARY	54.0	46.0	49.0	42.9	31.9	
SECONDARY	20.0	22.0	21.0	23.7	23.3	
ADULT LITERACY RATE (%)						
	..	..	52.0	37.1	43.3
CONSUMPTION						
PASSENGER CARS/THOUSAND POP	3.0	1.5	2.4/c	18.8	18.0	
RADIO RECEIVERS/THOUSAND POP	4.6	4.7	22.4	97.8	138.1	
TV RECEIVERS/THOUSAND POP	..	..	..	18.6	45.6
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION	..	..	1.0/f	18.2	31.0
CINEMA ANNUAL ATTENDANCE/CAPITA	..	..	..	0.6	1.7
LABOR FORCE						
TOTAL LABOR FORCE (THOUS)	487.0	570.0	704.0	.	.	
FEMALE (PERCENT)	45.3	44.3	43.5	36.1	10.7	
AGRICULTURE (PERCENT)	93.0	90.0	87.0	56.8	42.5	
INDUSTRY (PERCENT)	2.0	3.0	4.0	17.5	27.8	
PARTICIPATION RATE (PERCENT)						
TOTAL	56.1	53.7	51.3	37.0	25.6	
MALE	62.2	60.3	58.2	47.1	45.4	
FEMALE	50.1	47.2	44.4	27.0	5.6	
ECONOMIC DEPENDENCY RATIO						
	0.8	0.8	0.9	1.3	1.8	
INCOME DISTRIBUTION						
PERCENT OF PRIVATE INCOME RECEIVED BY						
HIGHEST 5% OF HOUSEHOLDS	..	..	..	..	..
HIGHEST 20% OF HOUSEHOLDS	..	..	..	..	..
LOWEST 20% OF HOUSEHOLDS	..	..	..	..	..
LOWEST 40% OF HOUSEHOLDS	..	..	..	..	..
POVERTY TARGET GROUPS						
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US\$ PER CAPITA)						
URBAN	..	..	304.0	534.2	276.1
RURAL	..	..	253.0	255.9	177.1
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US\$ PER CAPITA)						
URBAN	..	..	113.0	491.5	400.0
RURAL	..	..	113.0	188.1	283.3
ESTIMATED POP. BELOW ABSOLUTE POVERTY INCOME LEVEL (%)						
URBAN	..	..	50.0	..	22.0
RURAL	..	..	55.0	..	30.8

.. NOT AVAILABLE
.. NOT APPLICABLE

NOTES

/a The group averages for each indicator are population-weighted arithmetic means. Coverage of countries among the indicators depends on availability of data and is not uniform.

/b Unless otherwise noted, "Data for 1960" refer to any year between 1959 and 1961; "Data for 1970" between 1969 and 1971; and data for "Most Recent Estimate" between 1979 and 1981.

/c 1977; /d 1975; /e 1962; /f 1978.

DEFINITIONS OF SOCIAL INDICATORS

Notes: Although the data are drawn from sources generally judged the most authoritative and reliable, it should also be noted that they may not be internationally comparable because of the lack of standardized definitions and concepts used by different countries in collecting the data. The data are, nonetheless, useful to describe orders of magnitude, indicate trends, and characterize certain major differences between countries.

The reference groups are (1) the same country group of the subject country and (2) a country group with somewhat higher average income than the country group of the subject country (except for "High Income" Oil Exporters' group where "Middle Income North Africa and Middle East" is chosen because of stronger socio-cultural affinities). In the reference group data the averages are population weighted arithmetic means for each indicator and shown only when majority of the countries in a group has data for that indicator. Since the coverage of countries among the indicators depends on the availability of data and is not uniform, caution must be exercised in relating averages of one indicator to another. These averages are only useful in comparing the value of one indicator at a time among the country and reference groups.

AREA (thousand sq.km.)

Total - Total surface area comprising land area and inland waters; 1960, 1970 and 1980 data.

Agricultural - Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow; 1960, 1970 and 1980 data.

GNP PER CAPITA (US\$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1979-81 basis); 1960, 1970, and 1981 data.

ENERGY CONSUMPTION PER CAPITA - Annual apparent consumption of commercial primary energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of coal equivalent per capita; 1960, 1970, and 1980 data.

POPULATION AND VITAL STATISTICS

Total Population, Mid-Year (thousands) - As of July 1; 1960, 1970, and 1981 data.

Urban Population (percent of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries; 1960, 1970, and 1981 data.

Population Projections

Population in year 2000 - Current population projections are based on 1980 total population by age and sex and their mortality and fertility rates. Projection parameters for mortality rates comprise of three levels assuming life expectancy at birth increasing with country's per capita income, life expectancy stabilizing at 77.5 years. The parameters for fertility rate also have three levels assuming decline in fertility according to income level and past family planning performance. Each country is then assigned one of these nine combinations of mortality and fertility trends for projection purposes.

Stationary population - In a stationary population there is no growth since the birth rate is equal to the death rate, and also the age structure remains constant. This is achieved only after fertility rates decline to the replacement level of unit net reproduction rate, where each generation of women replaces itself exactly. The stationary population size was estimated on the basis of the projected characteristics of the population in the year 2000, and the rate of decline of fertility rate to replacement level.

Year stationary population is reached - The year when stationary population size will be reached.

Population Density

Per sq. km. - Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970, and 1980 data.

Per sq. km. agricultural land - Computed as above for agricultural land only; 1960, 1970 and 1980 data.

Population Age Structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population; 1960, 1970, and 1981 data.

Population Growth Rate (percent) - Annual growth rates of total mid-year population for 1950-60, 1960-70, and 1970-81.

Population Growth Rate (percent) - Annual growth rates of urban populations for 1955-60, 1960-70, and 1970-81.

Crude Birth Rate (per thousand) - Annual live births per thousand of mid-year population; 1960, 1970, and 1981 data.

Crude Death Rate (per thousand) - Annual deaths per thousand of mid-year population; 1960, 1970, and 1981 data.

Gross Reproduction Rate - Average number of daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970, and 1981.

Family Planning - Acceptors, Annual (thousands) - Annual number of acceptors of birth-control devices under auspices of national family planning program.

Family Planning - Users (percent of married women) - Percentage of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

FOOD AND NUTRITION

Index of Food Production per Capita (1969=71=100) - Index of per capita annual production of all food commodities. Production excludes seed and feed and is on a basis. Commodities cover primary goods (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded). Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1981 data.

Per capita supply of calories (percent of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal feed, seeds, quantities used in food processing, and losses in distribution. Requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distribution of population, and allowing 10 percent for waste at household level; 1961-65, 1970 and 1980 data.

Per capita supply of protein (grams per day) - Protein content of per capita net supply of food per day. Net supply of food is defined as above. Requirements for all countries established by USDA provide for minimum allowances of 60 grams of total protein per day and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey; 1961-65, 1970 and 1980 data.

Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day; 1961-65, 1970 and 1977 data.

Child (ages 1-4) Death Rate (per thousand) - Annual deaths per thousand in age group 1-4 years, to children in this age group; for most developing countries data derived from life tables; 1960, 1970 and 1981 data.

HEALTH

Life Expectancy at Birth (years) - Average number of years of life remaining at birth; 1960, 1970 and 1981 data.

Infant Mortality Rate (per thousand) - Annual deaths of infants under one year of age per thousand live births; 1960, 1970 and 1981 data.

Access of Safe Water (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or untreated but uncontaminated water such as that from protected boreholes, springs, and sanitary wells) as percentages of their respective populations. In an urban area a public fountain or standpost located not more than 200 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the household or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

Access to Excreta Disposal (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) served by excreta disposal as percentages of their respective populations. Excreta disposal may include the collection and disposal, with or without treatment, of human excreta and waste-water by water-borne systems or the use of pit privies and similar installations.

Population per Physician - Population divided by number of practicing physicians qualified from a medical school at university level.

Population per Nursing Person - Population divided by number of practicing male and female graduate nurses, assistant nurses, practical nurses and nursing auxiliaries.

Population per Hospital Bed - total, urban, and rural - Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private general and specialized hospital and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally curatorial care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities. For statistical purposes urban hospitals include WHO principal/general hospitals, and rural hospitals, local or rural hospitals and medical and maternity centers. Specialized hospitals are included only under total.

Admissions per Hospital Bed - Total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING

Average Size of Household (persons per household) - total, urban, and rural - A household consists of a group of individuals who share living quarters and their main meals. A boarder or lodger may or may not be included in the household for statistical purposes.

Average number of persons per room - total, urban, and rural - average number of persons per room in all urban, and rural occupied conventional dwellings, respectively. Dwellings exclude non-permanent structures and unoccupied parts.

Access to Electricity (percent of dwellings) - total, urban, and rural - Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

EDUCATION

Adjusted Enrollment Ratios

Primary school - total, male and female - Gross total, male and female enrollment of all ages at the primary level as percentages of respective primary school-age populations; normally includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education enrollment may exceed 100 percent since some pupils are below or above the official school age.

Secondary school - total, male and female - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational, or teacher training instructions for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.

Vocational enrollment (percent of secondary) - Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary institutions.

Pupil-teacher ratio - primary, and secondary - Total students enrolled in primary and secondary levels divided by numbers of teachers in the corresponding levels.

Adult literacy rate (percent) - Literate adults (able to read and write) as a percentage of total adult population aged 15 years and over.

CONSUMPTION

Passenger Cars (per thousand population) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

Radio Receivers (per thousand population) - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.

TV Receivers (per thousand population) - TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.

Newspaper Circulation (per thousand population) - Shows the average circulation of "daily general interest newspaper", defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.

Annual Attendance per Capita per Year - Based on the number of tickets sold during the year, including admissions to drive-in cinemas and mobile units.

LABOR FORCE

Total Labor Force (thousands) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., covering population of all ages. Definitions in various countries are not comparable; 1960, 1970 and 1981 data.

Female (percent) - Female labor force as percentage of total labor force.

Agriculture (percent) - Labor force in farming, forestry, hunting and fishing as percentage of total labor force; 1960, 1970 and 1981 data.

Industry (percent) - Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1981 data.

Participation Rate (percent) - total, male, and female - Participation or activity rates are computed as total, male, and female labor force as percentages of total, male and female population of all ages respectively; 1960, 1970, and 1981 data. These are based on ILO's participation rates reflecting age-sex structure of the population, and long time trends. A few estimates are from national sources.

Economic Dependency Ratio - Ratio of population under 15 and 65 and over to the total labor force.

INCOME DISTRIBUTION

Percentage of Private Income (both in cash and kind) - Received by richest 5 percent, richest 20 percent, poorest 20 percent, and poorest 40 percent of households.

POVERTY TARGET GROUPS

The following estimates are very approximate measures of poverty levels, and should be interpreted with considerable caution.

Estimated Absolute Poverty Income Level (US\$ per capita) - urban and rural - Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus essential non-food requirements is not affordable.

Estimated Relative Poverty Income Level (US\$ per capita) - urban and rural - Rural relative poverty income level is one-third of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.

Estimated Population Below Absolute Poverty Income Level (percent) - urban and rural - Percent of population (urban and rural) who are "absolute poor".

Population : 1.4 million (mid-1981)
GNP per Capita in 1982: US\$445.4

LESOTHO — ECONOMIC INDICATORS

Indicator	Amount (million US\$ at current Prices) 1982	Share of GDP at Current Market Prices (percent)				Average Annual Growth Rate at Constant 1970 Prices			
		1970	1975	1980	1982	1970-75	1975-80	1980-82	
<u>NATIONAL ACCOUNTS</u>									
Gross domestic product	296.2 ¹	100	100	100	100	5.8	8.9	5.9	
Agriculture	67.3	32	32	27	23	4.4	0.3	..	
Mining	12.5	1	0	9	4	-22.2	86.7	-12.3	
Other Industry	52.9	7	13	16	18	9.0	12.6	-10.6	
Services	163.5	50	55	48	55	5.5	4.6	10.6	
Consumption	594.8	132	187	174	201	13.6	9.3	..	
Gross investment	103.4	11	25	38	35	22.1	22.9	..	
Exports of Goods & NFS	50.8	11	15	16	17	1.7	9.7	..	
Imports of Goods & NFS	374.7	54	121	125	133	24.1	10.8	..	
Gross national savings	28.7	..	15	5	7				
Gross National Product	623.5								
<u>GOVERNMENT FINANCE</u>									
		Central Government (1982/83)							
		(M Million)		% of GNP					
Current Receipts ²		143.9		21					
Current Expenditures		152.5		23					
Current Account Surplus/Deficit		-8.6		1					
Capital Expenditures		54.5		8					
Overall Deficit		-63.1		9					
<u>Financing of the Deficit</u>									
External Borrowing		44.1		7					
Internal Borrowing		19.0		3					
<u>MONEY CREDIT & PRICES</u>									
		1970	1975	1980	1981	1982			
		(Million Maloti, End of Period)							
Money and Quasi Money		.	.	117.1	144.9	185.4			
Bank Credit to Government (net)		.	.	22.8	51.1	65.4			
Bank Credit to the Private Sector ³		.	9.8	26.1	43.8	54.1			
<u>Percentage and Index Numbers</u>									
Money and Quasi Money as % of GDP				38	42	49			
Consumer Price Index (1975 = 100)			100	188.9	217.0	238.0			
<u>Annual percentage change in</u>									
Consumer Price Index ⁴			14.2	15.7	14.9	9.7			
Bank Credit to Government					124.1	28.0			
Bank Credit to Private Sector					67.8	23.5			

¹ GDP at factor cost
² Current receipts include grants of M 9.4 million
³ Includes parastatals
⁴ Maseru Urban Area

LESOTHO

TRADE PAYMENTS AND CAPITAL FLOW

BALANCE OF PAYMENTS

	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>MERCHANDISE EXPORTS 1982</u>		
					<u>US\$ Million</u>	<u>%</u>	
Exports of Goods & NFS	55.0	72.1	65.0	50.8	Diamond	14.2	36.6
Imports of Goods & NFS	327.3	430.4	480.4	425.7	Wool	3.9	10.1
Resource Gap	-272.3	-358.3	-415.4	-374.9	Mohair	2.6	6.7
Net Factor Services	204.9	255.2	266.2	252.8	Others	18.1	46.6
Net Transfers	48.8	63.8	58.6	52.9	Total	38.8	100.0
Balance of Current Account	-18.6	-39.3	-90.6	-69.2			

EXTERNAL DEBT, DECEMBER 31, 1982

					<u>US\$ Million</u>	
Official Grants	21.4	30.9	24.1	9.2	Public Debt Incl. guaranteed	138.6
Direct Foreign Investment	-	4.5	4.8	3.7	Non-guaranteed Private Debt	..
Net M< Borrowing	24.4	31.4	31.4	24.9	Total Outstanding & Disbursed	138.6
Disbursements	24.9	31.8	32.2	25.8		
Amortization	0.6	0.6	0.8	0.9		
Change in Reserves	0.6	0.6	-2.0	-10.0	<u>Debt Service Ratios for 1982</u>	
						<u>%</u>
<u>Memorandum Items</u>					Public Debt incl. guaranteed	14.8
Current A/C Balance % of GNP	4.2	7.6	15.1	10.2	Non-guaranteed Private Debt	..
					Total Outstanding & Disbursed	14.8

Rates of Exchange

	<u>US\$/Maloti</u>
1980	1.2854
1981	1.1490
1982	0.9228

IBRD/IDA Lending as of March 31, 1983 (US\$ Million)

	<u>IBRD</u>	<u>IDA</u>
Outstanding and Disbursed	-	50.6
Undisbursed	-	19.7
Outstanding Incl. Undisbursed	-	70.3

.. not available

May 1984

STATUS OF BANK GROUP OPERATIONS IN LESOTHO

A. STATEMENT OF IDA CREDITS
(as at March 31, 1984)

<u>Credit</u>	<u>Year</u>	<u>Borrower</u>	<u>Purpose</u>	Amount (less cancellations, reimbursed, terminations)	
				US\$ Million	
				<u>Credit</u>	<u>Undisbursed</u>
Six credits are fully disbursed				29.79	-
795-LSO	1978	Lesotho	Basic Agricultural Services	6.00	2.53
884-LSO	1979	Lesotho	Third Highway	9.00	4.39
887-LSO	1979	Lesotho	Water Supply	6.00	2.04
985-LSO	1980	Lesotho	Second LNDC	4.00	3.07
1036-LSO	1980	Lesotho	Urban Development	6.00	2.53
1148-LSO	1981	Lesotho	Third Education	<u>10.00</u>	<u>5.16</u>
Total				70.79	<u>19.72</u>
of which has been repaid				<u>0.48</u>	
Total now held by IDA				70.31	
of which undisbursed				<u>19.72</u>	

Note: The status of projects listed in Part A is described in a separate report on all IDA-financed projects in execution, which is updated twice yearly and circulated to the Executive Directors on April 30 and October 31.

B. STATEMENT OF IFC INVESTMENTS (as at March 31, 1984)

<u>Investment No.</u>	<u>Year</u>	<u>Type of Business</u>	<u>(US\$ Million)</u>		
			<u>Loan</u>	<u>Equity</u>	<u>Total</u>
405-LSO	1978	Lesotho Quality Aggregate (PTY) Ltd.	<u>299,000</u>	<u>31,000</u>	<u>330,000</u>
		Total Gross Commitments	299,000	31,000	330,000
		Less: Cancellations, terminations, repayments and sales			
		Total now held by IFC	299,000	31,000	330,000

KINGDOM OF LESOTHO
FOURTH HIGHWAY PROJECT
SUPPLEMENTARY PROJECT DATA SHEET

I. Timetable of Key Events

- (a) Time taken to prepare project: 2-1/2 years
- (b) Project prepared by: Government, assisted by consultants
- (c) Appraisal: September 1983
- (d) Negotiations: March 1984
- (e) Planned date of effectiveness: September 1984

II. Special IDA Implementation Action

PPF advance of US\$300,000 to finance detailed engineering and tender documents (para. 44).

III. Special Conditions

- (a) Government to budget M 4.4 million for road maintenance in financial year 1984/85 and to maintain allocation at this level in real terms in subsequent years (para. 44);
- (b) Annual regravelling and upgrading program to be agreed with IDA at least three months before the beginning of each financial year (para. 38).
- (c) Study of domestic construction industry to be carried out by December 31, 1985 (para. 40);

