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Report No. P-1640a-YAR

REPORT AND RECOMMENDATION

OF THE

PRESIDENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED CREDIT

TO THE

YEMEN ARAB REPUBLIC

FOR A

SECOND HIGHWAY PROJECT

June 2, 1975

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CURRENCY EQUIVALENTS

US\$1	=	YR 4.50 <u>1/</u>
YR 1	=	US\$0.22
YR 1,000	=	US\$222
YR 1,000,000	=	US\$222,222

Fiscal Year: July 1 to June 30

1/ No par value for the Yemen rial has yet been declared to the IMF. All exchange transactions are effected at the Central Bank rate which is based on the free market rate.

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS ON A
PROPOSED CREDIT TO THE YEMEN ARAB REPUBLIC
FOR A SECOND HIGHWAY PROJECT

1. I submit the following report and recommendation on a proposed development credit to the Yemen Arab Republic (YAR), for the equivalent of US\$9.0 million on standard IDA terms to help finance a second Highway Project. The Kuwait Fund for Arab Economic Development will participate in financing the project with a loan of US\$5.0 million at an interest rate of 1-1/2 percent per annum, for a period of 40 years, including 10 years' grace.

PART I - THE ECONOMY

2. A report entitled "Economic Development in the Yemen Arab Republic" (R73-161), dated June 18, 1973, was distributed to the Executive Directors on June 28, 1973. An economic mission visited YAR in September 1974 and its findings are reflected in the present report. A country data sheet is attached in Annex I.

3. The Republic was established in 1962, replacing the feudal rule of the Imamate, under which Yemen had remained almost completely isolated from the rest of the world. Lack of internal transport and communication facilities has contributed to the continuing isolation of many parts of the country. Since 1962, Yemen has suffered from a long civil war (1962-70) and a prolonged drought which resulted in the recurrence of widespread famine and near famine conditions. There were also several frontier clashes with the People's Democratic Republic of Yemen.

4. Political integration has been hindered by tribal differences. The end of the civil war left the tribal sheikhs in a stronger and more independent position than before. This fragmentation of power, combined with the insufficiency of institutions and of trained cadres at the central government level, has for many years hindered the government's ability to formulate national economic objectives and carry out a program of economic development. Although attempts have been made to reduce political differences through the formation of coalition governments, tribal differences remain a major factor affecting political stability.

5. Despite these problems, considerable progress has been made, since early 1970, in introducing basic elements of modern administration. With significant technical assistance provided by the IMF, the Bank and the Kuwait Fund, Yemen established a Central Bank in 1971, and a Central Budget Bureau and Central Planning Organization in 1972. For 1973/74, the Government produced its first formal budget. Moreover, a first Three-Year Development Program, covering the period of 1973/74-1975/76 was drafted, which defined the general long-term development strategy for YAR as well as medium-term development policies for the public sector. The project list contained in the Program is confined to public sector projects.

Development Objectives and Constraints

6. The long-term goals for economic development as expressed in the Three-Year Program emphasize (a) the development of agriculture to achieve self-sufficiency in food; (b) the expansion of the transport and communications infrastructure to improve economic and social integration; (c) education and manpower development to secure the needs of Yemen's future development efforts; and (d) institution-building at central and local government levels. For the Program period, public sector development expenditure of about YR 936 million (approx. US\$208 million) is envisaged; of this 31 percent has been allocated to transport and communications, 21 percent to education and manpower development, 15 percent to agriculture, and 10 percent each to industry and water supply.

7. Due to widespread shortage of administrative and technical skills and the scarcity of domestic development finance, the Development Program rests almost entirely on foreign technical and capital assistance. About 75 percent of the project financing is expected to come from foreign sources. However, since the planned contributions from the Government budget (19 percent) are themselves mostly financed by external sources, the foreign share in total financing is much greater.

8. Yemen is among the ten least developed countries in the world. Over 80 percent of its estimated 6.3 million people are engaged in agriculture producing predominantly for their subsistence. Literacy is exceptionally low, estimated at about 10 percent of the population. However, Yemen's population has some outstanding traditional skills, especially in land cultivation practices and in house construction. Although there are only about half a million Yemenis living in urban areas, a pattern of urban migration is beginning to develop as is migration abroad, notably to Saudi Arabia. Yemen's cities still lack basic public services. Neither the capital, Sana'a, nor the port city, Hodeidah, has municipal water supply systems, and electric power supply is inadequate and unreliable. While progress has been made in building a basic road network and other transport facilities, Yemen remains extremely under-developed in virtually every other form of economic and social infrastructure, and in its institutional and manpower base.

9. Another basic constraint to development is the country's narrow resource base. In agriculture, which accounts for about two-thirds of GDP and for virtually all of the meagre exports (notably cotton, coffee, and hides and skins), development is seriously constrained by physical limitations, particularly the erratic nature of rainfall and the uncertainty of additional groundwater supplies. Food grains (sorghum, millet, barley and wheat) for local consumption are the principal crops; only modest quantities of cash crops (cotton, coffee, qat) are produced. Agriculture is predominantly devoted to rainfall-dependent grain production, and as a result of the prolonged drought conditions, it has been meeting a decreasing share of domestic needs. Thus, food imports, in part provided through emerging relief operations, grew

dramatically from US\$23 million in 1970 to almost US\$64 million in 1973, constituting about half of total recorded imports.

10. Yemen has little known mineral resources. Only rock salt has been exploited so far. Unlike most countries of the Arabian Peninsula, Yemen has no known oil resources, but exploration is currently under way. Due to the scarcity of natural resources, but also because of the small domestic market, industry was virtually non-existent until the late 1970's. Since then a number of medium-sized, import-substitution plants have been established, mostly with bilateral assistance. They include a textile mill, a cement factory, a cigarette factory and other plants producing light consumer manufactures and construction materials. Their overall production, however, still represents less than 6 percent of GDP.

Recent Developments

11. Economic developments in recent years have remained overshadowed by the drought-inflicted poor performance of the agricultural sector. Despite the rapid expansion, from extremely low levels, of private and public services and of industrial activities, GDP at constant prices probably grew at less than 4 percent a year during 1970-1973, as agriculture remained stagnant. The growth of non-agricultural activities was stimulated by sizeable inflows of capital and skills from abroad provided by both displaced and returning Yemenis (mainly from Ethiopia) and large injections of foreign aid in support of current and capital expenditure. Moreover, urban growth has been supported by large private remittances from possibly over half a million Yemenis working abroad; the workers' remittances were estimated at approximately US\$100 million in 1973.

12. The large inflow of remittances from Yemenis abroad and the foreign cash loans and grants to the government (US\$28 million in 1973/74), which were partly used to finance current budget expenditures, contributed to raising foreign assets and to increasing inflationary pressure on domestic resources. Consumer prices in YAR are estimated to have increased by over 30 percent in 1973 (over 40 percent in Sana'a), and by probably 25 percent in 1974. Higher prices for imported commodities also contributed to domestic price increases. With respect to the recent sharp rises in international oil prices it appears, however, that YAR has, for the time being, been only moderately affected, as other oil-rich Arab States extended to Yemen special price and supply arrangements, including the delivery of petroleum products free of charge.

13. Yemen's budgetary situation is extremely weak and vulnerable because of the small tax base and the increasing dependence on foreign aid in financing even current expenditure. Current revenues, based largely on customs duties, amounted to only 73 percent of current expenditure in 1972/73 and to 85 percent in 1973/74. The current deficit was reduced to YR 50 million in 1973/74 (from YR 73 million in the previous year), but mainly as a result of substantial salary increases following the change in government in mid-1974, the current budgetary deficit for 1974/75 is estimated to increase to

YR 81 million, equivalent to one-fifth of budgeted current expenditure. Foreign budgetary support (mainly from Saudi Arabia) was equivalent to about one-third of current expenditure in 1973/74 (22 percent in 1972/73), while development expenditure continued to be financed almost entirely from foreign aid. Foreign project and commodity aid averaged about YR 80 million (US\$18 million) during 1971/72-1973/74.

Reserves and External Debt

14. The gross foreign exchange reserves of the Central Bank increased substantially in recent years, reaching about US\$153 million as of June 30, 1974. Of this amount, only US\$83 million represented free reserves, the balance being mainly blocked accounts with the Central Bank of Egypt. The free reserves were equivalent to about six months of estimated imports of goods at the 1973 level. On March 31, 1975, total gross reserves were approximately US\$222 million.

15. The external public debt outstanding on June 30, 1974 was estimated at US\$339 million, of which US\$138 million was undisbursed. The major creditors were: USSR, the People's Republic of China, the Federal Republic of Germany, Saudi Arabia, the Kuwait Fund and more recently, the Association. Debt contracted with IDA accounted for US\$48.2 million or about 14 percent of the total reported debt. The USSR, and the People's Republic of China have provided interest-free loans. Loans from Germany and the Kuwait Fund have been at interest rates between 1.0 to 2.5 percent per year; other lenders of relatively small significance in YAR's debt structure, have charged 4-6 percent per annum. The debt service for 1974 was estimated at US\$12 million, equivalent to about 10 percent total exports of goods and services, including workers' remittances, in 1973/74. The available data indicate a sharply rising trend in debt servicing obligations, estimated to reach US\$20 million in 1975 and US\$23 million in 1976. Yemen has a very limited debt service capacity. As a least-developed country with an already high debt burden, but with scope for improved economic performance, Yemen has a strong case for obtaining assistance in as concessionary a form as possible.

PART II - BANK GROUP OPERATIONS

16. The proposed credit would be the seventh to YAR, bringing total IDA commitments to about US\$57.2 million. Annex II contains a summary statement of IDA credits and Bank grants and notes on the execution of on-going projects, as of April 30, 1975.

17. The major focus of Bank Group activity has been to develop the essential prerequisites for development: the basic institutions, skills and physical infrastructure, and to begin lending in the dominant productive sector--agriculture. In 1971, the Bank made a grant of US\$200,000 to help finance, jointly with the Kuwait Fund for Economic Development, a team of

planning and economic advisors; in September 1973 a second Bank grant of US\$200,000 to make possible the continuation and expansion of the planning team services, was approved. The Government has recently asked the Bank and the Kuwait Fund for Economic Development to extend this technical assistance and to expand it into the field of public administration. This request is being considered and a mission visited Yemen in early March to review the public administration system in the country. The Bank is also providing technical assistance for institution building to the Ministry of Agriculture through the presence of four advisors, financed by UNDP with the Bank serving as Executing Agency.

18. In June 1972, IDA extended a Credit of US\$7.7 million equivalent for a first Highway Project. The project has helped create a national Highway Authority, provided equipment for road maintenance and feeder road construction, and financed feasibility studies and detailed designs of important highway links. An important secondary road from Taiz to Turba will also be constructed under the project. In May 1973, the Association made a US\$10.9 million Credit for the Tihama Agricultural Development Project which will help finance the development of surface and groundwater irrigation works at Wadi Zabid in the Tihama (coastal) region, the establishment of a Tihama Development Authority and institutions for agricultural credit, extension and research, training and a major soils and groundwater survey of the Wadi Mawr region. The project is proceeding satisfactorily. The Kuwait Fund is financing \$6.0 million of project costs. A US\$11.0 million Credit for an Education Project was approved in July 1973. The project is an integrated program of assistance with the UNDP (UNESCO, FAO, ILO), Federal Republic of Germany and United Arab Emirates, and will help meet the most immediate needs of the educational system. It will concentrate on improving and expanding teacher training and secondary school education and establish the country's first vocational and agricultural training institutions and non-formal basic education centers. A US\$2.3 million Credit for an Industrial Estate Project was approved on January 29, 1974. This project is designed to help stimulate investment in modern small-scale industry and provide a model and pattern for future industrial development. On the same date a US\$6.25 million Credit for the Sana'a Water Supply Project was approved. This project will provide Sana'a with its first adequate public water supply system. It will also help in creating a competent national organization to administer the country's water and sewerage systems. A credit of US\$10.0 million for the Southern Uplands Rural Development Project was approved on May 6, 1975.

19. Future Bank Group activity will concentrate on reinforcing the institutional progress made in the essential sectors of transportation, agriculture and public utilities; and continue to help devise an appropriate development strategy and investment program including special project identification and preparation work. Negotiations on a US\$8.1 million Credit for a Hodeida Water Supply and Sewerage Project have been completed and the credit documents are expected to be submitted to the Executive Directors for consideration in June 1975. Port development, education and agricultural credit

projects are still in the planning stage. The Bank Group's lending strategy recognizes that Yemen is among the poorest of the 25 least-developed countries and thus requires special assistance, which justifies IDA financing of a high percentage of project costs, including local expenditures.

PART III - THE TRANSPORT SECTOR AND THE HIGHWAY SUBSECTOR

The Transport Sector

The Transport System

20. Until the late 1950's, modern transport infrastructure was almost completely lacking in Yemen. Only primitive tracks, suitable for four-wheel drive vehicles and animal transport, connected major towns and there were no rail facilities or internal air service. Port facilities were limited to the ancient port of Mocha, suitable only for lighterage. In 1957 the elements of a modern transport system began to be created, initially with bilateral assistance and later with the help of IDA. A new port at Hodeida, financed by the Union of Soviet Socialist Republics (USSR), was completed in 1960; an international airport was built in Sana'a with the aid of the Federal Republic of Germany (FRG).

The Highway Network

21. While the highway network, totalling about 3,670 km, is not officially classified into types of roads, 1,370 km are considered to be main roads, and about 2,300 km secondary and feeder roads. About 930 km of roads are paved, and a further 200 km are under construction to paved standards. Gravel and earth roads total 1,460 km and unimproved tracks about 1,080 km. The latter are generally old trails adapted to motor traffic by minor improvement of the more difficult sections.

22. Highway development began in 1967. Bitumen-surfaced roads from Hodeida to Sana'a and to the other main city, Taiz, and a gravel road from Sana'a through Taiz to Mocha, were constructed between 1957 and 1975, with assistance from the People's Republic of China (PRC), the USSR, and the United States Agency for International Development (USAID). The FRG is now financing the paving of the Sana'a-Taiz road, while IDA is assisting highway development under Credit 315-YAR (see para 23). Construction and improvement of feeder roads is proceeding concurrently, under schemes initiated and financed by local authorities and cooperatives, with the assistance of the World Food Program (WFP) and within various agricultural projects.

Previous IDA Lending in the Transport Sector

23. The Association is financing under Credit 315-YAR of June 26, 1972, a project which includes the construction of the Taiz-Turba road; feasibility

studies and detailed engineering of other priority roads; the purchase of equipment for the Highway Authority (HA); and technical assistance and staff training for HA. The estimated cost of this project, which was the first Bank Group operation in Yemen after it became a member in May 1970, was \$8.6 million, of which the IDA Credit financed US\$7.7 million. After serious initial delays because the bids for road construction received from qualified contractors were considered to be unreasonably high, it was agreed that HA would carry out the construction of this road by force account. Implementation began in March 1975 (see Annex II).

Transport Policy, Planning and Coordination

24. Yemen is still in an early stage of development. Although remarkable progress has been made in the last decade, Yemen has not yet been able to prepare a comprehensive economic development plan, and has only limited capacity to identify and to prepare investment projects and to evaluate their economic and financial viability. No overall transport planning exists, either in the Central Planning Organization (CPO), the unit within the Ministry of Development which is responsible for national economic planning, or in the ministries concerned. Transport investments have been made on a project by project basis, with the principal determining factor in their selection being the availability of foreign aid for particular projects.

Highway Planning and Administration

25. Two ministries are responsible for the highway network: the Ministry of Development (MD) and the Ministry of Public Works (MPW). The formulation of policies and the financing of highway development is the responsibility of MD, within which highway planning is carried out by CPO; MPW is responsible for project implementation and highway administration. The executing agency for all highway matters is the Highway Authority (HA), an autonomous agency established by Presidential Council Decree in November 1972, whose responsibilities include detailed planning, design, construction, maintenance, contract supervision, and execution of works for local authorities and other entities (on a contractual basis). HA was initially under the auspices of the MD, but was transferred to MPW in April 1975. It is controlled by a Board of Directors, which approves its budget, formulates its policies and supervises their implementation. It has about 800 permanent staff members, with headquarters in Sana'a and operating sub-divisions in Sana'a, Taiz and Hodeida. HA has its own capital, its main assets being road equipment and buildings taken over from the General Corporation for Construction and Development (GCCD), which previously carried out highway works as well as constructing public buildings. HA has insufficient highway and mechanical engineers, but technical assistance provided under the first credit, and proposed under the second, is contributing to strengthening it in this area. For adequate staffing it will require greater financial support from Government (see para. 29 below).

26. The turnover of HA personnel is high, due to relatively low salaries compared with those available elsewhere in the area. This situation applies particularly to technicians, skilled mechanics and equipment operators. The problem is a general one, related to Yemen's present economic and manpower conditions. Some on-the-job training has been provided under highway projects, including the first credit, and since 1971 UNDP has been conducting a vocational training program for mechanics and equipment operators in Taiz. The proposed credit would also provide on-the-job training.

Highway Program

27. In 1971, the Swedish Consulting Group (SWECO) carried out an Investment Feasibility Study financed by UNDP, with the Bank acting as Executing Agency. SWECO proposed a program of highway investment for 1972-79 totalling about 1,400 km. Although this investment program was prepared using limited traffic data and a summary economic analysis, it provided a sufficient basis to determine priorities. The Government has a fairly large program of paved roads construction, consisting of about 960 km of main and secondary roads, which includes about 70 percent of the roads proposed in the study. Specific feasibility studies and detailed engineering for some of these roads were carried out under the first IDA credit, including the road to be financed under the second credit. Other studies have been carried out under UNDP projects and various bilateral aid programs.

Financing of Program

28. Major highway construction has been financed mainly by bilateral assistance and, to a smaller extent, by the Association. Most of the feasibility studies and detailed engineering, training, technical assistance and equipment have been financed by UNDP and the Association. The Government's development budgets are intended to cover part of the local costs of IDA and UNDP projects, and some project preparation studies. The construction of feeder roads is financed mainly by local authorities and cooperatives, with the help of the World Food Program (WFP). In 1970/71, a WFP project contributed food commodities estimated at US\$0.6 million for the construction of about 300 km of feeder roads: An expansion of this project for five years has been requested by the Government and is being considered by WFP. Financing for the construction of some feeder roads is also included in both IDA credits for the Tihama Development project and the Southern Uplands Rural Development project.

Financing of Highway Authority

29. Due to financial constraints, budgetary allocations for HA have so far been below the amounts required for the effective operation in highway administration and road maintenance, particularly as the financial uncertainties make it difficult to set up a sound basic staff structure and work program. To maintain a viable basic organization, HA has been undertaking works for local authorities (such as street construction) by contract. It was agreed that, the Government will: (i) ensure adequate financing for HA to cover the cost of its operations, that is, highway administration, road

maintenance and road improvement works ordered by the Government (Section 4.04, draft Development Credit Agreement); (ii) prepare within eight months of credit effectiveness, for discussion with the Association, a work program for HA for a period of not less than three years; and (iii) arrange for consultations with the Association each year on the annual work program of HA, prior to the preparation of its annual budget, and take appropriate measures to implement each such program (Section 4.03, draft Development Credit Agreement).

Statistics

30. No regular traffic counts have been taken in Yemen, although some counts have been made for individual road projects. With the aid of technical assistance under the first credit, to be continued under the second, a traffic counting program has started on all major roads and on roads in the Government's proposed feeder road construction program.

Legislation

31. At present, few regulations govern highway traffic. Registration of vehicles and licensing of drivers are required, but are poorly organized. There is no legislation controlling vehicle weights or dimensions, nor have design standards for roads yet been formally adopted: standards have been established on a project-by-project basis. Recommended legislation to meet these needs was prepared by the technical assistance team under the first credit. Assistance with the implementation of these measures would be continued under the proposed credit. It was agreed that the Government will, within 12 months of credit effectiveness, establish general highway design standards which are satisfactory to the Association (Section 4.02, draft Development Credit Agreement).

Engineering and Contracting

32. There are currently two consulting firms employed on detailed highway engineering: SWECO on the Sana'a-Marib road (financed by the Abu Dhabi Fund for Arab and Economic Development), and Ingeroute-Gibb on the Rada'a-Al Beida Road (financed by the Government). Most domestic contractors have had little experience in road construction, other than works of a minor nature. Local firms did, however, work on Taiz airport and one is currently constructing feeder roads under the IDA financed Tihama Development project. Some bigger contractors are interested in highway projects. Two local firms bid on the Taiz-Turba road in 1973, but their bids were rejected on grounds of lack of experience, and insufficiency of equipment and qualified personnel. The Government is aware of the need for greater involvement of domestic contractors in highway construction and has requested the Association to include the 7.5 percent bidding preference for domestic contractors applicable to Yemen in procurement arrangements for road construction under the proposed credit. During negotiations, different ways and means were discussed as to how to increase the participation of domestic contractors in roadworks, particularly in the construction of feeder roads and municipal streets.

Maintenance and Training

33. Mostly due to lack of sufficient funds (see para. 29 above), highway maintenance is inadequate, sporadic and unplanned: maintenance is restricted mostly to urgent repair works. HA has the potential in personnel and equipment to set up an adequate road maintenance organization, provided the necessary funds are allocated. The technical assistance team under the first credit is formulating routine and periodic maintenance programs, including related costs. Technical assistance would be provided under the proposed credit to help implement such programs. The Government has increased the road maintenance budget from Rls 1.0 million in 1974/75 to Rls 7.0 million each in the years 1975/76 and 1976/77. This large increase in allocation would improve road maintenance substantially.

PART IV - THE PROJECT

Project History

34. The project would be a follow-up to the First Highway Project with respect to both road construction and technical assistance. Of the two roads for which detailed engineering was carried out under the first credit, Taiz-km 64 and Damar-Rada'a, the Taiz-km 64 has higher priority and provision for its construction is included in the project. The project was appraised in November/December 1974. Negotiations were held in Washington from May 15 to 16, 1975. The Yemen delegation was headed by Mr. Al-Kurshumi, Minister of Public Works, and included Messrs. Hamadani, Kassim, Galandar and Al-Kibssi.

Project Description

35. The project is summarized in Annex III and described in detail in the Appraisal Report entitled "Appraisal of a Second Highway Project, Yemen Arab Republic" (No. 771-YAR), dated June 3, 1975, which is being distributed separately to the Executive Directors. It consists of:

- (i) construction (with supervision) of the Taiz-km 64 road (63 km) to primary bitumen-surfaced standards; and
- (ii) continuation of technical assistance to HA to increase efficiency and effectiveness in highway planning, construction, maintenance and administration, for a period of two years.

The project road is the only unpaved section (apart from the Km-64-Mocha extension) of Yemen's main rectangular road grid (see map), which connects the capital (Sana'a), the main ports (Hodeida and Mocha) and the other main towns (Taiz). Km-64 is the junction where the road from Taiz meets the road joining Hodeida and Mocha. Thus the Taiz-km 64 road connects Taiz to Hodeida and to Mocha, as well as being the shortest route from Sana'a to Mocha. It crosses mountainous country, is currently of poor alignment, and its gravel surface is in poor condition.

Project Cost and Financing

36. The total project cost, including contingencies, is estimated at US\$15.7 million, with a foreign exchange component of US\$9.8 million, or 62 percent. The proposed credit of US\$9.0 million would cover about 92 percent of the foreign exchange costs of the project. The Kuwait Fund for Arab Economic Development will participate in financing the project with US\$5.0 million at an interest rate of 1-1/2 percent per annum, for a period of 40 years, including 10 years' grace. The Government would provide the balance of US\$1.7 million. Details of costs and financing are shown in Annex III.

Project Execution

Responsibility

37. HA, assisted by consultants, will be responsible for executing the project. The Government will negotiate a contract for supervision of construction with the consultants Ingeroute/Gibb, who were responsible for the road design under the first credit. The consultants will be employed on terms and conditions satisfactory to the Association (Section 3.02, draft Development Credit Agreement).

38. There will be little need for land acquisition in this project, because the new road will follow, to a great extent, the existing road alignment. The Government has an established policy and procedure for land expropriation for highway projects and no problems are expected in respect of timely availability of the land required for construction.

Technical Assistance

39. The technical assistance to HA would be a continuation of that provided under the first credit. Negotiations with Kampsax/Louis Berger Int. (Denmark/US) are underway to provide these services. The consultants would provide a five-man team, composed of three highway engineers, a mechanical engineer, and an administrative and accounts expert. Other experts would be available on a short-term basis, if and when required. Funds are still available under the first credit for about six months' services of the technical assistance team. The project includes continuation of technical assistance for about two more years, totalling about 120 man-months. The consultants would advise and assist HA in planning, programming and budgeting road construction and maintenance, design standards, data collection, traffic regulations, administration and accounting, organization and quality control of works, administration of contracts, workshops procedures and staff training. This technical assistance would continue to provide and to foster essential expertise in HA, to enable it better to serve the country's vital transport needs.

Construction Method and Schedule

40. The method of road construction would be generally capital intensive. Since there is relatively little unemployment in Yemen due to the labor migration to neighboring countries, labor intensive construction methods were not considered. However, drainage structures and protection works against erosion are designed for extensive use of masonry. Subcontracts of masonry works are expected to be made with local contractors.

Procurement and Disbursements

41. Contracts for road construction would be awarded after international competitive bidding according to World Bank Guidelines for Procurement. Bids were received on May 10, 1975. Although the contract has not yet been awarded, a preliminary analysis of bids has shown that the most advantageous bid is the one received from Trapp/Heit Kamp/Tarmac (joint venture, Federal Republic of Germany/United Kingdom). This firm had recently completed construction of the Sana'a-Taiz road and can start the works within one month and complete within 10 months thereafter.

42. Disbursements from the credit account would be on the basis of 100 percent of the foreign exchange costs of consulting services for technical assistance and supervision of works, and 54 percent of the cost of road construction. An estimated Schedule of Disbursements is given in Annex III.

Economic Justification

43. The relationship of the Taiz-km 64 road link to the remainder of Yemen's road network is described in para. 35 above. Construction to adequate standards of the project road would result in lower transport costs, principally between Taiz and Hodeida, Taiz and Mocha, and Sana'a and Mocha, including savings in fuel, vehicle depreciation, and a saving in time for freight and passenger movement. The road would not divert traffic from other routes, since the existing route is already the "least cost" solution for the area it serves. The savings in vehicle operating cost are estimated to range from about 30 percent to 40 percent according to vehicle type. The economic return on the investment in this proposed road construction is estimated at about 14 percent.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

44. The draft Development Credit Agreement between the Yemen Arab Republic and the Association, the Recommendation of the Committee provided for in Article V, Section 1(d) of the Articles of Agreements and the text of the resolutions approving the proposed development credit are being distributed to the Executive Directors separately.

45. Features of the Development Credit Agreement of special interest are referred to in paragraphs 29 and 31 of this report.

46. Section 6.01 of the draft Development Credit Agreement provides for an additional condition of effectiveness, namely the signing of Kuwait Fund Loan Agreement by the Borrower and the Kuwait Fund for Arab Economic Development.

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

PART VI - RECOMMENDATION

48. I recommend that the Executive Directors approve the proposed development credit.

Robert S. McNamara
President

Attachments
June 2, 1975
Washington, D.C.

COUNTRY DATA - YEMEN ARAB REPUBLIC

<u>AREA</u>	<u>POPULATION</u>	<u>DENSITY</u>
Roughly 190,000 sq km	About 6.3 million (1974 est.)	Roughly 30 per sq km
	Rate of growth: 2.3 % (1960-70)	

POPULATION CHARACTERISTICS

Crude birth rate : 49 per 1,000 (est.)
 Infant mortality : 160 per 1,000 live births (est.)
 Life expectancy : About 40-45 years (est.)

HEALTH

Population per physician: 26,000
(1974)
 Population per hospital
 bed (1974) : 1,600
 Widespread endemic and epidemic
 diseases, particularly water-borne
 diseases (bilharzia, worm diseases)

NUTRITION

Widespread malnutrition and
 protein deficiency, especially
 among children

EDUCATION

Literacy rate : roughly 10 percent
 Primary school enrollment : 182,000 (1973/74)
 Secondary school enrollment : 13,000 (1973/74)

GNP PER CAPITA IN 1972 : \$90^{1/}

<u>OUTPUT AND LABOR FORCE (1973 est.)</u>	<u>GDP in US\$ Million</u>	<u>GDP Percent</u>	<u>Percent of Labor Force</u>
Agriculture	488	68	80-85
Industry	47	6	About 1
Services	187	26	14-19
TOTAL	722	100	100

<u>GOVERNMENT FINANCE (YR Million)</u>	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75 ^{2/}</u>
Current revenue	98	151	199	274	339
Current expenditure	171	228	272	324	419
Current balance	-73	-77	-73	-50	-81
Development expenditure ^{3/}	83	56	57	139	344
Overall balance	-156	-133	-130	-189	-425
Domestic financing	37	-38	13	-32	n.a.
External Financing	119	171	117	250	n.a.
Commodity and project loans	(83)	(56)	(57)	(126)	(n.a.)
Cash loans	(36)	(59)	(1)	(15)	(n.a.)
Cash grants	(n.a.)	(56)	(59)	(109)	(n.a.)
Discrepancy	-	-	-	29	-

^{1/} World Bank Atlas, 1974

^{2/} Budget estimate

^{3/} Equivalent to foreign project and commodity aid

MONEY AND CREDIT (YR Million, end of period)

	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>June 1973</u>	<u>June 1974</u>
Money supply	276.9	402.3	531.8	471.3	612.0
Quasi money	35.7	80.6	105.1	113.6	117.5
Credit to private sector	70.0	119.8	169.5	168.6	230.1
Net claims on Government	110.1	115.9	135.2	116.2	84.2

BALANCE OF PAYMENTS (US\$ Million)

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>July 1973/ June 1974</u>
Exports	7.0	7.7	7.6	8.9	13.7
Imports	-106.1	-86.5	-113.2	-156.0	-193.1
Balance of trade	-99.1	-78.8	-105.6	-147.9	-179.4
Services and workers' remittances (net)	54.0	56.4	89.5	109.1	130.1
Commodity and cash grants	21.2	6.8	20.8	23.4	30.7
Balance in current account	-23.9	-15.6	4.7	-16.4	-18.6
Non-monetary capital ^{1/}	35.0	35.4	24.8	31.7	44.9
Increase in reserves	12.0	19.8	29.5	17.0	26.3
of which with Central Bank of Yemen	(7.4)	(17.3)	(22.2)	(16.9)	(33.7)

Total Reserves (March 31, 1975) US\$222 Million

MERCHANDISE EXPORTS (recorded for 1969-73)^{2/}

	<u>Average US\$ Million</u>	<u>Percent</u>
Cotton	1.3	30
Coffee	1.3	30
Hides and skins	0.6	14
Qat	0.4	9
Others	0.8	17
TOTAL	4.4	100

EXTERNAL DEBT, June 30, 1974

US\$ Million

External public debt outstanding	338.8
of which : disbursed	200.7
Debt service payments 1974	12.2
Ratio of debt service to 1973/74 exports of goods and services, including remittances	8 percent

^{1/} Includes SDR allocations and errors and omissions

^{2/} Only an estimated 50-60 percent of total export is recorded

<u>RATE OF EXCHANGE</u> ^{1/}	<u>IBRD/IDA LENDING</u> ^{2/} (as of April 30, 1975)	<u>US\$ Million</u>	
Through February 1973		<u>IBRD</u>	<u>IDA</u>
US\$1 = YR 5	Outstanding and disbursed	-	4.3
YR 1 = US\$0.20	Undisbursed	-	33.9
	Outstanding incl. undisbursed	-	38.2
		==	==
Since February 1973			
US\$1 = YR 4.50			
YR 1 = US\$0.22			

EMENA
June 2, 1975

1/ No par value for the Yemen rial has yet been declared to the IMF. All exchange transactions are effected at the Central Bank rate which is based on the free market rate.

2/ A Credit of US\$10.0 million (Cr. 545) for the Southern Uplands project, was signed on May 13, 1975.

THE STATUS OF BANK GROUP OPERATIONS IN THE YEMEN ARAB REPUBLIC

A. Statement of IDA Credits
(As of April 30, 1975 - US\$ Million)

<u>Credit Number</u>	<u>Year</u>	<u>Borrower</u>	<u>Purpose</u>	<u>Amount (less cancellations)</u>	
				<u>IDA</u>	<u>Undisbursed</u>
315	1972	Yemen Arab Republic	Highways	7.7	6.1
376	1973	Yemen Arab Republic	Tihama Agri- culture	10.9	8.5
421	1973	Yemen Arab Republic	Education	11.0	10.9
464	1974	Yemen Arab Republic	Water Supply	6.3	6.1
465	1974	Yemen Arab Republic	Industrial Estate	2.3	2.3
Total				38.2	33.9
Of which has been repaid				-	-
Total now held by IDA				38.2	
Total undisbursed					<u>33.9</u>

B. Statement of IFC Investments
(As of April 30, 1975)

IFC has made no investments in YAR.

C. Other Bank Group Activities

A Bank grant of US\$200,000 equivalent was approved by the Executive Directors in July 1971, to help finance, jointly with the Kuwait Fund for Arab Economic Development, a team of planning and economic advisors. The team of five advisors has helped establish the Central Planning Organization (CPO) which is responsible for preparing a development program, devising general economic policies, identifying and preparing investments projects, and coordinating external aid. The CPO is perhaps the most dynamic and active public sector organization in Yemen. The Executive Directors approved on September 11, 1973 a Bank grant of US\$200,000 equivalent to make possible the continuation of the planning team. The Government has recently requested the Kuwait Fund for Economic Development and the Bank to expand their joint on-going technical assistance into the field of public administration. This request is being considered and a mission visited Yemen in early March to review the public administration system in the country.

Note: A credit of US\$10.0 million (Cr. 545) for the Southern Uplands Project was signed on May 13, 1975.

D. Projects in Execution 1/

Cr. No. 315-YAR - Highway; US\$7.7 million Credit of June 26, 1972; Closing Date: June 30, 1976.

The Yemen Government established a Highway Authority in November 1972, appointed as its Director a competent and experienced civil engineer and appointed three engineering firms for consulting services: technical assistance, feasibility studies and supervision of construction. The feasibility studies have been completed, as well as the detailed engineering, including bidding documents of the two selected roads. After satisfactorily completing phase I technical assistance services (data collection, recommendation on reorganization and work program) the working relations between the Highway Authority and the consultants gradually deteriorated and the contract was terminated in July 1974, on mutual agreement. Negotiations for engagement of new consultants are in progress. Construction of the Taiz-Turba road has been delayed, because of the six bids received, four foreign bids were for amounts more than double the appraisal estimate, and in excess of the construction costs current at the time of bidding, while two domestic bidders, offering acceptable prices, were found lacking required experience, staff and equipment. All bids were rejected and the Government and Association agreed that the road be constructed by the Highway Authority under supervision of the consultants. The Highway Authority acquired necessary equipment under the Government advance payment, and is employing foreign managerial and technical staff to assist in this construction. The work started in March 1975, and is scheduled to be completed in two years. The road maintenance and construction equipment, engineering equipment and spare parts have been ordered, and delivery is expected to be completed in 1975.

Cr. No. 376-YAR - Tihama Agriculture; US\$10.9 million Credit of May 2, 1973; Closing Date: June 30, 1978.

The Development Credit was declared effective on September 4, 1973. The Tihama Development Authority, responsible for project execution, was set up and two advisors (technical and financial) were appointed by end of 1973. Project consultants, appointed since April 1973, have completed designs of four preliminary works contracts, of which three have already been awarded to local contractors. Engineering designs and contract documents for the first of the two main civil works contracts were recently completed, reviewed and issued in May 1975 to international contractors; documents for the second are due for issue by December 1975. The Agricultural Credit Fund was legally established towards end of 1974. The Credit Manager and the Field Manager

1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project executions.

for the ACF have been appointed and work is progressing satisfactorily. A cost overrun of about US\$17 million or 100 percent over the estimated cost at the time of appraisal, is envisaged. A Re-Appraisal Mission will be in the field in July 1975.

CR. No. 421-YAR - Education Project; US\$11 million Credit of July 19, 1973; Closing Date: December 31, 1978.

The Development Credit was declared effective on April 10, 1974. The Government has appointed the five expatriate members of the Project Unit, which is performing satisfactorily. Several members of the UNDP financed Task Force are also in the field. Procurement of equipment and books for the nine existing schools is underway. The Consultant Architects for the project have been appointed and sites for the project institutions have also been selected. In April 1975 a Bank mission visited Sana'a to review the special studies prepared by the Task Force on non-formal and secondary education.

CR. No. 464-YAR - Water Supply Project: US\$6.25 million Credit of March 4, 1974; Closing Date: June 30, 1978

The Development Credit was declared effective on July 15, 1974. Tenders for the principal contracts were opened mid-January and are being evaluated by the consultant and the National Water and Sewerage Authority (NWSA). Award of contracts is expected to be made in May 1975. Good progress has been made in recruiting staff for the newly-established NWSA and for operating the existing Sana'a water facilities. Project implementation has been delayed by several months, following delays in preparation of final design and tender documents. The Government has decided to meet the cost overruns of about \$3.5 million for this project from its own resources.

Cr. No. 465-YAR - Industrial Estate Project; US\$2.3 million Credit of March 4, 1974; Closing Date: December 31, 1980.

The Development Credit was declared effective on November 27, 1974. The Advisor to the Director General has been appointed and is now in the field. The Industrial Engineer has been also appointed and will arrive in Yemen in June 1975. The project implementation is progressing satisfactorily. The Director General has returned to Yemen after completion of a very useful training program. The consulting engineers are in the process of preparing a detailed masterplan, the project designs and the tender documents. They will also supervise the construction. The project is proceeding on schedule.

Cr. No. 545-YAR - Southern Uplands Rural Development Project; US\$10.0 million Credit of May 13, 1975; Closing Date: March 31, 1982.

The Development Credit was approved on May 6, 1975 and signed on May 13, 1975.

WFL:GNA
June 2, 1977

YEMEN ARAB REPUBLIC - SECOND HIGHWAY PROJECT

Development Credit and Project Summary

Borrower: Yemen Arab Republic.

Amount: US\$9 million equivalent.

Terms: Standard.

Project Description: The proposed project would comprise:

- (a) construction with supervision of the Taiz-km 64 (63 km) road to primary standards; and
- (b) continuation of technical assistance to the Highway Authority for a period of two years, to increase efficiency and effectiveness in highway planning, construction, maintenance and administration.

<u>Estimated Cost:</u>	US\$'000			Foreign Exchange Component %
	<u>Local</u>	<u>Foreign</u>	<u>Total</u>	
I - Construction of Taiz-km 64 road	4,643	6,822	11,465	60
II - Supervision of Construction	98	392	490	80
III - Technical Assistance	168	672	840	80
Total Base Cost	4,909	7,886	12,795	62
IV - Contingencies:				
Price	471	1,007	1,478	68
Quantity	537	890	1,427	62
Total Project Cost Estimate	<u>5,917</u>	<u>9,783</u>	<u>15,700</u>	62

<u>Financing Plan:</u>	US\$ '000		
	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
IDA	-	9,000	9,000
Kuwait Fund	4,217	0.783	5,000
Government	1,700	-	1,700
Total	<u>5,917</u>	<u>9,783</u>	<u>15,700</u>

<u>Estimated</u> <u>Disbursements:</u>	<u>FY</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>Total</u>
			(US\$ millions)		
		6.600	1.800	0.600	9.000
	<u>Cumulative</u>	6.600	8.400	9.000	9.000

Procurement

Arrangements:

Contracts for road construction would be awarded after international competitive bidding according to World Bank Guidelines for Procurement. Bids were received on May 10, 1975. A preliminary analysis of bids has shown that the most advantageous bid is the one received from Trapp/Heit Kamp/Tarmac (joint venture, Federal Republic of Germany/United Kingdom). This firm had recently completed construction of the Sana'a-Taiz road and can start the works within one month and complete within 10 months thereafter.

Consultants:

Two years of technical assistance totalling about 120 man-months to the HA to increase efficiency and effectiveness in highway planning, construction, maintenance and administration.

Economic Rate of

Return:

14 percent

Estimated Completion

Date:

June 30, 1978

Appraisal Report:

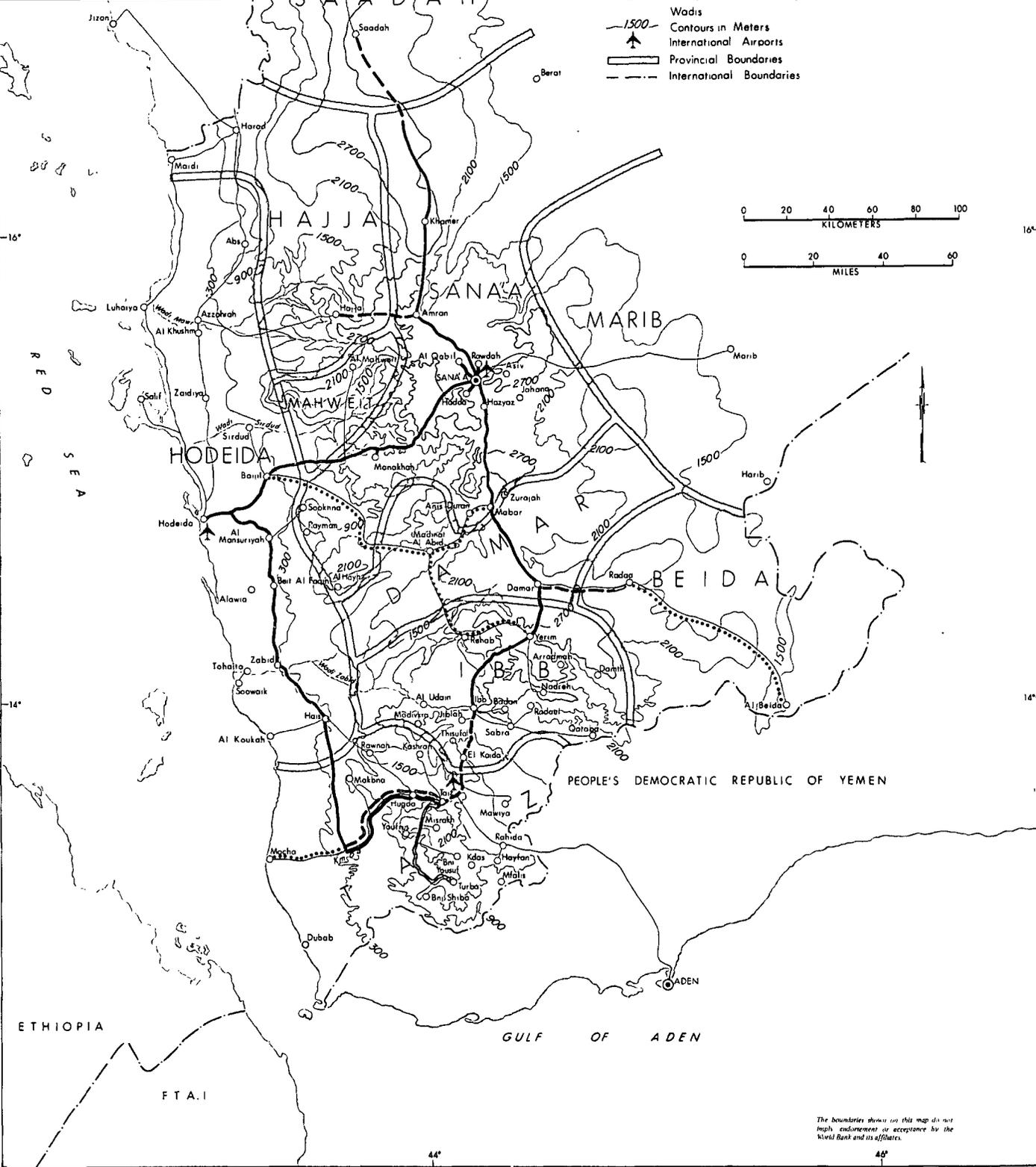
"Appraisal Report of a Second Highway Project,
Yemen Arab Republic"
(No. 771-YAR)
Dated: June 3, 1975

YEMEN ARAB REPUBLIC HIGHWAY NETWORK

SECOND HIGHWAY PROJECT

FIRST HIGHWAY PROJECT (Credit 315-YAR)

- Project Road
- Construction
- Feasibility study
- - - Detailed engineering
- Paved Roads
- - - Paved Roads under construction
- Other Roads
- ⊙ National Capital
- Cities, Towns and Villages
- Wadis
- 1500 Contours in Meters
- ↑ International Airports
- ▭ Provincial Boundaries
- - - International Boundaries



0 20 40 60 80 100
KILOMETERS

0 20 40 60
MILES

The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.