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INTERNATIONAL DEVELOPMENT ASSOCIATION

**REPORT AND RECOMMENDATIONS
OF THE
PRESIDENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED DEVELOPMENT CREDIT
TO
THE HASHEMITE KINGDOM OF JORDAN
FOR
THE AMMAN WATER SUPPLY PROJECT**

December 13, 1961

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATIONS OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS ON A PROPOSED
CREDIT TO THE HASHEMITE KINGDOM OF JORDAN
FOR THE AMMAN WATER SUPPLY PROJECT

1. I submit the following report and recommendations on a proposed development credit to the Hashemite Kingdom of Jordan in an amount in various currencies equivalent to \$2 million to assist in financing a water supply project for the city of Amman.

I. BACKGROUND

2. In the late summer of 1960 when the International Development Association was about to be established, the Government of Jordan submitted several proposals of which highest priority was given to a group of water supply projects. The Amman Water Supply project is the first of these. A preliminary appraisal of it was made by a mission which went to Jordan in November 1960. Since that time, at the suggestion of the Bank, the demand estimates on which the project had originally been based have been reexamined. It was found that the project could be reduced in scale without prejudicing the objective of providing a water system adequate to supply the needs of the city for a substantial period of time. On this basis the project design was considerably changed by the engineering consultants to the Municipality of Amman. Negotiations with representatives of the Government of Jordan and of the Municipality of Amman were held in Washington during November 1961.

3. The proposed credit would be the Association's first operation in Jordan. The Bank has made no loans there. Apart from several further water supply projects, the Association has under consideration a number of proposals in other fields, including agriculture.

II. DESCRIPTION OF PROPOSED CREDIT

4.	Purpose:	To assist in financing the cost of expanding and improving the water supply system of the city of Amman.
	Borrower:	The Hashemite Kingdom of Jordan.
	Amount:	The equivalent in various currencies of \$2 million.

Term and Amortization: The term of the credit would be 50 years with no amortization for 10 years. From November 15, 1971, $\frac{1}{2}$ of 1% of the principal amount would be repayable semi-annually for 10 years; and $1\frac{1}{2}$ % semi-annually thereafter to May 15, 2011.

Service Charge: $\frac{3}{4}$ of 1% p.a. on the principal amount of the credit withdrawn and outstanding.

Payment Dates: May 15 and November 15.

The Borrower would relend the proceeds of the credit to the Municipality of Amman which would construct and operate the project through its Water Department. The project is divided into two parts: The basic project as described in Part A of Schedule I to the draft Credit Agreement; and additional water treatment facilities as described in Part B of that Schedule. These latter facilities would not be constructed, and the portion of the credit relating thereto could not be withdrawn, unless and until the need for additional water treatment, beyond what is provided in the basic project, had been demonstrated.

III. LEGAL DOCUMENTS AND LEGAL AUTHORITY

5. Attached are a draft Development Credit Agreement between the Hashemite Kingdom of Jordan and the Association (No. 1) and a draft Project Agreement between the Municipality of Amman and the Association (No. 2).

6. Section 2.03(b) of the draft Development Credit Agreement provides that the Borrower shall not be entitled to make withdrawals in respect of goods required to carry out the facilities described in Part B of Schedule 1 (Project Description) of the Development Credit Agreement until satisfactory evidence shall have been furnished to the Association establishing the need for these facilities. Section 2.11 of the draft Project Agreement contains a corresponding provision with regard to the construction of these facilities by Amman.

7. According to Section 4.02(a) of the draft Development Credit Agreement, the Borrower shall relend the proceeds of the credit to Amman on terms and conditions satisfactory to the Association. Section 6.01(d) of the draft Development Credit Agreement provides as an additional condition of effectiveness that Amman shall make arrangements, satisfactory to the Borrower, Amman and the Association, for the establishment and operation of a Water Department which would be responsible for carrying out and operating the project and all other municipal water supply facilities.

8. In other respects the draft Development Credit Agreement and the draft Project Agreement conform generally to the pattern of IDA credits which have included a project agreement. Both agreements would be submitted for ratification to the Council of Ministers of the Borrower and to the Municipal Council of Amman.

9. The recommendation of the Committee provided for in Article V, Section 1(d) of the Articles of Agreement of the Association is attached (No. 3).

IV. APPRAISAL OF THE PROPOSED CREDIT

The Project

10. A detailed appraisal of the project (TO(IDA)19) is attached (No. 4). Due to its extremely rapid growth, Amman has for many years been faced with increasing water supply problems. Because of a high rate of natural increase, a large influx of refugees from Palestine and a continuous movement of Jordanians from other parts of the country into the capital, the population has increased from 20,000 in the 1930s to 108,000 in 1952 and an estimated 203,000 in 1961. This has put a tremendous strain on the existing water system, which until 10 years ago received its supply from an old Roman collection gallery. The Municipality has attempted to adapt the system to the extraordinary increase in demand by developing new wells and constructing further distribution lines on an emergency basis. Since no major extension and rehabilitation works were undertaken, however, the water system has become increasingly inadequate. At present it serves only about two-thirds of the population. Its poor operating condition leads to contamination and makes it impossible to maintain pressures and ensure regular supply. In some areas of the city service is frequently interrupted for periods of up to several days. As a consequence, water consumption per head is low by world standards and the incidence of water-borne diseases, although declining, is still relatively high.

11. Although the nature of the recent population increase makes any forecast quite speculative, Amman's population can be expected to continue to grow rapidly. Besides planning for a system adequate to meet present demand, the Municipality has drawn up a 25-year master plan designed to provide the basic elements for long-term expansion. Within this framework the project would provide a safe and dependable water supply sufficient to meet the demand expected up to 1972 when population is estimated to reach 360,000.

12. The project provides for the development of several new deep wells to increase the total water supply from a capacity of approximately 520 cubic meters per hour to approximately 1,500 cubic meters per hour, for pumping stations at the new wells, for about 3,000 cubic meters of additional distribution storage capacity and for major improvements and reinforcements to the existing transmission and distribution mains. The project also includes

facilities for water treatment by superchlorination, dechlorination and retention at two collection points. Because water testing facilities are inadequate and because the new wells have been drilled only recently, complete analyses of the water sources are not yet available. Funds have therefore been included in the proposed credit for water testing equipment and for additional treatment facilities if further analyses demonstrate the need for these.

13. The total cost of the project as a whole, including interest during construction, is estimated at about JD 1.1 million, equivalent to about \$3.0 million. The foreign exchange costs would be around 60% of the total, or \$1.8 million. Amman would provide JD 375,700, or about one-third of the total, from municipal funds and loans received from the Municipal Loan Fund, a governmental agency. Most of this sum has already been spent on work connected with the project during the last twelve months. JD 714,300, equivalent to \$2.0 million and representing about two-thirds of total cost, would be financed by a loan which the Government of Jordan would make to the Municipality of Amman out of the proceeds of the proposed credit. This loan would be repaid by Amman in local currency over a period of 20 years, after 3 years of grace, with interest at 4% per annum, which is the prevailing rate for loans of this type in Jordan. These terms are acceptable.

14. Of the proposed credit, \$1.5 million would be allocated to the basic project referred to in paragraph 4 above and \$0.5 million to the additional treatment facilities.

15. All contracts for major items of equipment and works required for the project would be awarded on the basis of international competitive bidding.

16. The project would be carried out by the Municipal Water Department with the assistance of engineering consultants. At the suggestion of the Association, the Municipality has drafted new regulations for the Department, giving it a large degree of autonomy and separate accounts. In order to improve the Department's management and administration, funds would be provided under the proposed credit for the employment of a management team which would be in charge of the Department's operations during the period of construction and an initial period of operation, and would train local personnel.

17. In order to ensure that the municipal water supply system is operated on a sound financial basis, the Municipality has agreed to establish water rates which will provide sufficient funds to cover operating costs, debt service, normal extension expenditures and a reasonable part of the cost of future major expansion. It is estimated that present rates will have to be raised by about 15 or 25% depending on the degree of water treatment required. On the basis of the new rates, annual water expenditures would amount to not more than 3% of the average disposable income of Amman households and should therefore not impose an undue burden on most consumers.

18. The project would be of substantial benefit to the population of Amman. It would provide an adequate supply of pure water to the whole city. This can be expected to have favorable effects on public health and will also be of importance for tourism, which is one of Jordan's most promising sources of foreign exchange earnings.

Economic Situation

19. A Bank mission visited Jordan during the winter of 1960/61 and presented its conclusions in a report "The Economy of Jordan" dated March 30, 1961 (IDA/R61-6).

20. Jordan is an overpopulated country. Almost 90% of the country is uncultivable desert. Its present population is about 1.65 million and is growing at about 3% a year. Roughly one-third of the people are refugees from the area which is now Israel and a high proportion of these are still unemployed.

21. The economy is not self-supporting and foreign aid has been necessary in substantial proportions since the inception of the State of Jordan in 1950, partly because the Kingdom, owing to its special circumstances, maintains a military establishment much larger than it can support from its own resources. The steadily growing import surplus, which in 1959 represented an addition of 40% to the gross domestic product of JD 82 million (\$230 million), has been made possible by foreign aid which provides about 60% of total government revenues.

22. The Jordan Development Board recently prepared a draft Five-Year Plan which is now under consideration by the Government. The principal objectives of the Plan would be (1) to reduce substantially the annual deficit in the balance of trade which at present is JD 36.5 million, by vigorously exploiting Jordan's exportable resources (mainly potash, phosphate, agriculture and tourism), (2) to create employment, and (3) to increase the national income which in 1959, including the import surplus, was JD 116 million or approximately \$196 per head.

23. The Bank report referred to above stated: "Assuming that U.S. and U.K. development aid continues at about the present level, Jordan could achieve a significant increase in its public investment expenditures by improving the tax system and by...mobilizing part of the economy's financial reserves. It should not be unduly difficult to reach an investment level of JD 5-6 million a year, which should be well within Jordan's capacity to use effectively. It would permit a substantial development program to go forward...assuming that Jordan will be successful in attracting private capital for investment in the limited number of important industrial projects, e.g. Dead Sea Potash, which are open to it. It would not, however, permit much increase in the rather low level of social investment."

24. The report stated (paragraph 95) that: "To make up the balance of its requirements, particularly in the social field, Jordan will have to find additional sources of finance. It cannot borrow abroad from conventional sources because it has no capacity to service debt except by drawing on other aid funds." It is clear that if Jordan is to rely on additional foreign assistance to carry out its development program, this will have to be given largely on terms which do not impose a heavy transfer burden. IDA assistance is therefore particularly appropriate.

V. COMPLIANCE WITH ARTICLES OF AGREEMENT

25. I am satisfied that the proposed Development Credit will comply with the Articles of Agreement of the Association.

VI. RECOMMENDATIONS

26. I recommend that the Association make available a development credit to the Hashemite Kingdom of Jordan in an amount in various currencies equivalent to \$2 million for a total term of 50 years with service charge of 3/4 of 1% per annum and on such other terms as are specified in the draft Development Credit Agreement and draft Project Agreement, and that the Executive Directors adopt a resolution to that effect in the form attached (No. 5).

Eugene R. Black
President

Washington, D.C.
December 13, 1961