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REPORT AND RECOMMENDATION

OF THE

PRESIDENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED LOAN TO

SYRIAN ARAB REPUBLIC

FOR THE

SECOND DAMASCUS WATER SUPPLY PROJECT

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# CURRENCY EQUIVALENTS

Currency Unit: Syrian Pound (LS)

LS 1 = US\$0.27 US\$1 = LS 3.70

Fiscal Year: January 1 to December 31

#### INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO THE SYRIAN ARAB REPUBLIC FOR THE SECOND DAMASCUS WATER SUPPLY PROJECT

I submit the following report and recommendation on a proposed loan to the Syrian Arab Republic for the equivalent of US\$35 million to help finance the Second Damascus Water Supply Project. The loan would have a term of twenty-five years, including 5 years of grace, with interest at 8-1/2 percent per annum and would be relent to the Etablissement Public des Eaux de Figeh (EPEF), the Damascus Water Authority, on the same terms and conditions. It is proposed that partly joint, partly parallel financing for the project be provided by the Arab Fund for Economic and Social Development in the form of a loan to the Government of \$40 million equivalent, with a term of 25 years including 5 years of grace, at 6 percent per annum, to be utilized as Government's contribution to EPEF's equity.

#### PART I - THE ECONOMY

- 2. A report entitled "Current Economic Position and Prospects for Syria" (No. 806-SYR, October 31, 1975) was distributed to the Executive Directors on November 12, 1975. Country data sheets are attached as Annex I.
- 3. Since attaining independence in 1946, Syria has had several changes in regime which resulted in a shift of power from groups of landowners, traders, and industrialists to a rising class of officers, technicians, and civil servants, as well as a shift of the economy from an essential laissez-faire system to a largely publicly-owned and regulated one. The Baath Socialist Party, the ruling party since 1963, provided substantial continuity of emphasis on economic and social development policies which have, by and large, prevailed in spite of internal Government changes and tensions within the Middle East. During the 1960's an agrarian reform was completed, with redistribution of land to large number of formerly landless peasants. In November 1970 General Assad became President of the Republic, and his regime has since been characterized by a balance of firmness and conciliation in domestic policies, economic pragmatism, a concerted search for a better defined role for the private sector in a centrally regulated economy, as well as diversification of foreign economic relations. These aims have been pursued gradually and, in spite of continued political uncertaintity in the Middle East, substantial reorientation of economic policies and diversification of production have been achieved.
- 4. Developments in the second half of the 1960s had far-reaching effects on economic performance as private initiative and investment declined while public sector investment gained momentum only slowly. However, economic performance since 1970 has improved significantly, partly as a result of favorable weather conditions which led to a substantial increase in agricultural

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production, and partly because the newly-introduced economic policy measures which aimed at stimulating the private sector began to take effect. The rising trend in output, however, was interrupted by the severe drought in 1973 and the aftermath of the October war. Nevertheless, by 1974 the Syrian economy had almost completely recovered both from the dislocation caused by the war and from the relative stagnation of the agricultural sector brought about by the drought. As a result, GDP in 1974 increased by almost 13 percent in real terms compared to just over 2 percent in the previous year. Overall, real per capita income increased by over 5 percent per year between 1970 and 1974. Economic growth in 1975 is believed to have been close to that achieved in 1974, and prospects for continued growth in 1976 are good.

- Because of the size and importance of the agricultural sector, the Syrian economy remains highly vulnerable to fluctuations in agricultural output brought about by variations in the amount and timing of rainfall. However, the share of industry in GDP has grown substantially in recent years and industry is emerging as a leading sector in the economy. National accounts estimates for 1974 indicate that both agriculture and industry accounted for about 22 percent of GDP in constant 1963 prices, but because of the relative increases in industrial prices, value added in industry at current prices amounted to 30 percent of GDP while that for agriculture reached 22 percent. With the expected growth in extractive industries, the share of the industrial sector relative to that of agriculture is expected to rise further in the near future.
- Total investment continues to increase both in absolute and relative terms. Gross fixed investment increased from about LS 1.2 billion (about 16.7 percent of GDP) in 1971 to about LS 3.0 billion in 1974 (about 20.5 percent of GDP), with the public sector accounting for about two-thirds of the total. Though its share in total investment has remained about constant, private investment in absolute terms increased threefold between 1970 and 1974. By far the larger part of investment was in industry and construction. At the same time, domestic savings continued to grow and on average financed some 70 percent of total investment with net imports accounting for the remaining 30 percent. However, with the growth of current transfers from abroad, national savings, which averaged about 29 percent of GNP over the past two years, have substantially exceeded current domestic investment in recent years.
- Recently, there have been significant changes in absolute and relative prices. The GDP deflator indicates a 37 percent increase in prices in 1974 compared to under 6 percent average growth per year during 1970-1973. Indices of wholesale and retail prices, though less reliable, confirm the rapidly emerging inflationary pressures in the economy as increased aggregate demand continues to generate pressures on domestic resources. In spite of an improved external balance situation import liberalization policies have so far not been used effectively to increase the total supply of resources. Growing inflationary pressures may pose serious problems for the Syrian economy in future and, if unchecked, may reflect adversely on future growth prospects of the economy. A favorable balance of payments

position and a relatively high level of foreign exchange reserves would warrant a further liberalization of import regulations to increase the supply of goods and services in an attempt to dampen inflationary pressure in the economy.

- 8. Continued overall deficits have been the main characteristic of the Syrian Government budget in recent years. Domestic revenues have been slightly higher than current expenditures, so that a large part of development expenditures has been financed through external project loans or through borrowing from the banking system. Since 1973, however, the situation has substantially changed as grants and aid from other Arab countries increased to such a level that Government recourse to the banking system to finance the overall deficits was unnecessary. With an even higher level of public expenditures, the overall budgetary deficit in 1974 was twice as large as that for the previous year, yet it was more than covered by an even larger amount of Arab grants and other aid.
- 9. The substantial increase in domestic revenues in 1973 and 1974, mainly as a result of the rapid growth of oil revenues, is expected to continue in 1975. To the extent that the past increase in income was not a result of higher taxes, their use in financing an even higher level of public expenditure on domestic goods and services results in a net injection of extra liquidity in the economy which might lead to an intensification of the inflationary impact of the budget. This is even more so since the share of tax and other non-oil revenues in total revenues has been declining.
- 10. Government development expenditures are carried out in accordance with the Third Five-Year Plan (1971-75). During the first three years of the Plan, there were considerable shortfalls in total planned expenditures, mainly due to weaknesses in project preparation and follow up procedures, as well as severe shortages of foreign exchange. More recently, however, a heightened concern with development issues, new procedures and reporting systems, as well as a considerable easing of the foreign exchange situation, have led to a considerably higher public sector investment, particularly for 1974, with an even stronger performance anticipated for 1975. However, these improvements might have come too late to substantially increase the implementation rates of the current Plan, which at the end of 1975 probably did not exceed 55-60 percent.
- 11. Syria's balance of payments, which had been in substantial deficit since 1968, improved in 1971 when the deficit was reduced sharply, registered a small surplus in 1972, very substantial surpluses in 1973 and 1974, and is expected to have been in surplus again in 1975. The improvement initially reflected increased oil transit dues, current transfers from abroad, and private capital inflow. In the last two years, large transfers from Arab countries have offset the widening trade deficit and resulted in overall payment surpluses of LS 1.2 billion in 1973 and an estimated LS 641 million in 1974. As a result, gross foreign international reserves increased from the equivalent of US\$135 million at the end of 1972 to US\$481 million at the end of 1973, \$528 million at the end of 1974, and an estimated \$770 million as of

September 30, 1975, equivalent to about six months imports at 1974 levels. With a satisfactory foreign exchange position and increasing inflationary pressures, further liberalization of import policies is warranted and can be expected.

- Work on the Fourth Development Plan 1976-80 has been nearly com-12. pleted. Preliminary indications are that the strategy of the forthcoming Plan may not differ substantially from that of the previous Plan with heavy concentration of public sector investment on the development of agriculture, including irrigation, as well as extractive industries, particularly oil and phosphates. The investment rate is to be stepped up considerably, although skilled manpower and domestic resources may be increasingly-felt constraints on the growth of investment, particularly in the public sector. Taking these factors into account, future prospects for the Syrian economy are favorable and would be greatly enhanced if peace is restored to the area. The pragmatic outlook of the present Government and the recent changes in the direction of economic policies are likely to make it possible for the private sector to contribute effectively to the future development and diversification of the Syrian economy. Syria's oil output in 1975 was about 10 million tons worth about \$700 million, which makes it eligible for membership in OPEC. Oil exports for 1975 provided foreign exchange for about one-half of imports and export prospects are quite favorable. Syria has also substantial though low quality phosphate reserves and while export prospects also look favorable, revenues will depend on the fluctuation of the price level on the world markets. Assuming that the Syrian authorities can keep current inflationary pressures under control, real growth could exceed 9 percent per year between 1975 and 1980, with an assumed acceleration of the growth of investment and exports by comparison with 1970-74 results. This would create substantial import and external borrowing requirements.
- 13. The country will, therefore, continue to need to borrow abroad to finance development projects, particularly in the public sector. Excluding external obligations contracted for military purposes, Syria's external public debt amounted to \$702 million by the end of 1974, and debt service payment on external public debt (excluding military) were estimated at about \$52 million, equivalent to 5 percent of exports of goods and nonfactor services at 1974 level. Although investment and growth targets of the Five-Year Plan (1976-80) are uncertain, preliminary Bank projections estimate that on average, the resource gap may be about \$445 million during 1976-80 with an implied gross borrowing requirement of some \$340 million per year over this period. Beyond 1980, however, capital requirements may be substantially larger as grant inflows may be reduced. Nevertheless, the debt service ratio is likely to be well under 15 percent over the next decade and beyond.

### PART II - BANK GROUP OPERATIONS IN SYRIA

14. Syria has to date received four IDA credits totalling \$47.3 million and four loans totalling \$168.6 million, both net of cancellations. All loans were made in 1974 and 1975. Although Syria is a member of the Corporation, IFC

has made no investments. Annex II contains a summary statement of IDA credits and Bank loans as of February 29, 1976 together with notes on the execution of ongoing projects.

- 15. Project implementation has generally suffered substantial delays due in large part to circumstances beyond Syria's control. The 1973 hostilities brought works to a standstill and diverted the country's resources first to military, then to reconstruction tasks although recovery was quite rapid (see above paragraph 3). Continued unsettled conditions in the region compounded the high rate of world inflation and combined with local bottlenecks in the administrative system and the construction industry and the need for expensive expatriate skilled labor to generate considerable cost overruns. Three projects were most severely affected, the First Water Supply Project (Credit 401-SYR), the Ealikh Irrigation Project (Credit 469-SYR and Loan 975-SYR), and the first Mehardeh Power Project (Loan 986-SYR). As a result, composition of the water supply and the power projects had to be revised and additional financing secured. In the case of the Balikh project, another cause of delays was the difficulty in agreeing on bidding documents and procedures acceptable to the Syrian authorities and the Bank; however, this question has now been resolved satisfactorily.
- 16. Following the priorities assigned to investment under the Third Development Plan, past Bank Group lending concentrated on infrastructure (about two-thirds) and irrigation (one-third). Lending to infrastructure, with power accounting for about 50 percent of overall lending, highways about 10 percent and water supply 7 percent, aimed to improve sector policies and strengthen various public institutions in charge. The objective of improving irrigation and soils in the Euphrates Basin was to increase agricultural employment, production and exports while reducing food imports, and the dependency on weather fluctuations. A number of ambitious programs in water supply, electricity, telecommunications, and highways are planned in 1976-1980, while Syria will step up its effort to become self sufficient in and even an exporter of food resources.
- 17. The Bank envisages further support to the Government's strategy of improving infrastructure. Preparation of the third highway project is underway and studies for a sewerage project which are financed from proceeds of the first water supply project will commence shortly. A telecommunications project which involves the expansion of the telephone system by 129,000 lines has been appraised and is scheduled to be presented to the Executive Directors later in the current fiscal year. This project is aimed at eliminating major communications deficiencies in Syria which are hampering productivity in many sectors of the economy. Continued support is also envisaged to the Government's strategy of developing productive capacity in the agricultural sector. While in the past, lending for agriculture has been for irrigation, more emphasis will now be given to projects increasing the productivity of Syria's 2.8 million ha of rainfed land. To assist the Government in improving the living standards of the rural population, the Bank has also incorporated in its lending program and is now helping to prepare a project for rural electrification. A livestock project involving credit for animal feed requirements during dry years, which would benefit about 17,000 semi-nomadic families among the poorest in the country, has been appraised and is scheduled to be presented to the Executive Directors in the course of the current fiscal year.

- 18. Together with continued support of infrastructure and agriculture, a degree of diversification is contemplated for future lending. In view of Syria's drive to develop manufacturing industries, which will be accelerated in the Fourth Development Plan, the Bank plans to assist the development of Syrian industry possibly through a DFC project. Projects in education and tourism are also planned.
- 19. Through the lending activities described above, the Bank proposes to put more emphasis in Syria on project preparation and implementation. While in the short-term this may lead to increased utilization of expatriate consultants, the longer term objective is to build up local expertise in these field.
- 20. As of the end of 1974, the Bank Group's share in Syria external public debt (excluding military) was estimated at 4 percent on a disbursement basis. The share of the Bank Group in debt service was nil in 1974. By 1980, the Bank's Group shares in debt outstanding and in debt service are expected to rise to about 17 percent and 11 percent respectively.

#### PART III - WATER SUPPLY AND SEWERAGE IN SYRIA

- 21. Generally, because of its semi-arid climate, its geology and geographical location, Syria's water resources are scarce. Economic growth and the rapid expansion of the urban population to almost one-half of total population are creating an increasing demand for water for domestic and industrial uses which strains traditional sources of supply. Most of the existing urban water transmission and distribution systems, notably that of Damascus, have not been rehabilitated or expanded for a long time and are becoming overburdened. Water pollution problems also exist in the large cities, none of which has a treatment plant.
- 22. The situation in Damascus is becoming increasingly difficult. The city has experienced dry season water shortages and restrictions since 1972, with no improvement in sight since the growing population remains dependent on one single source of supply—the Figeh Spring—and a transmission system of limited capacity. In addition, there are substantial losses from the distribution system which is in serious need of rehabilitation. As a result, per capita consumption has fallen from 174 1. per day in 1972 to 163 1. in 1975 and is expected to fall to 145 1. in 1979. Also, the number of individual water connections is not keeping pace with the increasing population.
- At the central level, the responsibility for water supply and sewerage both in rural and urban areas is shared between the Ministry of Local Affairs (MLA) and the Ministry of Housing and Utilities (MHU). Generally, water supply and distribution as well as other urban services are managed by units within the municipal administrative structure with assistance from MHU for project design and implementation. Damascus and four other large cities (Aleppo, Homs, Hama, and Lattakia) have independent authorities in charge of potable water supply. These authorities are subject to close control from Government on all important mattters such as tariffs, personnel, budgets,

accounts and major contracts; in addition, they are required to transfer any current surplus to the Treasury. Generally, central services and authorities suffer from a shortage of qualified staff.

- 24. The supply of water in Syria is traditionally considered as a basic public service, the price of which should be kept low, if need be, through subsidization. In most parts of the country, water tariffs have not been changed for several years and a nation-wide ceiling of LS 0.40 per m3 (US¢ 41 per 1,000 gal.) was imposed by the Government in 1969. In the absence of a pricing system reflecting actual cost, the sector is incapable of generating the financing necessary for new investments, and authorities and municipalities are dependent upon Government contributions for capital works.
- 25. Under the Third Development Plan (1971-1975) the Government aimed at expanding the supply and distribution systems of Damascus and of a number of villages in all parts of the country with a total population of 300,000 people. However, a large part of the proposed works were not executed due to lack of qualified personnel and the cumbersome administrative system. Proposals have been made by MHU to improve project implementation in the water supply sector through establishment of new agencies, coordination of studies, and the reorganization and expansion of local construction industries. It is unlikely that these proposals can be implemented without profound changes within the public sector to attract the needed professional staff and skilled manpower. Even more important, because of the magnitude of investments contemplated, considerable efforts will be necessary to find adequate sources of financing. Overall investment in water supply and sewerage for 1976-1980 has been estimated at over \$1.2 billion in January 1975 prices. In addition to substantial borrowing, such level of investment, even if only partly attained, would require a measure of cash generation by the sector institutions to supplement Government contributions. The Government has now recognized the need for an increase in the average price of water expected to be implemented in the near future (Project Agreement, Section 4.04 and Loan Agreement, Section 4.02).
- Urbanization and industrial activity have created serious pollution problems affecting the populated areas of Syria, and gastrointestinal diseases related to polluted water resources and lack of sanitation are considered the most prevalent causes of sickness and death. Fairly adequate sewer networks exist in the cities of Aleppo, Homs, and Hama, but the centuries-old system of Damascus is inadequate. None of these cities nor any large industries have sewerage treatment plants, and their discharge into rivers, with relatively small dry water flow, causes pollution of water used for irrigation, industries, and towns. Pollution problems are especially serious in the Orontes River basin where almost one million people live and where the industrial towns of Homs and Hama are located and in the basin of the Barada River which receives sewerage from Damascus.

27. The Government has become increasingly aware of these problems and has created a pollution control department within MHU. The department has prepared draft legislation for regulating discharge of industrial waste and is considering measures to control waste discharges. However, progress is hampered by shortage of financial resources and the scarcity of engineering skills. It has been agreed with the Government that a Bank mission would carry out a survey of the water supply and sewerage sector before the end of FY 1976.

# PART IV - THE PROJECT

28. A report entitled "Appraisal of a Second Damascus Water Supply Project" (No. 938-SYR, dated March 24, 1976) is being distributed separately to the Executive Directors. The main features of the proposed loan and project are summarized in Annex III.

#### Background

- Although for many years Damascus has had an abundant supply of cheap and high quality water from the Figeh spring in the neighboring hills above the city, peak demand has now overtaken maximum production capacity. Following studies commissioned at the end of the 1960's by "Etablissement Public des Eaux de Figeh" (EPEF, the Damascus Water Supply Authority), IDA agreed in 1973 to assist in financing a project with a \$15 million Credit (401-SYR). The project included the expansion of the supply (through construction of an underground cutoff wall and tunnel) and distribution works (through construction of 530 km of mains); provision of equipment to assist in the operation and maintenance of the distribution system; engineering and management consulting assistance; training for EPEF staff in management and engineering; and studies of sewerage and pollution control.
- 30. The outbreak of hostilities in the Middle East in October 1973 delayed project implementation. When in January 1975, the first tenders for the project (tunnel and underground work and first phase of distribution works) were received, it became evident that costs would greatly exceed appraisal estimates. The increase was due to a number of factors including delays, steeper than expected international inflation, change in currency parities, the strained capacity of local construction industry, and a premium charged by foreign contractors and suppliers because of unsettled conditions in the region.
- 31. This led to a thorough review of the composition of the project. Additional studies were requested by the Association to determine whether an underground tunnel remained the least cost means of supply. At the same time the Government was compelled to revise its financing plan for the project. On May 12, 1975, at the request of the Syrian Government, the Executive Directors agreed to a revision of the original project description and to utilize the proceeds of the credit only for urgently required distribution rehabilitation works and sewerage studies. In June 1975, the United States Agency for

International Development (USAID) agreed to lend Syria \$48 million to help finance the foreign exchange component of the remainder of the distribution works needed to serve the city until 1980.

32. The additional feasibility studies requested by IDA confirmed that an underground tunnel was the least cost solution for supply. Subsequently, the proposed water supply project was appraised in August/September 1975. At negotiations in Washington in March 1976, the Syrian Government was represented by Mr. H.E. Abdul Baki, Minister of Housing and Utilities, and EPEF by Mr. Rida Mourtada, President and General Manager of EPEF.

# Project Description

- 33. The main purpose of the project is to increase the supply of water from the Figeh Spring to serve the population of Damascus until about 1987 through the distribution works which now exist or are under construction and through expected extensions and new connections to the system. The project consists of:
  - (i) An underground cutoff wall to increase and regulate the flow from the Figeh Spring;
  - (ii) A pumping station to increase low season flows;
  - (iii) A 15 km tunnel to the main storage reservoirs;
  - (iv) The main storage reservoir (60,000 m3);
  - (v) Distribution reservoirs (44,800 m3 in total);
  - (vi) Pumping stations;
  - (vii) Dispatching equipment for data transmission and flow control;
  - (viii) Related engineering studies;
    - (ix) Training of EPEF staff.

Project execution is scheduled to be completed by end-1979.

# Project Management

34. EPEF was established as an independent water authority in 1958 to take over a communal water supply syndicate which had existed since 1924. EPEF is autonomous in its day-to-day operations, but the Ministry of Housing and in some cases the Cabinet of Ministers are involved in all major decisions. The General Manager is appointed by the Government and is responsible for the execution of managerial and administrative functions.

- 35. EPEF's senior management is of high quality and dedication, but the institution suffers from an acute shortage of staff. Measures were taken in October 1974 in accordance with the terms of Credit 401-SYR to improve employment conditions for the staff of the Project unit established under the first project and several additional engineers have been hired. However, EPEF's current staff still needs strengthening for its ongoing operations and more emphasis is being put on the use of consultants. USAID is now considering a Government request to provide EPEF with technical assistance and SONEDE (Tunisia's Water Authority) has agreed to help train EPEF's technicians. EPEF has agreed to employ engineering consultants to provide technical assistance for ongoing works (Project Agreement, Section 2.02). A technical assistance and training program for intermediate technicians is to be agreed upon and implemented (Project Agreement, Sections 2.10 and 3.06). In addition. EPEF has commissioned with consultants a study of its organization and operating procedures as provided for under Credit 401-SYR; the study would cover, among others, EPEF's cost accounting and cost control systems to produce adequate data for management and the billing and collection procedures whose length and inaccuracy cause substantial losses in revenues.
- Project implementation itself will be carried out under the authority of a special commission created by Presidential decree, in charge of EPEF water supply projects. The commission which is chaired by the Minister of Housing and Utilities has full powers to take any action required for project execution and to this end has been exempted from existing laws and regulations. Day-to-day project management and supervision is the responsibility of EPEF's project unit created under Credit 401-SYR. The unit has recently been substantially reinforced through the hiring of consultants and additional staff so as to enable it to control works both under Credit 401-SYR and under the proposed project.

### Cost Estimates

37. Cost estimates for the project are shown in Annex III and are summarized below:

		<pre>\$ Million</pre>	
	<u>Local</u>	Foreign	Total
Underground cutoff wall, tunnel, and main reservoir	21.4	49.5	70.9
Figeh pumping station	1.6	2.4	4.1
Distribution reservoir	4.1	8.8	12.9
Distribution pumping stations	1.2	4.2	5.4
Dispatching	0.8	2.7	3.5
Sub Total	29.0	67.6	96.8
Design and supervision	0.6	2.2	2.7
Training - technical assistance	0.1	0.1	0.2
Base Cost	<u>29.7</u>	69.9	99.7
Physical contingencies	3.3	7.7	11.0
Expected price increase	12.9	13.4	26.3
<u>Total</u>	<u>45.9</u>	91.0	137.0

Cost estimates are based on actual contract prices (underground cutoff, tunnel, and reservoir) under bids received in January 1975 and on unit prices for contracts under Credit 401-SYR. All costs are expressed in January 1976 prices.

- 38. Cost estimates greatly exceed those for comparable works tendered under ICB but are considered realistic for Syria under present conditions. The Bank and the Syrian authorities have discussed possible ways of reducing costs, in particular through calling new tenders, but have agreed that there was no assurance that any alternative would succeed in this while all of them would result in delays. Faced with the urgency of supplying water to the city of Damascus, the Government decided that contracts be awarded at tendered prices.
- 39. Physical contingencies are relatively low (10 percent of base cost) because extensive drilling and analysis have already been carried out by consultants. Price increases totalling 23.7 percent of base costs over the construction period have been assumed; this figure reflects the projected trend of international prices as well as price increases for cement and fuel recently implemented in Syria and estimated future costs of wages and local construction materials in accordance with Government policies. Price escalation clauses, covering 100 percent of price changes, are included in all contracts already concluded.

#### Financing Plan

40. External financing for the project would be provided by the Bank and the Arab Fund for Economic and Social Development. The proposed Bank loan of

\$35 million would cover 38.5 percent of the project's foreign exchange requirements. The Arab Fund would make a loan of \$40 million, and the two external loans together would cover about 70 percent of the project's foreign exchange costs and 55 percent of total costs. The balance of financing required would be provided through a Government contribution to EPEF and cash generation. The proposed Bank loan would be made to the Government for 25 years and 5 years of grace and be relent to EPEF on the same terms and conditions through a subsidiary loan agreement acceptable to the Bank. The Arab Fund loan would be made to the Government for the same term and grace period at 6 percent per annum and utilized as Government's contribution to EPEF's equity; signature of the Loan Agreement between the Government and Arab Fund would be a condition of effectiveness of the Bank loan (Loan Agreement, Section 6.01(c)). It has been agreed that the already awarded contract for the underground cutoff, the tunnel, and supply reservoir (contract no. 1) whose cost would constitute more than 70 percent of project costs would be financed jointly by the Arab Fund and the Bank. It is proposed that the remainder of the Arab Fund loan would be used for financing of the Wali pumping station, the reservoirs west, and the Barada overflow (contract no. 2) under the regulations of the Arab Fund for international competitive bidding and that the Bank would contribute toward financing of the remaining contracts. All foreign exchange cost of the technical services will be financed by the Bank (see paragraph 46).

# Financial Situation

- 41. For 1972-74, EPEF's operating ratio was about 60 percent and the return an averaged fixed assets about 10 percent. These figures reflect EPEF's relatively low operating expenses since personnel is paid according to the Government's low salary scale, and EPEF's low depreciation charges since it acquired most of its present assets in the 1930's. EPEF does not have an adequate physical inventory of its assets or a system for the integration of newly acquired extensions or renewal into assets. Conditions of the loan would, therefore, be that within 6 months of effectiveness EPEF complete an inventory and within one year of effectiveness a revaluation of its assets (Project Agreement, Section 4.03).
- 42. Over the next 5 years EPEF is to embark on an ambitious program of works of which the proposed project is only a part. Total envisaged investments have been estimated at \$279 million with a foreign exchange cost of \$171.5 million. Already secured and anticipated foreign borrowings would cover the latter, except for the equivalent of \$35 million to be provided by Government. About 12 percent of local financing requirements (\$107.5 million equivalent) would be provided by EPEF's internal cash generation, the remainder being provided by the Government mostly as equity to avoid burdening EPEF with heavy debt service payments.
- 43. However, the envisioned EPEF contribution would require tariff increases. Were present tariffs to remain unchanged, EPEF would be unable to participate in the financing of this investment program and would even suffer

increasing cash deficits starting in 1977. The present system of water charges in Damascus results in very low rates as compared to most developing countries, leaving ample scope for increases. Under Credit 401-SYR, EPEF was committed to set and maintain its tariffs at such level as shall be required to produce an annual rate of return of 7.5 percent in 1982 and thereafter on average net fixed assets in operation. This covenant was appropriate in view of the then expected gradual build-up of EPEF's assets. However, because of the abnormally high construction costs in Syria, it is now expected that the rate base will increase by 1980 to 27 times the 1975 level. Therefore, to provide a substantial contribution of EPEF to its investment program, while avoiding an undue impact of the rate increase on consumers, the rate of return covenant was replaced by a cash generation covenant (Project Agreement, Section 4.04). Accordingly, the Government has agreed to take all necessary action to enable EPEF to set its rates so as to generate not less than 10 percent for 1977-80 and 35 percent thereafter of its average capital expenditure during any consecutive three years, comprising one actual and two forecast years; this result should be achieved after covering all operating expenses, debt service, and working capital requirements. An increase of the average rate from LS 0.2 to about LS 0.5 is expected shortly and on the basis of the above requirements would be necessary early in 1977. The Government has agreed to the principle of introducing, on the occasion of the increase, a progressive tariff in order to lessen the financial impact on low income groups and encourage the conservation of water.

#### Procurement

Major civil works and equipment contracts financed by the Bank loan would be let under international competitive bidding in accordance with the Bank's guidelines for procurement. However, minor equipment contracts of less than LS 100,000 (US\$27,000 equivalent) for works financed by the Bank would be awarded on the basis of local procurement procedures which are acceptable to the Bank, up to an aggregate amount of LS 1 million (US\$270,000 equivalent).

# Retroactive Financing

45. Because of the urgency of the project, works for the tunnel, the underground cutoff, and the supply reservoir were contracted in advance. A contract of \$70.8 million plus contingencies and price escalation was signed in December 1975 following international competitive bidding procedures acceptable to the Bank. Retroactive financing of not more than \$3 million is proposed for this contract.

# Disbursement

- 46. The proposed Bank loan of US\$35.0 million would be disbursed as follows:
  - (i) 40 percent of the foreign exchange costs indicated in the contract for civil works construction, equipment supply and installation of the underground cutoff wall, tunnel and supply reservoir (contract no. 1).

- (ii) 40 percent of the foreign exchange costs indicated in the contractors' bids for civil works construction, equipment supply and installation of reservoirs, pumping stations and dispatching (contracts nos. 3, 4, 5).
- (iii) 100 percent of the total cost of consultants for design, supervision, technical assistance, and training of EPEF staff.

The estimated schedule of disbursement is shown in Annex III.

# Justification

- The proposed project, together with related projects forming the Damascus five year water supply investment program, is the first major expansion of the city's water supply and distribution system in more than 40 years; it is unavoidable if Damascus is to avert serious water shortages and related health hazards as well as serious constraints in the city's expansion and in the improvement of its inhabitants' living conditions. The major elements of the program represent the least-cost solution, chosen from among several alternatives.
- 48. The economic benefits of the project cannot be separated from those of the remainder of the program of works required to meet the needs of Damascus. Using incremental water supply revenues from the investment program as a minimal measure of economic benefits, on the basis of the charges the consumers are currently (1975) paying for water, the program has a negative internal economic return (about -2 percent). This calculation merely demonstrates the total inadequacy of present tariffs relative to the very high costs of EPEF's expansion. On the basis of revenues derived from the first tariff increase (see paragraph 43 above), the internal economic return would rise to 3 percent; it has been calculated that the return would rise to 8.5 percent on the basis of revenues derived from subsequent tariff increases as required in keeping with the provisions of the cash generation covenant. In the long run, the tariff would thus approach the average incremental cost of water.

#### PART V - LEGAL INSTRUMENTS AND AUTHORITY

- The draft Loan Agreement between the Syrian Arab Republic and the Bank, the draft Project Agreement between the Bank and Etablissement Public des Eaux de Figeh, the Report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement, and the text of a draft resolution approving the proposed loan are being distributed to the Executive Directors separately.
- The draft agreements conform to the usual patterns for water supply projects. Features of the Loan and Project Agreements of special interest are referred to in paragraphs 35, 40, 41, 43 of the Report. The signing of the Arab Fund Loan Agreement between the Borrower and the Arab Fund, and the signing of the subsidiary Loan Agreement between the Borrower and EPEF (Loan Agreement, Section 6.01) would be additional conditions of effectiveness.

51. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

# PART VI - RECOMMENDATIONS

52. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara President

Attachments

TABLE SA

LAND AREA (THOU KMZ)	SYRIAN ARAS			TORS DATA SHEET		
	SYRIAN ARAB REP				NCE COUNTRIE	8 (1970)
TOTAL 185.2 Arable	1960	1970 E	T RECENT Stimate	TUNISIA	TURKEY	LEBANDN
GNP PER CAPITA (US\$)	150.0	320,0	400.0	320.0	450,0	700.0
SOFTETTATE JATEV GNA MCTTAJUMON						
POPULATION (HID-YR, MILLIGN)	4.6	6.3	6.9	5.1	35,2	2.7
POPULATION DENSITY				•• •		24.0.0
PER SGUARE KM. Per sguare km. Arable Land	25.0	34.0 75.0	37.0	31.0 95.0	45.0 140.0	268.0 553.0
VITAL STATISTICS						
CRUDE BIRTH RATE PER THOUSAND CRUDE DEATH RATE PER THOUSAND	••	48.0 15.0	47.0 14.0	38.0 14.0	38,0 <u>/a</u> 13.0 <u>/a</u>	41.0 13.0
INFANT MORTALITY RATE (/THOU)	••	93.0	• •	106.0	145.0	82.0
LIFE EXPECTANCY AT BIRTH (YRS) GROSS REPRODUCTION RATE	• •	53.0 3.5	56.0 3.5	56.0 3.4	55.0 /b 2.6 /a,t	58,0 1,9
POPULATION GROWTH RATE (%)						
TOTAL Urban	3,6	3,2 5,0	3,3	2.1 2.4	2.5 4.5	2.5 6,0
JRBAN POPULATION (% OF TOTAL)	37.0	44.0	44.0	40.0 /a		58.0
AGE STRUCTURE (PERCENT)	- •		¥		•	•
O TO 14 YEARS	46.0	49.0	49.0	46.0 <u>/a</u>	41.8	43.0
15 TO 64 YEARS 65 YEARS AND OVER	49.0 5.0	47.0	47.0 4.0	50.0 <u>7a</u> 4.0 <u>7a</u>	53.9 4.3	52,0 5.0
AGE DEPENDENCY RATIO	1.0	1.1	1.1	1.0	0.9	0.9
SCONDMIC DEPENDENCY RATIO	5.5	2.5	5.5	1.8 <u>/b</u>	1.1 <u>/c</u>	1.8
FAMILY PLANNING- ACCEPTORS (CUMULATIVE, THOU)				106.0	484.0 /d	87.0
USERS (% OF MARRIED WOMEN)	••	••	••	12.0	6.2	14.0
EMPLIYMENT						
TOTAL LABOR FORCE (THOUSAND)	1100.0	1500.0 /a	1700.0	1400.0	14500.0 <u>/e</u>	570.0
LABOR FORCE IN AGRICULTURE (%) JNEMPLOYED (% OF LABOR FORCE)	47.0 9.0	1500.0 <u>/a</u> 49.0 <u>/a</u> 6.0 <u>/a</u>	54.0 4.5	97.0 /c 14.0 /a	67,0	19.0
INCOME DISTRIBUTION	. • •	• (4		74	.,	•••
* OF PRIVATE INCOME REC'D BY- Highest S* of Population		••	••	23.5 <u>/a</u>	32.8 <u>/r</u>	26.0 /B
HIGHEST 20% OF POPULATION LOASET 20% OF POPULATION	• •	• •	••	55.5 <u>7a</u>	60.6 /g	55.0 /B 4.0 /B
LOWEST GOT OF PUPPLATION	••	••	• •	55.5 <u>7a</u> 4.2 <u>7a</u> 11.4 <u>7a</u>	60.6 TR 2.9 TR 9.4 TR	11.0 2
DISTRIBUTION OF LAND DWNERSHIP						
P440441740000						
X DWNED BY TOP 10% OF DWNERS X DWNED BY SMALLEST 10% DANERS	••	••	••	53.0 0.5	53.0 0.9	57.0 <u>/6</u> 1.0 <u>/6</u>
HEALTH AND NUTRITION						
************	F300 0 /9	7860 A	***	5950.0	2220.0	1470.0
POPULATION PER PHYSICIAN POPULATION PER NURSING PERSON	5200.0 <u>/a</u>	3850.0 4460.0	3860.0	730.0 <u>/e</u>	1860.0 /h	1050.0 /c
POPULATION PER HOSPITAL BED	930.0 <u>/a</u>	1010.0	1090.0	410.0 <u>7</u>	490.0	200,0
PER CAPITA SUPPLY OF - CALDRIES (% OF REQUIREMENTS)	102.0	102,0	107.0	86.0	110.0	96.0
PROTEIN (GRAMS PER DAY) -OF WHICH ANIMAL AND PULSE	74.0 28.0	70.0 16.0 <u>/</u> b	75.0	54.0 14.0 <u>/g</u>	78.0 22.0 <u>/1</u>	70.0 11.0
DEATH PATE (/THOU) AGES 1-4	••	••	••		15.0 /b	8.0
DUCATION	••	••	••	••		•••
*******						
ADJUSTED ENROLLMENT RATIO PRIMARY SCHOOL	65.0	88.0 C	••	107.0	111.0	111.0 /4
SECONDARY SCHOOL YEARS OF SCHOOLING PROVIDED	16.0	39.0 6	• •	20.0	58.0	40.0 Zd
(FIRST AND SECOND LEVEL) VDCATIONAL ENROLLMENT	12.0	15.0	12.0	13.0	11.0	12.0
(% OF SECONDARY) ADULT LITERACY RATE (%)	6.0 36.0	3.0 /c	4.0 <u>/a</u>	34.0	14.0 55.0 <u>/</u> j	1.0 <u>/d</u> 69.0 <u>/e</u>
DJRTRE	• • •	·			_	
*****	2.1 🕭			3 7 /0	1.9	2.1
PERSONS PER ROOM (AVERAGE) DCCUPIED DHELLINGS WITHOUT		••	••	2.7 <u>/a</u>		
PIPED WATER (%) ACCESS TO ELECTRICITY	59.0 <u>/b</u>	••	••	60.0 <u>/a</u>	64.0	34.0
(X OF ALL OHELLINGS) RURAL DHELLINGS CONNECTED	38.0 <u>/b</u>	••	• •	24.0 <u>/a</u>	41.0	98.0
TO ELECTRICITY (%)	11.0 <u>/b</u>	••	• •	••	18.0	••
ONSUMPTION						
RADIO RECEIVERS (PER THOU POP)	57.0	224.0	374.0	77.0	89.0	215.0
PASSENGER CARS (PER THOU POP) ELECTRICITY (KMM/YR PER CAP)	4.0 77.0	5.0 152.0	5.0 183.0	13.0 155.0	4.0 244.0	58.0 441.0
MEMSPRINT (KG/YR PER CAP)	0.2	0,2	0.1	0.1	0.7	1.7

NOTES

Unless otherwise noted, data for 1960 refer to 1959-61, for 1970 to 1968-70, and for Most Recent Estimate to 1971-73.

\*\* Lebanon has been selected as an objective country on the basis of the strong and continuous economic, social, historical and political ties which bind the two countries.

<u>/a</u> 1962; <u>/b</u> 1961-62. SYRIA

> /a Syrian population only; /b 1964-66; /c Including UNRWA schools. 1970

/a Including UNRWA schools. MOST RECENT ESTIMATE:

/a 1966; /b Ratio of population under 15 and 65 and over to total labor force; /c Males only; /e Personnel in government services only; /f Government hospitals only; /g 1961-66. /d Income recipient; TUNISIA 1970

/a Excludes 17 eastern provinces; /b 1965-67; /c Ratio of population under 15 and 65 and over to labor force 15 years old and over; /d 1964 to June 1974, 86 percent being IUDs; /e 15 years and over, excludes unemployed; /f Registered only; /g Disposable income of households; /h Including assistant nurses and midwives; /i 1964-66; /i Persons six years old and over who tell the census takers that they can read and write. TURKEY 1970 /f Registered // Persons

/a Personal disposable income of households, Beirut and outskirts; /b 1966; /c Including assistant nurses and midwives; /d Excluding 26 percent of private schools; /e 10 years and over, read and write. LEBANON 1970

Ri February 4, 1976

#### DEFINITIONS OF SOCIAL INDICATORS

Land Area (thou km²)

Total - Total surface area comprising land area and inland waters.

Arable - Most recent estimate of land area used temporarily or permanently for cultivation, pastures, market and kitchen gardens or to lie fallow.

GNP per capita (US\$) - QNP per capita estimates at market prices, calculated by same conversion method as World Bank Atlas (1972-74 basis).

Population and vital statistics
Population (mid-yr. million) - As of July first; if not available, average of two end-year estimates.

Population density - per square km - Mid-year population per square kilometer (100 hectares) of total area.

Population density - per square km of arable land - Computed as above for arable land only.

Vital statistics
Crude birth rate per thousand - Annual live births per thousand of midyear population; usually five-year averages ending in 1960, 1970 and
1975 for developing countries.
Crude death rate per thousand - Annual deaths per thousand of mid-year
population; usually five-year averages ending in 1960, 1970 and 1975

for developing countries.

Infant mortality rate (/thou) - Annual deaths of infants under one year of age per thousand live births.

Life expectancy at birth (yrs) - Average number of years of life remaining at birth; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Gross reproduction rate - Average number of live 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 1975 for developing countries.

Population growth rate (1) - total - Compound annual growth rates of mid-year population for 1950-60, 1960-70, and 1960 to most recent year. year population for 1990-00, 1900-70, and 1900 to most recent year.

Population growth rate (3) - urban - Computed like growth rate of total
population; different definitions of urban areas may affect comparability of data among countries.

Urban population (5 of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data

among countries.

Age structure (percent) - Children (0-ll years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population.

Age dependency ratio - Ratio of population under 15 and 65 and over to those of ages 15 through 64.

Becommic dependency ratio - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.

Family planning - acceptors (cumulative, thou) - Cumulative number of acceptors of birth-control devices under suspices of national family

planning program since inception.

Family planning - users (% of married women) - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

Employment
Total labor force (thousand) - Economically active persons, including
armed forces and unemployed but excluding housewives, students, etc.;

armed forces and unemployed but excluding housewives, students, etc.; definitions in various countries are not comparable.

Labor force in agriculture (\$) - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force. Nemployed (\$ of labor force) - Unemployed are usually defined as persons who are able and willing to take a job, out of a job on a given day, remained out of a job, and seeking work for a specified minimum period hot exceeding one week; may not be comparable between countries due to different definitions of unemployed and source of data, e.g., employment office statistics, sample surveys, compulsory unemployment insurance.

Income distribution - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of population.

<u>Distribution of land ownership</u> - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.

Health and Nutrition

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, "trained" or "certified" nurses, and auxiliary personnel with training or experience.

Population per hospital bed - Population divided by number of hospital beds available in public and private general and specialized hospital and rehabilitation centers; excludes mursing homes and establishments for custodial and preventive care.

custodial and preventive care.

Per capita supply of calories (% 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 PAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distributions of population, and allowing 10% for waste at household

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 Economic above; requirements for all countries established by USIM Economic Research Services provide for a minimum allowance 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 5 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.

Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day.

Death rate (/thou) ages l-li - Annual deaths per thousand in age group l-li years, to children in this age group; suggested as an indicator of malnutrition.

Education
Adjusted enrollment ratio - primary school - Enrollment of all ages as percentage of primary school-age population; includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education, enrollment may exceed 100% since some pupils are below or above the official school age.

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

excluded.

excluded.
Years of schooling provided (first and second levels) - Total years of
schooling; at secondary level, vocational instruction may be partially
or completely excluded.
Vocational enrollment (% of secondary) - Vocational institutions include
technical, industrial or other programs which operate independently or
as departments of secondary institutions.
Adult literacy rate (%) - Literate adults (able to read and write) as per-

centage of total adult population aged 15 years and over.

Persons per room (average) - Average number of persons per room in occupied conventional dwellings in urban areas; dwellings exclude non-permanent structures and unoccupied parts.

Structures and undertained parts.

Coupied chellings without piped water (\$) - Occupied conventional chellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied chellings.

Access to electricity (\$ of all chellings) - Conventional chellings with electricity in living quarters as percent of total chellings in urban and rural areas.

dwellings connected to electricity (5) - Computed as above for rural dwellings only.

<u>Radio receivers (per thou pop)</u> - 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 coun-

tries abolished licensing.

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

Electricity (kwh/yr per cap) - Annual consumption of industrial, commercial, public and private electricity in kilowatt hours per capita; generally based on production data, without allowance for losses in grids

but allowing for imports and exports of electricity.

Newsprint (kg/yr per cap) - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newsprint.

# ECONOMIC INDICATORS

GROSS NATIONAL PRODUCT IN 1	974 <sup>1</sup> /				ANNUAL R	ATE OF GRO	WIH (%, const	ent prices)
	us\$ Mn.	18			<b>1960 -6</b> 5		196 <sub>5</sub> -70	1970-74
GNP at Market Prices Gross Domestic Investment Gross National Saving 2/ Current Account Balance Exports of Goods, NFS Imports of Goods, NFS	3, 995 913 1,140 227 1,059	100.0 22.9 28.5 5.7 26.5			8.5 1.5 - 8.1 0.0		5.5 10.6 7.0 0.6 4.6	8.6 15.0 - 2.0
OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1973 1/	1,329	33.3			,		4.0	21.0
	Value US\$ Min.	Added		Labor Mln.	For ce 3		V. A. P	er Worker
Agriculture Industry Services Unallocated	433 504 1,309	19.3 22.4 58.3		.86 .19 .60 .05	50.5 11.2 35.3 3.0		5 <b>0</b> 5 2,650 2,180 -	38.3 200.0 65.2
Total	2,240	100.0		1.70	100.0		1,320	100.0
GOVERNMENT FINANCE	(s.L. 197	Mln.)	Government  S of GD	P 1970-74				
Current Receipts Current Expenditure Current Surplus Capital Expenditures External Assistance (net)	4,29 3,20 1,08 2,39 2,00	4 9 3	29.6 22.1 7.5 16.5 13.8	25.0 21.0 4.0 12.3				
MONEY, CREDIT and PRICES		<u>1970</u>	<u>1971</u> (Mil:	<u>l</u> lion S.L	972 .outstanc	1973 ling end pe	prio	1974
Money and Quasi Money Bank credit to Public Sector Bank Credit to Private Sect		2,521 2,790 551	2,715 3,210 570	4,	428 <b>01</b> 6 578	4,114 3,677 653		5970 5581 742
				(Percen	tages or	Index Numb	ærs	
Money and Quasi Money as \$ General Price Index (1963 = Annual percentage changes	· 100) <u>4</u> /	39.2 115	36.5 120		8.6 131	43.7 136		41.1 185
General Price Index 4/ Bank credit to Public Sector Bank credit to Private Sector	or	26.6 -7.6	4.4 15.1 3.5		9.2 5.1 1.4	3.8 -8.4 13.0		36.0 51.8 13.6

NOTE: All conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

Y Preliminary estimates.

2/ Including current transfers from abroad equivalent to US\$424 millions.

3/ Total labor force; unemployed are allocated to sector of their normal occupation. "Unallocated" consists mainly of unemployed workers seeking their first job.

<sup>4/</sup> GDP deflator

<sup>..</sup> not available

<sup>.</sup> not applicable

# TRADE PAYMENTS AND CAPITAL FLOWS

BALANCE OF PAYMENTS				MERCHANDISE EXPORTS (AVERAGE 197	2-74)	
	1972 (H111	<u>1973</u> ions US	\$) <u>1974</u>		<u>US \$ M1</u> 1	<u> %</u>
Exports of Goods, NFS Imports of Goods, NFS Resource Gap (deficit = -)	482 <u>599</u> -117	604 690 -86	1,059 1,329 -270	Crude 011	188	39.2
Interest Payments (net) Workers' Remittances Other Factor Payments (net) Net Transfers	-7 68 - 58	-1 51 - 373	7 66 - 424	Raw Cotton Textiles Wool Industrial Products All other commodities	136 48 15 15 78	28.3 10.0 3.1 3.1 16.3
Balance on Current Account	2	337	227	Total	480	100.0
Direct Foreign Investment Net MLT Borrowing Disbursements	- 30	- 67	- 118	EXTERNAL DEBT, DECEMBER 31, 1974	:	US 6 W1-
Amortization Subtotal	-35 - 5	<u>-40</u> 27	-48 70	Public Debt, incl. guaranteed		US \$ Mln 257.8
Capital Grants Private Short-Term Capital(net Other items n.e.i	:) 17 -7 7	-27 -21 316	20 -144 .	Non-Guaranteed Private Debt Total outstanding & Disbursed		257.8
Increase in Reserves (+)			<u>173</u> 2/	DEBT SERVICE RATIO for 1974		_%_
Gross Reserves (end year)2/ Net Reserves (end year)2/ Fuel and Related Materials	135 -36	481 273	528 453	Public Debt, incl. guaranteed Non-Guaranteed Private Debt		5.0
Imports of which: Petroleum Exports	24 () 52	28 () 77	74 () 434	Total outstanding & Disbursed		5.0
of which: Petroleum	(52)	(77)	(434)	IBRD/IDA LENDING, (Dec. 30, 1975) (Mill	ion US \$)	<u>) :</u>
RATE OF EXCHANGE				•	IBRD	<u>IDA</u> 9.6
Through January 1973 US\$ 1.00 = LS 3.82 (Official) US\$ 1.00 = LS 4.32 (Market) February 1973 to June 1973 US\$ 1.00 = LS 3.85 (Official) US\$ 1.00 = LS 4.05 (Market) July 1973 to January 1974 US\$ 1.00 = LS 3.80 (Official & LS 1.00 = US\$0.26 (Official & February 1974 to Date US\$ 1.00 = LS 3.70 LS 1.00 - US\$0.27	Market) Market)			-	3.6 165.0 168.6	9.6 37.7 47.3

Ratio of Debt Service to Exports of Goods and Non-Factor Services.
 Recently revised data. Increase in Reserves in the balance of payments differ from differences in end-year Net Reserves, due to changes in the exchange rate.

<sup>..</sup> not available

<sup>.</sup> not applicable

# STATUS OF BANK GROUP OPERATIONS IN SYRIA

# A. Statements of Bank loans and IDA credits (As of February 29, 1976)

				Δmc		Millions ess cancellations)
Number	Year	Borrower	Purpose	Bank	IDA	Undisbursed
46	1963	Syrian Arab Republic	Highways		8.5	-
298	1972	Syrian Arab Republic	Highways		13.8	13.8
401	1973	Syrian Arab Republic	Water suppl	у	15.0	14.9
469	1974	Syrian Arab Republic	Irrigation		10.0	8.7
975	1974	Syrian Arab Republic	Irrigation	63.0		63.0
986	1974	Etablissement Public d'Electricité	Electricity	25.0		20.7
986-1	1975	Etablissement Public d'Electricité	Electricity	8.6		8.6
1144	1975	Etablissement Public d'Electricité	Electricity	72.0		72.0
	Total			168.6	47.3	201.7
	of	which has been repaid		0	.2	
	Total	now outstanding		168.6	47.1	
	Amoun	t sold	-/	1.1	0	
	Total	Now held by Bank and ID.	<u>a</u> / A	167.5	<u>47.1</u>	
	Total	undisbursed		164.3	37.4	201.7

a/ Prior to exchange adjustments.

# G. Statements of IFC Investments: None

(As of February 29, 1976)

# C. Projects in Execution 1/

# Credit 290 - Second Highway Project; US\$13.8 Million Credit of April 17, 1972; Date of Effectiveness: February 2, 1973; Closing Date: June 30, 1978

This project includes improvement and construction of 153 km of roads linking Damascus with the Lebanese and Jordanian borders, and improvement of the road Tartous-Homs. It also includes feasibility studies and detailed engineering for bypasses for the cities of Homs, Hama, Aleppo and Deraa and the Aleppo-Tall Kojak Road (about 470 km). Project implementation started in 1975 after an initial delay due to the unsettled conditions in the region. In the meantime, the Government decided to upgrade the project roads to four-lane standards for which it has undertaken to provide additional funds. A consultant's study to assess the economic viability of the new designs is expected shortly.

# Credit 401 - Damascus Water Supply Project; US\$15 Million Credit of June 22, 1973; Date of Effectiveness: February 24, 1974: Closing Date: December 31, 1978

This projet consisted of five main elements: (i) rehabilitation and renewal of existing distribution system; (ii) expansion of distribution system with 370 km of watermains; (iii) construction of a 15 km tunnel to improve the supply of water to the city; (iv) pumping and storage facilities; and (v) studies of pollution and sewerage problems in Damascus, Homs, and Hama. Delay in the execution of the project and high cost overruns prompted the Syrians to split the works of this project, and on May 12, 1975 the Association agreed that IDA credit would be used only for the urgent phase of the distribution works (item i) and for pollution and sewerage studies (item v). It was deemed important to move ahead quickly with the rehabilitation and renewal of existing distribution system in order to reduce the amount of water, currently not accounted for due to leakages in the mains and malfunctioning of the water meters. The work on the urgent phase of the distribution system is in progress.

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 correct them. They should be read in this sense and with understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

Credit 469/Loan 975 - Balikh Irrigation Projects; US\$10 Million Credit and US\$63 Million Loan of April 6, 1974; Date of Effectiveness: September 12, 1974; Closing Date: June 30, 1982

The project provides for the development of irrigated agriculture in a net area recently increased, as a result of detailed surveys, from 41,000 ha to 45,000 ha in the Balikh River Basin, including the resettlement of farmers displaced by the filling of Lake Assad. The project includes use of consultants' services for the preparation of a master plan for the rehabilitation of agriculture in the Lower Euphrates Valley, for the preparation of a feasibility study of a rehabilitation project on the right bank of the river in the valley, and for the preparation of detailed designs and contract documents for the said area. Bids received for a first development stage, which would construct an 18 km main canal headreach and provide pumped irrigation supplies for a 10,000 ha area, were much higher than expected at the time of the appraisal in February 1974 chiefly is a result of the impact of the October 1973 hostilities and of inflation. It was decided in August, after improving the bid documentation, that new tenders for the works would be invited. New bids were received on November 25 and recommendations for award of the first two contracts at substantially lower prices than the earlier bids have been received. The Government will have to arrange for the mobilization of substantial additional financial resources to meet the project's likely increase in foreign exchange requirements. Total project cost is now estimated to be US\$673 million--a fourfold increase over the appraisal estimate. Adequate technical solutions now seem to have been found to the problems of canal construction in gypsiferous soils which had beset works in pilot areas, provided that supervision is sufficient to ensure the observance of high standards of construction by contractors. The ambitious timetable for completion of the project, coupled with Government's intention to develop 240,000 ha in the Euphrates Basin by 1980, will severely strain the limited resources of supervisory personnel and should be carefully monitored. Procurement for the next two irrigation areas is expected to be initiated soon.

Loan 986 - Mehardeh Power Project; US\$25 Million Loan of May 23, 1974 and Supplementary Loan of \$8.6 Million of April 29; Date of Effectiveness: February 28, 1975; Closing Date: June 30, 1977

This project consists of the first 150 kw unit of a new steam electrical power station at Mehardeh, eight 230 kw substations, consultant services, and training. This project is co-financed by a US\$33 million loan by the Kuwait Fund, which includes a second portion of \$15 million to cover the considerable cost overrun of this project due to the increased level of world prices. The Bank has amended this loan on April 29, 1975 to increase it by \$8.6 million in order to finance the foreign exchange cost of the increase in capacity of the first power unit from 125 mw to 150 mw. Site work has started, but overall progress has been slow because main contracts were amended in October-November 1974, about 5 months late. Management consultants were appointed in March 1975, and consultants for tariff studies were recently engaged.

# Loan 1114 - Second Mehardeh Power Project; US\$72 Million Loan of June 17, 1975; Date of Effectiveness: January 17, 1976; Closing Date: June 30, 1980

This project consists of the second 150 mw unit of the new steam electric power station of Mehardeh; construction of 6 new and extension of 2 existing substations; new headquarters building of Damascus; engineering consultant services and training. Progress of the project is as per schedule.

### SYRIA - DAMASCUS SECOND WATER SUPPLY PROJECT

Borrower: Syrian Arab Republic.

Amount: \$35 million.

Terms: Payable in 25 years including 5 years of grace at 8-1/2

percent interest per annum.

Project Description: The Project includes:

(i) an underground dam to capture the flow of the source (Figeh Spring);

- (ii) a pumping station at the Figeh Spring to increase season flows;
- (iii) a tunnel 15 kilometers in length from the spring the principal storage reservoirs of Damascus;
  - (iv) a principal storage reservoir (underground) at Wali with a capacity of 60,000 m3;
  - (v) distribution system reservoirs with a combined capacity of 44,800 m3;
- (vi) a new pumping station and renovation of existing pumping stations;
- (vii) a telecommunication system for data transmission, water flow control and leak detection;
- (viii) engineering services for design and supervision;
  - (ix) training of EPEF's staff and technical assistance to EPEF.

# Estimated Cost Second Damascus Water Supply Project

	Local	000 US\$ Foreign	Total
Tunnel and Wali Reservoir	21,351	49,482	70,833
Reservoirs II West	2,352	5,027	7,379
Pumping Station Wali	365	1,265	1,630
Barada Overflow	351	433	784
Distribution Pumping Stations	851	2,952	3,803
Dispatching	811	2,703	3,514
Distribution Reservoirs	1,379	3,378	4,757
Figeh Pumping Station (permanent installation)	1,623	2,434	4,057
Sub Total Works	29,083	67,674	96,757
Training and Consultant Services	649	2,270	2,919
Sub Total (Base Cost)	29,732	69,944	99,676
Physical Contingencies	3,294	7,677	10,971
Price Increases	12,900	13,369	26,269
Total	45,926	90,990	136,916
Financing Plan:	<pre>\$ Millions</pre>		
Proposed Bank Loan Government Equity of which	35		
Arab Fund Loan Other Government Equity	40 48		
EPEF Cash Generation	14		
Total	137		

Estimated	
.Disbursements:	

	\$ M	illions by	fiscal yea	r	
1976	1977	1978	1979	1980	1981
2.0	5.4	7.5	8.1	10.6	1.4

# Procurement Arrangements:

Goods financed by the proposed credit would be procured through internal competitive bidding, except for minor contracts for maintenance and supply of equipment costing less than LS 100,000 subject to an aggregate of LS 1 million (US\$270,000); disbursements to not more than \$3 million for the underground cutoff structure, tunnel and supply reservoir and for the related consulting services would be financed retroactively after December 1, 1975. The contract was signed with a French-Greek consortium in mid-December 1975 for an amount of US\$70.8 million.

# Consultants:

- Societe Grenobloise d'Etudes et d'Applications Hydrauliques. Sogreah (France): Feasibility studies for final designs and tender documents for source development, tunnel between the source and Damascus, terminal reservoirs and supervision of test pumping project and of construction of a source improvement, tunnel, and terminal reservoirs.
- Societe d'Etudes pour L'Urbanisme, L'Equipment et Les Canalisations SEURECA (France): final designs and tender documents for distribution network and supervision of construction of the distribution works.
- Metra International, SEMA and Societe Lyonnaise des Eaux et de l'Eclairage (SLEE) of France for management and organization studies at EPEF.
- In total, it is estimated that approximately 400 manmonths of consulting services are involved.

# Rate of Return:

Internal economic return (excluding non-quantifiable benefits): 8.5 percent.

#### Appraisal Report:

938-SYR, dated March 24, 1976.

