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REPORT AND RECOMMENDATION  
OF THE  
PRESIDENT OF THE  
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
TO THE  
EXECUTIVE DIRECTORS  
ON  
PROPOSED LOAN TO  
THE SYRIAN ARAB REPUBLIC  
FOR A  
LIVESTOCK DEVELOPMENT PROJECT

June 22, 1976

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CURRENCY EQUIVALENTS

Currency Unit: Syrian Pound (LS)

LS 1	=	US\$0.27
US\$1	=	LS 3.675

ABBREVIATIONS

GOTPC	General Organisation for Trade and Processing of Cereals
MAAR	Ministry of Agriculture and Agrarian Reform
NFRF	National Feed Revolving Fund
ACB	Agricultural Cooperative Bank
GOF	General Organisation for Feed
NFFC	National Feed Policy Committee

Fiscal Year

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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE  
EXECUTIVE DIRECTORS ON PROPOSED LOANS TO  
THE SYRIAN ARAB REPUBLIC FOR A LIVESTOCK  
DEVELOPMENT PROJECT

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1. I submit the following report and recommendation on a proposed Bank Loan of \$5 million equivalent and a Third Window loan of \$12.5 million equivalent to the Syrian Arab Republic to help finance a livestock development project. The Bank loan would have a term of 20 years including 5 years of grace, with interest at 8.85 percent per annum; the Third Window Loan would be on standard Third Window terms of 25 years, including 7 years grace, with interest at 4.85 percent.

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 1960s an agrarian reform was completed, with redistribution of land to a 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 uncertainty in the Middle East, substantial re-orientation 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 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

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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.

5. 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.

6. 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 22.9 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. In this situation interest rates, which are controlled and held at low levels, (between 2.5 and 9 percent) have played only a limited role in resource mobilisation. The role of interest rates is also limited in resource allocation, which is achieved mainly through central planning decisions.

7. 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, 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 accelerated sharply in 1974 and 1975, but was partly covered by grants from friendly countries.

9. The substantial increase in domestic revenues in 1973 and 1974, mainly as a result of the rapid growth of oil revenues, continued 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 were 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. A heightened concern with development issues, new procedures and reporting systems, as well as a considerable easing of the foreign exchange situation, have however led to a considerably higher public sector investment, particularly for 1974, with an even stronger performance in 1975. These improvements came too late though to increase the Plan's implementation rate which was around 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, and has registered surpluses since then. The improvement initially reflected increased oil transit dues, current transfers from abroad, and private capital inflow. In the last three 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, net foreign reserves increased to about \$640 million at the end of 1975, the equivalent of about 5 months of 1974 merchandise imports. The indications are however that since then reserves have declined, as a result of smaller inflow of grants, of the loss of revenue due to interruption of transit of oil through the pipeline from Iraq, and of the impact of civil war in Lebanon.

12. Work on the Fourth Development Plan 1976-80 has been nearly completed. 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 in 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 payments 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 per year 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 under 15 percent over the next decade and more. As of the end of 1974, the Bank Group's share in Syria's 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 Group's share in debt outstanding and in debt service are expected to rise to about 17 percent and 11 percent respectively. Syria is considered credit-worthy for additional borrowing on Bank terms. In view of recent intensification of its development efforts (paragraph 10) and the consequent need to mobilize substantial additional external resources, some local cost financing by external lenders is justified for high priority projects. The need for such financing has been heightened by the recent decrease in budgetary grant receipts which cannot be offset in the short-term by an increase in tax and non-tax revenues.

14. Syria is considered eligible for Bank lending on Third Window terms on the basis of the following criteria:

- (1) 1972 Per capita income: \$320
- (2) Performance: With the adoption of pragmatic and flexible economic policies by the Government and institutional improvements in development planning, Syria has achieved high rates of economic growth in recent years, and overall economic performance has improved substantially.
- (3) Ability to Repay: Syria's substantial economic resources and good medium-term development prospects make the country credit-worthy for continued IBRD lending.
- (4) Access to Alternative Sources of Capital: Although Syria has had access to substantial amounts of transfers from Arab countries in the wake of the 1973 war, mainly for military purposes and reconstruction, capital assistance for economic development projects has been limited, partly as a result of limitations in the availability of well prepared investment projects. Bank assistance is designed to act as an important catalyst both in project preparation work and in the mobilization of complementary capital assistance.

#### PART II - BANK GROUP OPERATIONS IN SYRIA

15. Syria has to date received four IDA credits totalling US\$47.3 million and six loans totalling US\$231.6 million, both net of cancellations. 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 May 31, 1976 together with notes on the execution of projects.

16. Project implementation has generally suffered substantial delays due largely 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 (paragraph 4). 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, generated considerable cost overruns. Three projects were most severely affected, the First Water Supply Project (Credit 401-SYR), the Balikh Irrigation Project (Credit 469-SYR and Loan 975-SYR), and the first Mehardeh Power Project (Loan 986-SYR). As a result, the 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 to agree on bidding documents and procedures acceptable to the Syrian authorities and the Bank; however, following discussions with the Syrian Government, this question has now been resolved satisfactorily.

17. 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 at fostering well designed sector policies and strengthening various public institutions in charge. The objective of improving irrigation and drainage in the Euphrates Basin is to increase agricultural production and exports while reducing food imports, and the dependency on weather fluctuations. Although the Fourth Development Plan has not yet been published, there are strong indications that it will follow the same strategy as the Third Plan. A number of substantial programs in water supply, electricity, telecommunications, and highways are planned in 1976-1980, to bring these sectors more in line with current needs, while Syria will step up its effort to become self sufficient in and even an exporter of food resources.

18. The Bank envisages further support to the Government's strategy of improving the 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. 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.

19. 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 envisages assisting the development of Syrian industry possibly through a DFC project. Projects in education and tourism are also planned.

20. 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.

### PART III - SHEEP PRODUCTION IN SYRIA

21. Sheep husbandry is the most important component of livestock production in Syria, accounting for more than 65 percent of all meat produced, and about 50 percent of the total output of milk and milk products. The population of adult sheep is about 6.4 million (1967-73 average). There are three characteristic forms of sheep production: (a) range-based sheep raising, which is the major source of income for some 35,000 nomadic bedouin families, amongst the poorest people in Syria, and which is concentrated in the low



rainfall areas of central and eastern Syria, (b) farm-based sheep production, carried out by most of the country's half million farm families, to supplement cash income and for family consumption and (c) intensive lamb fattening and finishing of cull ewes in and near towns.

22. Since on average about two-thirds of their feed intake comes from natural grazing land, sheep are subject to large fluctuations in feed availability due to rainfall variability. This in turn leads to considerable variations in fertility levels, weaning rates, mortality, population and productive output. During drought years, sheep raisers are forced to sell breeding stock while in years of good rainfall offtake rates are reduced in order to rebuild flocks. As a result, rainfall fluctuations impose considerable losses on the Syrian economy, and the sheep population and meat and milk supply and prices fluctuate considerably.

23. While most sheep are used for domestic consumption, Syria has benefited from a substantial but fluctuating import and export trade in meat and live animals. Typically, yearling rams are imported from Turkey for fattening; and exports, both of meat and live animals are directed towards Lebanon and Jordan. Occasionally imports from Turkey are interrupted and, more frequently, in years of poor rainfall, exports are restricted or banned by the Syrian Government in order to keep down domestic meat prices. However, there is substantial illegal trade. Over 1967-73 recorded imports of sheep and goats averaged 250,000 head, valued at \$3.2 million, and recorded exports averaged 389,000 head, valued at \$11.2 million. However, over the same period the trade surplus in live animals declined and an average annual trade deficit in fresh and frozen meat of 82,000 tons was recorded.

24. The marketing and prices of sheep and sheep products within Syria are free, except for supplies to Damascus, which are mainly channelled through the General Supply Institution at fixed prices. Bedouin sheep are marketed mainly through merchants or small shopkeepers, while villagers usually sell their animals at regional markets or, on occasion, to merchants. Typically, fattened animals are sold to traders in regional markets, or to the General Supply Institution, or are exported. Sheep milk is marketed in the cities mostly in the form of cheese. Wool is marketed through merchants who control both domestic and export trade.

25. The main livestock feed resources in Syria are rangeland, crop residues, fallow grazing, straw and concentrates. In general range grazing provides about 50 percent of the feed consumed by all livestock; crop residues, straw and fallow about 32 percent, and concentrates (barley, cottonseed cake, wheat bran, sugarbeet pulp, beet molasses) about 16 percent. Dependence on range grazing is greatest in the case of bedouin sheep and extensively managed goats (approximately 70 percent of total intake from range) followed by farm sheep and local cattle (48 percent), draught animals (20 percent) and high producing dairy cows and milking goats (0 percent). On average, sheep receive from 25 percent (in the case of bedouin sheep) to 40 percent (for farm sheep) of their total feed intake from crop residues, fallow and straw, and from 3 percent (bedouin sheep) to 13 percent (farm sheep) from concentrates.

26. Concentrate prices are affected by Government intervention. The prices paid by livestock producers for barley, wheat bran, cottonseed cake and sugarbeet pulp reflect the growers' prices for these commodities fixed by the Government. Barley is purchased from merchants acting as intermediaries for the General Organization for Trade and Processing of Cereals (GOTPC) (See paragraph 30). Other concentrates are obtained directly from processing plants, which are Government-owned.

27. Syria is at present a net exporter of concentrates, particularly of barley and cottonseed cake. In addition, there is substantial potential for increased production of concentrates, through the expansion of irrigation, and through bringing unused rainfed land into production. The country therefore possesses a resource base for the development of livestock. A livestock development plan drafted in 1973 but not officially adopted, calls for an increase of sheep meat and milk production of 2.5 and 4 times respectively by 1980. Production increases would be achieved mainly by increased use of concentrates.

28. Development of sheep production is the responsibility of the Ministry of Agriculture and Agrarian Reform (MAAR), through its Departments of Animal Production and Animal Health and through several parastatal organisations which are directly responsible to the Minister. The Animal Production Department provides extension services through the provincial offices of the Ministry. The Animal Health Department operates the veterinary field clinics, which administer about 6 million vaccinations and treat some 5 million cases of disease a year. However, the work of the Department is seriously hampered by a shortage of qualified staff and of funds, particularly to purchase or manufacture pharmaceuticals, which at present are provided free to livestock owners.

29. In 1965 a National Feed Revolving Fund (NFRF) was established with the proceeds from the sale of feed supplied by the World Food Program. The fund is administered by the Sheep and Range Section of the Animal Production Department and held in the Agricultural Co-operative Bank (ACB). The fund provides short-term credit to sheep producers who are organized in co-operatives for feed purchases and to the co-operatives for the construction of feed stores. Assistance in forming and running co-operatives is provided by the Sheep and Range Section. Two kinds of co-operatives are formed. Through sheep fattening co-operatives, fatteners receive credit from NFRF to buy feed for a 3-month fattening cycle for lambs, yearlings and culled ewes, obtained domestically or imported from Turkey. Sheep and range co-operatives are mainly composed of bedouin flock owners who keep their flocks in the range area, but move them to cropped areas in the autumn for stubble grazing; however, some are comprised of farm based sheep farmers, who hold their flocks in cultivated areas, but move them to the range for spring grazing. Members of sheep and range co-operatives have access to NFRF credit for purchase of annual supplementary feeds for breeding stock. At present there are 37 fattening co-operatives and 14 sheep and range co-operatives. Legislation of 1970 and 1973 provides for improved management of range pastures, by giving co-operatives in these areas sole control of a defined zone and setting limits

on the number of animals per family for which credit for feed purchase can be obtained from NFRF. NFRF has so far enjoyed an excellent repayment record on the credit it provides, close to 100 percent.

30. The General Organisation for Feed (GOF), established in February 1974, has broad responsibilities in the feed sector, including the supervision of feed processing and establishment of feed mills, establishment of feed storage warehouses, supervision of the marketing of all feed commodities both inside and outside the country, supervision of domestic feed distribution and the purchase of feed from producers through advance contracts. The General Organisation for Trade and Processing of Cereals (GOTPC) purchases wheat and barley at fixed prices from producers, through its collection points, and operates flour mills. The GOTPC is also the source of wheat bran used as animal feed (paragraph 26).

31. The National Feed Policy Committee (NFPC) discusses, approves and submits general feed policy guidelines to the Minister of Agriculture and Agrarian Reform for issue as ministerial decisions. The Committee also discusses and makes recommendations on feed prices to the Council of Ministers for Economic Affairs. The Committee is composed of the heads or their representatives of all Government departments and parastatal organizations concerned with the production, marketing and use of feed and is chaired by the Minister for Agriculture and Agrarian Reform or his deputy (see paragraph 34).

#### PART IV - THE PROJECT

##### Background

32. In early 1974, the FAO/IBRD Co-operative Programme reviewed the prospects for development of livestock in Syria, and examined several possible projects envisaged by the Government. The proposed project was identified as a result of this review, and was prepared by a second Co-operative Programme mission in September 1974. The project was appraised in May 1975. At negotiations in Washington in May 1976, the Syrian Government delegation was led by Dr. Joumah, Deputy Minister of Agriculture. An appraisal report, No. 1209-SY dated 16 June, 1976, is being circulated separately to the Executive Directors. A loan and project summary is given in Annex III.

##### Objectives and Description

33. The project is aimed at increasing and stabilizing the production of and income from the sheep subsector throughout Syria, through the strengthening of national feed policy, the increased use of supplementary feed, and the reinforcement of animal health services. The project consists of:

- (a) strengthening the organizational framework, including NFPC, GOF, NFRF and ACB to be responsible for defining and implementing feed policies aiming at optimizing on a national basis, the use of available feed materials and feed storage facilities;

- (b) provision of financing for the annual purchase of feed needs of sheep cooperatives, thus permitting the creation of 12 new sheep and range co-operatives and 12 new sheep fattening co-operatives;
- (c) reinforcement of the animal health services of the MAAR through provision of vehicles, equipment, pharmaceuticals and technical assistance, and construction of sheep dips;
- (d) execution of a study of manpower requirements and training needs in the animal health field;
- (e) execution of a study of feed prices.

Project implementation would be completed by September 30, 1981. The project would complement the national Emergency Feed Reserve, to be established, operated and financed by the Government. Establishment of the Emergency Reserve would make it possible to provide subsistence rations, consisting mostly of feed grains to sheep producers in drought years in order to reduce losses from the national sheep flock (see paragraphs 46-50 below).

#### Detailed Features and Project Execution

34. Organization. Under the project, a secretariat for the National Feed Policy Committee (paragraph 31) would be created in the Office of the Minister of Agriculture and Agrarian Reform. The functions of the secretariat would be to provide advice to the National Feed Policy Committee on annual feed allocations, pricing, exports and imports and the size of emergency feed stocks, taking into account projected production, consumption and storage availability. The secretariat would be headed by an Executive Secretary with qualifications and experience acceptable to the Bank (Section 3.02(a) of the draft Loan Agreements). Advisers in price policy, feed distribution and cost accounting would be provided for the secretariat under the project (Section 3.02(b) of the draft Loan Agreements). Appointment of the Executive Secretary and of the advisers would be conditions of effectiveness of the proposed loan.

35. Development of NFRF. Additional sheep co-operatives, whose members qualify for credit from the NFRF, would be created. Establishment of the co-operatives would be the responsibility of the Sheep and Range Section of the Ministry of Agriculture and Agrarian Reform (MAAR) which has successfully implemented an impressive programme of establishment of livestock co-operatives over the last 10 years. The Sheep and Range Section of MAAR would provide technical support to the co-operatives. Under the project, about 12 sheep and range co-operatives and about 12 fattening cooperatives (paragraph 29) would be established. As a result of this programme, the number of bedouin flockowners who are members of sheep and range cooperatives would be increased from the present level of 11,400 to 24,000 by 1980, comprising about two-thirds of the bedouin flockowners, who would control about 1.6 million sheep, about 40 percent of the range sheep population.

36. The volume of credit provided by the NFRF for purchase of concentrates by the livestock co-operatives for annual feed needs and for fattening would be increased sharply under the project. NFRF's gross disbursements for feed purchases would increase to \$24.8 million by 1980 (in 1975 prices) compared to a level of \$0.8 million in 1974. The additional credit provided by NFRF by 1980 would help finance the purchase of about 240,000 tons of concentrates annually.

37. Credit provided by NFRF for feed purchase would normally carry an interest charge of 7.5 percent per annum. However it was agreed that a preferential rate of 5.5 percent per annum would be applied to farmers whose annual household income, as assessed by NFRF according to criteria acceptable to the Bank, is less than LS 3,500 at 1976 prices, that is, less than about 30 percent of the average national family income (Schedule 5 to the draft Loan Agreements). These interest rates would be towards the higher end of rates prevailing in Syria (paragraph 6). The 7.5 percent rate is the maximum permitted in the agricultural sector and is so far applicable only to loans larger than LS 50,000. A survey of the pre-project income situation would be carried out before December 31, 1976, in order to develop criteria to be used by NFRF in determining which members of the co-operatives are eligible for obtaining feed loans at the preferential interest rate of 5.5 percent per annum. It would include an analysis of the availability of credit for the purchase of feed from existing sources, as well as the terms and conditions of such credit. Until these criteria have been established, members of sheep and range co-operatives will be considered eligible for the 5.5% interest rates if they hold less than 60 ewes, and members of sheep fattening cooperatives if they fatten less than 255 sheep per year. In addition, a quarterly monitoring of income levels and of the availability and cost of credit would provide information about the debt service burden and debt service payment capacity of members of the cooperatives. The Government and the Bank have agreed to undertake jointly not later than July 30, 1978 a review of the adequacy of interest rates on credit used for the purchase of feed, including the need for a preferential interest rate for poor farmers, and the need for a revision of the income level criterion for the preferential interest rate.

38. In addition to \$11.3 million of the proceeds of the proposed loan, the Government would provide NFRF with the balance of financial resources required to achieve the planned increase in feed loans, through budgetary allocations (Section 3.06(a) of the draft Loan Agreements). NFRF's income from interest would accrue to its own resources (Schedule 5 to the draft Loan Agreements). The Sheep and Range Section of MAAR would be reinforced to carry out its expanded technical responsibilities for NFRF under the project, and its accounting capability would also be strengthened (Section 3.08 of the draft Loan Agreements).

39. Monitoring. Under the project, establishment of sheep and range co-operatives should lead to improvements in the condition of range vegetation, as a result of control of animal numbers and movements (paragraph 29 above), the use of annual supplementary feed, and the provision of emergency feed. MAAR would implement by June 30, 1977, a system acceptable to the Bank which

would effectively monitor vegetative changes in the range areas used by sheep and range co-operatives (Section 4.03 of the draft Loan Agreements). In addition, MAAR would begin, before December 31, 1977, field studies to measure the effect of feeding purchased concentrates on range sheep production (Section 4.04 of the draft Loan Agreements).

40. Animal Health. Under the project, MAAR's Animal Health Department would be strengthened. Equipment would be procured for the Central Veterinary Laboratory, to allow the production of vaccines to increase from the present level of 6 million doses to 20-25 million doses per year. A laboratory equipment adviser to be recruited under the project would assist in the selection, installation and maintenance of equipment (Section 3.03 of the draft Loan Agreements). His appointment would be a condition of effectiveness of the Loan. Drugs for treatment of internal and external parasites, equipment, and vehicles would also be provided for 56 mobile veterinary field service teams, which would provide animal health services to producers. Seven sheep dipping centres would be constructed with a total capacity of 3 million sheep twice a year. Vaccines and drugs, now provided free, would be provided to beneficiaries at 50 percent of cost in the fourth year of the project, and 100 percent from the fifth year on; revenues from vaccine and drug sales would be used exclusively to finance the production of vaccines and the purchase of drugs (Section 3.11 of the draft Loan Agreements). To ensure that adequate Syrian staff becomes available to meet the needs of the expanding programme in veterinary services, the project includes a study of manpower and training requirements in this field, to be completed by June 30, 1977 and the recommendations of which would begin to be implemented by December 31, 1977 (Section 3.05 of the draft Loan Agreements).

41. Feed Prices. While feed traded within the private sector is sold at market prices, the prices of feeds sold by the Government organizations (paragraph 26) do not necessarily reflect relative feed values. Under the project a study would be carried out by June 30, 1977 to review feed price policies and to review price relationships among different feeds and between feeds and animal products; the recommendations of the study would begin to be implemented by December 31, 1977 (Section 3.05 of the draft Loan Agreements).

#### Cost Estimates and Financing Plan

42. Cost estimates are summarised below (excluding duties and taxes):

	US\$ million		
	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
Working capital required to finance co-operatives annual feed needs	20.5	4.2	24.7
Animal health services	1.1	3.6	4.7
Technical assistance	<u>0.1</u>	<u>0.4</u>	<u>0.5</u>
<u>Base Cost</u>	<u>21.7</u>	<u>8.2</u>	<u>29.9</u>
Physical contingencies	0.1	0.4	0.5
Price increases	<u>2.4</u>	<u>1.7</u>	<u>4.1</u>
TOTAL	<u>24.2</u>	<u>10.3</u>	<u>34.5</u>

Cost estimates have been adjusted to end-1975 price levels. Physical contingencies included are 10 percent of the cost of the animal health component and 5 percent of the cost of technical assistance. Price contingencies, totalling 13.5 percent of base cost, reflect the projected trend of international prices.

43. The Bank Loans of \$17.5 million would finance 51 percent of the total cost of the project, net of duties and taxes. Bank financing would cover the foreign exchange cost (\$10.3 million) and \$7.2 million of the local cost of the project. The local cost financing (see justification in paragraph 13 above) would allow disbursements from the Bank Loans to contribute a reasonable share of financing for expansion of the NFRF, which is destined mainly for use by the poorer members of the population (paragraph 52). The farmers would finance 20 percent of the funds required for co-operatives annual feed purchases (\$5.5 million). The remaining costs (\$11.5 million) would be financed by the Government.

#### Procurement

44. Feed purchased with credit provided by NFRF would be procured by flockowners through existing private and public trade channels. The sheep dipping centres, for which disbursements would not be made from the Bank Loans, would be procured through competitive bidding advertised locally, following a review of bidding documents by the Bank. Vehicles for the animal health services would be procured through international competitive bidding in accordance with the Bank Guidelines for Procurement. Pharmaceuticals would be procured through international shopping with at least three quotes, to allow procurement of brands customarily used in Syria. Equipment for the animal health services comprises many small items to be obtained from different manufacturers; it would be procured through competitive bidding in accordance with local procedures, acceptable to the Bank, or, where applicable, through international shopping with at least three quotes. Procurement of pharmaceuticals, vehicles and equipment would be grouped as far as practicable. Consultants services, amounting to about 70 man-months at an average cost of \$6,700 per month (excluding contingencies), would be procured in accordance with the Bank Guidelines for Use of Consultants.

#### Disbursement

45. The Bank Loan, to be fully disbursed by September, 1982, would be disbursed against:

- 57 percent of gross disbursements under the project until December 31, 1976 and thereafter of incremental disbursements by NFRF for credit for financing supplementary and fattening feed purchases by members of livestock co-operatives;
- 100 percent of foreign expenditures or 70 percent of local expenditures for equipment, pharmaceuticals and vehicles for animal health services;
- 100 percent of foreign expenditures for consultants.

### Emergency Feed Reserve

46. The establishment of the Emergency Feed Reserve would not be financed out of the proceeds of the proposed loan. Nevertheless, since it is a key element in the stabilization and improvement of the national sheep flock, agreements and understandings have been reached with the Government on its major features. It has been agreed (Section 3.04(a) of the draft Loan Agreements) that a reserve sufficient to provide adequate feed resources to sheep producers during drought years should be established over a three-year period. The Government's intention is that the target maximum size of the Emergency Reserve, to be reached in the first three years, will be at least 280,000 tons, of which cottonseed cake will account for not more than 65,000 tons and the balance will be made up of a stock of feedgrain, mostly barley. This target is estimated to be sufficient to provide an average size of reserve adequate to meet emergency feed needs in likely drought situations, but its size would be reviewed from time to time in the light of operating experience. The availability of cottonseed cake is fairly stable, even in drought years, and it is exported from Syria. Accordingly, the cottonseed cake component of the Emergency Reserve would not be stored, but the Government's intention is that in a drought year exports of cottonseed cake would not be permitted until 65,000 tons of cake had been made available to sheep flockowners as emergency feed. The feedgrain component of the Reserve would be held as a stock, to be stored in existing storage facilities controlled by the General Organisation for Feed (GOF).

47. Establishment and operation of the Emergency Reserve would be the responsibility of GOF. The funds required by GOF to establish, operate and replenish the reserve would be provided by the Government. The Reserve would be stored in existing storage facilities controlled by GOF, and would be rolled over to the extent to which current production of barley permits. Plans for rodent and insect control in the GOF warehouses, as well as those belonging to the livestock co-operatives, would be carried out by June 30, 1977 (Section 3.07 of the draft Loan Agreements). GOF would be provided with a feed stock management adviser (Section 3.04(b) of the draft Loan Agreements).

48. Unless unusual circumstances materialize, the feedgrain component of the Emergency Reserve would be established and replenished from surpluses in domestic feedgrain production, normally exported, when they occur. The rate at which the feedgrain component of the Reserve is accumulated depends therefore on weather conditions; if serious droughts occur early in the life of the Reserve, a part of the feedgrain requirement would be procured abroad. In any case, the Government's intention is that no exports of feedgrain would be permitted unless the feedgrain component of the Emergency Reserve is at its target level.

49. The Government's intention is that normally, emergency supplies of feed would be made available to individual flockowners at a price which would cover (i) the cost of barley purchased by GOF, (ii) GOF's procurement, storage and distribution charges on the basis of norms to be reviewed by the Bank, and (iii) the financial charges borne by GOF for the Emergency Reserve. However, in the event of a major drought disaster, defined as two severe drought years



in succession, which would impair flockowners' payment capacity for emergency feed, the Government could allocate feed at less than actual cost, in which case the Government would provide to GOF, by way of grant, the funds required to cover the difference between the sales price and actual cost. The Agricultural Co-operative Bank (ACB) would provide flockowners with credit to help finance the cost of emergency feed purchases. Sheep owners would raise cash for their share of the purchase cost of emergency feed by culling more rigorously than usual, disposing of old and less productive breeding ewes and thus improving the overall performance of their flocks.

50. Use of feed from the Emergency Reserve would be decided by the Minister for Agriculture and Agrarian Reform. On advice from the Ministry's Animal Production Department, he would declare a drought, and instruct GOF on the quantities of feed to be released from the Emergency Reserve and the locations at which it should be made available. Successful utilization of the reserve depends on the Government's and GOF's ability to respond quickly and make feed available where needed and in the appropriate quantities when a drought situation emerges. The Animal Production Department would at all times monitor the evolution of feed availability nationwide through MAAR's Provincial services (Section 3.09 of the draft Loan Agreements). A Director of GOF would be appointed, with qualifications and experience acceptable to the Bank, and directly responsible to the General Manager of GOF, whose only responsibility would be to manage the Emergency Reserve (Section 3.04(b) of the draft Loan Agreements). His appointment would be a condition of effectiveness of the proposed loan. GOF and ACB would establish by December 31, 1976, coordinated procedures, to be reviewed by the Bank, for making available feed and credit, respectively, to beneficiaries of emergency feed allocations.

#### Benefits and Risks

51. In conjunction with the Government-financed emergency feed reserve, which would prevent the major sheep losses now occurring in drought years, the project would lead to a major increase in output of the national sheep flock. Through the provision of adequate financing of purchased feed, the project would provide incentives for fattening for about twice the number of animals fattened at present, strengthen the recent trend of providing supplementary winter feed to animals on the range, and increase the availability of grazing resources to range sheep. The strengthening of animal health services would consolidate the gains in sheep flock stabilization by sharply reducing the losses in livestock and production resulting from preventable infectious diseases and parasites. At a national level, at full development by 1983, the project is expected to lead to increases in meat, milk and wool production of 67,33 and 10 percent respectively. The economic rate of return of the Project and the interrelated Emergency Feed Reserve is estimated at 21 percent, and would remain attractive even for a range of adverse assumptions; if operating costs increased by 10 percent and the incremental value of production fell simultaneously by 15 percent, the economic return would still be 9 percent.

52. The beneficiaries of the project, sheep flockowners and fatteners, are among the poorer people in Syria with a per capita income of about 50 percent of the national average. The principal beneficiaries of the project

would be the bedouin and semi-nomadic flockowners, members of the sheep and range co-operatives. Under the project, their number would increase from 11,400 at present to 24,000 by 1980, thus covering two-thirds of the bedouin flockowners. Around 1983, when the full effect of the project and the Emergency Feed Reserve on the national sheep flock would be felt, their net per capita income would have increased from slightly over \$200 now to about \$400. The number of sheep fatteners benefitting from the project is expected to increase from about 1,600 at present to 2,800 by the end of project implementation. By 1980, when sheep fattening co-operatives would reap the full benefits of the project and the Emergency Feed Reserve, their net per capita income, now also slightly over \$200, would have increased to about \$315. Through the establishment of the Emergency Feed Reserve, all bedouin flockowners (estimated at 35,000) and to a lesser extent all sheep fatteners, even if not members of co-operatives, would benefit from the reduction of losses in stock and of the associated variability in income from year to year. Consumers would also benefit from the increased availability of meat and milk products.

53. The main risk faced by the project is related to the fluctuations of sheep feed availability as a result of variable rainfall. In the event that adequate measures are not taken to ensure that range sheep flock-owners have survival rations of feed available during drought years, benefits of the use of supplementary feed financed through NFRF as well as the benefits derived from improved animal health services would be greatly reduced. In order to minimise this risk, the Government would provide specific assurances concerning the establishment and timely operation of the Emergency Feed Reserve (see paragraphs 46-50).

#### PART V - LEGAL INSTRUMENTS AND AUTHORITY

54. The draft Loan Agreements between the Syrian Arab Republic and the Bank, the Report of the Committee provided for in Article III, Section 4(iii) of the Articles of Agreement, and the texts of draft resolutions approving the proposed loans are being distributed to the Executive Directors separately.

55. Features of the draft Loan Agreements of special interest are described in paragraphs 34, 37-41, 46, 47 and 50 of this report.

56. Appointment of the Executive Secretary, the price, feed allocation and cost accounting advisers of the NFPC (paragraph 34); of the Laboratory equipment adviser of MAAR's Animal Health Department (paragraph 40); and of GOF's feed stock management adviser (paragraph 47); and of the Director of GOF for the Emergency Reserve (paragraph 50) would be additional conditions of the effectiveness of the Loan Agreement.

57. I am satisfied that the proposed Loans would comply with the Articles of Agreement of the Bank and with the established criteria for Third Window Loans.

PART VI - RECOMMENDATION

58. I recommend that the Executive Directors approve the proposed Loans.

Robert S. McNamara  
President

by J. Burke Knapp

June 22, 1976  
Attachments



TABLE 3A  
SYRIAN ARAB REP - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOU KM <sup>2</sup> )	SYRIAN ARAB REP			REFERENCE COUNTRIES (1970)		
	1960	1970	MOST RECENT ESTIMATE	TUNISIA	TURKEY	LEBANON **
TOTAL ARABLE	185.2	..	..	..	..	..
GNP PER CAPITA (US\$)	150.0	320.0	400.0	320.0	450.0	700.0
<b>POPULATION AND VITAL STATISTICS</b>						
POPULATION (MID-YR, MILLION)	4.6	6.3	6.9	5.1	35.2	2.7
POPULATION DENSITY PER SQUARE KM, ARABLE LAND	25.0	34.0	37.0	31.0	45.0	268.0
VITAL STATISTICS	..	..	..	..	..	..
CRUDE BIRTH RATE PER THOUSAND	..	48.0	47.0	38.0	38.0 /a	41.0
CRUDE DEATH RATE PER THOUSAND	..	15.0	14.0	14.0	13.0 /a	13.0
INFANT MORTALITY RATE (/THOU)	..	93.0	..	108.0	145.0	82.0
LIFE EXPECTANCY AT BIRTH (YRS)	..	53.0	56.0	56.0	55.0 /b	58.0
GROSS REPRODUCTION RATE	..	3.5	3.5	3.4	2.6 /a,b	1.9
POPULATION GROWTH RATE (%)	..	..	..	..	..	..
TOTAL	3.6	3.2	3.3	2.1	2.5	2.5
URBAN	..	5.0	..	2.4	4.5	6.0
URBAN POPULATION (% OF TOTAL)	37.0	44.0	44.0	40.0 /a	39.0	59.0
AGE STRUCTURE (PERCENT)	..	..	..	..	..	..
0 TO 14 YEARS	46.0	49.0	49.0	46.0 /a	41.8	43.0
15 TO 64 YEARS	49.0	47.0	47.0	50.0 /a	53.9	52.0
65 YEARS AND OVER	5.0	4.0	4.0	4.0 /a	4.3	5.0
AGE DEPENDENCY RATIO	1.0	1.1	1.1	1.0	0.9	0.9
ECONOMIC DEPENDENCY RATIO	2.2	2.5	2.2	1.8 /b	1.1 /c	1.8
FAMILY PLANNING-ACCEPTORS (CUMULATIVE, THOU)	..	..	..	109.0	484.0 /d	87.0
USERS (% OF MARRIED WOMEN)	..	..	..	12.0	8.2	14.0
<b>EMPLOYMENT</b>						
TOTAL LABOR FORCE (THOUSAND)	1100.0	1500.0 /a	1700.0	1400.0	14500.0 /e	570.0
LABOR FORCE IN AGRICULTURE (%)	47.0	49.0 /a	54.0	57.0 /c	67.0	19.0
UNEMPLOYED (% OF LABOR FORCE)	9.0	6.0 /a	4.5	14.0 /a	0.0 /f	6.0
<b>INCOME DISTRIBUTION</b>						
% OF PRIVATE INCOME RECD BY- HIGHEST 5% OF POPULATION	..	..	..	23.5 /d	32.8 /g	26.0 /a
HIGHEST 20% OF POPULATION	..	..	..	55.5 /d	60.6 /g	55.0 /a
LOWEST 20% OF POPULATION	..	..	..	4.2 /d	2.9 /g	4.0 /a
LOWEST 40% OF POPULATION	..	..	..	11.4 /d	9.4 /g	11.0 /a
<b>DISTRIBUTION OF LAND OWNERSHIP</b>						
% OWNED BY TOP 10% OF OWNERS	..	..	..	53.0	53.0	57.0 /b
% OWNED BY SMALLEST 10% OWNERS	..	..	..	0.5	0.9	1.0 /b
<b>HEALTH AND NUTRITION</b>						
POPULATION PER PHYSICIAN	5200.0 /a	3850.0	3860.0	5950.0	2220.0 /b	1470.0
POPULATION PER NURSING PERSON	..	4960.0	3920.0	730.0 /c	1880.0 /b	1050.0 /c
POPULATION PER HOSPITAL BED	930.0 /a	1010.0	1090.0	410.0 /c	490.0	260.0
PER CAPITA SUPPLY OF - CALORIES (% OF REQUIREMENTS)	102.0	102.0	107.0	86.0	110.0	96.0
PROTEIN (GRAMS PER DAY)	74.0	70.0	75.0	54.0	78.0	70.0
OF WHICH ANIMAL AND PULSE	28.0	16.0 /b	..	14.0 /g	22.0 /i	11.0
DEATH RATE (/THOU) AGES 1-4	..	..	..	..	15.0 /b	8.0
<b>EDUCATION</b>						
ADJUSTED ENROLLMENT RATIO	..	..	..	..	..	..
PRIMARY SCHOOL	65.0	84.0 /c	..	107.0	111.0	111.0 /d
SECONDARY SCHOOL	16.0	39.0 /c	..	20.0	28.0	40.0 /d
YEARS OF SCHOOLING PROVIDED (FIRST AND SECOND LEVEL)	12.0	12.0	12.0	13.0	11.0	12.0
VOCATIONAL ENROLLMENT (% OF SECONDARY)	6.0	3.0 /c	4.0 /a	34.0	14.0	1.0 /d
ADULT LITERACY RATE (%)	36.0	40.0	..	..	55.0 /c	69.0 /e
<b>HOUSING</b>						
PERSONS PER ROOM (AVERAGE)	2.1 /b	..	..	2.7 /a	1.9	2.1
OCCUPIED DWELLINGS WITHOUT PIPED WATER (%)	59.0 /b	..	..	60.0 /a	64.0	34.0
ACCESS TO ELECTRICITY (% OF ALL DWELLINGS)	38.0 /b	..	..	24.0 /a	41.0	98.0
RURAL DWELLINGS CONNECTED TO ELECTRICITY (%)	11.0 /b	..	..	..	18.0	..
<b>CONSUMPTION</b>						
RADIO RECEIVERS (PER THOU POP)	57.0	224.0	376.0	77.0	89.0	215.0
PASSENGER CARS (PER THOU POP)	4.0	5.0	5.0	13.0	4.0	58.0
ELECTRICITY (KWH/YR PER CAP)	77.0	152.0	143.0	155.0	244.0	491.0
NEWSPRINT (KG/YR PER CAP)	0.2	0.2	0.1	0.1	0.7	1.7

SEE NOTES AND DEFINITIONS ON REVERSE

NOTES

Unless otherwise noted, data for 1960 refer to 1959-61, for 1970 to 1968-70, and for Most Recent Estimate to 1971-72.

\*\* 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.

<b>SYRIA</b>	1960	/a 1962; /b 1961-62.
	1970	/a Syrian population only; /b 1964-66; /c Including UNRWA schools.
	<b>MOST RECENT ESTIMATE:</b>	/a Including UNRWA schools.
<b>TUNISIA</b>	1970	/a 1966; /b Ratio of population under 15 and 65 and over to total labor force; /c Males only; /d Income recipient; /e Personnel in government services only; /f Government hospitals only; /g 1961-66.
<b>TURKEY</b>	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 Jews; /e 15 years and over, excludes unemployed; /f Registered only; /g Disposable income of households; /h Including assistant nurses and midwives; /i 1964-66; /j Persons six years old and over who tell the census takers that they can read and write.
<b>LEBANON</b>	1970	/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.

Rh February 4, 1976

DEFINITIONS OF SOCIAL INDICATORS

**Land Area (sq km)**

**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.

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

**Population** - As of July first; if not available, average of two end-year estimates.

**Population per square kilometer** - Mid-year population per square kilometer.

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

**Crude birth rate** - Annual live births per thousand of mid-year population; averages ending in 1960, 1970 and 1975 for developing countries.

**Crude death rate** - Annual deaths per thousand of mid-year population; averages ending in 1960, 1970 and 1975 for developing countries.

**Infant mortality rate** - Annual deaths of infants under one year of age; averages ending in 1960, 1970 and 1975 for developing countries.

**Life expectancy** - Average number of years of life remaining at birth; 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** - Compound annual growth rates of mid-year population; averages ending in 1960, 1970 and 1975 for developing countries.

**Urban population growth rate** - Computed like growth rate of total population; averages ending in 1960, 1970 and 1975 for developing countries.

**Urban population ratio** - Ratio of urban to total population; differences among countries may affect comparability of data.

**Age structure** - Children (0-14 years), working-age (15-64 years), and 65 years and over) as percentages of mid-year population.

**Dependency ratio** - Ratio of population under 15 and 65 and over to population aged 15 through 64.

**Ratio of population under 15 and 65 and over to population aged 15 through 64** - Ratio of population under 15 and 65 and over to population aged 15 through 64.

**Family planning - acceptors (cumulative, thou)** - Cumulative number of acceptors of birth-control devices under auspices of national family planning program since inception.

**Family plan - married women** - Percentages of married women 15 years and over who use birth-control devices in 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.; 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.

**Unemployed** - Unemployed are usually defined as persons who have left a job, out of a job on a given day, and seeking work for a specified minimum period not 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 50% of population.

**Percentage of land owned by wealthiest 5%** - Percentages of land owned by wealthiest 5% of owners.

**Population divided by number of practicing medical school at university level** - Population divided by number of practicing medical school at university level.

**Nurses** - Population divided by number of practicing "trained" or "certified" nurses, and auxiliary personnel with training or experience.

**Hospital beds** - Population divided by number of hospital beds in private general and specialized hospital and rehabilitation centers; excludes nursing homes and establishments for 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 FAO 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 level.

**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 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 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.

**Per capita protein (grams per day)** - Protein supply of food derived from animal and pulse.

**Annual deaths per thousand in age group 1-4** - Annual deaths per thousand in age group 1-4; 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; second-level education requires at least 6 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.

**Total years of schooling** - Total years of schooling may be partially or completely excluded.

**Vocational institutions include** - Vocational institutions include technical schools, trade schools, and other institutions which operate independently or as part of secondary or higher education.

**Percentage of total adult population aged 15 years and over** - Percentage of total adult population aged 15 years and over.

**Average number of persons per room in occupied structures and unoccupied parts** - Average number of persons per room in occupied structures and unoccupied parts.

**Occupied dwellings without piped water (%)** - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.

**Access to electricity** - Conventional dwellings with electricity as percentage of total dwellings in urban and rural areas.

**Rural dwellings connected to electricity (%)** - Computed as above for rural dwellings only.

**Consumption**

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

**Passenger cars comprise motor cars seating** - Passenger cars comprise motor cars seating excluding ambulances, hearses and military vehicles.

**Annual consumption of industrial, commercial and domestic electricity in kilowatt hours per capita** - Annual consumption of industrial, commercial and domestic 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.

**Per capita annual consumption in kilograms** - Per capita annual consumption in kilograms production plus net imports of newsprint.

ECONOMIC INDICATORS

	<u>GROSS NATIONAL PRODUCT IN 1974<sup>1/</sup></u>		<u>ANNUAL RATE OF GROWTH (% constant prices)</u>		
	<u>US\$ Mln.</u>	<u>%</u>	<u>1960 -65</u>	<u>1965 -70</u>	<u>1970-74</u>
GNP at Market Prices	3,995	100.0	8.5	5.5	6.6
Gross Domestic Investment	913	22.9	1.5	10.6	15.0
Gross National Saving <sup>2/</sup>	1,140	28.5	-	7.0	- 2.0
Current Account Balance	227	5.7	.	.	.
Exports of Goods, NFS	1,059	26.5	3.1	0.6	3.7
Imports of Goods, NFS	1,329	33.3	0.0	4.6	21.0

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1973 <sup>1/</sup>

	<u>Value Added</u>		<u>Labor Force<sup>3/</sup></u>		<u>V. A. Per Worker</u>	
	<u>US\$ Mln.</u>	<u>%</u>	<u>Mln.</u>	<u>%</u>	<u>US \$</u>	<u>%</u>
Agriculture	433	19.3	.86	50.5	505	38.3
Industry	504	22.4	.19	11.2	2,650	200.0
Services	1,309	58.3	.60	35.3	2,180	65.2
Unallocated	-	-	.05	3.0	-	-
Total	2,246	100.0	1.70	100.0	1,320	100.0

GOVERNMENT FINANCE

	<u>General Government</u>		
	<u>(S.L. Mln.)</u>	<u>% of GDP</u>	
	<u>1974</u>	<u>1974</u>	<u>1970-74</u>
Current Receipts	4,293	29.6	25.0
Current Expenditure	3,204	22.1	21.0
Current Surplus	1,089	7.5	4.0
Capital Expenditures	2,393	16.5	12.3
External Assistance (net)	2,003	13.8	-

<u>MONEY, CREDIT and PRICES</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
		<u>(Million S.L. outstanding end perio</u>			
Money and Quasi Money	2,521	2,715	3,428	4,114	5,970
Bank credit to Public Sector	2,790	3,210	4,016	3,677	5,521
Bank Credit to Private Sector	551	570	578	653	742

(Percentages or Index Numbers)

Money and Quasi Money as % of GDP	39.2	36.5	38.6	43.7	41.1
General Price Index (1963 = 100) <sup>4/</sup>	115	120	131	136	135
Annual percentage changes in:					
General Price Index <sup>4/</sup>	-	4.4	9.2	3.8	36.0
Bank credit to Public Sector	26.6	15.1	25.1	-8.4	51.8
Bank credit to Private Sector	-7.6	3.5	1.4	13.0	13.6

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

<sup>1/</sup> Preliminary estimates.

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

<sup>3/</sup> 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

.. not available  
.. not applicable

TRADE PAYMENTS AND CAPITAL FLOWS

BALANCE OF PAYMENTS

	1972	1973	1974
	(Millions US \$)		
Exports of Goods, NFS	482	604	1,059
Imports of Goods, NFS	599	690	1,329
Resource Gap (deficit = -)	-117	-86	-270
Interest Payments (net)	-7	-1	7
Workers' Remittances	68	51	66
Other Factor Payments (net)	-	-	-
Net Transfers	58	373	424
Balance on Current Account	2	337	227
Direct Foreign Investment	-	-	-
Net MLT Borrowing	-	-	-
Disbursements	30	67	118
Amortization	-35	-40	-48
Subtotal	-5	27	70
Capital Grants	-	-	-
Private Short-Term Capital (net)	17	-27	20
Other items n.e.i	-7	-21	-144
Increase in Reserves (+)	7	316	173 <sup>1/</sup>
Gross Reserves (end year) <sup>1/</sup>	172	461	597
Net Reserves (end year) <sup>1/</sup>	-36	276	445
			Nov.75 982
Fuel and Related Materials			
Imports	24	28	74
of which: Petroleum	(..)	(..)	(..)
Exports	52	77	434
of which: Petroleum	(52)	(77)	(434)

MERCHANDISE EXPORTS (AVERAGE 1972-74)

	US \$ Mln	%
Crude Oil	188	39.2
Raw Cotton	136	28.3
Textiles	48	10.0
Wool	15	3.1
Industrial Products	15	3.1
All other commodities	78	16.3
Total	480	100.0

EXTERNAL DEBT, DECEMBER 31, 1974

	US \$ Mln
Public Debt, incl. guaranteed	257.8
Non-Guaranteed Private Debt	-
Total outstanding & Disbursed	257.8

DEBT SERVICE, % of exports, 1974

	%
Public Debt, incl. guaranteed	5.0
Non-Guaranteed Private Debt	-
Total outstanding & Disbursed	5.0

RATE OF EXCHANGE

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 & Market)

LS 1.00 = US\$0.26 (Official & Market)

February 1974 to Date

US\$ 1.00 = LS 3.70

LS 1.00 = US\$0.27

<sup>1/</sup> Recently revised data. Includes \$27.5 in gold, valued at \$35 per ounce. Increase in Reserves in the balance of payments differ from differences in end-year Net Reserves, due to changes in the exchange rate.

.. not available

. not applicable



STATUS OF BANK GROUP OPERATIONS IN SYRIA

A. Statements of Bank loans and IDA credits  
(As of May 31, 1976)

<u>Number</u>	<u>Year</u>	<u>Borrower</u>	<u>Purpose</u>	<u>Bank</u>	<u>IDA</u>	<u>Undisbursed</u>
46	1963	Syrian Arab Republic	Highways		8.5	-
298	1972	Syrian Arab Republic	Highways		13.8	13.8
401	1973	Syrian Arab Republic	Water Supply		15.0	14.2
469	1974	Syrian Arab Republic	Irrigation		10.0	8.5
975	1974	Syrian Arab Republic	Irrigation	63.0		63.0
986	1974	Etablissement Public d'Electricité	Electricity	25.0		17.1
986-1	1975	Etablissement Public d'Electricité	Electricity	8.6		8.6
1144	1975	Etablissement Public d'Electricité	Electricity	72.0		72.0
124 <sup>1/</sup>	1976	Etablissement Public des Eaux de Figeih	Water Supply	35.0		35.0
126 <sup>1/</sup>	1976	Syrian Telecommunica- tions Establishment	Telecommuni- cations	28.0		28.0
<u>Total</u>				<u>231.6</u>	<u>47.3</u>	<u>260.2</u>
of which has been repaid				0	.2	
Total now outstanding				<u>231.6</u>	<u>47.1</u>	
Amount sold				1.1	0	
of which has been repaid				0	0	
Total now held by Bank and IDA <sup>2/</sup>				<u>230.5</u>	<u>47.1</u>	
Total undisbursed				<u>223.7</u>	<u>36.5</u>	<u>260.2</u>

<sup>1/</sup> Signed June 9, 1976.

<sup>2/</sup> Prior to exchange adjustments.

B. Statements of IFC Investments: None  
(As of May 31, 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 Tartous-Homs road. 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. Arrangements have been made to assess the economic viability of the new designs.

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 project 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 the 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.

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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 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 an area of 48,000 ha gross (with a net area which recently was increased from 41,000 to 45,000 ha) in the Balikh river basin, and the resettlement of farmers displaced by the filling of Lake Assad. The project includes consultant services from the preparation of an agricultural rehabilitation master plan in the Euphrates Valley, the preparation of a feasibility study for a 55,000 hectares rehabilitation project also in the Valley and the preparation of detailed designs and contracts' documents for the same area. The project suffers from substantial delays and cost overruns due for a large part to the general situation in the region. Bids for the first three civil works contracts have now been received, evaluated and awarded. 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. Adequate technical solutions now seem to have been found for problems of canal construction in gypsoferous soil which has beset works in pilot areas, provided that supervision is sufficient to ensure the observance of high standards of construction by contractors. 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

The Project consists of the first 150-MW unit of a new steam-electric power station at Mehardeh; eight 230-kV substations, consultant services and training. The Project is co-financed by a US\$33 million loan from the Kuwait Fund, including a second portion of US\$15 million to cover the considerable cost overrun due to the increased level of world prices. With Amending Agreement signed June 3, 1975, the Bank has increased the loan by US\$8.6 million in order to finance the foreign exchange cost of the increase in capacity of the first unit from 125-MW to 150-MW. The Amending Agreements became effective on January 19, 1976. Although main contracts were awarded about 5 months late, physical progress is satisfactory and ultimate delays are expected to be minimal.

Loan 1114 - Second Mehardeh Power Project; US\$72 million loan of June 17, 1975; Date of Effectiveness: January 19, 1976; Closing Date: June 30, 1980

The project comprises: Second steam generating unit at Mehardeh construction of 6 and extension of 2 substations, new office building, studies and training. Progress is as per schedule; the options under the contracts signed under Loan 986-SYR for the second 150-MW steam electric unit at the new Mehardeh power station and 220 kV substations have been exercised.

FIRST LIVESTOCK DEVELOPMENT PROJECT

SYRIA

LOAN AND PROJECT SUMMARY

- Borrower: Syrian Arab Republic.
- Amount: Bank: US\$5 million in various currencies.  
Third Window: US\$12.5 million in various currencies.
- Terms: Bank loan: Twenty years, including a 5-year grace period, with interest at 8.85 percent.  
Third Window Loan: Twenty five years including a 7-year grace period, with interest at 4.85 percent.
- Relending Terms: National Feed Revolving Fund. Through budgetary allocations, the Government would make the necessary resources available to the National Feed Revolving Fund (NFRF) to enable it to make loans to members of livestock co-operatives for the purchase of annual feed requirements. NFRF would levy an interest charge of 7.5 percent per annum on beneficiaries. However, a preferential rate of 5.5 percent per annum would be applied to beneficiaries with an annual household income of less than LS 3,500. NFRF would use the revenues from interest payments to expand its feed loan operations.
- Project Description: The project would increase and stabilize livestock production and the incomes of bedouin flock owners and sheep fatteners through the strengthening of national feed policy, improved feed availability and reinforced animal health services. The project would consist of:
- (a) strengthening the organizational framework including the National Feed Policy Committee, the General Organization for Feed, NFRF and the Agricultural Co-operative Bank, to be responsible for defining and implementing feed policies aiming at optimizing, on a national basis, the use of available feed materials and feed storage facilities;
  - (b) provision of financing for the annual purchased feed needs of sheep co-operatives, thus permitting the creation of 12 new sheep and range co-operatives and 12 new sheep fattening cooperatives;

- (c) reinforcement of the animal health services of the Ministry of Agriculture and Agrarian Reform through provision of vehicles equipment, pharmaceuticals and technical assistance and construction of sheep dips;
- (d) execution of a study of manpower requirements and training needs in the animal health field;
- (e) execution of a study of feed prices.

Project implementation would be completed by September 30, 1981.

Estimated Cost:

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	-----US\$ million-----		
Working capital to finance co-operatives' annual feed needs	20.5	4.2	24.7
Animal health services	1.1	3.6	4.7
Technical assistance	<u>0.1</u>	<u>0.4</u>	<u>0.5</u>
Base Cost	21.7	8.2	29.9
Physical contingencies	0.1	0.4	0.5
Price increases	<u>2.4</u>	<u>1.7</u>	<u>4.1</u>
Total Project Cost	<u>24.2</u>	<u>10.3</u>	<u>34.5</u>

Financing Plan:

<u>Component</u>	<u>Farmers</u>	<u>Government</u>	<u>IBRD</u>	<u>Total</u>
	-----US\$ million-----			
Co-operatives' Annual Feed Needs	5.0	8.4	11.3	24.7
Animal Health Services	-	1.6	3.1	4.7
Technical Assistance	-	0.1	0.4	0.5
Contingencies	<u>0.5</u>	<u>1.4</u>	<u>2.7</u>	<u>4.6</u>
Total Project Cost	<u>5.5</u>	<u>11.5</u>	<u>17.5</u>	<u>34.5</u>

Estimated Disbursements:

<u>Fiscal Year</u>	<u>Annual Amount</u>	<u>Cumulative</u>
	-----US\$ million -----	
1977	0.8	0.8
1978	2.4	3.2
1979	5.3	8.5
1980	4.6	13.1
1981	1.8	14.9
1982	1.7	16.6
1983	0.9	17.5

Procurement  
Arrangements:

Feed purchased with credit provided by NFRF would be procured by flockowners through existing private and public trade channels. The sheep dipping centres, for which disbursements would not be made from the Bank Loans, would be procured through competitive bidding advertised locally, following a review of the bidding documents by the Bank. Vehicles for the animal health services would be procured through international competitive bidding in accordance with the Bank Guidelines for Procurement. Pharmaceuticals would be procured through international shopping with at least three quotes, to allow procurement of brands customarily used in Syria. Equipment for the animal health services comprises many small items to be obtained from different manufacturers; it would be procured through competitive bidding in accordance with local procedures, acceptable to the Bank, or, where applicable, through international shopping with at least three quotes. Procurement of pharmaceuticals, vehicles and equipment would be grouped as far as practicable.

Consultants:

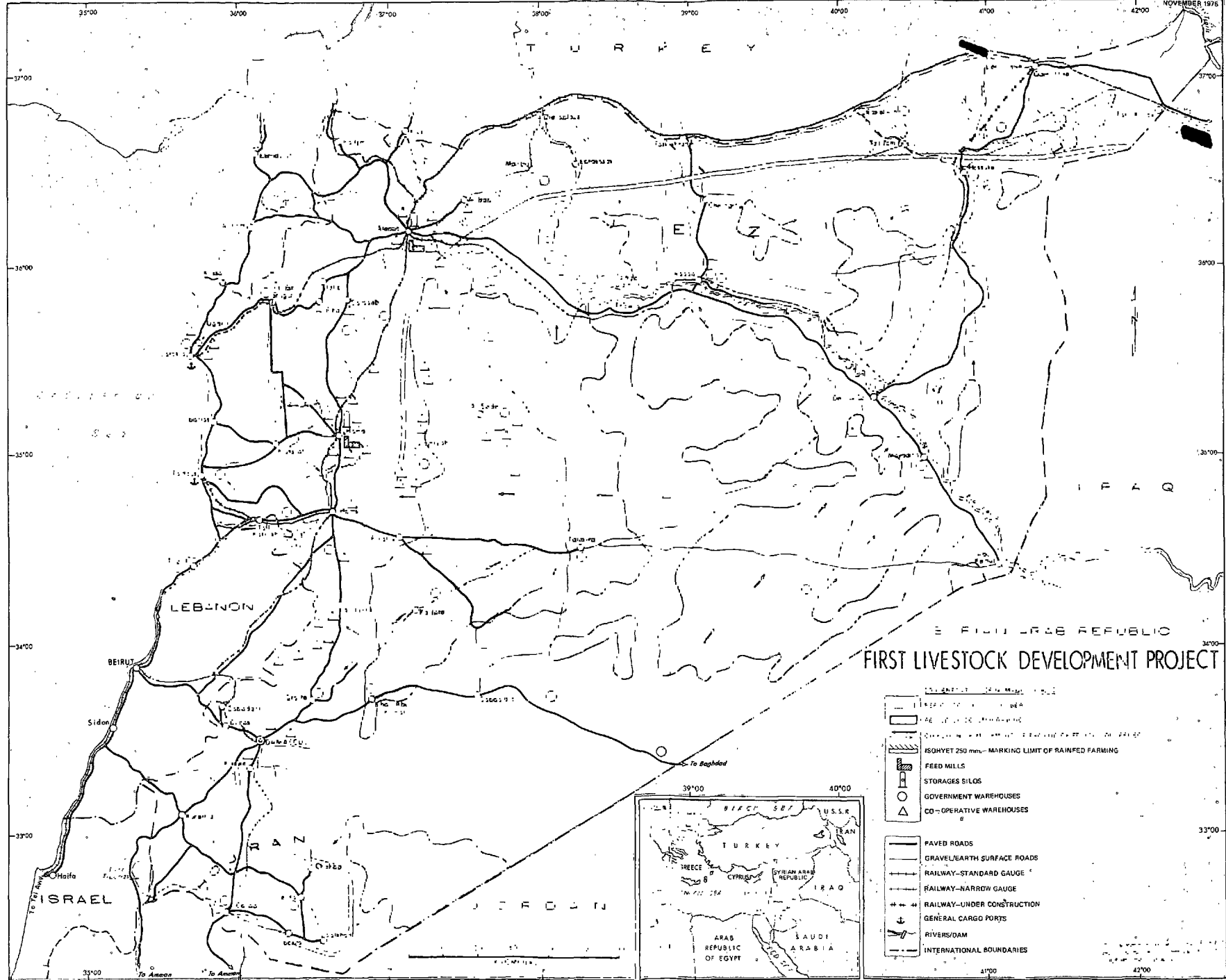
About 70 man-months of consultant services would be provided under the project, at an average cost (excluding contingencies) of \$6,700 per man-month.

Economic Rate of  
Return:

Estimated at 21 percent.

Appraisal Report:

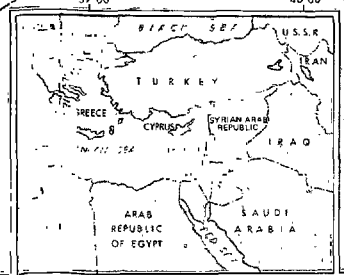
Report No. 1209-SY dated June 16, 1976



### FIRST LIVESTOCK DEVELOPMENT PROJECT

- LEGEND
- ISOLYNET 250 mm. MARKING LIMIT OF RAINFED FARMING
  - ☐ FEED MILLS
  - ☐ STORAGE SILOS
  - ☐ GOVERNMENT WAREHOUSES
  - ☐ CO-OPERATIVE WAREHOUSES

- PAVED ROADS
- GRAVEL/EARTH SURFACE ROADS
- RAILWAY-STANDARD GAUGE
- RAILWAY-NARROW GAUGE
- RAILWAY-UNDER CONSTRUCTION
- ⚓ GENERAL CARGO PORTS
- RIVERS/DAM
- INTERNATIONAL BOUNDARIES



Scale: 1:500,000