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Report No. P-2789-TU

REPORT AND RECOMMENDATION
OF THE
PRESIDENT OF THE
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED LOAN
TO THE
REPUBLIC OF TURKEY
FOR THE
KARAKAYA HYDROPOWER PROJECT

April 25, 1980

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TURKEY

CURRENCY EQUIVALENTS

<u>Currency Unit</u>		<u>Calendar 1978</u>	<u>July 1979</u>	<u>Jan. 1980 /1</u>
US Dollar 1	=	TL 24.28	TL 47.10 /2	TL 70.00 /3
TL 1	=	US\$ 0.04	US\$ 0.02	US\$ 0.01

/1 Since January 1980 the rate is being adjusted for the differential inflation between Turkey and its major trading partners. TL70/\$1 was used for this report.

/2 Except for imports of crude oil, petroleum products and fertilizer raw materials, and exports of agricultural products benefitting from official price supports, for which it was TL35 = US\$1.00

/3 Except for imports of fertilizers and insecticides/pesticides, as well as raw materials and inputs for their manufacture, for which the rate is TL55 = US\$1.00.

WEIGHTS AND MEASURES

kW	= kilowatt	One kilogram (kg)	
MW	= 1,000 kW	(1,000 grams)	= 2.2 pounds
kWh	= kilowatt hour	One tone (metric ton)	
GWh (Gigawatt hour)	= 1,000,000 kWh	(1,000 kg)	= 2,205 pounds
kV (kilovolt)	= 1,000 volts	One kilocalorie (kcal)	
One meter (m)	= 3.28 feet	(1,000 calories)	= 3.968 BTU
One kilometer (km)	= 0.624 miles	Cumecs (m ³ /second)	= 35.31 cubic feet per second

FISCAL YEAR

March 1 to February 28

GLOSSARY AND ABBREVIATIONS

CEAS	- Cukurova Elektrik A.S. (Cukurova Power Company)
DSI	- Devlet Su Isleri (State Hydraulic Works)
EIB	- European Investment Bank
EIE	- Elektrik Isleri Etut Idaresi (Electric Studies Institute)
IETT	- Istanbul Elektrik, Tramway, Tunel Isletmeleri (Istanbul Electricity Tramway and Tunnel Company)
MTA	- Mineral Research Institute
SEE	- State Economic Enterprise
SIB	- State Investment Bank
SPO	- State Planning Organization
TEK	- Turkiye Elektrik Kurumu (Turkish Electricity Authority)
TKI	- Turkiye Komur Isletmeleri Kurumu (Turkish Coal Enterprises)
TPAO	- Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation)

TURKEY

KARAKAYA HYDROPOWER PROJECT

Loan and Project Summary

Borrower: Republic of Turkey.

Amount: US\$120.0 million equivalent in various currencies.

Terms: Seventeen years including four years of grace, with interest at ___ percent per annum.

Project

Description:

The project will add 1800 MW of additional capacity to the Turkish power system, with an average yearly generation of 7750 GWh of relatively low-cost hydropower, thus contributing to reduced dependence on more expensive energy sources and savings in foreign exchange. It comprises a 173 metres high, concrete arch-gravity dam which will create 5.62 km³ live storage reservoir (9.6 km³ total storage) on the Euphrates river, a power house containing six 300 MW turbo-generator units and appropriate accessory equipment. It also includes resettlement of population, estimated at 17,000 living in 34 villages, and relocation of existing railway lines (33 kms), roads (35 kms) and two bridges.

In addition to help meeting growing power demand in Turkey, the project, together with the existing Keban dam (16.3 km³ of live storage) will result in a better regulation of Euphrates river-flows, thereby benefitting power and irrigation projects downstream. The project faces no special risks, although realization of benefits will depend heavily on adequate and timely coordination of activities during project implementation, including adequate financing.

Estimated Costs: About \$1,160 million equivalent, (excluding interest during construction of \$138.2 million) broken down as follows:

	-----US\$ Million-----		
	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
Preliminary Works	32.1	12.4	44.5
Civil and Hydraulic Works (Contract No. 1)	81.1	205.6	286.7
Turbines and Generators (Contract No. 2)	2.3	119.5	121.8
Electromechanical Equipment (Contract No. 3)	1.6	55.9	57.5
Engineering Services	6.0	9.5	15.5
Land Appropriations	59.9	-	59.9
Resettlement	<u>113.6</u>	<u>-</u>	<u>113.7</u>
Subtotal	<u>296.7</u>	<u>402.9</u>	<u>699.5</u>
Physical Contingencies	47.6	52.2	99.8
Price Contingencies	<u>94.3</u>	<u>25.3</u>	<u>119.6</u>
Total	<u>438.5</u>	<u>480.4</u>	<u>918.9</u>
Expenditures up to 1979	<u>120.0</u>	<u>121.5</u>	<u>241.5</u>
TOTAL PROJECT COSTS	<u>558.5</u>	<u>601.9</u>	<u>1,160.4</u>

Physical contingencies are estimated at 20 percent for civil works and related equipment, and 5 percent for turbo-generators. Price contingencies where applicable have been calculated in dollar terms, for both local and foreign costs as follows:

CY				
<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983-85</u>	<u>1986-87</u>
------(percent)-----				
10.5	9	8	7	6

Financing Plan:
(including expenditures made up to end 1979)

	---US\$ Million---	
	<u>Local</u>	<u>Foreign</u>
Swiss Financing		295
World Bank		120
European Investment Bank (EIB)		110
Italy		20
Abu Dhabi Fund		26
Turkey	<u>558</u>	<u>31</u>
	<u>558</u>	<u>602</u>

Turkey will meet the financing charges during construction, estimated at about \$138 million.

Estimated
Disbursement:

	-----US\$ Million-----							
FY	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Annual	22	19	17	14	17	13	12	6
Cumulative	22	41	58	72	89	102	114	120

Rate of Return: 15 percent.

Appraisal: Report No. 2848-TU, dated April 25, 1980

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT OF THE IBRD
TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO
THE REPUBLIC OF TURKEY
FOR THE KARAKAYA HYDROPOWER PROJECT

1. I submit the following report and recommendation on a proposed loan to the Republic of Turkey for the equivalent of US\$120 million, to help finance part of the foreign exchange costs of the Karakaya hydropower project. The loan would have a term of 17 years including 4 years of grace, with interest at 8.25 percent per annum. Besides Swiss export financing already arranged, the European Investment Bank (EIB) proposes to cofinance the project with a loan of \$110 million. Italy has agreed to provide \$20 million, and Abu Dhabi Fund, \$26 million.

PART I - THE ECONOMY

2. A Special Economic Mission visited Turkey in April/May 1979 to evaluate the Fourth Five-Year Plan (1979-83). Following discussion with the Government in mid October 1979, its report entitled "Turkey: Policies and Prospects for Growth" (No. 2657a-TU dated December 12, 1979), was distributed to the Executive Directors on December 26, 1979. A Postscript to the Special Economic Report was distributed to the Board on March 24, 1980. Their findings are reflected in this Part. Annex I contains the Basic Country Data.

Development Trends and Policies

3. As the result of a strong commitment to rapid growth and modernization, GDP increased at an average annual rate of 6.4 percent, 6.7 percent and 7.2 percent respectively during the First Plan (1963-67), Second Plan (1968-72), and Third Plan (1973-77) periods. This compares favorably with the experience of 55 "middle income" developing countries, whose GDP grew on an average 6.0 percent per annum between 1960-70 and 6.1 percent per annum between 1970-77. Moreover, the relatively high growth rate in Turkey was achieved without significant deposits of oil or other important natural resources.

4. Growth was accompanied by significant social changes. Although population grew at 2.5 percent per annum, rapid GDP growth nevertheless allowed substantial advances in per capita income. However, rising income levels were not accompanied by better income distribution and significant sectoral and regional inequalities in income exist, although basic needs have been satisfactorily met.

5. The public sector has played a key role in Turkey's development. Between 1963-77, its share in total fixed investment fluctuated around 50 percent, and its share of fixed investment in manufacturing increased from 21

to nearly 49 percent. The public sector dominates basic industries. Nevertheless, the private sector has emerged as an increasingly important and dynamic element in the economy and is beginning to shift its orientation from consumer goods to intermediate and investment goods, and from the domestic market to exports. Private sector investment increased at nearly 11.5 percent per year in real terms during 1967-77 compared to an average annual increase of only 4.8 percent between 1963 and 1967.

6. Turkish development between 1963-77, however, exhibited a number of structural characteristics which are of considerable relevance for future development policy. First, for a country of Turkey's size and per capita income, it has a very low level of exports relative to GDP--about 4 percent in 1977--as against a more or less "normal" import level of around 20 percent for middle income countries; this highlights the vulnerability of the balance of payments and the importance of export development to sustain the needed inflow of foreign exchange resources. Second, while the level of investment relative to GDP increased rapidly and compares favorably with other developing countries, mobilization of domestic savings has lagged; the ratio of domestic savings to GDP is well below the average for middle income countries; the growing gap between domestic savings and investment led in the mid-70s to a relatively high level of external borrowing, and domestic inflationary pressures emanating from excess demand and deficit financing. Third, a relatively high proportion of the labor force is still in agriculture, reflecting significant disguised unemployment and the need for accelerated job creation in non-agricultural activities; that in industry is low compared to other large middle income countries; furthermore, the relatively inadequate generation of additional employment has become more serious following the near cessation of workers' migration to Europe since 1974. Fourth, despite the growing dynamism of the private sector, the industrial scene is dominated by inefficient State Economic Enterprises (SEEs) which have not been exposed to market forces and serve not only economic but social goals; their growing deficits have imposed an inflationary burden on the budget, while their ambitious investment programs were financed through Central Bank borrowings, since their controlled prices have, until recently, not enabled most of them to generate sufficient cash to cover costs or investment expenditures. Fifth, due to the successes achieved since the early sixties through economic planning, there has been an increasing tendency to plan to a micro-level and seek to achieve changes through administrative fiat; however, the economy has reached a stage where such excessive reliance on this becomes counter productive; planning needs to be increasingly geared towards setting a framework in which market forces could secure the desired economic results in both the public and private sectors.

The Economic Crisis and Stabilization Efforts up to Mid-1979

7. These economic, institutional and structural characteristics of the economy made it particularly vulnerable to the sharp increase in import prices (including oil) in 1974 and the simultaneous occurrence of recession, inflation and rising unemployment in the industrial countries. These factors

played a key part in the deterioration of the Turkish economy. However, the politically weak governments, their policies in response to these factors and their efforts to pursue high growth policy despite the worsening international environment with increasing reliance on short-term external financing, together created forces that brought about the economic crisis that began in mid-1977 and still continues. The detailed analysis of the causes of this crisis and the government's attempts to stabilize the economy in the short-run up to mid-1979, is provided in the above-mentioned Special Economic Report and in paras. 8 through 15 of the President's Report (dated February 29, 1980) for the Structural Adjustment Loan approved by the Board on March 25, 1980.

8. The new IMF Standby, which replaced the one arranged in April 1978, was negotiated after the government took the following overdue measures in March/April 1979, to reverse the continuing adverse economic trends: (a) to improve the balance of payments, the TL was devalued in several steps until June, when a new buying rate of TL 47.10 per US\$1 was established for most foreign trade and all invisibles; the new rate represented a depreciation in export-weighted terms of nearly 75 percent since the end of 1970, and more than offset the differential inflation rate during the course of 1978-79 between Turkey and its major trading partners; (b) to further stimulate exports of industrial and mining products, exporters were allowed to retain 50 percent (up from 25 percent) of their foreign exchange earnings to finance their imported inputs or those of their local suppliers; (c) to improve the financial position of SEEs, further substantial price increases (34 percent to 110 percent) were announced for a number of products, raising them above world prices at the new exchange rate; these increases were estimated to yield an additional TL 80 billion in FY1979, to help reduce the overall borrowing requirement of the public sector; and (d) to ensure more effective mobilization and allocation of resources, interest rates for deposits and loans were increased substantially, from up to a maximum of 16% p.a. to over 24% p.a.; repatriated savings of migrant workers were allowed an additional interest premium.

9. The July 1979 Standby covered a twelve month period, and foresaw total purchases of SDR 250.0 million in four tranches - SDR 70.0 million initially, and SDR 60 million each after November 1979, March 1980, and June 1980. It provided for a series of specific performance targets to strengthen the public finances, reduce inflation and improve the balance of payments situation in the short term. These measures were expected to prevent further deterioration in the balance of payments during 1979, with essential imports projected at \$5.0 billion, about the same level as the previous year in real terms. A substantial increase in workers' remittances to a level of \$1.2 billion was expected to compensate for the increasing interest payments on foreign debt. At the same time, disbursements of medium- and long-term foreign aid (including the Bank's Program Loan) were expected to increase markedly in 1979, thus reducing the need for renewed short-term borrowing.

10. In 1978, short-term debts continued to grow. However, 1979 witnessed the completion of a major Turkish effort to alleviate the primary

external debt issue through: (a) slowing the growth of short-term liabilities; (b) debt relief arrangements; and (c) efforts to pursue new sources of credits, especially M< credits. The first debt relief operation, arranged through the OECD Consortium for Turkey in May 1978, involved consolidation of \$1.14 billion in arrears on guaranteed short-term and bilateral M< debt, as well as amounts due over the 13-month period May 21, 1978 to June 30, 1979. A second such major rescheduling took place in July 1979 involving about \$1.02 billion of the official bilateral and private guaranteed credits due between July 1, 1979 and June 30, 1980. A third major arrangement, finalized in July and August 1979 with commercial banks, rescheduled convertible lira deposits (\$2.3 billion), banker's credits (\$429 million) and third party reimbursement credits (\$300 million). About \$317 million in oil debt was also rescheduled. The total amount thus rescheduled was about \$5.5 billion. This is perhaps the largest debt rescheduling operation anywhere.

11. Turkey also succeeded in 1978 and 1979, though to a limited extent, in diversifying the sources and increasing the level of M< commitments, including \$250 million in project credits from the Saudi Fund. Perhaps the most important arrangement arrived at was the May 1979 OECD sponsored pledging of \$1.45 billion in special assistance, including about \$900 million in M< bilateral credits and export credits, besides \$407 million of medium-term credits from commercial banks (finalized in September 1979). Agreements for all these funds were expected to be finalized before the end of 1979. By that time, about \$750 million of this was estimated to be disbursed.

Economic Situation As Of End 1979

12. The economic crisis still continues. The measures taken in the context of the July 1979 Standby Arrangement have essentially succeeded in arresting further economic deterioration. Since it came into effect only in July 1979, it was recognized that the stabilization objectives which could be realized within one year were necessarily limited, and the progress towards them within the remaining six months of 1979 would also be quite modest.

13. After a surge up to mid 1979, worker remittances slowed down; nevertheless, they totalled about \$1.7 billion, against \$983 million in 1978 and the Standby's target of \$1.2 billion. Industrial exports rose quite strongly in the first half of 1979 in response to the changes in the parity value of the TL in April and June 1979; but they subsequently slowed down, presumably, partly due to severe shortages of imported inputs and partly due to the anticipation of further devaluation in the second half of that year. Overall, exports totalled about \$2.3 billion in 1979, against the Standby's target of \$2.7 billion. As a result of higher prices and the necessity of purchasing oil on spot markets, the 1979 oil bill rose from the projected \$1.7 billion to nearly \$2.5 billion. While imports in 1979 were contained at \$5.1 billion, marginally higher than the Standby's target of \$5.0 billion, the large oil bill necessitated more than anticipated reductions in essential imports. The problem was compounded by a much lower inflow of new capital than that envisaged in July 1979, because a significant part of the \$900 million committed by bilaterals in May 1979 at the OECD meeting had not been made effective up to December 1979; besides, only a portion of what was made

effective was available to finance imports in 1979. Disbursements were also lower than expected against the \$407 million of new commercial bank financing, because of its linkage with the November 1979 tranche of the Standby Arrangements which could not take place in time due to a change of government in Turkey in late 1979. Consequently, while the estimated current account deficit of \$1.6 billion in 1979 was more or less in line with the target in the Standby Arrangements, the volume of imports declined by about 15 percent in 1979, following a decline of about 30 percent in 1978. Overall, GNP growth in 1979 was about 1.5 percent. Under the great pressure imposed by extremely limited supplies of vital imported inputs and products, including oil, the resulting shortfalls in export earnings, the shortages of a wide variety of consumer goods, and much stronger pressure on wages than anticipated at the time of the Standby, the rate of inflation reached 64 percent in 1979.

January 1980 Economic Program and Policy Objectives

14. Despite the difficult stabilization measures adopted since 1978 and those reflected in the July 1979 Standby Arrangements, the economic crisis persisted throughout 1979. Following elections in October 1979 a new government was formed. It obtained a vote of confidence in late November 1979. Bold and far-reaching measures to reverse the economic situation were announced on January 25, 1980. These are summarized in Annex II and more fully discussed in Part II of the President's Report (No. P-2725-TU) for the Structural Adjustment Loan approved by the Executive Directors on March 25, 1980. The announced economic policy objectives underlying these measures represent a basic departure from the past planning objectives. Turkey has undertaken, through this program, the essential first steps to initiate major structural and institutional changes in the key areas summarized in para 6, so as to foster medium-term economic development on a stable basis.

15. Following the announcement of this program, the IMF approved a modification of the terms of the July 1979 Standby Arrangements, and the release of a larger second tranche on February 21, 1980. On March 24, 1980, it approved the release of an increased third tranche. Thus, of the balance of SDR 180 million remaining in their July 1979 Standby, only SDR 20 million remains for release by end June 1980. In addition, compensatory financing of SDR 71.6 million has been provided on February 21, 1980 together with the modification of the Standby. Together, this results in the provision of \$301 million (SDR 231.6 million) now with \$26 million (SDR 20 million) to be provided in June 1980. In addition, Germany took the lead in organizing the provision of sizeable external assistance, as well as a further debt relief operation. Also, in meetings sponsored under OECD auspices on March 26 and April 15, \$1.16 billion of bilateral aid was pledged. The success of the January 1980 measures is clearly dependent not on Turkey's own further efforts alone, but also on the willingness of the international economic and financial community to provide adequate and timely assistance in the period immediately ahead. The alternative for Turkey would be to cut back on imports, already pared to the bone; this, in turn, would postpone the possibility of economic recovery even further, jeopardize its efforts to curb inflation, and hamper the success of the bold structural changes it has initiated.

16. The new economic policy objectives underlying the Government's stated goal of "bringing about a major reorientation of the economy," can be summed up as follows:

- (a) Greater reliance on market mechanisms and forces by both the public and private sectors, and lesser reliance than hitherto on planning up to micro-levels and on administrative fiats to realize planned targets and objectives.
- (b) Reduction in the rate of inflation and improved management of balance of payments and external debts have the highest priority; in the process, Turkey may have to accept temporarily a lower GNP growth.
- (c) Import substitution and protection oriented policies, on which Turkish development policy hitherto relied and which resulted in a bias favoring production for the domestic markets, must give way to policies encouraging the public and private sectors to be efficient and internationally competitive.
- (d) In future, reliance must be placed on exports and foreign currency earning activities to finance Turkey's economic needs; the implementation of rational exchange rate policies and of measures encouraging exports are essential to achieve this objective.
- (e) The SEE sector must be reformed, by exposing it to market forces, by allowing it to set its own prices and by improving its management; through such actions, it must generate its own resources to cover operating costs and investment expenditures.
- (f) Domestic resource mobilization efforts, unlike the past, must be substantially augmented through increased tax efforts, the banking system, increased savings and the development of financial markets; the elimination of deficits of the public sector is an important objective of budgets from 1980 onwards.
- (g) Investments aiming at fuller utilization of existing productive capacity and completion of those ongoing projects requiring modest inputs should have first priority; thereafter, the priority should be for new investments stressing exports and employment or those removing critical infra-structural bottlenecks; in any event, investments should be tailored to scarce resources.
- (h) Conditions to stimulate foreign investments in oil, industry and agriculture must be created, in contrast to the past when such investments were not encouraged; prudent external debt management policies to create confidence in and flow of large external resources to Turkey should be followed.

17. These are radical departures from past Turkish economic policy. Considerable effort will be required to implement the new policies and complete the structural and institutional changes which Turkey has begun. The difficulty of the task should not be underestimated. The key policy areas are: (a) a rational exchange rate policy; (b) policies ensuring increased export earnings and encouraging foreign investments; (c) reform of the SEE sector, and the use of market forces to improve its efficiency and output as well as that of the private sector; (d) policies to improve domestic resource mobilization; and (e) formulation and pursuit of rational external debt management policies.

18. The actions taken by Turkey since 1978 in these areas, including measures in the January 1980 program and those planned for implementation in the medium-term, are summarized in the Table in Annex II. Progress in implementing them so as to foster economic recovery in the medium-term will be the focus of two reviews in July 1980 and December 1980, under the recently approved Structural Adjustment Loan. While all the issues listed in the Table are important, two of them merit further discussion: (a) external debt management and (b) public sector investment program.

19. Turkey's external debt management policy has to grapple with several difficult issues. First, the large overhang of debt, and the relatively hard terms of the recent debt reschedulings, together raise a question regarding the need for further rescheduling in the near-term. A substantial improvement in the repayment profile of the rescheduled debts and the containment of Turkey's short-term indebtedness over the medium-term to no more than the present level of about \$3.8 billion is necessary to alleviate the heavy debt servicing burden over the next 5 years; a critical element here is the likely posture of commercial creditors, which cannot be easily anticipated. Second, it is important that Turkey obtain sizeable external credits on as long-term and concessional a basis as possible, to complete ongoing projects and undertake new ones in accordance with its stated investment criteria (para. 20). Recognizing the importance of these issues and the longer-term concerns regarding its creditworthiness that its creditors have, Turkey has been focussing its attention on evolving a balanced and prudent policy for external debt management. The Government has already initiated a comprehensive study of external debt, which it expects to complete before October 31, 1980. This study should help Turkey to further improve and refine its present external debt management policy; that should also assist Turkey in exercising greater control over the level and terms of new external financing it would seek from various external sources over the next five years.

20. As discussed earlier, the overall size and quality of the public investment programs until 1977 have contributed to the economic crisis. Actions taken over the last several months provide some evidence that given the severe domestic and foreign exchange constraints, public investment expenditures are being channelled towards projects meeting strict investment criteria. However, the January 1980 program and the policy announcements accompanying it go beyond that. They emphasize that since control of inflation is more important at present than the past Turkish strategy of concentrating only on higher growth, the projected level of annual investments

must be rigorously tailored to meet the availability of scarce resources each year. Investments in fiscal 1979 were lower in real terms than those in fiscal 1978. The Government proposes to continue that trend for fiscal 1980. Priority is to be accorded first to investments designed to utilize existing productive capacity more fully and to complete ongoing projects which can yield attractive returns with modest additional investments. Thereafter, the priority for new investments is for productive projects either contributing to exports or employment, or for those which remove critical infrastructural bottlenecks. A new Incentives and Investment Department has been established, whose purpose is to review which ongoing investments should be stopped, deferred or completed on an accelerated basis.

21. Successful implementation of the economic reorientation begun in January 1980 will take time, require persistence and courageous action on the part of the Government and call for substantial support from the international community. In the medium term, it will strengthen the basis for Turkey's creditworthiness and reestablish a path of stable economic growth.

Turkey's Medium-Term Economic Prospects

22. The Fourth Five-Year Plan (1979-83), approved by Parliament in November 1978, was in many essential ways an extension of the traditional Turkish development planning. It set out to complete the unfinished tasks of the Third Plan, and continued to emphasize a high growth rate, a large investment allocation for import substitution in basic and intermediate goods industries, and reliance on administrative controls rather than on market incentives. But it also attempted to address some development issues which came to the fore during the economic crisis, i.e. export growth and increased savings. Consequently, an export growth target of 18 percent p.a. in real terms and a marginal savings ratio of 34 percent were set, and priority was also accorded to export-oriented investments. But investment allocations provided mixed signals, favoring import substitution. In view of the continuation of the economic crisis, the unattainability of the targeted marginal savings ratio, and the difficulties that Turkey is facing currently, the Fourth Plan targets of investment and growth are clearly not going to be achieved.

23. Against this background, the Bank has made its own prognosis based on a general equilibrium model of the economy which permits quantification of alternative policies and a detailed and consistent examination of Turkey's medium-term prospects. Given the accumulation of economic problems of the last three years, the political difficulties besetting the country, the additional resources needed to cover the significantly increased cost of imports (including oil), and the limitations which Turkey is likely to encounter over the medium-term in significantly increasing the net inflow of capital, GDP growth in real terms may average around 4 percent p.a. with a real growth of exports about 12 percent p.a., during 1980-85. These growth rates appear attainable, assuming continuation of appropriate economic policies (including those announced in January 1980), and taking into account the low export base

and present underutilization of capacity. 1/ The international oil situation, following the recent substantial oil price increases at end-1979, has a major impact on future prospects. Even if Turkey allows only a marginal increase in oil imports during 1980-1985 to sustain a lower level of growth, the oil import bill is estimated to increase to \$3.2 billion in 1980 and \$6.1 billion by 1985, which as a percentage of merchandise exports and non-factor services reached 78.1 percent in 1979 and is likely to remain at a level of about 68 percent until 1985. The pressure this will exert on Turkey's already difficult balance of payments position is obvious. Although in constant dollars the ratio appears manageable, in current prices the projected current account deficit as a percent of GNP increases from 3 percent in 1979 to about 5.3 percent in 1980 and remains at a level of about 4 percent thereafter until 1984. Considering the limitation on the gross inflows of available external assistance and given the need for sound external debt management, Turkey can sustain an average annual current account deficit of the order of \$2-2.2 billion annually over the next 5 years.

24. Taking into account international inflation and the growing obligations for debt amortization, this situation necessitates a large and sharply increasing gross annual average inflow of foreign capital, rising from the current relatively low levels to about \$5.2 billion during the next five years, implying an annual average of about \$2.3 billion of net capital inflow for the same period. Such major inflows of foreign capital can only be sustained on the basis of prudent external debt management. In any case, debt service obligations are likely to remain very high over the coming 5 years. In 1978, total debt service payments had risen to 26.7 percent of exports of goods, non-factor services and workers' remittances after making allowance for the rescheduled service payments. In 1980, the ratio is projected to reach close to 37 percent, and is likely to peak in 1985 at a high level of about 48 percent, before declining. This, however, should represent the culmination of the financial consequences of the present crisis and the debt burden should remain manageable, provided the new policies are successfully implemented and the export drive is sustained.

PART II - BANK GROUP OPERATIONS IN TURKEY

25. A large lending program for Turkey essentially began following the introduction of its 1970 Stabilization Program. To date, the Bank/IDA have lent \$2,320 million through 56 projects. Agriculture accounts for 30 percent of funds lent, industry and DFCs for 34 percent, power for 14 percent and urban development, transportation, education and tourism for the rest. Annex III contains a summary statement of Bank loans, IDA credits and IFC investments as of March 31, 1980, with notes on the execution of ongoing projects.

26. Since mid-1975 the implementation of private sector projects has been satisfactory. Political uncertainty, limited coordination amongst

1/ See "Turkey: Postscript Special Economic Report", Attachment 1, Report No. 2918-TU, dated March 20, 1980, circulated to the Executive Directors on March 24, 1980.

ministries and staffing problems resulted in uneven and delayed project implementation in the public sector. Therefore, a system of joint project reviews between Turkey and the Bank was instituted in June 1975. This resulted in distinct, but modest, improvements up to end 1977. The situation was again reviewed with the Government in March 1978, and further discussed with the then Prime Minister in April 1978. Subsequently, Turkey established a new high-level coordination team. This team set up procedures for monitoring and achieving realistic implementation and disbursement targets. As of December 1979 disbursements increased to 69 percent of appraisal estimates against 51 percent in June 1975. The last joint review was held in April 1979. The encouraging progress that is now manifest allows cautious optimism that performance will gradually improve further.

27. Bank lending is now aimed at supporting Turkey's efforts to improve its: (a) capacity to earn foreign exchange, through promotion of industrial and agro-industrial exports; (b) income distribution, employment opportunities and living standards, through rural and urban development projects; (c) lagging public sector savings, through the encouragement of improved management and financing of the investments of key SEEs; and (d) infrastructure posing critical bottlenecks for development. The Bank has begun discussions with the new government on how its lending can best contribute to the government's medium-term objectives, especially export promotion, without being handicapped by past policy and institutional obstacles. Meanwhile, agriculture and industry remain the key sectors for lending. In agriculture, projects emphasize livestock, exports, and rural development; in industry (including DFCs), the emphasis is on promotion of exports and employment, as also the gradual strengthening of the SEEs. Projects for urban development, public utilities and transportation supplement these efforts. We propose to maintain a close macroeconomic and sector dialogue with Turkey. The economic and sector work planned over the next few months includes an updating economic mission and completion of sector memoranda on industry and energy. In addition, the progress made in fostering the structural adjustments initiated by the Government through the January 1980 program will be discussed in the context of the disbursements of the Structural Adjustment Loan.

28. A thirteenth TSKB loan designed to stimulate investments in export projects of the private sector, loans for a Private Sector Textile Project and an engineering loan to assist the alleviation of air pollution in Ankara, were approved by the Board in the first four months of FY80. A loan for Structural Adjustment was approved on March 25, 1980. The Sumerbank Textile and the Fifth Livestock Development Projects are scheduled for Board consideration later this fiscal year. Projects being processed for future fiscal years include those for pilot enhanced oil recovery and oil exploration, fruit and vegetables, livestock products, rural development, fertilizer production, employment generation in selected cities, pulp manufacture, seed production and sewerage disposal in Istanbul.

29. The Bank Group's share of the estimated total external debt (including short-term obligations) was 5.9 percent in 1978, and is expected to grow to 10.0 percent by 1981 and to 12.5 percent by 1985. The Bank's share of

service payments is projected to fall slightly from its level of 7.7 percent in 1978 to 6.4 percent in 1981, thereafter increasing to 7.6 percent by 1985.

30. IFC has invested in synthetic yarns, pulp and paper, glass, aluminum, iron and steel products, motor bicycle engines, piston rings and cylinder liners, and tourism. It has also invested in TSKB. As of March 31, 1980, gross IFC commitments totalled about \$208 million, of which \$96 million were still held by IFC. New investment opportunities are being pursued.

PART III - THE POWER SUB-SECTOR AND ENERGY SECTOR

Power and Energy Resources

31. The spiralling cost of imported oil and the current serious fuel and power shortages make energy supplies a critical constraint on Turkey's growth. Turkey's main indigenous energy resources are hydropower and lignite. Other resources consist of coal, bituminous schist, oil, uranium and geothermal energy. The total hydropower potential is estimated at 100,000 GWh p.a., with a corresponding installed capacity of 25,000 MW; of which nearly 30 percent is developed or under construction. Lignite reserves, estimated at about 5.5 billion tons, are sufficient to provide fuel for about 10,000 MW of thermal power plants. The estimated oil reserves are in the order of 60 million tons, but intensive prospecting for oil and gas has not yet been done. The known reserves of uranium totals 4,500 tons of uranium oxide (U_3O_8). Geothermal energy resources, thought to be fairly abundant have not been adequately evaluated so far. The first geothermal power plant is currently under construction. Non-commercial energy sources, wood and wastes, which contributed more than half of Turkey's energy supply in 1960 have declined to less than 20 percent by 1978.

32. Imported oil meets over 50 percent of Turkey's commercial energy needs. The principal domestic alternatives for producing electric power are low-calorific lignite, hydropower, plus reserves of geothermal energy. At present, the development of lignite and water as energy sources is being emphasized.

Capacity and Demand

33. Turkey's installed public generating capacity at the end of 1978 totalled 4,125 MW; of this, 92 percent was owned by Turkiye Elektrik Kurumu (TEK) and 7 percent by Cukurova Elektrik A.S. (CEAS). In addition, municipalities and self-producers have a combined capacity of 742 MW. The annual growth rate of electricity sales during 1965-78 was about 11 percent, and would have been higher but for constraints in generating capacity. Industrial users predominate and have maintained a relatively constant share of about 73 percent in total electricity consumption over the past 15 years.

34. The national load forecasts for the period 1979-1986 show an annual growth rate in sales of 14 percent until 1986 and 9 percent thereafter.

The maximum demand would increase from 4,060 MW in 1979 to 11,240 MW in 1986. The 1979-86 development program would add 5,542 MW of hydro plant and 6,695 MW of thermal plant to the power system, and the installed capacity is expected to grow from 4,867 MW in 1978 to 15,976 MW in 1986. Most of the thermal plants will be fuelled with lignite. Major projects intended to meet the projected demand are: Keban hydro-power (1,260 MW), partly commissioned; Elbistan lignite (1,200 MW), under construction and partly financed by the Bank (Loan No. 1023-TU); and the proposed Karakaya hydropower project (1,800 MW). Major power generation will be concentrated in eastern and central Turkey, and most of it will have to be transmitted an average of 700-800 km, to the main consumption centers in the western part of the country. Transmission network construction will include 5,670 km of 380 kV, 45,000 km of 154/60-kV and 30-kV lines, and 22,360 MVA in substation capacity. This development program for 1980-86 is estimated to cost about \$22 billion in early 1980 prices, and the Karakaya project represents 4 percent of this total. However, it is clear that this program is rather optimistic in light of Turkey's financial constraints in the medium-term period; nor is such a level of investment likely to be necessary because the rate of GNP growth in this period, for reasons discussed in Part I, can be expected to be below the high historical rate of growth achieved during 1962-77. The Government is therefore reviewing its Fourth Plan targets. Given the severe domestic and foreign resource constraints, the level of annual investments in the power subsector, as in other sectors, are proposed to be vigorously tailored to available resources each year, and these limited resources are being channelled towards projects meeting strict investment criteria. Therefore, appraisal has been based on an alternative load forecast, with an annual trend growth rate of 11 percent. Nevertheless, in view of the present serious energy situation, Turkey must speedily augment power generating capacity, especially that based on cheaper hydropower, to reduce its dependence on expensive imported oil. Indeed, Turkey's present economic difficulties, combined with the high costs of imported oil, has led to even existing oil-fuelled generating capacity not being fully utilized, resultant drastic power cuts, and consequent loss of production to the economy.

Energy Policy

35. Against the setting described above, a major objective of Turkey's energy policy is optimum utilization of indigenous resources to restrain the growing dependence on imported oil. Turkey is therefore trying to develop its own energy resources, particularly hydropotential of the Euphrates River and lignite deposits at Afsin-Elbistan. The hydropower potential and lignite reserves could cover power generation needs almost to the end of this century. Although not economically justified before 1994, the first nuclear power plant is planned for 1988 to obtain required experience in construction and operation.

36. Apart from measures to develop indigenous energy resources and restrain oil consumption through price increases and restricted supply, the Government plans to expand petroleum exploration activities by increasing the financial resources available for this purpose, encouraging joint-venture exploration efforts in collaboration with foreign oil companies, providing increased incentives for offshore exploration and application of enhanced

recovery methods to existing oil fields. However, despite all these measures, Turkey is unlikely to accomplish its objectives of meeting 60 percent of the demand for domestic production during this decade, unless sizeable new reserves are discovered in the near future. National energy policy focusses on effective energy conservation (about which much remains to be done), development of oil-shale, geothermal and solar energy, and long-range energy planning encompassing viable supply options, together with demand and utilization patterns.

Institutions

37. Under the general authority of the Ministry of Energy and Natural Resources (MOE), responsibility for electricity generation and supply is divided between:

- (a) The Turkish Electricity Authority (TEK), an SEE formed in 1970 with primary responsibility for electrical energy planning as well as construction and operation of thermal generation and transmission facilities;
- (b) The State Hydraulic Works (DSI), a semi-autonomous agency with responsibility for the planning of water resource development and for the construction of hydroelectric facilities, in coordination with TEK, which assumes ownership after such facilities are brought fully into commercial operation;
- (c) two concessionary utility companies, authorized to generate and distribute power in four out of a total of 67 Turkish provinces, the more important being the Cukurova Electric Company (CEAS) in the Adana region;
- (d) municipal authorities, most of whom purchase bulk power from TEK and distribute it within their jurisdiction.

The principal institutional constraints in the power sub-sector lie in:

(a) coordination and planning; (b) organization, management, and staffing; and (c) subsector financing. These are discussed below.

38. Coordination and Planning. Although the responsibility for coordination and planning is centralized in TEK, significant improvements in the coordination of planning and the allocation of resources among the various agencies concerned with power are still needed. Some agencies have, in practice, maintained a fairly independent role; for example, although the TEK Law requires close coordination between DSI and TEK in the planning and design of hydroelectric generating facilities, TEK is not always sufficiently involved in the identification, selection and design stages of such facilities. Similarly, improved coordination is needed between TEK and the Turkish Coal Authority (TKI) in the planning of coal and lignite mining development and related power generation. Moreover, all these plans need to be carefully evaluated in the light of available local and foreign resources and their relative priorities established in the context of resource constraints. As a result, there have been lags in the implementation of some new projects, which

have aggravated shortages of energy supplies. The Government has agreed to review existing arrangements, with a view to improving coordination between TEK and DSI for hydro-power development, and between TEK and TKI, in formulating medium and long-term development plans and integration of their development programs, and ensuring their timely execution (Loan Agreement Section 4.06).

39. Organization, Management and Staffing. Ever since its creation, TEK has faced problems of organization, management and staffing. The organizational structure it inherited from its predecessor organization was not suited to its widened responsibilities under the TEK Law and recommendations for a reorganization were formulated in March 1973 by consultants financed under the Bank's 1967 technical assistance grant. These recommendations aimed at decentralization of authority for operations to regional offices and reorganization of management responsibilities at headquarters. TEK has already prepared a reorganization plan, and partially implemented it, with the establishment of some regional offices. A fuller implementation of this plan must, however, await an improvement in TEK's staffing situation. To provide TEK's management with reliable estimates of the magnitude and composition of its future staffing needs, under the ongoing TEK II project (Loan No. 1194-TU), TEK completed a detailed manpower study through its consultants, and has agreed to furnish a program of action to implement the recommendations of the study. However, in TEK, as in other SEEs, the management's ability to recruit and retain competent personnel, especially experienced engineers with senior and middle level management capabilities, has been affected by the Personnel Law governing SEEs. Attempts to overcome management and staffing problems through special authority to hire outside personnel on contract, has alleviated the situation, but is by no means entirely effective. This situation can only be resolved by a basic SEE reform; though efforts to achieve such a reform did not succeed in the past, we expect that following the Government's bold and far-reaching measures enacted early in 1980 to reform the SEE's financial operations, basic reforms needed in SEE management will receive much needed attention. This matter, insofar as it relates to TEK, will therefore continue to be pursued under the on-going TEK II Transmission project. DSI's staffing is adequate, but it has to strengthen its project management and supervision capacity. Measures to strengthen DSI project management and supervision capacity have been proposed under this project (see para. 58).

40. Sub-Sector Financing. The problems of coordination and planning that face TEK, DSI and TKI (para. 38) also affect the financing of investments for generation and transmission facilities. They are characterized by a lack of coordinated policies and clear financial goals for the many institutions involved.

41. Investments in power generation and transmission are financed through two principal channels. Government budget and foreign loans are used to finance the hydro-electric facilities, constructed by DSI, a non-revenue generating agency. When fully completed and in commercial operation, they are transferred as Government equity to TEK. On the other hand, thermal generation and transmission facilities constructed by TEK, are financed by TEK's internal cash generation and loans from the State Investment Bank and foreign sources. Municipalities who purchase bulk power from TEK, are responsible

for investments in distribution and related facilities in their jurisdiction. Municipal tariffs are expected to contribute a reasonable portion of future investments in the municipal distribution assets. Many municipal organizations are however involved not only in electrical power distribution, but also in other activities such as public transportation and gas supply. While municipal power distribution activities have remained generally profitable, transport, and to a lesser extent gas supply, have generally incurred heavy losses, which were met from electricity profits. Against this background, the question of adequate generation of resources for power subsector investments, especially of generation and transmission undertaken by DSI and TEK, assumes significance.

42. TEK is not immediately concerned with the proposed project, but it will be the ultimate beneficiary when the Karakaya assets are transferred to it on completion by DSI, several years from now. However, in view of its central role in the subsector, as the "generator of cash" for major power investments, it becomes important to pay attention to its financial role in the system.

43. In its past power loans, the Bank has tried to promote the concept of the "user paying for service" and TEK generating internal resources to finance part of its investments. This meant, in practice, a concern with the financial soundness of TEK as an enterprise, and with TEK's tariffs, receivables and its rate of return. The loan agreements with TEK (Loan 1023-TU and Loan 1194-TU) require it to earn an 8 percent return on revalued assets. This is in line with TEK Law, which requires TEK to earn an 8 percent return on net fixed assets. However, as the TEK Law does not spell out the manner of computing the return, or explain what constitutes expenses, these matters have been clarified in the Loan Agreements with the Bank. They provided that the rate of return be calculated on the basis of revalued assets, according to a formula which realistically reflected changes in values as a result of inflation and exchange rate changes.

44. TEK's financial operations have however been marked by two features: (i) failure, except in 1972, to earn the minimum 8 percent return on net fixed assets; and (ii) a chronic shortage of cash, on account of continuing inability to collect its bills for electricity, mainly from municipalities. The major reasons for the former were: (i) Government's caution in increasing tariffs of a basic input like electricity, out of concern that drastic tariff increases could aggravate inflation and affect Government efforts to control it; (ii) the tariff increases being largely offset by a significant rise in operating expenses, caused by substantial increases in fuel prices and wages; (iii) the expensive generation-mix of TEK, with a large dependence on small, inefficient and fuel fired plants, as well as small distant hydro sources; and (iv) the high level of income-taxes payable by TEK (41.7 percent of income).

45. These difficulties led to serious differences between Turkey and the Bank and delayed the effectiveness of the TEK II Loan for nearly two years. In April 1978, following discussions with the then Prime Minister, an agreement was reached that the Government would increase TEK's bulk tariffs by January 1, 1980 to enable TEK to achieve a 5.5 percent return for 1980 on the basis of agreed principles, and increase tariffs thereafter, to achieve the 8 percent return for 1982. Effective February 1, 1980, the Government raised the TEK's

tariffs to 280 krs/kwh, nearly 130 percent above April 1979 levels, as part of the Government's comprehensive January 1980 economic program. Consequently, the Government has ensured that, in line with its commitment, TEK will achieve the agreed 5.5 percent return for 1980. Despite this salutary development, the pricing of electric power remains affected by two inter-related difficulties: first, the tariffs do not enable TEK to generate internally sufficient cash to make a reasonable contribution to the cost of its investment program; and second, the tariff structure is unrelated to either marginal cost or the cost of supply. To provide a basis for rationalizing the structure of tariffs and electricity pricing policies at the bulk supply and distribution levels, TEK carried out under the TEK II project, with the help of qualified experts, a nationwide study of tariffs in the power sub-sector, which is now under review by the Government, TEK and the experts. We expect to exchange views in the near future on this tariff study's recommendations for a revised power tariff structure. Nevertheless, given the continuing high rate of inflation and periodic substantial exchange rate changes which affect the revaluation of net fixed assets, it seems more appropriate to relate a rationalized bulk tariff structure to yield each year adequate level of cash towards the power investment of both TEK and DSI. The Government has therefore recently requested the substitution of a viable cash generation covenant for the rate of return covenant in Loans 1023-TU and 1194-TU. As the objectives of both the rate of return and cash generation covenants are the same, namely, adequate cost recovery and generation of internal resources to meet a reasonable part of future investments, the Bank agreed to consider the request, provided principles yielding adequate levels of cash generation are reflected in such a covenant.

46. During negotiations, agreement was reached on the principles as well as on appropriate levels of cash generation, gradually increasing over time. Since TEK's cash generation is also derived in part from assets constructed by DSI, the cash generation objective would be applied to the total generation and transmission investments in the power sub-sector, instead of only to TEK's investments. TEK's cash generation will be computed before income-taxes, but after deducting total debt service not merely on TEK's loans, but also on foreign loans incurred by the Government for DSI's hydro projects. It was agreed that beginning in 1981, TEK would generate not less than 20 percent of total TEK and DSI investments in the power subsector including interest during construction, gradually increasing to about 35 percent in 1986 and thereafter. This will be an interim arrangement, pending the completion of the subsector financing study (para. 50). The Government will furnish to the Bank by December 31 each year its total power subsector investments for TEK and DSI in the coming year, including interest charged during construction, the extent of cash generation based on TEK's financial forecasts for the coming year and its proposal for meeting agreed internal cash generation. Following approval by Parliament of the Government's Budget and the annual investment plan, including the power subsector plan by end February, the Government will take necessary tariff measures by May 31 to meet that year's cash generation requirements (Loan Agreement, Section 4.08).

47. While the arrangements described above should enable sufficient mobilization of resources from bulk power users, they will be of little avail unless TEK can collect these resources. TEK has had serious difficulties in

collecting from municipalities, to whom it sells bulk electricity. Such sales account for nearly 35 percent of TEK's sales. There are two principal reasons for the municipal defaults. First, municipal retail electricity tariffs were not promptly increased in the past, in line with increases in TEK's tariffs. Secondly, municipalities were diverting their electricity surpluses to meet losses in their other activities such as transport and gas. However, since 1977, the Government has faithfully fulfilled its first commitment to increase municipal retail tariffs promptly, along with increases in TEK's tariffs. However, municipalities have failed to remit their payments on time. Therefore, the Government has paid TEK from time to time the municipal overdues out of municipal taxes collected by it on behalf of the municipalities. There is an inevitable time lag in making such payments, and the Government itself recognizes that this unsatisfactory arrangement is a temporary expedient. As a long-term solution to increase municipal resources, it passed a revenue law through Parliament in 1979, which was vetoed for various reasons by Turkey's President. Thus pending further legislative measures, this problem will have to be dealt with by consolidating municipal dues and by paying them out of the budget every year. During negotiations, the Government agreed to explore administrative measures to expedite its payment of dues to TEK on behalf of municipalities, and to ensure a timely flow of funds to TEK, so that implementation of important on-going power projects is not delayed.

Proposed Comprehensive Review of Power Sub-Sector Financing

48. Besides the problems of adequate cash generation and liquidity for TEK, the situation is compounded by other financial relationships between TEK and other agencies involved in the subsector. For example the pricing policies of TKI for coal and lignite it supplies to TEK, and also the policies regarding petroleum fuel, affect TEK. TKI has been suffering losses, despite price increases, and these losses have been met by Government. By fixing fuel prices at uneconomical levels in the past, the Government provided a hidden subsidy to TEK and therefore to electricity consumers in the country. The recent increases in coal and lignite prices are expected to enable TKI to cover its costs and earn a return on investments, thus obviating any indirect subsidy to electricity consumers. Certain industrial consumers of power are also directly subsidized by Government through rates lower than the prevailing tariff, for example, aluminum and ferro-chrome producers. Another matter which blurs the picture is the transfer of hydro-electric assets constructed by DSI as Government's equity to TEK. This is advantageous to TEK, as the Government remains responsible for the related debt service, although this is partially offset by TEK's liability to pay higher income-taxes; TEK does not get the benefit of the associated interest charges in computing its income-tax liability. Finally, the Government siphons away as income-taxes 41.7 percent of TEK's income. The emphasis on TEK's rate of return obscured the fact that TEK is only one of the principal agencies in the power sub-sector, and did not address directly the power subsector, its financial needs, the relationship between the various agencies operating in the sub-sector, and the total impact of pricing, capitalization and subsidy policies on the Government's budget.

49. As part of the January 1980 economic program, the Government has proposed a radical reform of SEE finances. It has removed many items, except electricity used for aluminum and ferro-chrome production, coal, lignite and

fertilizers, from the list of basic goods whose prices are subject to Government approval. SEEs are now free to determine their prices, based on market forces, so as to generate sufficient resources for their future investments. While their investments would be reviewed by the State Planning Organization to ensure conformity to Plan objectives and their viability, they are no longer expected to be financed by the Budget, except for physical infrastructure. While these reforms will go some way towards resolving the problems of financing in the subsector, it is still necessary to extend the reform of power subsector financing beyond TEK and to address more directly the broader issues of power subsector investment priorities and financing. An integrated view of the subsector's needs and financing policies is needed. The investment needs of the power development program will be large, even when the targets are realistically set. In addition to measures to improve coordination in planning, the Bank had therefore, for sometime, urged the Government to study the broad question of the financing of power subsector investments, including not merely TEK, but also DSI and TKI, with a view to establishing guidelines for pricing of not merely electricity, but also of fuels used in power generation and for the generation of adequate funds for financing subsector investments.

50. The Government has now appointed a committee of experts to review the electricity demand and supply forecast for 1980-83, the investment programs of TEK and DSI and to make recommendations for funds to be generated by TEK and the corresponding level of its tariffs. During negotiations, agreement was reached on elaborating the Committee's terms of reference to include an analysis of the Government's fuel pricing policies, treatment of Government's income taxes, debt service associated with hydroelectric assets, finances of municipal power distribution agencies and other related matters and on dates for completing the studies and follow-up actions (Loan Agreement, Section 4.05). This study will help advance the Government's own financial objectives, as far as the power subsector is concerned. This review should assist in evaluating the financial contribution made under present arrangements by both bulk and retail customers to the total generation, transmission and distribution investments and will also concentrate more directly on the real issue of investment financing of TEK, DSI and the distribution agencies for meeting Turkey's power needs until 1988.

PART IV - THE PROJECT

Project History

51. Turkey has actively studied plans for the development of the Euphrates Basin since 1962, and formulated projects for irrigation and power development. In 1974, it completed the first stage of the Keban power project, with a total reservoir capacity of 30.7 km³, useful storage of 16.3 km³ and 1,260 MW installed generating capacity. The Bank chaired the syndicate for the financing of Keban and participated in the financing of transmission lines associated with Keban (Loan No. 568-TU). Karakaya represents the second stage in the basin development program and involves primarily reregulation of the waters released from the existing Keban reservoir for the generation of

hydropower. The project, like Keban, would have no irrigation uses and does not involve abstraction of water from the Euphrates River, except for initial filling. While Bank consideration of the international water aspects of this and other projects on the Euphrates river in the lower riparian countries started in 1972, the Government requested Bank assistance for the project only in January 1975. Following considerable discussions, agreement was reached in June 1976 on the filling and operational principles to be applied during the construction and operation of Karakaya which would ensure that the project would not adversely affect the interests of either Turkey, Syria or Iraq, with regard to the use of the Euphrates waters. Turkey then communicated these principles to Iraq and Syria, and offered to discuss the development of a tripartite system to monitor these principles. It was only then that the project was appraised in late 1976. But, with the change of government in 1977 and its new outlook on the subsector's financial and related issues, and on the abovementioned riparian arrangements which were confirmed only in March 1979, both Turkey and the Bank agreed to defer consideration of the project. The request for financing was renewed by Turkey in mid 1979 to the European Investment Bank (EIB) and the Bank. The project was reappraised in November 1979. EIB participated in the reappraisal, and also attended, as observers, the Bank's loan negotiations held in Washington from March 26 to April 1, 1980. The Turkish delegation was led by Mr. Gunay, Assistant Director General of the Treasury.

The Project

52. The proposed project involves the establishment of a reservoir having 9.6 km³ of total storage and 5.6 km³ useful storage located about 160 km downstream of the Keban hydropower plant, through the construction of (a) a concrete arch-gravity dam (173 meters high), with an overflow spillway, intakes and penstocks, (b) a power house with six 300-MW turbo-generator units, and (c) appropriate accessory equipment and a switchyard located 2.5 km from the dam. It also includes the relocation of a railway line, roads and bridges, and resettlement of about 17,000 inhabitants in the reservoir area. A Staff Appraisal Report (2848-TU) dated April 25, 1980, and entitled "Appraisal of Karakaya Hydropower Project" is being distributed separately to the Executive Directors.

Project Costs and Financing

53. The estimated total project cost, excluding \$138 million of interest during construction, is about \$1,160 million equivalent. Of this, \$602 million is in foreign exchange. Turkey has concluded agreements with Swiss banking institutions, manufacturers and consultants for S.Frs. 509 million (\$295 million), which will cover all foreign exchange costs of contracts for generating units, electro-mechanical equipment and consulting services awarded to Swiss manufacturers and consultants. In addition to \$19 million already spent, about \$12 million will be borne by Turkey, mainly toward foreign exchange costs of locally procured material. The remainder of the foreign exchange costs will be financed, in addition to the proposed Bank loan, as follows: (a) EIB has agreed in principle to provide \$110 million equivalent, as co-financing; its loan negotiations are scheduled in May and consideration by its Board in June 1980; a letter of administration will be signed by EIB and the Bank to cover the usual administrative aspects and coordination necessary to

ensure success of the cofinancing arrangements; (b) Italy has agreed to provide \$20 million equivalent; and (c) the Abu Dhabi Fund has indicated to Turkey its intention to provide \$26 million. Signing of the financing arrangements with Italy and Abu Dhabi Fund would be a condition of the Bank loan effectiveness (Loan Agreement, Section 6.01). Local financing and financing of interest during construction, will be secured through annual governmental budget allocations in accordance with the Project implementation schedule. However, to ensure timely availability of local funds, it has been agreed that a special revolving fund will be established, with an initial amount of 500 million TL, equal to three months' estimated civil works expenditure requirements, to be replenished monthly (Loan Agreement, Section 3.01). The establishment of this revolving fund will be a condition of loan effectiveness (Loan Agreement, Section 6.01).

International Riparian Aspects

54. Karakaya is a non-water-consumptive project, once the reservoir is filled. It therefore does not directly raise technical questions of long-term sharing of waters with the two lower riparians, Syria and Iraq. It does, however, involve the need to ensure that, during initial filling and subsequent operation of the reservoir, the interests of the downstream riparians are not adversely affected. This matter was thoroughly and very carefully studied during the preparation stages of the Project. In addition, although Karakaya is non-consumptive, its role in regulating the flow of the Euphrates river, on which a number of consumptive and non-consumptive projects are under operation or construction or planned in all three riparian countries, made its construction an appropriate occasion for assessing the question of long-term water sharing and for seeking to establish a process for addressing this question among the three riparians. Thus, the Bank's consideration of Karakaya from the beginning was based on seeking satisfactory arrangements to facilitate eventual agreement among the three riparians on long-term sharing of the waters. These arrangements are summarized in succeeding paragraphs and discussed in Annex V.

55. With a view to ensuring that the Karakaya project will not adversely affect the lower riparians, Turkey's filling and operational proposals for Karakaya were evaluated by the Bank in the model developed in the technical study which the Bank undertook in 1974, following a request by Iraq for the Bank's good offices to help achieve a just and equitable solution between the riparian countries on the division of the Euphrates waters (an issue which had become urgent because of the simultaneous filling of the Turkish Keban reservoir and the Syrian Tabqa reservoir which the Bank, incidentally, had anticipated since 1972). After discussions with all the riparians, this evaluation revealed that if Turkey maintains an average monthly discharge of water of at least 500 cubic meters per second (cumecs), as the Euphrates passes from Turkey into Syria at Birecik, this would ensure that: (a) the existing requirements of downstream riparians for power generation and irrigation needs and reasonable growth in these requirements during 1975-85, would be met; (b) the Karakaya reservoir could be filled within a period of three to seven months, depending on the date of closure and actual water flows; and (c) the Turkish power plants could be operated for maximum energy output. This operating rule is called the "Rule of 500". The study also revealed that, while Turkey's release of a minimum of 500 cumecs would ensure the lower riparians' interests, the benefits in Syria and Iraq could be further increased, if the Syrian and Iraqi reservoirs are also operated according to principles developed in the model.

56. In 1976, in the context of the proposed project, Turkey informed Syria and Iraq that it would observe the Rule of 500 during the construction, initial filling and operation of the Karakaya Dam, until such time that any large water consumptive project is implemented in any of the three riparian countries, and also of its readiness to initiate tripartite discussions on the better use of the common waters. Iraq and Syria have yet to accept this offer, but have made their views known to the Bank, which commented thereon (Annex V). Subsequently, in March 1979 Turkey's Minister of Energy recorded an official policy statement in the Turkish Parliament that during construction, initial filling and operation of Karakaya, the monthly average flow of Euphrates waters would not fall below 500 cumecs at Birecik, with shortfalls in any averaging period of not more than a month being made up in the next period. He also announced that this Rule of 500 would be applied by Turkey unless very abnormal hydrometeorological conditions exist, and as long as Turkey had not developed a project involving large consumptive use of the river's waters in its territories. Turkey has also formally represented to the Bank that in considering Karakaya for financing, the Bank may rely on this policy statement regarding the international riparian aspects of the project.

57. The Bank is fully conscious that the arrangements agreed upon by the Turkish Government in connection with Karakaya are but an initial step towards a broader agreement between the three riparian countries on the long-term apportioning of Euphrates and Tigris waters. The Bank has repeatedly tried since 1965, when this problem was raised in connection with the Keban Dam in Turkey, to bring about negotiations between the riparians to resolve this issue. The three riparian countries have themselves held tripartite or bilateral discussions on this project, but the long-term interests at stake as well as political differences have proved to be obstacles difficult to overcome. As a result, several projects, some of them involving consumptive uses, have been started in the Euphrates and Tigris basins without consultation, let alone agreement, between the riparians. In all cases where the Bank has been involved in the financing of such projects (Lower Khalis in Iraq, Balikh in Syria, and Keban and Karakaya in Turkey), it has carried out detailed studies to ascertain that the projects would not harm, or not be adversely affected by developments in the other riparian countries; it has also always endeavoured to use its good offices in order to bring about tripartite discussions with a view to making progress towards an agreement on water sharing. As regards Karakaya, since consumptive use is limited to initial filling, and since the "Rule of 500" agreed upon by Turkey would adequately protect the downstream riparians, the Bank considers it appropriate to participate in the financing of the Project. The Government has agreed to establish an appropriate reporting system on the actual operation of the Project and Euphrates river flows (Loan Agreement, Section 4.04).

Project Implementation

58. DSI will be responsible for project execution. Project construction began in late 1976, but due to unavailability of adequate foreign exchange financing, only preliminary works had been completed as of end 1979. The construction and erection schedule is now phased up to 1987. DSI will continue to retain consultants to assist in engineering, procurement, supervision of construction and initial operation (Loan Agreement, Section 3.03(a)). Although well-known and experienced consultants are assisting DSI in project

supervision, in view of the project size and its potential risks, DSI agreed to establish a board of experts, independent of the designers of the project, to familiarize themselves with the designs and to advise DSI in the event of unforeseen problems arising during project construction (Loan Agreement, Section 3.03(b)). The establishment of this board of experts will be a condition of loan effectiveness (Loan Agreement, Section 6.01(b)). To ensure effective supervision, the Government will establish effective project site management by October 31, 1980, with a full-time site manager with responsibilities, qualifications and experience satisfactory to the Bank, along with adequate technical and financial authority to solve problems at the site as they arise (Loan Agreement, Section 3.07). As several ministries and agencies, such as those responsible for highways, railways, resettlement, industry and customs are involved, the Government has already established a central coordinating committee, which will review progress regularly and help in resolving difficulties in project coordination and implementation (Loan Agreement, Section 3.08). The Government will also undertake periodic inspection of the dam to ensure its sound condition and proper maintenance (Loan Agreement, Section 4.07).

Ecological and Resettlement Aspects

59. Intensive archaeological investigations, with the assistance of numerous foreign scientific institutions, over the last ten years, have not revealed any sites of archaeological or historical significance in the reservoir area. In view of the potential importance of the ecological aspects of a project as large as Karakaya, the Government appointed independent consultants to study these aspects in detail. The draft study did not identify any significant adverse environmental effects. However, it highlighted the importance of dealing adequately with the problem of resettling about 17,000 inhabitants who would be displaced by the construction works and the filling of the reservoir. Most are subsistence farmers living in 34 villages, only 3 of which have populations exceeding 1,000 persons. Turkey has legally established a comprehensive resettlement methodology, so that resettlements are carried out in a coordinated manner. While persons living on and around the dam site have already been resettled, DSI has just started addressing the resettlement of population in areas which will be flooded by the dam. Adequate funds have been included in the project cost estimates for resettlement. In addition, the owners of the land or houses in the area which will be inundated by the Karakaya reservoir will be fairly indemnified under existing law and provided with at least the same economic benefits they had prior to the flooding of their properties. However, in view of the importance of the resettlement problem, the Government presented, during negotiations, a workable resettlement plan and a tentative implementation schedule. The Government has arranged to prepare an inventory of the property which would be submerged by the project, and is initiating action for their valuation to make compensation payments. A census of the families requiring Government assistance in resettlement has been completed, which indicates that only a small proportion of the population has expressed a preference for Government assistance in resettlement. Resettlement sites have been tentatively identified, and Government plans to provide them with accommodation and support services to enable them to rebuild their livelihood. Further, the Government has agreed

to furnish a detailed implementation schedule by February 28, 1981 and to ensure that its implementation is fully coordinated with reservoir filling (Loan Agreement, Section 3.06(b)).

Procurement and Disbursement

60. The proposed loan would finance (i) a part of the foreign costs of the main civil and hydraulic works contract for the Karakaya dam which amounts to about \$260 million including contingencies and (ii) equipment and materials relating to relocation of railways, roads and bridges. The civil works contract, which provides for some related permanent equipment, was awarded in October 1976, after international competitive bidding in accordance with Bank guidelines and in consultation with the Bank. Advance contracting of the main civil and hydraulic works is justified, in terms of the project construction schedule and the Bank's involvement in the project since 1975. The contracts for turbines, generators and other electro-mechanical equipment, totalling some \$285 million have been awarded by DSI to Swiss manufacturers after limited bidding to use available Swiss financing. Swiss financing also includes \$10 million for consultants. Equipment and materials relating to relocation of railways, roads and bridges would be procured through international competitive bidding in accordance with Bank guidelines. Disbursements of the proposed Bank loan would be 45 percent of the foreign expenditures on civil works in a cofinancing arrangement with EIB and 100 percent of foreign expenditures for equipment and materials for relocating railways, roads and bridges. Disbursements are expected to begin in the first half of FY81 and the loan should be fully disbursed by the end of FY88. Retroactive financing of not more than \$10 million is proposed for civil works expenditures from February 1, 1980.

Operation and Role of DSI and TEK

61. After the project is in full commercial operation, its assets will be transferred, in accordance with sound financial and accounting practices, from DSI to TEK, in the form of a Government equity holding in TEK (Loan Agreement, Section 4.09(b)). The Government will be required to ensure that, apart from TEK operating these assets in accordance with sound public utility practices, TEK's and DSI's operation of the power plants and reservoir will be in conformity with the "Rule of 500," described in para. 55. The Government has undertaken that TEK will construct the transmission lines needed to connect the Karakaya facilities with Turkey's national inter-connected power grid system. To ensure that TEK completes these lines (which are not part of the proposed project) prior to the commissioning of the project's generating units, the Government has agreed to (i) provide the Bank with a construction schedule and a tentative financing plan for these lines by June 30, 1981 and (ii) make arrangements satisfactory to the Bank for securing the financing needed for the lines to enable their construction by the time the project's generating units are commissioned (Loan Agreement, Section 4.09(a)).

Economic Justification and Project Risks

62. The project is the least-cost means of meeting Turkey's projected growth of power demand at discount rates up to 30 percent. The estimated rate of return is at least 15 percent, valuing benefits at the present electricity

tariff rates. It is likely that the incremental revenues understate the benefits, some of which will arise from assured availability of electricity supply.

63. The project site has difficult geological conditions and construction involves large excavation in an area with steep slopes. The geological investigations for the dam have been thorough and the best site chosen. The construction risks are normal for this type of project and manageable, with expert supervision provided by the consultants. The coffer dam and diversion tunnels have been designed for a flood of 25 years. The existence of a much larger reservoir in Keban will facilitate handling any floods unforeseen beyond the design levels. Other potential risks are the flow of adequate local currency funds, timely supplies of fuel, lubricants and construction materials and effective project site management. Reasonable precautions have been taken to ensure that these will be forthcoming.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

64. The draft Loan Agreement between the Republic of Turkey and the Bank, and the Report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement are being distributed separately to the Executive Directors. Features of special interest are referred to in paragraphs 38, 55, 57, 58, 59, 60 and 61 of this Report. Additional conditions of effectiveness would be: (i) the signing of agreements to finance the remaining foreign exchange costs of the Project; (ii) the establishment of a special revolving fund to meet local expenditures; and (iii) establishment of a panel of experts to advise DSI in the event of any unforeseen problems during Project construction (Loan Agreement, Section 6.01). In other respects, the draft loan documents conform to the normal pattern for loans for power projects.

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

PART VI - RECOMMENDATION

66. I recommend that the Executive Directors approve the proposed Loan Agreement.

Robert S. McNamara
President
by
Moeen A. Qureshi

Attachments
April 25, 1980
Washington, D.C.

TABLE 3A
TURKEY - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOUSAND SQ. KM.) TOTAL 780.6 AGRICULTURAL 552.0	TURKEY			REFERENCE GROUPS (ADJUSTED AVERAGES - MOST RECENT ESTIMATE)		
	1960 /b	MOST RECENT		SAME GEOGRAPHIC REGION /c	SAME INCOME GROUP /d	NEXT HIGHER INCOME GROUP /e
		1970 /b	ESTIMATE /b			
GNY PER CAPITA (US\$)	290.0	520.0	1210.0	2906.3	1097.7	1942.6
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF COAL EQUIVALENT)	265.0	479.0	743.0	2033.2	730.7	1646.7
POPULATION AND VITAL STATISTICS						
POPULATION, MID-YEAR (MILLIONS)	27.5	35.3	42.9	.	.	.
URBAN POPULATION (PERCENT OF TOTAL)	29.7	38.4	42.9	56.3	49.0	51.2
POPULATION PROJECTIONS						
POPULATION IN YEAR 2000 (MILLIONS)			64.0	.	.	.
STATIONARY POPULATION (MILLIONS)			98.0	.	.	.
YEAR STATIONARY POPULATION IS REACHED			2070	.	.	.
POPULATION DENSITY						
PER SQ. KM.	35.0	45.0	54.0	81.5	44.6	28.2
PER SQ. KM. AGRICULTURAL LAND	51.0	64.0	76.0	138.8	140.7	100.5
POPULATION AGE STRUCTURE (PERCENT)						
0-14 YRS.	41.3	41.7	41.0	25.6	41.3	35.4
15-64 YRS.	55.2	54.0	54.0	62.9	55.3	56.3
65 YRS. AND ABOVE	3.5	4.3	5.0	10.2	3.5	5.1
POPULATION GROWTH RATE (PERCENT)						
TOTAL	2.8	2.5	2.5	0.9	2.4	1.7
URBAN	3.1/f	5.1	4.7	2.6	4.3	3.0
CRUDE BIRTH RATE (PER THOUSAND)						
	43.0	38.0	30.0	18.5	31.1	27.5
CRUDE DEATH RATE (PER THOUSAND)						
	16.0	13.0	10.0	9.2	9.2	9.1
GROSS REPRODUCTION RATE						
	2.9	2.6	2.1	1.2	2.2	1.8
FAMILY PLANNING						
ACCEPTORS, ANNUAL (THOUSANDS)	..	45.6	66.6	..	..	..
USERS (PERCENT OF MARRIED WOMEN)	3.3	8.2	28.0	..	34.7	..
FOOD AND NUTRITION						
INDEX OF FOOD PRODUCTION PER CAPITA (1969-71=100)						
	91.5	100.0	105.0	115.7	104.4	102.0
PER CAPITA SUPPLY OF CALORIES (PERCENT OF REQUIREMENTS)						
	110.0	112.0	113.0	134.2	105.0	120.6
PROTEINS (GRAMS PER DAY)						
	78.0	78.0	75.7	95.4	64.4	80.9
OF WHICH ANIMAL AND POULTRY						
	..	22.0/g	24.7	45.4	23.5	31.3
CHILD (AGES 1-4) MORTALITY RATE						
	24.0	16.0	10.0	1.3	8.6	5.1
HEALTH						
LIFE EXPECTANCY AT BIRTH (YEARS)						
	31.0	37.0	41.0	70.0	40.2	65.6
INFANT MORTALITY RATE (PER THOUSAND)						
	187.0/h	153.0/i	118.0	31.5	46.7	45.3
ACCESS TO SAFE WATER (PERCENT OF POPULATION)						
TOTAL	..	51.0	75.0	..	60.8	69.4
URBAN	..	51.0	70.0	..	75.7	85.1
RURAL	..	53.0	80.0	..	40.0	43.0
ACCESS TO EXCRETA DISPOSAL (PERCENT OF POPULATION)						
TOTAL	..	..	..	..	46.0	70.1
URBAN	..	..	19.5	..	46.0	86.3
RURAL	..	..	..	..	22.5	33.2
POPULATION PER PHYSICIAN						
	3000.0/j	2250.0	1720.0	661.6	2262.4	1343.2
POPULATION PER NURSING PERSON						
	..	1880.0	1430.0	677.1	1195.4	785.0
POPULATION PER HOSPITAL BED						
TOTAL	590.0/k	490.0	460.0	180.1	453.4	197.6
URBAN	190.0/l	200.0	210.0	..	253.1	260.2
RURAL	..	3890.0	3750.0	..	2732.4	1055.0
ADMISSIONS PER HOSPITAL BED						
	..	20.0	20.0	15.3	22.1	17.3
HOUSING						
AVERAGE SIZE OF HOUSEHOLD						
TOTAL	5.7	5.9	..	..	5.3	4.7
URBAN	..	..	..	..	5.2	4.4
RURAL	..	..	..	..	5.4	5.1
AVERAGE NUMBER OF PERSONS PER ROOM						
TOTAL	..	2.2	..	..	1.9	1.1
URBAN	2.0	1.9	..	..	1.6	1.2
RURAL	..	..	..	..	2.5	1.2
ACCESS TO ELECTRICITY (PERCENT OF DWELLINGS)						
TOTAL	29.0	40.0	57.0	..	50.0	66.0
URBAN	..	..	..	..	71.7	85.1
RURAL	2.0	18.0	..	..	17.3	..

TABLE 3A
TURKEY - SOCIAL INDICATORS DATA SHEET

	TURKEY			REFERENCE GROUPS (ADJUSTED AVERAGES - MOST RECENT ESTIMATE) ^{/a}			
	1960 ^{/b}	MOST RECENT		GEOGRAPHIC REGION ^{/c}	SAME INCOME GROUP ^{/d}	NEXT HIGHER INCOME GROUP ^{/e}	
		1970 ^{/b}	ESTIMATE ^{/b}				
EDUCATION							
ADJUSTED ENROLLMENT RATIOS							
PRIMARY:	TOTAL	75.0	109.0	104.0	105.7	102.5	101.7
	MALE	90.0	124.0	114.0	107.1	108.6	110.0
	FEMALE	58.0	94.0	94.0	104.5	97.1	92.8
SECONDARY:	TOTAL	14.0	28.0	29.0	65.9	33.5	51.2
	MALE	20.0	39.0	39.0	70.3	38.4	56.4
	FEMALE	8.0	16.0	19.0	62.2	30.7	43.7
VOCATIONAL ENROL. (% OF SECONDARY)		18.0	14.0	15.0	20.4	11.5	18.3
PUPIL-TEACHER RATIO							
PRIMARY		46.0	38.0	34.0	26.7	35.8	27.1
SECONDARY		19.0	28.0	27.0	..	22.9	25.3
ADULT LITERACY RATE (PERCENT)		36.0	55.5/ ^k	60.0	..	64.0	86.1
CONSUMPTION							
PASSENGER CARS PER THOUSAND							
	POPULATION	2.0	4.0	11.4	105.5	13.5	53.4
RADIO RECEIVERS PER THOUSAND							
	POPULATION	49.0	89.0	105.0	233.7	122.7	225.9
TV RECEIVERS PER THOUSAND							
	POPULATION	..	3.0	12.0	148.0	38.3	102.6
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION							
		51.0	..	..	..	40.0	78.5
CINEMA ANNUAL ATTENDANCE PER CAPITA							
		1.1	6.7	..	6.4	3.7	3.6
LABOR FORCE							
TOTAL LABOR FORCE (THOUSANDS)							
		13783.0	15591.0	17052.0	..	..	..
FEMALE (PERCENT)							
		40.2	37.2	37.3	32.3	25.0	24.5
AGRICULTURE (PERCENT)							
		78.5	67.7	62.0	25.8	43.5	28.9
INDUSTRY (PERCENT)							
		10.5	12.1	14.0	33.1	21.5	30.6
PARTICIPATION RATE (PERCENT)							
TOTAL							
		50.1	44.3	42.8	37.6	33.5	33.8
MALE							
		58.7	54.9	53.2	37.0	48.0	51.3
FEMALE							
		41.2	33.4	32.1	28.0	16.8	16.3
ECONOMIC DEPENDENCY RATIO		0.9	1.0	1.1	1.0	1.4	1.3
INCOME DISTRIBUTION							
PERCENT OF PRIVATE INCOME RECEIVED BY							
	HIGHEST 5 PERCENT OF HOUSEHOLDS	33.0/ ^h	32.8/ ^l	..	..	20.8	..
	HIGHEST 20 PERCENT OF HOUSEHOLDS	61.0/ ^h	60.6/ ^l	56.3/ ^m	47.9	52.1	57.6
	LOWEST 20 PERCENT OF HOUSEHOLDS	4.2/ ^h	2.9/ ^l	3.4/ ^m	5.0	3.9	3.4
	LOWEST 40 PERCENT OF HOUSEHOLDS	10.6/ ^h	9.4/ ^l	11.4/ ^m	15.4	12.6	11.0
POVERTY TARGET GROUPS							
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US\$ PER CAPITA)							
	URBAN	..	..	330.0	..	270.0	..
	RURAL	..	..	162.0	..	183.3	..
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US\$ PER CAPITA)							
	URBAN	..	..	385.0	..	282.5	550.0
	RURAL	..	..	367.0	436.1	248.9	403.4
ESTIMATED POPULATION BELOW ABSOLUTE POVERTY INCOME LEVEL (PERCENT)							
	URBAN	..	..	..	..	20.5	..
	RURAL	..	..	..	..	35.3	..

.. Not available
 . Not applicable.
 - Zero

NOTES

^{/a} The adjusted group averages for each indicator are population-weighted geometric means, excluding the extreme values of the indicator and the most populated country in each group. Coverage of countries among the indicators depends on availability of data and is not uniform.

^{/b} Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961; for 1970, between 1969 and 1971; and for Most Recent Estimate, between 1974 and 1977.

^{/c} Europe; ^{/d} Intermediate Middle Income (\$551-1135 per capita, 1976); ^{/e} Upper Middle Income (\$1136-2500 per capita, 1976); ^{/f} 1955-60; ^{/g} 1965-70; ^{/h} 1963; ^{/i} 1967; ^{/j} 1962; ^{/k} Six years and above; ^{/l} 1968; ^{/m} 1973.

Most Recent Estimate of GNP per capita is for 1978.

DEFINITIONS OF SOCIAL INDICATORS

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

The adjusted group averages for each indicator are population-weighted geometric means, excluding the extreme values of the indicator and the most populated country in each group. Due to lack of data, group averages of all indicators for Capital surplus Oil Exporters and of indicators of Access to Water and Ekreta Disposal, Housing, Income Distribution and Poverty for other country groups are population-weighted arithmetic means without exclusion of the extreme values and the most populated country. Since the average of countries among the indicators depends on availability of data and is not uniform, caution must be exercised in relative averages of one indicator to another. These averages are mainly useful as approximations of "expected" values when comparing the values of the indicator at a time among the country and reference groups.

LAND AREA (thousand sq.km)

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

Agricultural - Most recent estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to livestock.

GDP PER CAPITA (US\$) - GDP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1976-78 base); 1960, 1970, and 1978 data.

ENERGY CONSUMPTION PER CAPITA - Annual consumption of commercial energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of coal equivalent per capita; 1960, 1970, and 1976 data.

POPULATION AND VITAL STATISTICS

Total Population (Mid-Year (billions)) - As of July 1; 1960, 1970, and 1977 data.

Urban Population (percent of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries; 1960, 1970, and 1975 data.

Population Projections

Population in year 2000 - Current population projections are based on 1975 total population by age and sex and their mortality and fertility rates. Projection parameters for mortality rates comprise of three levels assuming life expectancy at birth increasing with country's per capita income level, and female life expectancy stabilizing at 77.5 years. The parameters for fertility rates also have three levels assuming decline in fertility according to income level and past family planning performance. Each country is then assigned one of these nine combinations of mortality and fertility trends for projection purposes.

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

Year stationary population is reached - The year when stationary population size has been reached.

Population Density

Per sq. km - 194-year population per square kilometer (100 hectares) of total area.

Per sq. km agricultural land - Computed as above for agricultural land only.

Population Age Structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population; 1960, 1970, and 1977 data.

Population Growth Rate (percent) - total - Annual growth rates of total mid-year populations for 1950-60, 1960-70, and 1970-77.

Population Growth Rate (percent) - urban - Annual growth rates of urban populations for 1950-60, 1960-70, and 1970-77.

Crude Birth Rate (per thousand) - Annual live births per thousand of mid-year population; 1960, 1970, and 1977 data.

Crude Death Rate (per thousand) - Annual deaths per thousand of mid-year population; 1960, 1970, and 1977 data.

Gross Reproduction Rate - Average number of daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970, and 1975.

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

Family Planning - Users (percent of married women) - Percentage of married women of child-bearing age (15-64 years) who use birth-control devices to all married women in same age group.

FOOD AND NUTRITION

Index of Food Production per Capita (1960-71=100) - Index of per capita annual production of all food commodities (cereals, pulses, roots and tubers, and other food crops) on a calendar year basis. Commodities cover primary goods (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded). Aggregate production of each country is based on national average producer price weights.

Per capita supply of calories (percent of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal feed, seeds, quantities used in food processing, and losses in distribution. Requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distributions of population, and allowing 10 percent 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 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 25 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.

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

HEALTH

Life Expectancy at Birth (years) - Average number of years of life remaining at birth; 1960, 1970, and 1977 data.

Infant Mortality Rate (per thousand) - Annual deaths of infants under one year of age per thousand live births.

Access to Safe Water (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) with reasonable access to safe water (includes treated surface waters or untreated but uncontaminated water such as that from protected handholes, springs, and sanitary wells) as percentages of their respective populations in an urban area a public fountain or standpost located not more than 300 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

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

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

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

Population per Hospital Bed - total, urban, and rural - Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private general and specialized hospital and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally custodial care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodations and provide a limited range of medical facilities.

Access to Hospital Bed - total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING

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

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

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

EDUCATION

Adjusted Enrollment Ratios

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

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

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

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

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

COMMUNICATION

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

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

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

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

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

LABOR FORCE

Total Labor Force (thousands) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc. Definitions in various countries are not comparable.

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

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

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

Participation Rate (percent) - Total, male, and female - Participation or activity rates are computed as total, male, and female labor force as percentages of total, male and female population of all ages respectively.

1960, 1970, and 1975 data. These are ILO's participation rates reflecting age-sex structure of the population, and long time trend. A few estimates are from national sources.

Economic Dependency Ratio - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.

INCOME DISTRIBUTION

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

POVERTY THRESHOLD GROUPS

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

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

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

TURKEY - ECONOMIC DEVELOPMENT DATA SHEET ^{1/}

ANNEX I
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	Actual				1978	Projections					Growth Rates			Share of GDP 1978	
	1976	1977	1978	1979		1980	1982	1983	1985	1990	76-78	79-85	85-90		
A. NATIONAL ACCOUNTS (TL Billion, 1978 Prices)															
1. Gross domestic product	720.3	876.1	1036.2	1172.1	1212.7	1230.9	1360.3	1344.7	1405.2	1536.6	1912.3	6.7	3.7	4.5	100.0
2. Gain from terms of trade	-4.0	3.8	-6.2	-10.1	0.0	-24.2	-21.8	-33.0	-37.8	-48.1	-89.6	-	-	-	0.0
3. Gross domestic income	714.3	879.9	1030.0	1162.0	1212.7	1206.7	1236.6	1311.7	1367.5	1488.5	1822.7	6.8	3.4	4.2	100.0
4. Exports (G + NFS)	42.7	66.3	50.8	34.4	67.2	64.0	86.0	108.1	126.3	151.3	230.9	5.8	15.4	8.8	5.5
5. Imports (G + NFS)	60.0	93.9	140.4	167.4	118.8	103.1	114.9	131.3	136.1	145.2	178.6	8.9	5.9	4.0	9.8
															-4.3
6. Investment	130.0	156.1	265.0	273.2	248.4	238.5	238.5	233.4	266.6	295.1	380.2	8.4	3.6	5.2	20.5
7. Consumption	590.4	723.7	864.5	938.4	1015.9	1021.9	1099.4	1106.6	1140.4	1233.5	1477.8	7.0	3.2	3.7	83.8
8. Domestic savings	129.9	152.4	187.7	197.7	196.8	200.0	212.9	230.1	256.8	301.1	434.5	5.3	6.3	7.6	14.2
9. National savings	143.3	191.3	214.2	213.0	212.7	225.2	229.2	257.8	277.7	321.7	459.0	5.1	6.1	7.4	17.5
B. SECTOR OUTPUT															
	Share of Total Output (Percent)														
1. Agriculture	29.6	27.9	29.5	28.1	27.0	26.8	26.7	26.2	25.9	26.0	24.2				
2. Industry	27.2	26.5	26.1	26.1	27.7	27.5	27.4	27.8	28.2	28.2	25.4				
3. Other	43.2	45.6	44.4	45.8	45.4	45.7	45.9	46.0	45.9	45.6	44.8				
C. PRICES (1978 = 100)															
1. Export prices	43.7	63.8	84.0	95.6	100.0	105.6	110.1	122.2	128.9	143.9	186.9				
2. Import prices	47.7	61.8	84.2	86.8	100.0	125.6	147.9	178.8	183.8	213.1	309.5				
3. Terms of trade	91.4	103.2	99.7	99.6	100.0	86.1	76.4	71.5	70.1	67.5	61.2				
4. GDP deflator	20.2	33.7	50.2	73.4	100.0	160.0	240.0	432.0	543.0	718.0	1444.2				
5. Average exchange rate (\$1.00 = TL)	11.0	14.2	14.4	18.0	24.3										
D. PUBLIC FINANCES															
	Percent of GDP														
1. Central government revenue	22.6	20.9	23.1	26.2	24.2										
2. Central government expenditure	24.9	22.0	23.7	27.9	28.5										
3. Public sector deficit ^{2/}	-	2.1	6.1	9.0	-										
E. SELECTED INDICATORS															
	1970-78										1970		1975	1977	Est. 1978
EDUK	3.0 ^{3/}										13.6	15.7	16.2	16.2	
Import elasticity	2.4										11.0	12.3	13.1	13.5	
Average domestic saving rate	16.9										13.1	14.7	14.8	14.7	
Marginal domestic saving rate	13.6														
Investment/GDP	20.2										67.1	64.5	61.6	61.3	
Imports/GDP	11.4										13.3	14.9	16.3	16.7	
F. LABOR FORCE															
Civilian labor force (million)											13.6	15.7	16.2	16.2	
Unemployment and underemployment (% of GDP)											11.0	12.3	13.1	13.5	
Civilian employment (million) of which (%)											13.1	14.7	14.8	14.7	
Agriculture											67.1	64.5	61.6	61.3	
Industry											13.3	14.9	16.3	16.7	
Other											19.6	20.6	22.1	22.0	

^{1/} Totals may not add up because of rounding errors.

^{2/} Borrowing requirement of central government, state economic enterprises, and other public authorities.

^{3/} For 1970-77 period.

TURKEY - BALANCE OF PAYMENTS
(Million US Dollars)

ANNEX I
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	1970	1973	Actual			Provisional	Projected						
			1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1990
A. SUMMARY OF BALANCE OF PAYMENTS													
1. Exports of goods and NFS	754	1799	2152	2556	3108	3200	4050	4818	5839	6706	7771	8971	17787
2. Imports of goods and NFS	-1096	-2391	-5219	-6436	-5059	-5550	-7000	-8140	-9239	-10305	-11485	-12751	-22229
3. Resource balance	-342	-592	-3067	-3880	-1953	-2350	-2950	-3324	-3400	-3600	-3714	-3781	-4442
4. Interest (net) ^{1/}	-- 47	- 59	- 124	- 570	- 680	- 900	-1200	-1350	-1406	-1453	-1597	-1749	-2294
5. Profits	- 33	- 35	- 36	- 116	- 60	- 50	- 60	-80	-103	-108	-114	-120	-150
6. Workers' remittances	273	1183	1312	982	983	1700	2100	2500	2700	2916	3149	3401	4998
7. Net factor service income	193	1089	1152	366	243	750	840	1070	1191	1355	1438	1532	2554
8. Transfers	91	18	23	12	-	-	-	-	-	-	-	-	-
9. Current account balance	- 58	515	-1892	-3572	-1710	-1600	-2110	-2254	-2209	-2245	-2276	-2249	-1888
10. Private foreign capital	92	77	251	169	147	200	200	240	268	302	342	378	660
11. Public medium & long-term (M<)(gross) ^{2/}	271	376	386	502	530	1020	1230	1650	2653	2814	3440	3281	4640
12. Amortization of public M< ^{1/ 2/}	- 146	- 72	- 117	- 214	- 380	- 550	- 900	-1200	-1606	-2261	-2544	-2710	-3212
13. Public M< (Net)	125	304	269	288	150	470	330	450	1047	552	896	571	1428
14. Short-term (net) ^{3/}	- 66	-235	1159	1807	1097	335	230	-130	-172	-123	-94	-58	-
15. Capital not included elsewhere ^{4/}	- 39	67	- 204	742	464	521	1500	1844	1404	1682	1318	1558	169
16. Change in reserves (= + increase)	- 186	- 728	417	566	- 148	74	-150	-150	-338	-168	-186	-200	-369
B. M&LT LOAN COMMITMENTS ^{5/}													
Public Sector	487	491	649	1105	1307	2404							
1. Bank group	40	135	158	144	358	371							
2. Other multilateral	1122	100	40	6	54	113							
3. Governments: market economies	154	718	197	282	288	1320							
4. Governments: centrally planned economies	114	3	3	150	204	90							
5. Suppliers	47	4	79	260	123	510							
6. Financial institutions	-	32	172	263	281								
7. Other	-	-	-	-	-								
Private sector	19	56	106	100	100	100							
C. AVERAGE TERMS OF M&LT LOAN COMMITMENTS ^{5/}													
1. Grant element (%)	37.4	39.2	15.6	11.4	14.2	14.2							
2. Interest (%)	3.6	4.7	7.2	7.6	7.2	7.0							
3. Maturity (years)	18.8	25.7	13.5	11.6	10.8	11.5							
4. Grace (years)	4.6	7.1	3.8	4.2	3.1	4.9							

^{1/} Net of debt relief.

^{2/} Up to and including 1978 these figures are government estimates, which are not consistent with Bank DRS data.

^{3/} Mainly convertible Turkish lira deposits, acceptance credits, commercial and oil arrears, bankers' credits, reimbursement credits, overdrafts, and Dresdner Bank scheme deposits.

^{4/} Including errors and omissions up to 1979; for projected years it includes gapfill, and private M< borrowings on a net basis.

^{5/} Public and publicly guaranteed external debt only.

TURKEY - EXTERNAL DEBT AND CREDITWORTHINESS

ANNEX I
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	Actual						Provisional
	1970	1973	1975	1976	1977	1978	1979
A. OUTSTANDING DEBT (Million US Dollars)							
1. Public Medium and Long Term (M and LT)(Disbursed) <u>1/</u>	1854	2869	3176	3519	4326	6100	10956
2. Private M and LT (disbursed) <u>1/</u>	42	115	160	253	479	557	650
3. Short Term <u>2/</u>	.	279	1398	3441	6600	7469	3770
4. Total Outstanding Disbursed Debt	1896	3263	4734	7313	11405	14126	15376
5. Undisbursed Public M and LT <u>1/</u>	840	1101	1641	2393	2804	3500	3800
B. DEBT SERVICE (Million US Dollars)							
1. Interest on all Debt (net of relief) <u>3/</u>	-47	-59	-150	-300	-570	-710	-930
2. Amortization of M and LT Debt (net of relief)	-146	-72	-117	-119	-214	-380	-550
3. Total Debt Service Payments	-193	-131	-267	-419	-784	-1090	-1480
C. DEBT BURDEN							
1. Debt Service Ratio <u>4/</u>	18.8	4.4	7.7	11.2	22.2	26.7	30.2
2. Total Outstanding Disbursed Debt/GDP <u>5/</u>	15.0	15.7	13.1	17.9	23.9	28.3	28.5
D. EXPOSURE							
1. Bank Group DOD/Total Outstanding Disbursed Debt	7.2	7.8	9.1	7.6	6.1	6.0	6.9
2. Bank Group Debt Service/Total Debt Service	3.2	14.9	12.2	10.8	8.3	7.7	7.7
E. COMPOSITION OF TOTAL OUTSTANDING DISBURSED DEBT (Million US Dollars)							
	1978		1979 ^{6/}				
	(Amount)	(As % of Total)	(Amount)	(As % of Total)			
1. <u>Medium & Long-Term Debt</u>	6657	47.1	11606	75.5			
a. <u>Public Medium and Long-Term</u>	6100	43.2	10956	71.3			
(i) Bank Group	836	5.9					
(ii) Other Multilateral	612	4.3					
(iii) Governments	3900	27.6					
(iv) Suppliers	170	1.2					
(v) Financial Institutions	545	3.9					
(vi) Bonds	35	0.2					
b. <u>Private Medium and Long-Term (Total)</u>	557	3.9	650	4.2			
2. <u>Short Term</u>	7469	52.9	3770	24.5			
(i) Convertible Turkish Lira Deposits	2860	20.2					
(ii) Suppliers' Credits/Commercial and Oil Arrears	1675	11.9					
(iii) Acceptance Credits	862	6.1					
(iv) Bankers Credits, Reimbursement Credits, Overdrafts	924	6.5					
(v) Dresdner Bank	363	2.6					
(vi) IMF	622	4.4					
(vii) Other	163	1.2					
3. <u>Total Outstanding Disbursed Debt</u>	14126	100.0	15376	100.0			

- 1/ Bank DRS data.
2/ Based on Turkish Central Bank estimates.
3/ Based on Turkish Balance of Payments data, except for 1979.
4/ Total debt service (line B3) divided by exports of goods and non-factor services plus workers' remittances.
5/ At market prices.
6/ Bank staff estimate.

February 1980

Economic Policy Package

On January 25, the Government announced, through several interlocking decrees, a rather comprehensive economic policy package. It is not only a strong stabilization program, but also one that lays the foundation for some structural economic changes and desirable modifications in medium-term economic policies. The detailed decrees are being translated. Meanwhile based on extensive explanations of what they contain, the principal elements are summarized below.

Exchange Rate Regime

- (a) The Turkish Lira, whose parity value was TL35 = US\$1.00 except for several commodities that had a premium fixed at TL47 = US\$1.00, has been devalued by nearly 100 percent to TL70 = US\$1.00. A lower multiple rate of TL55 = US\$1.00, now applies only to the import of fertilizers, insecticides and inputs for both.
- (b) In future, cross rates will be adjusted automatically by the Central Bank. The principle is also established that so will the exchange rate vis a vis the US\$ (after discussion with a new Money and Credit Committee (para. q below)), generally determined by the differential rate of inflation in Turkey and its trading partner having the weakest currency.
- (c) The temporary 20 percent stamp duty on imports is reduced to 1 percent, thus linking exports and imports directly to the exchange rate.
- (d) The difference between TL earned from exports of key agricultural commodities and the prices fixed on a weight basis by the Government as those which provide sufficient incentives to the producers, are to be channelled into a Price Stabilization Fund now with the Central Bank. From this Fund, the Government will cover subsidies on fertilizers, provide export credits etc. to exporters and cover export risk insurance until institutional facilities in that regard are approved by Parliament.

Export/Foreign Investment Incentives

- (e) Except for commodities covered by agriculture support prices, foreign exchange earned in exports totalling less than \$50,000 can be retained abroad by the exporters. Over that, the exporter is allowed to retain 50 percent of export earnings to be applied towards the import of his inputs, provided he advises his bank handling the transaction within 6 months of export of his intention to do so.

(f) Commercial banks are now allowed to maintain accounts in which they will retain 80 percent of export earnings or worker remittances made by their clients (20 percent goes to the Central Bank). Once the importers get clearance from the technical ministry concerned for the import of commodities on the Restricted List, they get foreign exchange from these banks, out of such accounts, instead of from the Central Bank. This is a major structural change for liberalizing the export and import licensing regime.

(g) From the 50 percent legal reserve placed by commercial banks with the Central Bank, the commercial banks can provide export credits, term credits and working capital to exporters, as well as finance export investment proposals, at an interest rate of 11 percent only, with the discount rate of the Central Bank being 8 percent.

(h) Investments up to \$50 million, in which foreign investors must have a minimum investment of \$2 million and no more than a 49 percent share, are to be automatically approved by a new department created in the Prime Minister's office (para. r). Those over \$50 million, will be reviewed on merit by that Office. Investments involving IFC or Islamic Bank have no limit on size or field of investment and will be automatically approved, provided the investor holds no more than 49 percent. Even this ceiling is not applicable to investments made by Arab OPEC countries, or for hotels with more than 400 beds, where 100 percent foreign ownership can be allowed. The repatriation of the sale of an investor's equity is also guaranteed, as IFC had been insisting.

(i) To encourage oil exploration/investments by foreign oil companies, the well-head price of oil is further increased over the sizeable increase made in April 1979. For oil found or produced by such companies after January 1, 1980, they can export 35 percent of oil produced, as their share of the profits.

(j) To resolve the problem of unguaranteed trade credit arrears of about \$1.9 billion, foreign creditors must opt within 90 days between: (i) consolidation in US\$, with repayment over 10 years including 4½ years grace, with 7 percent interest at the TL parity on January 25, 1980, or (ii) consolidate in TL with smaller amounts repaid in 18 months and larger ones with 24 to 30 months. Such TL amounts can be used by them to invest in Turkey, within the liberalized investment rules mentioned above.

SEE Reforms

(k) Substantial increases in prices of SEE products such as petroleum, cement, steel, sugar, coal, lignite and printing paper, as also in tariffs of service SEEs like railways, Soil Products Office and Maritime Bank (which collectively accounted for nearly 50 percent of budgetary deficits) have

been announced, to add about TL350 billion to 1980 gross revenues. In this the average tariff for bulk power has been increased from about 120 krs/kwh to an average of 280 krs/kwh.

(1) So far, the prices of several SEE products/services were arbitrarily constrained and could be increased only by Cabinet approval, since they were placed on "a list of basic items". All goods and services have now been removed from this "basic list", except for fertilizer, coal/lignite, the cargo tariffs of Railways, Maritime Bank and Turkish Cargo Lines, and electricity rates only for ferro chrome and aluminium production. In other words, the Board of Directors of the SEEs concerned will now set their own prices depending on market forces, so as to generate enough not only to cover their operating deficits, but cash for their investment programs. Through the price mechanism and improved management and efficiency in the SEEs themselves, the SEEs will have to meet all of this. Their operating deficits will no longer be met from the Budget. While their investment projects would in future be reviewed by the SPO from the viewpoint of whether they fall within the Plan objectives and are viable proposals, such projects will no longer be financed from the Budget. Nor will SEEs have any access to Central Bank borrowings, except seasonal credits for some of them. This is a major milestone in Turkish economic policy, which has been accomplished by decree under the existing SEE law, and does not require parliamentary approval.

Domestic Resource Mobilization

(m) Since continuing increases in SEE prices could price them out of the international market, revenues are instead to be augmented through a "significant tax package" being tabled to the Parliament soon. After study, new simple indirect taxes, like value added taxes, are proposed to be introduced in future, along with others, to raise resources on a continuing basis. This is another major shift in Turkish economic policy, since proposals for new taxes have rarely been proposed to the Parliament, nor has the Parliament passed any tax package for the last 8 years.

(n) All lending rates have been increased by 2 percent over those prevailing before January 25, 1980. In addition, interest rates for medium-term credits of beyond 5 years no longer have any ceiling and can be negotiated between the borrower and the banks concerned. This freeing of interest rates on loans beyond 5 years, is a major step towards gradually reducing the negativeness of the interest rate structure in Turkey.

(o) As part of the Government's objective to bring down inflation in 1980 to about 50 percent, and then continue to exercise a downward pressure on inflationary growth, legislation is being introduced in Parliament to contain wage increases in public and private sectors by allowing automatic rate adjustments of only half the rate of inflation in a given year, if the overall rate exceeds 40 percent.

Administrative Arrangements

(p) A small Coordination Committee under the Undersecretary in the Prime Ministry and having the Undersecretaries of SPO, Industry, Energy and Treasury, the Governor of the Central Bank and the Head of the Economic Department of SPO, will expedite formulation and implementation of economic policies, trade regimes and the coordination of external aid.

(q) A new Money and Credit Committee, again under the Undersecretary in the Prime Ministry, with the Undersecretaries of SPO, Treasury and Commerce as well as the Governor of the Central Bank, the Head of the Economic Department of SPO and the Head of Internal Revenue's Economic Department, are to coordinate monetary and credit developments, solve financial bottlenecks, decide on pricing policies and quickly approve adjustments in cross rates and exchange rates.

(r) A new private Foreign Investment Department has been created under the Undersecretary in the Prime Minister's Office. It alone will review and approve applications of foreign investors for investments in Turkey.

(s) An Incentives/Implementation Department has also been established under the Undersecretary in the Prime Minister's Office. It will not only develop and deal with all export promotion incentives, measures and institutions in order to promote export and export oriented investments, but will also continuously review the ongoing investments in the country from the point of view of establishing which of them should be stopped, deferred or processed quickly, besides reviewing and proposing general investment incentives for investments considered desirable in the Turkish context.

TURKEY: Key Elements of Turkey's Ongoing and Medium-Term Recovery Efforts

Main Issues	1978/79 Trends	Measures up to January 1980	Policies and Measures for the Future	Expected Impact
A. Balance of Payments				
a. Exchange Rate Policy	Overvaluation and inadequate adjustments encouraged imports and capital intensive investments; discouraged exports.	Administrative measures to prevent increase in deficit beyond '78 level. Adoption in June '79 of a realistic exchange rate to help alleviate situation, was followed up in Jan. '80 by a further drastic devaluation fixing a rate of TL70 = \$1, except for fertilizer and insecticide imports.	Frequent and almost automatic adjustment by the Central Bank, in consultation with a new Money and Banking Coordination Committee, of the exchange rate to cover the differential inflation in Turkey and of her main trading partners.	Strengthen balance of payments; encourage exports and workers' remittances; stimulate less capital intensive investments.
b. Exports	Agricultural exports still dominate; export orientation is gradually increasing in the industrial sector. However, cumbersome export restrictions and licensing procedures and more lucrative domestic market discouraged exports.	Measures taken in '78/79 boosted exports by 15% pt in real terms in '78 and '79. Realistic exchange rate should help maintain growth trend. Permission to exporters to retain 50% of export earnings for import needs helped stimulate exports. Decreases in May '79 and Jan. '80 have reduced procedural delays drastically; interim arrangements established to provide export risk insurance coverage as well as term and working capital credits to exporters.	Steps to further minimize export procedures; review by Oct. '80, of the efficacy of the interim arrangements for export risk insurance and priority access to credits to exporters, as well as of institutional arrangements to further develop traditional and non-traditional exports. Incentives and priority for export oriented investments in private sector. Study of protection to be initiated in April '80.	Continued export growth by at least 10% in real terms between '80 and '83. Actions should contribute to increase of non-traditional exports, improve capacity utilization, and increase employment.
c. External Debt	Substantial accumulation of short-term indebtedness imposes and inordinately heavy burden, in the medium-term, on balance of payments; short-term debt went up in '78 by another \$2 b. because Turkey borrowed <u>net</u> short-term, <u>and</u> valuation adjustment of old debt, due to \$ slipping against Euro-currencies.	Guaranteed bilateral debts rescheduled up to June '79: IMF Standby Arrangement in July '79; commercial bank debts of \$429 m. rescheduled and further rescheduling of \$2.46 b. negotiated. Jan. '80 economic package included reasonable alternative proposals to settle about \$1.9 b. of unguaranteed export credits.	Further rescheduling on extended terms of guaranteed bilateral debt, containment of short-term debts over medium-term to no more than current level of about \$2.8 b., securing of new credits on as concessional terms as possible, and completion by Oct. '80 of an ongoing study to further improve and refine this external debt policy.	Gradual restoration of creditworthiness, to maintain viable growth and economic stability.
B. Domestic Policies				
a. Inflation	Has encouraged consumption, discouraged savings and eroded potential benefits from Government's stabilization policies. Budget deficit of TL61 b. (4.7% GDP) and overall public sector deficit of TL115 b. (8.8% GDP) in '78. Net public sector borrowing from Central Bank TL63 b. in '78.	Effort to control public sector deficits and Central Bank borrowings in '78/79. Upward adjustment of interest rates in May '79, followed up in Jan. '80 with further 2 percentage point increases in all rates, and liberalization of the interest rate regime through allowing borrowers and banks to agree on rates for deposits beyond 4 years and lending beyond 5 years.	With the objective of reducing the rate of growth of inflation in '80: limit net new Central Bank credits to public sector to TL94 b. in FY79/80. Continue policy of limiting wage increases. Review of Turkey's completed Financial Sector Study by Bank; By mid '80, review measures to encourage increases in household savings and deposits as part of measures to improve resource mobilization/allocation. Restructuring of tax system to augment tax revenues to be done. Elimination of deficit financing of public sector, to be an important feature of 1980 and future budgets.	Gradual reduction in inflation in '80. Slight decline in private consumption and some decline in private fixed investments.
b. Price Policies of SEEs	Domestic resource mobilization and total deficits have increased. Deficit of SEEs 4.1% GDP in '78. Underpricing of industrial goods produced or distributed by SEEs, has resulted in substantial losses, met through the budget and Central Bank borrowings. Has aggravated inflation and the economic crisis.	Systematic increases in prices during '78/79, followed up in Jan. '80 by increases of between 50 to 300% in products and services of SEEs, to net TL350 b. in '80; this should help alleviate situation. <u>Importantly</u> , except for coal/lignite, railway and shipping freights and power tariffs for aluminum and ferrochrome production, SEEs are now allowed to fix their own prices depending on market prices. Through prices and improved efficiency, they are to cover all costs and generate cash for investments, since their reliance on the budget and Central Bank borrowings for both purposes, has been stopped.	Continue policy of encouraging SEEs to improve productivity and management, and generate their resources to cover their investment programs.	Strengthen public sector finances. Improve resource allocation.
c. Public Sector Investment Program	An investment program, excessive in the light of available resources, and emphasis on large projects with long gestation period and marginal returns, has increased country's debt burden and fuelled inflation.	Highest priority accorded to completion of ongoing projects which can give good returns with modest investments, and those that can use existing productive capacity fully. New investments, tailored to available resources, to be made mainly on priority projects for removing infrastructural bottlenecks, or promoting exports and employment.	Restraint on new investments in light of available resources; all investments to be made according to strict criteria mentioned under "Measures up to January 1980" column. Should resources fall short in any year to those estimated in the relevant Annual Program, they would be channelled to projects having highest priority according to that criteria, the list of which is to be provided shortly to Bank.	Sizeable reduction in public fixed investments. Stimulate faster disbursements on priority project loans. Positive effect on containing inflation. Promotion of public sector exports.

STATUS OF BANK GROUP OPERATIONS IN TURKEY

STATEMENT OF BANK LOANS AND IDA CREDIT
(As of March 31, 1980)

Loan and Credit Number	Year	Borrower	Purpose	(Less Cancellations US\$M)		
				Bank	IDA	Undisbursed
Nineteen loans and twelve credits fully disbursed				533.0	160.2	
748-TU	1971	Republic of Turkey	Education	13.5		3.9
844-TU	1972	Republic of Turkey	Istanbul Water Supply	37.0		9.5
324-TU	1972	Republic of Turkey	Istanbul Urban Development		2.3	0.7
330-TU	1972	Republic of Turkey	Livestock II		16.0	0.1
883-TU	1973	Republic of Turkey	Ceyhan Aslantas	44.0		20.0
892-TU	1973	Republic of Turkey	Istanbul Power Distribution	14.0		0.2
893-TU	1973	Turkish State Railway	Railway Project	46.7		2.3
957-TU	1974	Republic of Turkey	Antalya Forestry	40.0		0.9
1023-TU	1974	TEK/TKI	Elbistan Power	148.0		59.0
1024-TU	1974	DYB	Industry	40.0		1.5
1078-TU	1975	TSKB	Industry	65.0		0.8
1130-TU	1975	Republic of Turkey	Rural Development	75.0		46.5
1248-TU	1976	Agriculture Bank of Turkey (TCZB)	Agriculture Credit	54.3		33.1
1258-TU	1976	State Pulp and Paper Industry (SEKA)	Newsprint	70.0		13.8
1265-TU	1976	Republic of Turkey	Livestock III	21.5		16.2
1194-TU	1976	TEK	Power Transmission II	56.0		21.4
1310-TU	1976	Republic of Turkey	Tourism	26.0		23.3
1379-TU	1977	DYB	Industry	70.0		47.5
1430-TU	1977	TSKB	Industry	74.0		22.5
1585-TU	1978	Republic of Turkey	Northern Forestry	86.0		73.5
1586-TU	1978	Republic of Turkey	Livestock IV	24.0		23.9
1606-TU	1978	Republic of Turkey	Erdemir Steel Stage II	95.0		94.2
S-13-TU	1978	Republic of Turkey	Oil Recovery	2.5		1.0
1741-TU	1979	Republic of Turkey	Ports Rehabilitation	75.0		75.0
1742-TU	1979	Republic of Turkey	Grain Storage	85.0		85.0
1748-TU	1979	TSKB	Industry	60.0		60.0
1754-TU	1979	TSKB	Private Sector Textiles	65.0		65.0
1755-TU	1979	SYKB	Private Sector Textiles	15.0		15.0
S-15-TU	1979	Republic of Turkey	Ankara Air Pollution Control	6.0		6.0
1818-TU	1980	Republic of Turkey	Structural Adjustment	200.0		200.0
Total				2141.5	178.5	1021.8
of which has been repaid				185.5	6.1	
Total now outstanding				1956.0	172.4	
Amount sold				3.6		
of which has been repaid				3.6		
Total now held by Bank and IDA /a				1956.0	172.4	
Total undisbursed /b				815.0	0.8	815.8

/a Prior to exchange adjustments.

/b Excluding loans not yet effective.

STATUS OF BANK GROUP OPERATIONS IN TURKEYSTATEMENT OF IFC INVESTMENTS

(As of March 31, 1980)

Fiscal Year	Obligor	Type of Business	Amount in US\$ Million		
			Loan	Equity	Total
1964	TSKB	DFC	-	0.92	0.92
1966	SIFAS I	Nylon Yarn	0.90	0.47	1.37
1967	TSKB II	DFC	-	0.34	0.34
1969	TSKB III	DFC	-	0.41	0.41
1969	SIFAS II	Nylon Yarn	1.50	0.43	1.93
1970	Viking I	Pulp and Paper	2.50	0.62	3.12
1970	ACS	Glass	10.00	1.58	11.58
1971	NASAS	Aluminum	7.00	1.37	8.37
1971	SIFAS III	Nylon Yarn	0.75	-	0.75
1971	Viking II	Pulp and Paper	-	0.05	0.05
1972	SIFAS IV	Nylon Yarn	-	0.52	0.52
1972	TSKB IV	DFC	-	0.43	0.43
1973	TSKB V	DFC	10.00	-	10.00
1973	Akdeniz	Tourism	0.33	0.27	0.60
1974	Borusan	Steel Pipes	3.60	0.44	4.04
1974	AKSA	Textiles	10.00	-	10.00
1975	Kartaltepe	Textiles	1.30	-	1.30
1975	Sasa	Nylon Yarn	15.00	-	15.00
1975	Aslan	Cement	10.60	-	10.60
1975	DOKTAS	Steel	7.50	1.37	8.87
1975	TSKB	DFC	25.00	1.22	26.22
1976	NASAS	Aluminum	1.58	-	1.58
1976	TSKB	DFC	25.00	-	25.00
1976	Asil Celik	Steel	12.00	2.20	14.20
1977	Borusan	Steel Pipes	-	0.06	0.06
1978	DOKTAS	Steel	-	0.10	0.10
1979	Ege Mosan	Engines for Mopeds	2.15	-	2.15
1979	ISAS	Motor Vehicles & Accessories	8.00	1.40	9.40
1979	Asil Celik	Steel	-	1.80	1.80
1979	Trakya Cam	Glass	31.15	4.00	35.15
1980	TSKB	DFC	-	1.09	1.09
1980	ISAS	Motor Vehicles & Accessories	-	0.56	0.56
Total Gross Commitments			186.86	21.65	207.51
Less Cancellations, Terminations, Exchange Adjustments, Repayments and Sales			109.48	2.43	111.91
Total Commitments now held by IFC			77.38	18.22	95.60
Total Undisbursed			10.84	6.12	16.96

C. PROJECTS IN EXECUTION 1/

Ln. No. 748 Education Project: US\$13.5 million loan of June 9, 1971. Effective Date: September 29, 1971. Closing Date: September 30, 1980.

The project was substantially delayed due mainly to initial difficulties in providing the project unit with adequate qualified staff and authority commensurate with its responsibilities. Implementation is now proceeding satisfactorily, with equipment procurement progressing smoothly. Completion of some training institutions, including the Management Training Institute, has been delayed by contract disputes. However 90 percent are now complete or almost complete, and remedial actions are being taken by Government to accelerate completion of the remaining schools. The Government is also considering alternative steps to formally establish the Management Training Institute without need for parliamentary action. Training of teachers for technician schools, adult training centers and practical trade schools has made considerable progress. Sixty-seven local advisory committees for vocational and technical education have been established, one in each province.

Ln. No. 844 Istanbul Water Supply Project: US\$37 million loan of June 30, 1972. Effective Date: January 4, 1973. Closing Date: June 30, 1980.

Project construction was delayed about 2-1/2 years due mainly to problems in the use of ICB procurement procedures and inefficient management. However, construction moved swiftly in 1977 and the two major water resources development programs were completed in early 1979. Substantial improvements to the distribution system are required, however, to enable full utilization to be made of the new water sources. Tariff increases have been implemented recently, and a reorganization of the management, accounting and financial systems is under consideration.

Cr. No. 324 Istanbul Urban Development Project: US\$2.3 million credit of June 30, 1972. Effective Date: January 4, 1973. Closing Date: June 30, 1980.

Consultants have completed Phase I of the general urban planning and urban transport/land use modelling studies as well as studies on wastewater and bus/traffic engineering and control. Phase II studies to prepare a shelter project for Bank financing are under discussion with the Government.

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

Cr. No. 330 Second Livestock Project: US\$16 million credit of September 28, 1972. Effective Date: January 5, 1973. Closing Date: June 30, 1980.

The fattening subproject has been completed. All unspent funds have been reallocated to the village livestock development subproject, which is expected to be completed on schedule.

Ln. and Cr. Nos. 883/360, Ceyhan Aslantas Multipurpose Project: US\$44 million loan and US\$30 million credit of March 22, 1973. Effective Date: March 20, 1974. Closing Date: December 31, 1981.

Following delays due to difficult rock conditions and inappropriate tunnelling methods, two diversion tunnels have been completed, about two years behind appraisal estimate. The upstream coffer dam has also been completed. Progress in 1979 was disappointing because of the difficulties that the contractors encountered in obtaining sufficient fuel, construction steel and cement; the supply situation has eased recently. The construction of the irrigation system is progressing, with the system now ready to transport irrigation water to about 40,000 ha, one third of the target. On-farm works are progressing slowly, with about 40 percent of the land leveling, 25 percent of the surface drainage, and 35 percent of the feeder roads completed. Tile drainage is being delayed until the main drains are located. Staffing of the extension service is satisfactory except as regards consultants, but the Government is taking steps to hire the latter.

Ln. No. 892 Istanbul Power Distribution Project: US\$14.0 million loan of May 25, 1973. Effective Date: September 28, 1973. Closing Date: June 30, 1980.

The project has been delayed by about four years mainly by slow procurement action; however, this is now almost completed. Both local and foreign costs have increased substantially over appraisal estimates. Consultant studies of the Istanbul power market and of the proposed reorganization of the company's electricity, transport and gas services have been completed. IETT's tariffs have been raised substantially in the recent past, and additional increases as a result of the Government's January 1980 economic package should help cover the increased project costs and revitalize the company's finances.

Ln. No. 893 Turkish State Railways: US\$47 million loan of May 25, 1973. Effective Date: August 28, 1973. Closing Date: June 30, 1980.

After initial delays, physical progress, including track renewals, rolling stock, and locomotive production, the latter financed by the European Investment Bank, is satisfactory. Over 90 percent of the loan has been disbursed and procurement action has been or is in the process of being completed for use of the remaining loan funds. Despite several tariff increases since

the loan was made, the Railways have continued to fall short of the financial targets in the revised Plan of Action agreed with the Bank in mid-1975. However, it is hoped that further increases in passenger fares and freight tariffs averaging 70 to 170 percent, which became effective in January 1980, will improve the Railways' financial situation. While the dieselization program is making satisfactory progress, other measures to improve operational efficiency, such as appropriate manpower planning, have not been given sufficient attention.

Ln. No. 957 Antalya/Akdeniz Forest Utilization Project: US\$40 million loan of January 28, 1974. Effective Date: May 26, 1976. Closing Date: June 30, 1980.

Following the approval by the Executive Directors of needed changes in the agreements arising from relocation of the pulp and paper mill, the loan was declared effective. Construction at the new site is underway, and the project is expected to be completed by mid-1981, two years behind the revised schedule. Some cases of sub-standard civil works construction have occurred, but a corrective program and strengthened supervision by SEKA have produced some improvement. Arrangements have been made to complete the foreign exchange financing plan, and procurement for the industrial part of the project is well advanced. Local currency payments for the Akdeniz establishment are also now being made. Price increases of 127-345 percent in January 1980 should enable the company to meet part of the local currency requirements.

Ln. No. 1023 Elbistan Lignite Mine and Power Project: US\$148 million loan of June 28, 1974. Effective Date: June 1, 1976. Closing Date: July 30, 1982.

Project implementation had been delayed by critical problems, including insufficient staff, inefficient management, inadequate coordination among various agencies and unsatisfactory performance of civil contractors. Following continuous Bank and co-lender reviews of the situation with the Turkish authorities from early 1977, the remedial measures initiated by Turkey have recently resulted in significant improvement of project execution. The Government's expected continued provision of adequate local funds for this high priority project, and early arrangements to finalize plans to meet the substantial foreign exchange gap, are likely to maintain project momentum in future. The Government is reviewing possible action to overcome remaining implementation problems.

Ln. No. 1024 DYB (State Investment Bank of Turkey): US\$40 million loan of June 28, 1974. Effective Date: September 30, 1974. Closing Date: June 30, 1980.

The loan was fully committed in February 1977, with eleven sub-projects approved by the Bank. Project implementation is satisfactory and disbursements are nearly complete.

Ln. No. 1078 TSKB (Industrial Development Bank of Turkey): US\$65 million loan of January 22, 1975. Effective Date: April 24, 1975. Closing Date: June 30, 1980.

The loan is fully committed and project implementation is satisfactory. Disbursements are nearly complete, although somewhat behind original appraisal estimates, as a result of difficulties with a few subprojects.

Ln. No. 1130 Corum-Cankiri Rural Development: US\$75 million loan of June 23, 1975. Effective Date: January 22, 1976. Closing Date: December 31, 1981.

The project is progressing satisfactorily. Corum dam has been completed and the works to divert run-off from 5 nearby watersheds have been completed. Kumbaba pumping station is ready. Diversion tunnels for Alaca and Guldercek dams are more than 90 percent completed. Designs for the irrigation systems of the Guldercek and Alaca areas have been completed and tendering is beginning in April 1980. The project extension service and credit components are operating successfully. The Government is taking steps to replace two of the three extension consultants who resigned for personal reasons. Further construction of village centers is being delayed until a satisfactory plan for using and maintaining existing centers is drawn up and plans for additional centers are revised.

Ln. No. 1194 Second TEK Power Transmission Project: US\$56 million loan of June 14, 1976. Effective Date: April 21, 1978. Closing Date: December 31, 1980.

Procurement action is complete, somewhat behind schedule, and almost the entire loan is committed. Some deliveries have also been delayed because of foreign exchange shortages. Improvements are expected to continue in over-all project implementation and the rate of disbursement.

Ln. No. 1248 Agricultural Credit and Agroindustries: US\$54.2 million loan of May 5, 1976. Effective Date: May 11, 1977. Closing Date: September 30, 1981.

The ferryship component has been implemented, and the two roll-on and roll-off ships purchased under this project and the Fruit and Vegetable Export project are now operating a regularly scheduled service between ports in Turkey and two ports in Italy. Selection of agro-industries sub-loans has been delayed, but some have recently been approved. The Agricultural Bank (TCZB) has introduced improved lending procedures for its ongoing supervised credit program, and this component is being implemented satisfactorily. After considerable delay, consultants will shortly begin to carry out the study of TCZB's structure and procedures. At the Borrower's request, a cattle-fattening component of the Project, and US\$7.7 million of the original Loan amount of \$63 million allocated for this purpose, were cancelled on May 5, 1977. Also, as provided for in the Loan Agreement, \$1.04 million for training was cancelled on December 22, 1977, following approval of UNDP funds for this purpose.

Ln. No. 1258 Balikesir Newsprint: US\$70 million loan of May 21, 1976.
Effective Date: October 15, 1976. Closing Date: December 31, 1980.

The project is proceeding slowly due to delays in civil works and procurement caused by insufficient local funds. Recent price increases of 130-345 percent are likely to correct this situation and the project is expected to start production in early 1981, 2 years behind the appraisal schedule. Erection of machinery and equipment began in early 1979 and trial runs are expected to begin in 1980.

Ln. No. 1265 Livestock III: US\$21.5 million loan of May 26, 1976. Effective Date: February 25, 1977. Closing Date: March 31, 1982.

After a slower than anticipated start-up, project implementation is now satisfactory. Project area offices have been established and are fully staffed. Preparation of farm development plans has been slower than expected but is now satisfactory. A higher than expected proportion of subloans has been made to small farmers.

Ln. No. 1310 South Antalya Tourism Infrastructure: US\$26 million loan of July 9, 1976. Effective Date: March 1, 1978. Closing Date: December 31, 1982.

Implementation of most project components is satisfactory, with progress being made in preparation of specifications and project design work, although the pace of overall project implementation is somewhat slower than expected due to staffing constraints and difficulties in ensuring adequate inter-ministerial and inter-agency coordination. However, measures to strengthen the Project Unit and its consultants, the Tourism Bank, are being taken, and the project is still expected to be completed without major delays.

Ln. No. 1379 DYB (State Investment Bank of Turkey): US\$70 million loan of March 23, 1977. Effective Date: July 21, 1977. Closing Date: March 31, 1981.

The loan has been fully committed. DYB still has severe staff constraints, which it has in part overcome by recruitment of additional junior staff. It hopes improved contract terms will enable it to fill more senior positions as needed.

Ln. No. 1430 TSKB XII (Industrial Development Bank of Turkey): US\$74.0 million loan of June 3, 1977. Effective Date: August 29, 1977. Closing Date: June 30, 1981.

Progress is satisfactory and 83 percent of the loan has been committed. TSKB has essentially reached its agreed targets for allocation of its resources to projects in less developed regions and small and medium-scale

labor-intensive enterprises. It has so far been unable to raise resources in international capital markets as expected because of Turkey's economic difficulties, but the interest of several financing sources is anticipated once conditions permit renewed efforts.

Ln. No. 1585 Northern Forestry: US\$86.0 million loan of June 5, 1978.
Effective Date: October 30, 1978. Closing Date: March 31, 1986.

Industrial wood production for 1979 will be close to forecasts but there will be significant shortfalls in some other targets, principally as a result of Government budget cuts. Foreign procurement for 1979 is effectively up to date but local state enterprises have been unable to supply much of the locally produced equipment (principally vehicles to replace existing stocks). Most technical problems have been resolved.

Ln. No. 1586 Livestock IV: US\$24.0 million loan of June 5, 1978. Effective Date: October 31, 1978. Closing Date: June 30, 1985.

The supervised credit program for farm development has not yet been initiated, mainly because of difficulties being encountered in recruiting veterinarians and agronomists to serve in eastern Turkey. The final draft of the milk industry study is expected shortly. International recruitment of technical specialists is underway.

Ln. No. 1606 Erdemir Stage II Steel: US\$95.0 million loan of June 30, 1978.
Effective Date: July 30, 1979. Closing Date: June 30, 1983.

Procurement for the phenol treatment plant, the raw material handling system and the hot rolled shear line are underway. Following technical review by the company's consultants, the fourth blast stove and the third down coiler have been deferred until a later date. Prices have been substantially increased in January 1980. Production from existing facilities however, have been restricted because of the lack of raw materials due to the limited availability of foreign exchange.

Ln. No. 1627 Import Program: US\$150.0 million of November 8, 1978.
Effective Date: November 16, 1978. Closing Date: June 30, 1980.

In accordance with Schedule 1 of the Loan Agreement a satisfactory review of Turkey's export policies and performance was made by the Bank in April 1979 and a determination made to continue disbursements after April 30. The loan is almost fully disbursed.

Ln. No. S-13 Bati Raman Engineering: US\$2.5 million of November 30, 1978.
Effective Date: February 27, 1979. Closing Date: September 30, 1980.

The engineering study has been completed and detailed design of a pilot project to test the chosen technology has begun.

Ln. No. 1741 Ports Rehabilitation: US\$75 million of July 2, 1979.
Effective Date: January 22, 1980. Closing Date: June 30, 1983.

The project coordinating committees are in place and functioning effectively. Preparation of equipment specifications and tender documents is making good progress. UNDP has appointed a project manager to implement the project related training programs. The port sector planning studies have been delayed by lack of staff, but steps are being taken to correct this.

Ln. No. 1742 Grain Storage: US\$85 million of July 2, 1979.
Effective Date: January 21, 1980. Closing Date: June 30, 1985.

Project implementation has begun. Tender documents to be sent to an approved short list of consultants are under review.

Ln. No. 1748 TSKB XIII (Industrial Development Bank of Turkey): US\$60 million of July 12, 1979. Effective Date: October 25, 1979. Closing Date: December 31, 1982.

TSKB and ITC finalized in November the technical assistance program for training and export development. Project screening is now underway.

Lns. Nos. 1754 TSKB (\$65 million) and 1755 SYKB (\$15 million) Private Sector Textiles loans of September 17, 1979. Effective Date: February 29, 1980. Closing Date: December 31, 1984.

Consultants have prepared the preliminary program for local training. The additional consultants for technical services and for the extension services are being recruited. Revised Action Plans are being prepared.

Ln. No. S-15 Ankara Air Pollution Engineering: US\$6 million loan of December 12, 1979. Effective Date: April 4, 1980. Closing Date: December 31, 1983.

Consultants being selected for project studies.

Ln. No. 1818 Structural Adjustment Loan: US\$200 million loan of March 26, 1980. Effective Date: April 1, 1980. Closing Date: September 30, 1981.

The loan has just become effective.

TURKEY

KARAKAYA HYDROPOWER PROJECT

SUPPLEMENTARY PROJECT DATA SHEET

Section I - Timetable of Key Events

- (a) Time taken by country to prepare Project: 10 years (1962-1972)
- (b) Agency which prepared Project: Consultants for the State Hydraulic Works (DSI); Electro-Watt and SGI (Switzerland); TAMS (USA); and Dolsar (Turkey)
- (c) Date of first presentation to the Bank: January 1975
- (d) Date of departure of reappraisal mission: November 1979
- (e) Date of completion of negotiations: April 1, 1980
- (f) Planned date of effectiveness: August 1980

Section II - Special Bank Implementation Action

In 1975, the Bank prepared and tested a computer simulation model to investigate principles of water management during the construction, filling and initial operation of water storage projects on the Euphrates in all the riparian countries. Bank assisted DSI in reviewing the Project design and developed a hydrologic model for the Euphrates basin.

Section III - Special Conditions

- (a) Special conditions of effectiveness:
 - (i) The signing of the financing agreements with cofinanciers, other than EIB, will be a condition of loan effectiveness (para 53).
 - (ii) The Government will establish a special revolving fund, with an initial amount of 500 million TL, equal to three months' local expenditure requirements, to be replenished monthly (para 53).
 - (iii) DSI will establish a panel of experts, independent of its consultants, to advise it in the event of unforeseen problems arising during project construction (para 58).

(b) Other conditions:

- (i) DSI will continue to employ engineering consultants whose qualifications, experience, terms and conditions of employment are satisfactory to the Bank (para 58).
- (ii) DSI will establish an appropriate reporting system on the operation of the Project and the Euphrates river flows so that records are regularly sent to the Bank (para 57).
- (iii) The Government will ensure that, beginning 1981, TEK will generate internal resources of not less than 20 percent of total TEK and DSI investments in the power sub-sector, gradually increasing to about 35 percent in 1986 and thereafter (para 46).
- (iv) The Government will undertake, through its Committee of experts, a comprehensive review of the financial relations between various agencies involved in the power sub-sector and develop appropriate policies on key financial aspects of power sub-sector investment and operations, including pricing of electricity and fuels (paras 48 and 50).
- (v) The Government will undertake to develop and institute improved procedures for power sub-sector planning, coordination and implementation (para 38).
- (vi) The Government will provide the Bank, by June 30, 1981 with TEK's construction schedule for the 380-kV lines needed to connect the Project with the power system, and a tentative financing plan for these lines, and thereafter make satisfactory financing arrangements for the completion of these transmission lines, prior to the commissioning of the generating units (para 61).
- (vii) The Government will prepare a detailed and comprehensive resettlement plan, and will ensure its implementation fully coordinated with reservoir filling (para 59).

TURKEY

KARAKAYA HYDROPOWER PROJECT

International Riparian Aspects

1. Karakaya is a non-water-consumptive project, once the reservoir is filled, and therefore does not directly raise technical questions of long-term sharing of waters with the two lower riparians, Syria and Iraq. It does, however, involve the need to ensure that, during initial filling and subsequent operation of the reservoir, the interests of the downstream riparians are not adversely affected. This matter was thoroughly and very carefully studied during the preparation stages of the Project. In addition, although Karakaya is non-consumptive, its role in regulating the flow of the Euphrates through the riparian countries, on which a number of projects, both consumptive and non-consumptive, are under operation or construction, or planned, in all three riparian countries, makes its construction an appropriate occasion for assessing the question of long-term water sharing and for seeking to establish a process for addressing this question among the three riparians. Thus the Bank's consideration of Karakaya from the beginning was based on seeking satisfactory arrangements to facilitate eventual agreement among the three riparians on long-term sharing of the waters. These arrangements are discussed below.

2. Long-term water-sharing arrangements. At the request of Iraq and following discussions with all three riparians, in 1974 the Bank submitted to Turkey, Syria and Iraq an outline of a proposed study work program in three stages, which would provide the technical information and background studies necessary to evaluate interim and long-term options for the coordinated utilization and development of the Euphrates river resources. The Bank undertook the first stage of the proposed work program, to prepare and test a computer simulation model. On the basis of the information available and certain assumptions, the Bank developed operating principles for Karakaya, as well as for existing reservoirs in all three countries, which would ensure that the interests of none of the riparians would be adversely affected under any conditions which could be reasonably anticipated. The detailed technical study underpinning these operating principles was sent to all three countries in February 1975. While Iraq emphasized its objection to the Bank's financing of the Karakaya project or any other similar project in Turkey and Syria on the Euphrates basin before an equitable agreement on the uses of the river between the three riparian countries, it urged the Bank to continue the second and third stages of the study program. Lack of agreement among the riparians did not permit further Bank studies needed to fully develop and clarify the technical options to pave the way for an ultimate settlement.

3. Interim filling and Operation of Karakaya. Turkey's filling and operational proposals for Karakaya were evaluated by the Bank in the model developed in the aforementioned study. This evaluation revealed that if Turkey maintains an average monthly discharge of water of at least 500 cubic meters per second (cumecs), as the Euphrates passes from Turkey into Syria at Birecik, this would ensure that: (a) the existing requirements of downstream riparians for power generation and irrigation needs and reasonable growth in these requirements in the coming decade, would be met; (b) the Karakaya reservoir could be filled within a period of three to seven months, depending on the date of closure and actual water flows; and (c) the Turkish power plants could be operated for maximum energy output. This operating rule is called the "Rule of 500". The study also

revealed that, while Turkey's release of a minimum of 500 cumecs would ensure the lower riparians' interests, the benefits in Syria and Iraq could be further increased if the Syrian and Iraqi reservoirs are also operated according to principles developed in the model. These principles are:

- (a) The releases from the Syrian Euphrates Tabqa reservoir be modified on a semi-annual basis, to the extent of 60 cumecs, mainly to take note of variations in rainfall, Iraq's irrigation demand patterns and present storage capacity. This is referred to as the "Rule of + 60 cumecs".
- (b) Flows from upstream reaching Ramadi reservoir in Iraq in excess of downstream irrigation requirements would be diverted and stored in the Habbaniyah reservoir to the extent such flows can be stored and the reservoir maintained as full as possible at all times.

4. Turkey has accepted the proposed "Rule of 500". Turkey also informed Syria and Iraq in 1976 that it would observe the "Rule of 500" during the construction, initial filling and operation of Karakaya, until such time that any large consumptive water use project on the Euphrates is implemented in any of the three riparian countries. Turkey invited them for tripartite discussions to establish a mechanism for exchange of information on the hydro-meteorological data in the Euphrates basin as well as on the better use of common waters. Iraq and Syria have yet to accept this offer. Meanwhile, recognizing this, in March 1979, Turkey's Minister of Energy recorded an official policy statement in the Turkish Parliament that during construction, initial filling and operation of Karakaya, the monthly average flow of the Euphrates river waters would not fall below 500 cumecs as measured at Birecik, with shortfalls in any averaging period of not more than a month being made up in the next period. He also announced that this "Rule of 500" would be applied unless very abnormal hydrometeorological conditions exist, and as long as Turkey had not developed a project involving a large consumptive use of the river's waters in its territories. Turkey has also formally represented to the Bank that in considering Karakaya for financing, the Bank may rely on this policy statement regarding the international riparian aspects of the project. The Bank also informed the lower riparians of the Turkish proposals for operating Karakaya and invited their comments on the suggested principles for existing reservoirs on the Euphrates in Syria and Iraq.

5. Syria commented on the proposed operational rules for Euphrates reservoirs. It suggested that the filling period should be determined on the basis of prevailing conditions of hydrological years. It questioned some assumptions underlying the model, in regard to return flows and rate of irrigation development. Syria appeared to interpret the "Rule of 500" to imply allocation of 45 percent of the average Euphrates yearly flow to Turkey, to be modified by agreement when any new large water consumptive projects are started. It indicated that its operation of Syrian reservoirs on the basis of the "Rule of + 60 cumecs" would result in its having to store 1 km³ per year in the Assad reservoir to the exclusive benefit of Iraq. Following the Bank's study of these comments, the Bank clarified to Syria that the "Rule of 500" does not imply any water sharing agreement between the riparians and is designed to assure the lower riparians an average minimum monthly flow of 500 cumecs to meet present and forecast needs of Syria and Iraq. It does not reflect the longer-term needs at full development and for this reason, the Bank recommended that the "Rule of 500" would have to be modified by agreement among the three riparians at

the start of any new large consumptive project on the Euphrates in any of the riparian countries. The "Rule of 500" implies that the filling period would be determined on the basis of prevailing conditions at the time of the closure. The "Rule of ± 60 cumecs" would not impose any difficult obligation on Syria. Syria is expected to utilize its storage reservoir to regulate available water supply in its own and Iraq's interests. Any mode of reservoir operation by Syria in variance with the "Rule of ± 60 cumecs" would likely result in reduced energy benefits for Syria.

6. Iraq has not communicated its comments on the operating criteria and the suggested operational rules in Turkey and Syria. In technical discussions with the Bank it recognized that Karakaya is a non-consumptive project, and could prove beneficial to Iraq through its regulation of Euphrates waters. However the Iraqi Government expressed objection to Turkey's proceeding with the project, until an equitable agreement among the three riparians is reached on the uses of Euphrates waters in the three countries. Iraq seems also concerned that it could be adversely affected if Syria did not operate the Assad reservoir in accord with the "Rule of ± 60 cumecs", a danger which exists irrespective of Karakaya. However, the impact on Iraq of Syria's not applying the "Rule of ± 60 cumecs" would be small. Moreover, Iraq would be able to protect itself against this risk through the operation of the Haditha dam, which it has started building and which would be completed about the same time as Karakaya. Under these circumstances the Bank is satisfied, based on careful technical analysis, that the arrangements proposed for the filling and operation of Karakaya would not adversely affect the interests of downstream riparians.

7. The Bank has repeatedly tried since 1965, when this problem was raised in connection with the Keban Dam in Turkey, to bring about negotiations between the riparians to resolve the question of long-term apportionment of Euphrates and Tigris waters. The long-term interests at stake as well as political differences have, however, proved to be obstacles difficult to overcome. In all cases where the Bank has been involved in the financing of projects on the Euphrates and Tigris (Lower Khalis in Iraq, Balikh in Syria, Karakaya in Turkey), it has carried out detailed studies to ascertain that the projects would not harm, or not be adversely affected by developments in the other riparian countries; it has also always endeavoured to use its good offices in order to bring about tripartite discussions with a view to making progress towards an agreement on water sharing. In the case of Karakaya, since consumptive use is limited to initial filling, and since the "Rule of 500" agreed upon by Turkey would adequately protect the downstream riparians, the Bank considers it appropriate to participate in the financing of the Project. Turkey has agreed to establish an appropriate reporting system on the actual operation of the Project and the Euphrates river flows.

