

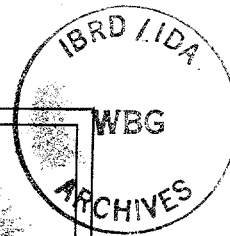
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**THE ECONOMY
OF TURKEY**

18N 172605



The Economy of Turkey



THE ECONOMY OF
TURKEY

*An Analysis and Recommendations for
A Development Program*

REPORT OF A MISSION

sponsored by the

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

in collaboration with

THE GOVERNMENT OF TURKEY

Published for

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**INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT
WASHINGTON 25, D. C.**

OFFICE OF THE PRESIDENT

May 15, 1951

His Excellency
Celal Bayar
President of the Republic of Turkey
Ankara

My dear Mr. President:

I take great pleasure in transmitting to you herewith the Report of the Economic Mission to Turkey, headed by Mr. J. M. Barker, which visited Turkey last year under the sponsorship of the International Bank for Reconstruction and Development in collaboration with the Government of Turkey.

In the opinion of the Bank, the Report provides an objective, unbiased analysis of Turkey's major economic problems and lays the foundation of a sound program for economic development. The Bank has not yet had the opportunity to study in detail the recommendations contained in the Report. They must therefore be regarded as matters for study and future discussion with your Government rather than recommendations of the Bank to your Government. We believe, however, that the analyses and recommendations of the Mission are deserving of the most careful consideration by the Government and people of Turkey so that they themselves may be able to work out a sound, well-balanced development program.

We share the hope expressed by Mr. Barker in his letter of transmittal that the Report will be widely studied and discussed from an objective, nonpolitical viewpoint, so that its major implications may be fully understood and so that actions based on it can enlist broad support from the Turkish people. Only with such full understanding and support can

the Mission's recommendations be translated into a Turkish national development program. The Bank is prepared to provide or to arrange for such other assistance as the Government might need or wish in studying the Report and working out a development program.

We will, of course, follow with interest the action taken by your Government in connection with the Report. At any appropriate time the Bank will be prepared to discuss with your Government the program that emerges from study of the Report and to consider the best ways in which the Bank can help in the execution of that program, through further technical or financial assistance or by other means.

It is my sincere hope that the Report will prove of lasting value in furthering the economic development of Turkey and in improving the standard of living of its people.

Sincerely yours,

A handwritten signature in cursive script that reads "Eugene R. Black". The signature is written in dark ink and is positioned above the printed name.

EUGENE R. BLACK

1430 LAKE SHORE DRIVE
CHICAGO, ILLINOIS

May 15, 1951

Mr. Eugene R. Black, President
International Bank for Reconstruction
and Development
Washington 25, D. C.

Dear Mr. Black:

I take great pleasure in submitting to you herewith the Report of the Economic Mission to Turkey sponsored by the International Bank for Reconstruction and Development in collaboration with the Government of Turkey. This Report is based on field studies made by the Mission in Turkey during the summer of 1950. The preface of the Report gives the chronology of the Mission's activities.

On behalf of the Mission, I desire to place on record here our appreciation for the unstinted help of all who have made this Report possible. In Turkey, His Excellency President Bayar, his Ministers and his Government throughout, by their interest and cooperation, greatly facilitated the Mission's work. His Excellency, the Turkish Ambassador at Washington, rendered important aid in the arrangements for the Mission and in many other ways. Members of the former Turkish Government, as well as Turkish professional men and businessmen, stood invariably ready to furnish assistance at every point. The American and British Ambassadors and the Chief of the ECA Mission, together with their staffs, were an invaluable source of help. The International Bank for Reconstruction and Development at Washington has from the beginning been of great help to the Mission, both through counsel and also with assistance as needed.

This letter would not be complete without mention of the loyal, competent and energetic work of each of the members

of the Mission. I particularly express my appreciation to Dr. B. U. Ratchford, Deputy Chief of Mission, who also had charge of the preparation of the Mission Report in Washington. He was ably assisted in this work by Dr. W. H. Nicholls, Dr. Murray Ross, Dr. R. A. Rennie and Mr. Robert W. Kerwin. I wish to record my cordial thanks to Mr. Richard H. Demuth, Assistant to the Vice President of the International Bank, for his unfailing and understanding assistance to the Mission at all stages of our work. I wish also to acknowledge the great assistance given to the Mission by Dr. William Diamond of the Bank staff and Miss Frances A. Henderson, Editorial Assistant, in editing the Report, and by Mr. Hurşit Çalika of the Turkish Ministry of Finance in translating the Report into Turkish.

As you know, the Mission undertook its work upon the successive invitations of two Turkish administrations representing the two major political parties of the Republic, which is evidence that in Turkey the work of the Mission has rightly been thought of as completely non-partisan. I feel that it is important that this non-partisan aspect of the Report should be continued in the processes of judging it and putting it into effect.

It is our confident hope that the recommendations of this Report will prove of value to Turkey as the foundation of a sound program for further improvement in the standard of life of a valiant and progressive people.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'B. U. Ratchford', written in a cursive style. The signature is positioned above the title 'Chief of Mission'.

Chief of Mission

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EUGENE S. TROY
Secretary and Administrative Assistant

ROSALIND WILLIAMS
Secretary

Preface

The idea of this Mission grew out of a series of conferences between representatives of the Turkish Government and the International Bank for Reconstruction and Development in early 1949. In July of that year, the Turkish Government requested that a mission be sent to Turkey to make an economic study and agreed to share the cost. The Bank undertook to recruit the personnel of the Mission and, in September 1949, asked Mr. James M. Barker to serve as Chief.

In late 1949, Mr. Barker made a preliminary trip to Turkey to determine what the general character of the Mission and its work should be. On his return, he submitted an advance report to the Bank in which he made recommendations on these matters. In February 1950, details regarding the organization and scope of the Mission and its terms of reference were agreed upon and transmitted to the Turkish Government, which indicated its acceptance the following month. The task of recruiting the personnel was completed in late May.

An advance party of the Mission began assembling and analyzing material in Turkey in March 1950. Following the May election and the change of government in Turkey, the new administration renewed the invitation for the Mission and expressed the desire to have the work continue as scheduled.

The Mission assembled at the headquarters of the Bank in Washington, D. C. on June 1, 1950 for 10 days of study and orientation. The members then proceeded to Turkey, arriving there between June 8 and 18. Mission headquarters were established in Ankara and field work started promptly. The members left Turkey between September 9 and 15, 1950. Thereafter, under the supervision of the Chief of Mission, a small group of members, headed by the Deputy Chief, prepared this Report. Although it is based on the reports of Mission members and was drafted in consultation with them, final responsibility for the Report rests with the Chief of Mission.

The terms of reference for the Mission, as set forth in a letter from the International Bank to the Turkish Government and agreed to by the Government, were as follows:

“The purpose of the Mission . . . is to make a broad survey of the Turkish economy, designed to enable the Bank to make recommendations to your Government primarily concerning long-term policies on:

- “(1) The directions in which investment might best be channeled in the Turkish economy. This would involve recommendations as to investment priorities as among various important sectors of the economy and as among various types of undertakings within each such sector;
- “(2) Other methods and measures which might raise the level of Turkey’s agricultural and industrial production and improve the efficiency of its distribution system; and
- “(3) Public financial policies and administrative mechanisms appropriate to carry out Turkey’s development objectives.”

In the letter transmitting these terms of reference to the Turkish Government, the Bank stated that “it will, of course, not be possible for the Mission to prepare a detailed and comprehensive plan for the solution of all of Turkey’s development problems, and it is not our intention that it should attempt to do so. We regard the Mission’s objective rather as being to outline a general pattern for Turkey’s future economic progress and to propose specific action which will contribute to that end.”

In accordance with this statement and with other communications and directives from the Bank, the Mission understood that it was not expected to evaluate, or assign priorities to, individual projects unless they were so large as to affect the general program. It has done its work on that basis.

At all times the Turkish Government was most helpful to the Mission. The President of the Republic and other high

government officials showed a keen interest in the work of the Mission and the various Ministries and agencies were most generous in providing help of many kinds, whenever requested. The Government also facilitated the work of the Mission by providing physical quarters for work, travel accommodations, clerical help and an able liaison officer. The Mission is also indebted to scores of private business and professional men throughout Turkey who gave freely of their time and effort to help in many ways. We regret that lack of space prevents individual acknowledgment of these acts of kindness and aid.

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Introduction

PURPOSE OF THE REPORT

For many years two basic objectives have been uppermost in the minds of the Turkish people. The first is maintenance of Turkey's territorial integrity and national independence. The second is further economic development of the country. The two objectives are closely interrelated. Neither can be realized without in some measure attaining the other. Certainly, at the present time, national defense is the primary objective.

Since the establishment of the Republic, Turkey has followed a strong, unified and nonpartisan policy in respect to national defense. On foreign policy the people have preserved an undivided front, unaffected by political changes. This has been of major importance to the country's survival as a free nation.

In respect to the broad outlines of an economic program, there is the same need for unified nonpartisan support. It is our hope that the general economic program proposed in this Report will commend itself to support by all parties and classes.

The Mission has made an objective analysis of the economic needs, resources and potentialities of Turkey. This Report is free of personal or political bias or prejudice. Its single purpose is to promote the economic development which the Turkish people fervently desire. It embodies the best judgment of specialists in many fields of economic activity, who arrived at their recommendations after extensive consultation and discussion with leaders in the political and governmental fields and in the principal sectors of the Turkish economy. It is based upon a short, but intensive, study of the Turkish economy on the ground. It benefits from many earlier studies and surveys.

While we hope that the broad program will receive general and nonpartisan support, we do not mean to suggest that there will be no room or occasion for political considerations in carrying it out. There is ample opportunity for healthy and stimulating competition between political parties

in regard to methods of implementation and to the energy and efficiency displayed in pushing the program through to completion. We hope, however, that differences of opinion on methods will not be permitted to block action and thus defeat or postpone implementation of the program.

In the past 20 years, a great many reports and surveys have been made with a view to improving the Turkish economy. Unfortunately most of them have been filed away and have had little effect on the course of developments. In some cases the character of the reports was partly responsible for that result. Some made a large number of detailed, uncoordinated recommendations, some recommended further study rather than action, and some made recommendations unsuited to the stage of economic development then prevailing in Turkey. In other cases, the Government took no steps to make use of the reports, or disagreement on details prevented action on the larger problems.

We have made a strong effort in this Report to outline a sound, coordinated program designed as a basis for action. We hope that the Government will place upon some competent group or agency specific responsibility for making a thorough study of this Report and pressing for action on it. If this is not done, our Report, too, will be ineffective.

CONTENTS OF THE REPORT

The Report is necessarily concerned with the less satisfactory aspects of the Turkish economy, with those parts which are not functioning with full effectiveness. If all parts were functioning satisfactorily there would have been no occasion for the Mission. The larger portion of the Report consists, therefore, of an analysis of the major economic problems confronting Turkey and a discussion of the measures needed to meet them. In compliance with the terms of reference, we have concentrated on the basic and general aspects of the economy rather than on particular programs or projects. The solutions we propose are broad rather than detailed. The Mission's time schedule would not have permitted an exhaustive investigation of all segments of the

economy. In addition, Turkish statistics are still in an early stage of development and, despite remarkable improvement in recent years, they are often lacking in completeness, uniformity and accuracy.

Before discussion of specific problems and needs in the chief sectors of the economy, the general setting in which they are framed is briefly described in introductory chapters on the historical background and existing pattern of economic activity. The outstanding weakness that emerges from this survey is lack of coordination of economic policy. For that reason we next consider the problem of better formulation and coordination of economic policy and make recommendations to that end.

We then examine specific areas of economic activity, agriculture, industry, mining, transportation, communications and power, and suggest ways to raise productivity and efficiency. A chapter on health and education is included because of the importance of these fields to any attempt to increase productivity and raise the general standard of living. Improvements in administrative organization, practices and personnel in specific fields, which are vitally important to continuing development and to the success of the program, are emphasized throughout the Report. A separate chapter is, however, devoted to recommendations concerning general aspects of governmental organization and personnel.

Monetary and fiscal policies, foreign trade and foreign exchange are then taken up and are followed by an analysis of the total investment resources likely to be available to Turkey over the next few years. Finally, we make recommendations which are designed to serve as a basis upon which the Government can formulate an over-all public investment program for the next five years, and suggest the directions and means by which private investment can be channelled into the most productive uses.

RECOMMENDATIONS

The recommendations in the Report fall into two major categories. The first category is concerned with the elimination or correction of a number of important impediments to

economic development; the second, with a program of economic development adapted to Turkey's needs and resources. Before any plan for economic development can work successfully, certain conditions must be reasonably favorable. These concern the habits and customs of the people, the administrative practices and attitudes of the Government, and the laws of the country. Together they make up the environment in which development takes place.

The recommendations in the first category apply almost exclusively to the Government for three reasons. First, through its general activities the Government has been responsible in considerable measure for creating the conditions which now need to be changed and it is the only agency which can make those changes. Second, as the most important direct participant in economic activity, the Government can contribute immensely to raising the level of economic efficiency by improving its own methods and practices. Third, the Government's attitude and actions will strongly influence the thinking and habits of the people generally, an intangible but powerful factor in economic development. If, for example, private enterprise is to thrive, it will be necessary for the Government to abolish the special privileges now enjoyed by state enterprises and to give fair and equitable treatment to private companies. A positive plan for aiding private business will be required in the beginning.

The major elements of this part of the program are designed to produce the following results: (1) better administration of governmental affairs, especially in the formulation and coordination of economic policies; (2) a more favorable environment for the development of private enterprise; (3) greater financial stability in the country; (4) the removal of tax barriers which now retard economic growth and development; and (5) better health and more adequate education.

Recommendations in the second category embody the positive plan for economic development which we believe to be most appropriate for Turkey, assuming that the changes recommended in the first category are made. This portion of the program rests upon several basic principles. The first is

that Turkey should direct its attention primarily to more efficient use of the resources it now has. A second is that the investment program should not be so large as to cause inflation. A third principle is that investments should be properly timed and coordinated. A fourth is that government investment should concentrate particularly on provision of the basic public service facilities needed to encourage private economic development.

Our proposed plan for economic development places primary emphasis on the two areas of greatest need in Turkey. They are (1) agriculture and (2) the training of technical, administrative and managerial personnel. The Report recommends that facilities in these fields be improved and increased as rapidly as possible in the next few years and that the funds necessary to that end be made available. Investment programs in agriculture, health and education, mining, railroads, highways, ports and shipping, communications, power, and public and private construction, are appraised in the light of over-all resources and needs. In addition the Report suggests the most fruitful fields for industrial expansion and development in the next few years, among them food processing, light metal-working, light machine and tool manufacture, building materials and leather working.

Reflected throughout the Report is our conviction that a balanced economic development program for Turkey, if it is to be successful, must stress the development of agriculture, not as an alternative to but rather as a necessary base for further industrialization.

In many phases of the recommended program Turkey will need various kinds of technical assistance from abroad. Careful planning will be necessary to assure the right kinds of aid and its full utilization.

The amounts of investment recommended for each field are necessarily approximate. They are presented as guides rather than as precise amounts. They indicate the scale and relative emphasis of the kind of coordinated investment program which we believe promises the most return to Turkey at its present stage of development.

POTENTIALITIES OF THE PROGRAM

It is not possible to predict exactly the benefits Turkey may expect to realize if the program we recommend is adopted and successfully carried out. We can, however, describe the nature of the results that can be expected.

The first and most important result should be to stir Turkish agriculture out of the lethargy in which it has remained for centuries. This is important for many reasons. Any improvement which benefits the greater part of the population will by that very fact contribute greatly to economic progress. Further, once the idea of progress is accepted by a group so long lethargic, the possibilities are enormous. Turkish agriculture can draw upon the accumulated knowledge and methods developed in other countries over many years and adapt them to Turkish conditions. Finally, an awakened, more efficient and progressive agriculture will provide the basis for further industrial development.

A second important result which Turkey should realize from the program is a higher and rising national income. Sound economic development is highly dynamic. Once started, its own momentum will carry it forward with increasingly favorable results. Through improved use of existing manpower and resources, incomes will be increased and additional resources created, thus generating still further economic development. Turkey has already made great progress in developing the basic public utilities (transportation, communications, power and the like) which are essential to the expansion of both industry and agriculture. This progress should now make it possible to increase the production of agricultural and industrial consumer goods and thus, within a reasonable period, to translate the efforts of the past two decades into a higher standard of living for the masses of the Turkish people. Vigorous execution of the program we recommend should enable Turkey to realize cumulative gains in real income and resources far greater than any it has yet experienced.

Since the program will provide a sound, stable and more productive economy, it should give Turkey greater national security. The most significant measure of a country's ability

to defend itself is the proportion of its manpower and economic resources which, in an emergency, it can devote to national defense.

In many ways Turkey has set precedents for the modern world. No other nation has successfully carried through so many basic reforms in so brief a period of time. In the past 30 years the country has made truly remarkable strides in political, economic and social development. The conduct of the 1950 election demonstrates the strength and stability of Turkish democracy. The Turk is a sturdy, patriotic, self-reliant and resourceful individual. A large and growing number of Turkish people are energetically seeking ways to lead their country along the path of progress.

Turkey is advancing along many lines. This Report is written with the confident hope that it will help to extend and accelerate that progress.

PART ONE

Turkey's Economic Problems

CHAPTER I

Historical Background

Some historical background is necessary for an understanding of any nation's economic problems. This is especially true of Turkey because of sweeping changes in recent years and because of its contrasts with Western nations.

Throughout most of its history the Ottoman Empire was a great military power, resting on an economy of far-flung tributary possessions. Until the Industrial Revolution it was fairly self-sufficient. After that Revolution military power everywhere came gradually to depend more and more on industrial power. The Ottoman Empire failed to build up an industrial system and did not have sufficient military strength to hold its tributaries. During the last century of its existence, there grew up in Turkey certain legal and economic practices which hampered the development of the country and affected the attitudes of the people. Superimposed on the customs, habits and attitudes which had been developed over the centuries, they constituted the heritage from the Ottoman Empire with which the Turkish Republic began life.

Heritage from the Ottoman Empire

Geographically, Turkey emerged from the Ottoman era as the remnant of a formerly great empire. The country had been ravaged by war. It had only a few rudimentary industries and its agricultural system was primitive. In addition to these physical drawbacks there were intangible handicaps inherited from the Empire, influencing the minds and actions of the Turkish people. Important among these were the pervading influence of certain social attitudes and customs and an antiquated legal and political system. Religious influences tended to reinforce the fatalism and resistance to change characteristic of Turkish life.

The social structure under the Empire was a handicap to industrial development. The four positions held in social es-

teem were those of the soldier, the government administrator, the church official and the landowner. Commerce and industry were regarded as degrading and were left almost completely to minorities, the Armenians, the Greeks and the Jews. These groups were, in fact, better trained for such work since the education they received in the minority schools placed emphasis on secular subjects rather than on formalistic and religious subjects.

Similarly, the legal and political system was not conducive to economic progress. Originally all law was holy law and religious authorities dominated the courts. Gradually a system of secular law and secular courts developed but the church retained important control of the legal system. The Sultan could create or wipe out property rights by decree and his permission might even be necessary for starting a business. Almost all political power, both legislative and executive, was concentrated in him. Property owners and businessmen had little security against sudden changes in the law and its arbitrary administration. The Sultan made policy and gave orders. It was the duty of all other officials to obey them without discretion or discussion.

A number of other obstacles to sound economic growth had developed. For centuries, the Sultans had granted foreigners special privileges or capitulations, as they came to be known, which included exemptions from or low rates on taxes and tariff duties, franchises and the right to be tried in special courts under foreign jurisdiction. The capitulations were carried to such lengths that, for example, Turkey was prevented from raising its tariff duties without the consent of the powers enjoying capitulations. Foreign banks could operate in Turkey under the laws of their own countries and with practically no control by the Turkish Government. The foreign-owned Ottoman Bank had exclusive power to issue currency and served as depository and paymaster for the Government. After Turkey had defaulted on its foreign debt in the 1870's, a group representing foreign bondholders collected certain revenues of the Government for the benefit of the bondholders and exercised substantial powers of control over Turkish finances.

In addition to these special privileges, the Sultans in the 19th century had seen the need of developing basic industrial and transportation facilities in Turkey. After desultory efforts to induce an indigenous development had failed, they began to try to attract foreign capital by special concessions, especially in the railroad, mining and public utility fields. As the Government became weaker, the concessions became increasingly more favorable to the foreigners and more onerous to Turkey. Although through these concessions Turkey obtained some facilities which it would not have secured otherwise, the country paid a high price for them.

The loss of governmental control over important parts of the fiscal system had serious after-effects. Industry did not progress. Turkish nationals, except for a few among the minority groups, had little or no opportunity to develop skill or experience in organizing, managing and operating financial, commercial and industrial companies. There was no mobilization of investment funds and no development of a capital market. In addition, Turkey came to regard foreigners and foreign capital with a deep-rooted resentment, distrust and suspicion. Hostility toward minority groups also increased since they were frequently associated with foreign enterprises and sometimes enjoyed the privileges of the capitulations.

Revolutionary Reforms

When Kemal Atatürk came to power, much of this heritage from the Ottoman Empire lay as an obstacle across the path to economic and industrial progress. Atatürk performed the difficult task of clearing away that obstacle in a series of basic reforms extending over several years.

Among the boldest moves taken by Atatürk were those designed to free the minds of his people for a new outlook on life. He made the State secular by abolishing the Caliphate, the office of supreme religious authority. He suppressed Moslem schools and made education the responsibility of the State. He abolished church law and adopted civil, criminal and commercial codes based on Western European models. He adjusted time reckoning to the international clock and the

Gregorian calendar. He outlawed the fez and prescribed western garb. He required everybody to adopt a surname.

Atatürk's economic program included the abolition of all capitulations, the termination of foreign concessions and the unqualified control of the Turkish State over its revenues and finances. He had to make one exception since the Treaty of Lausanne provided that until 1928 Turkey should not raise tariffs above a specified and fairly low level. His policies on foreign ownership of property were generally mild, considering the deep resentment which had grown up. This relative mildness, except for a few instances of confiscation, was doubtless due to Atatürk's awareness of his country's need for foreign capital to finance its development. Over a period of years, foreign-owned railroads, mines and public utilities were bought out, payment being made in Turkish national bonds.

The strong feeling of nationalism which Atatürk symbolized also showed itself in Turkish policies toward aliens. A large exchange of minority populations was carried out with Greece and foreigners were, and still are, barred from almost all positions in industry and commerce, as well as in government. This has probably prevented the most efficient use of men with needed skills or experience. More tolerant policies as to foreign capital and foreign workers are gradually being adopted, but occasionally there seems to be some reversion to discrimination.

During the first decade of his regime, Atatürk relied largely on domestic private enterprise to bring about the economic and industrial development which he so fervently desired. Some efforts were made to attract foreign capital but with very little success. In 1924, a semi-public institution, the İş Bank, was established to help finance industrial enterprises. In 1927, the Grand National Assembly enacted a law for the encouragement of industry which provided for grants to industrial firms of government-owned land, buildings and other facilities. It also provided for tax exemptions and low tariff duties, reduced transportation rates and preferential buying and selling prices in dealing with the Government.

This law gave some stimulus to industrial growth, but the results fell far short of expectations for several reasons. First, there was an acute shortage of investment funds and an almost complete lack of domestic organizational, managerial and technical skills. Second, until after 1928 foreign industrial goods could come into Turkey under the favorable tariff rates which had been frozen by the Lausanne Treaty. Third, the Turkish economy depended heavily on agricultural and raw material production and thus was hit early and hard by the world-wide depression of the 1930's, when it was virtually impossible for any system of private enterprise to expand industrial facilities.

The Adoption of Etatism

The leaders of Turkey were disappointed and impatient with the failure of private enterprise to perform as had been hoped. Their attention and their preference more and more turned toward a system of state enterprise and a policy of what was eventually to be called "etatism". The following may be mentioned among the many reasons involved in this trend. As production became paralyzed and unemployment grew with the world depression, private enterprise fell into considerable popular disfavor throughout the world. Managed or planned economies were being vociferously promoted in Italy, Germany, Russia and other countries. Most of the Turkish leaders were former soldiers or government officials. Accustomed to authoritative plans of action, they were naturally impatient with the individually organized and uncontrolled activities of private enterprise. As former soldiers, they recognized the need for a rapid industrial development to support national defense. Former President İnönü said: "The policy of economic etatism, above all, by being a means of defense, appears to be a necessity in itself."

The adoption of etatism was marked by the creation in 1933 of the Sümerbank as a combined bank and holding company with an initial capital of TL 20 million.¹ Its function

¹ One Turkish lira, at the present official exchange rate, equals U.S.\$0.3571.

was to establish, finance and manage industrial units in certain fields designated in a five-year plan proclaimed early in 1934. In 1937, the Etibank was similarly created to promote development in the mining and power fields. Some description of the policies and activities of these and other control organizations will be given later. For the present, let us note briefly the nature of the policy of etatism.

First, the policy was not adopted for ideological reasons and had no particular ideological basis. As was pointed out by its advocates at the time, it was nationalistic and not communistic, socialistic or capitalistic. It was not promoted by any special class nor was it designed to benefit any special group. It was adopted for reasons of national expediency, in an effort to promote industrialization as rapidly and as efficiently as possible.

Second, etatism did not express hostility or opposition to private enterprise. In fact, it has expressed sympathy for private enterprise and in some fields has promised aid. The Sümerbank charter, for example, provides that half of its resources may be used to make loans to private undertakings, although this provision has been largely lost sight of in the intervening years.

Third, while the policy was not designed to interfere with the rights of private property, it certainly had no positive bias in favor of private enterprise. In fact, the semi-monopolistic position of state enterprise in the investment market and other advantages of government organizations have at times restricted the opportunity of free enterprise to develop.

Finally, the policy of etatism has lacked centralized control, direction and coordination. Except for the loose and general direction afforded by the Council of Ministers and the Grand National Assembly, the major agencies which carry out the policy in industry, mining, transportation, power and communications are not subject to any central agency which can make policy for all of them. Atatürk maintained a close and coordinated control, but since his death and as dictatorial controls have been relaxed, the different agencies have drifted apart and coordination has been lost.

Under etatism Turkey has made substantial progress. It is doubtful if comparable accomplishment would have taken place in this period under domestic private enterprise with the handicap of the Ottoman heritage. Inevitably, however, etatism has not always worked as expected. In recent years, popular support of the policy has apparently declined until Turkey now has in power a government pledged to encourage private enterprise and to reduce government participation in economic activity. The time is ripe for a critical appraisal of Turkey's economic situation and the establishment of a new basis for a development program.

CHAPTER II

Survey of Present Resources

Physical Geography

Geographically, Turkey has long occupied a strategic focal position between the Black Sea countries and the Mediterranean and between Europe and Asia. Of its total area of 777,000 square kilometers, 97 per cent consists of the Anatolian peninsula of Asia Minor. The remaining three per cent consists of Turkey's small foothold in Europe. From early times Anatolia was a crossroads of caravan routes between the Orient and the West. As seaways gradually displaced land transportation, the strategic importance of the Bosphorus and Dardanelles increased until control of the Straits became a major subject of contention between the European powers throughout the 18th and 19th centuries. Today the military implications of Turkey's geographic location are still an important factor influencing the nature and extent of Turkey's economic development.

Physically, the country is divided into a number of regions of quite different characteristics. European Turkey (Thrace) has a gently rolling terrain, relatively well-adapted to general farming. Asiatic Turkey (Anatolia) consists primarily of a large semi-arid central plateau some 1,000 meters above sea level, virtually surrounded by a ring of mountains. The mountains shut off much of the rainfall from Central Anatolia where cereals, produced under dry-farming conditions, are the principal agricultural products. Central Anatolia is the most typical of Turkish regions, with an ancient village culture and primitive technology, and populated by hardy, independent Turkish peasants who live at a near-subsistence level.

To the south of the central plateau, between the Taurus Mountains and the Mediterranean, lies the Adana plain. This is a fertile delta region, where spring floods are often followed by long summer droughts; it produces large amounts of cotton, cereals and oil seeds. West of the plateau and draining into

the Aegean Sea lie fertile valleys with a Mediterranean climate, which permits the cultivation of tobacco, cotton, olives, figs and raisins, as well as miscellaneous tree fruits. To the north, the mountains drop sharply into the Black Sea, except for a narrow coastal strip which in the extreme northeast has a very heavy rainfall and an almost tropical climate. Here are found fruits, nuts and tea as well as extensive walnut forests. The mountains reach their greatest height in eastern Turkey where extensive grazing lands gradually give way to the dry but productive Syrian and Mesopotamian plains to the south.

Climate and Rainfall

Both climate and rainfall vary widely from one region to another although, in general, the climate is temperate. In the Black Sea area of the northeast, the annual mean temperature is about 45° Fahrenheit in winter and 70° Fahrenheit in summer as compared with 30° and 75°, respectively, in the central plateau. Because of its elevation, the central plateau has rigorous winters, short growing seasons and cool summer nights. In the mountainous areas of the extreme east, winters are severe and summers very short. Rainfall is moderate in the Adana region and the northwestern and southwestern coastal areas, averaging about 30 inches a year. In the extreme northeast, as much as 100 inches of rainfall is often recorded, while in the central plateau precipitation is very slight, not exceeding 10 inches annually in some parts.

Because of the low rainfall in most of Turkey, water is a scarce and valuable asset. The coastal mountain ranges frequently provide extensive watersheds which hold possibilities for irrigation of the fertile plains below. Among the principal rivers are the Seyhan and Ceyhan Rivers in the Adana region, the Gediz and Büyük and Küçük Menderes Rivers in Western Turkey, and the Sakarya and Kızılırmak Rivers which drain large areas of northern Anatolia. All of these provide potential sites for large irrigation and hydroelectric power projects. In the extreme east are the headwaters of the Tigris and Euphrates Rivers and, in Western Thrace, the Meriç River, which forms part of the Greco-Turkish frontier. While ambi-

tious schemes for development of the river valleys exist on paper, at present only about 100,000 hectares¹ of land in Turkey are irrigated, mostly by small-scale, improvised or partially developed systems. Existing irrigation is almost wholly based upon surface waters. Only the smallest beginnings have been made by way of hydrological surveys and test wells to determine the location and extent of underground water resources.

Soils and Land Use

According to the best estimates available, Turkey's total land area is divided among different uses as follows: 55 per cent in meadows and pastures; 19 per cent in croplands, vineyards, and orchards; 15 per cent in forests; and 11 per cent in other classifications. More than half of the cropland is in cereals. As in most countries, the soils are extremely variable. In general, the valley and delta soils are relatively fertile because of their sedimentary origin, organic matter content and the comparatively short period of time during which they have been farmed. A high proportion of the arable upland soils are remarkably fertile, although they have little organic matter and tend to be low in phosphorus.

The soils of Turkey are calcareous. A high lime stratum is of frequent occurrence from six to 18 inches below the surface. Where it is close to the surface the lime is sometimes too concentrated for normal crop production. On the Anatolian plateau, especially in the province of Konya, there are also considerable areas of alkaline soils where the salt content is often too high for profitable cultivation.

Soil erosion is not a problem on the Anatolian plateau, thanks to its semi-arid climate. The same is true of Thrace and the area south of the Marmara Sea. The normal processes of erosion have, of course, proceeded for centuries, leaving barren hills and mountains as characteristic features of the landscape in every section of the country. Erosion, however, has seldom been sufficiently active to cause gullying except along the Black Sea coast and in a few other locations where,

¹ One hectare equals 2.471 acres.

with high rainfall, the erosion problem is very serious because of forest denudation, steep slopes and shallow soil.

The grasslands of Turkey constitute an important natural resource, which has, however, been greatly abused by heavy over-grazing. More than half of the total consists of eroded, rocky and barren hills and mountains of very little value for grazing purposes. The other half, nearly 20 million hectares, represents potentially good grazing areas.

Through centuries of indiscriminate cutting and grazing, Turkey's forests have been greatly depleted. There are still, however, several areas in which forestry is of major importance. The principal stands are in the mountains of western Anatolia, along the Black Sea coast and in the Taurus mountains. Those around Bolu, those near the Marmara and Aegean Seas, and those in the Provinces of Trabzon, Giresun, Rize and Ordu are the most accessible. The principal varieties of trees in Turkey are walnut, spruce, pine, oak, hornbeam, beech, cedar and poplar. An area near Izmit has recently been planted with poplars to provide raw material for existing paper mills.

Coastal Waters

Excluding island coasts, Turkey's coastline is 6,606 kilometers in length. Bounded on the north by the Black Sea, on the west by the Marmara and Aegean Seas, and on the South by the Mediterranean, Turkey has the means for extensive and cheap coast-wise water transportation. The principal limitations on water transportation are the lack of streams navigable into the interior and the relatively few natural harbors. The best natural harbors are those of Istanbul, Izmir and Iskenderun. Mersin and the Black Sea ports, except Ereğli, Zonguldak and Trabzon, are open roadsteads where ships are fully exposed to the elements.

The coastal water of Turkey are also an important source of fish. An estimated 500,000 tons of fish pass through the Straits in the semi-annual migrations from the Black Sea to the Aegean and Mediterranean Seas in the late summer and fall, and back again in the spring. The present fishing industry

of Turkey is largely based upon this migration. Relatively little fishing is done in the Mediterranean, Aegean and Black Seas.

Minerals

Turkey has a diversity of mineral resources although few of them are known to occur in more than moderate abundance. As far back as Hittite times, when iron was first used by man, Anatolia produced minerals. Today they have a basic role in Turkey's economy and have become an important component of its foreign trade. The full extent of Turkey's mineral resources is not yet known. Both exploration and exploitation have been held back by lack of capital and geological knowledge and by inadequate power and transportation facilities.

Coal, lignite, chrome, iron, salt and copper are the principal minerals known to be present. By far the richest coal deposits are found along the Black Sea coast, at Zonguldak, about 150 miles east of Istanbul. Minor deposits of lower grade are scattered throughout the country but the chief source of lignite is Western Anatolia. Zonguldak and Western Anatolia together supply the bulk of the fuels used in the economy.

Chrome, while little used domestically, is increasingly important because of its value as an export and source of foreign exchange. Deposits have been located through the country but the chief sources are found in the Guleman area in southeastern Turkey, in the vicinity of Iskenderun in the northeast corner of the Mediterranean, in Western Anatolia in the area around Eskişehir and along the Mediterranean coast in the hinterland of Fethiye.

Production of other minerals is small in comparison with coal and chrome. Chief among these are copper, sulphur and salt. Important deposits of copper are located at Murgul, near the Soviet border, and at Erganimaden in central Anatolia. Sulphur mining has been carried on for many years at Keçiborlu in southwestern Anatolia.

So far no significant amounts of petroleum have been found in Turkey, though explorations have been under way for some time.

Human Resources

According to the 1950 census just completed, Turkey's population is 20.9 million. This represents an average annual rate of population increase of 1.7 per cent since 1940 and of about 2.1 per cent since 1945.

The population is chiefly rural and agricultural. In 1945, 75 per cent of the population lived in rural areas and only 25 per cent in towns and cities. According to the 1945 census, which gave a total population of 18.8 million, the density of population ranged from four per square kilometer in the extreme southeast to 200 in the Province of Istanbul. The national average was 24.5, a relatively low figure sometimes used to indicate that Turkey is far from overpopulated. In view, however, of the high percentage of the population which is engaged in agriculture, the very low productivity of agriculture and the early stage of industrialization in Turkey, the pressure of population upon resources is greater than this figure would indicate.

The distribution of the working population among the major occupation groups is shown in Table I.

TABLE I
ECONOMICALLY ACTIVE POPULATION BY MAJOR OCCUPATION GROUPS,
1935 AND 1945

Occupation Group	1935		1945	
	Number (000's)	Per Cent of Total	Number (000's)	Per Cent of Total
Agriculture, forestry and fishing ...	6,480	81.8	7,200	79.8
Mining and quarrying.....	19	0.2	34	0.4
Industry	638	8.1	640	7.1
Transport and communications.....	122	1.5	140	1.5
Commerce	218	2.8	280	3.1
Public administration and profes- sions	398	5.0	693	7.7
Domestic and personal services.....	47	0.6	30	0.4
Total	7,922	100.0	9,017	100.0

Source: 1935 and 1945 population censuses as adjusted by the Central Statistical Office.

Since few workers are engaged in forestry and fishing, nearly all of the workers in the first category are in agriculture. The conclusion is sometimes drawn from these figures that nearly eight of every ten workers must engage in farm work in order to produce the basic agricultural products necessary to give the country a minimum standard of living. This is not strictly accurate, since considerable amounts of agricultural products are exported. Nevertheless, it is true that a substantial majority of all workers must engage in farm work in order to feed the population. This fact is perhaps the most significant indication of the very low productivity of Turkish agriculture. Until there is a substantial increase in that productivity, it is unlikely that there will be any major change in the occupational pattern of Turkish workers.

Considerable progress has been made in education during the past 25 years. Between 1933 and 1945, the Government established some 10,000 primary schools, and the proportion of children of primary school age who were actually attending school increased from 31 to 58 per cent. However, education and training remain serious problems, particularly in the rural areas. According to official estimates, which do not specify the standard used, only 37 per cent of the population was literate in 1945. Probably not more than 15 to 20 per cent of the present population has completed primary school, and less than 10 per cent of Turkish students continue their education beyond the primary level. In the higher levels, opportunities for specialized training in most professional and technical fields are severely limited.

While public health statistics are not generally available, it is clear that there has been real progress in improving the health of the people. Public health problems still loom large, however. The basic problem is to overcome an acute shortage of trained personnel and to achieve a more even distribution of medical and health services, especially in the rural areas.

Agricultural Equipment and Livestock

Most peasants wrest a living from the land much as their ancestors did three thousand years ago. The basic cause of

their meager standard of living is the low ratio of capital, including land and land improvements as well as machinery and livestock, to the number of farm workers. In addition to the natural limitations of climate and soils, production by the typical peasant is restricted by shortages of even the simplest equipment and facilities. There are but a few places, notably in the Çukurova, at the northeast corner of the Mediterranean, in which land holdings are sufficiently large and contiguous to permit economical use of large farm machinery and to provide a satisfactory standard of living for the operator's family. In other areas in which large land holdings are relatively numerous, the fields are scattered and farmed in small strips by sharecroppers.

It is estimated that, by the middle of 1951, some 10,000 tractors will be in operation in Turkey. Given the preponderance of very small land holdings, any substantial extension of mechanization must depend upon either the consolidation of land holdings, the increased use of tractors rented on a part-time basis or the growth of equipment cooperatives. The development of such cooperative pools into efficient operating organizations is a difficult undertaking.

The estimated livestock population includes about 25 million sheep, 17 million goats, 10 million cattle and one million buffalo. Sheep and goats provide wool and meat and are also the country's principal source of milk, from which such staple products as yogurt and white cheese are made. Cattle and water buffalo also supply milk and meat, but they are more important as draft animals. There is a tendency for horses (of which there are 1.1 million) to displace oxen as draft animals, but the change is taking place very slowly. Donkeys (1.6 million) and, to a lesser extent, camels (0.1 million) and mules (0.1 million) are used extensively as beasts of burden. Poultry numbers, 20 million chickens and 1.1 million turkeys, are surprisingly low.

In general, Turkish livestock is deficient in quality rather than in quantity. Until recently, very little attention has been given to the improvement of livestock by selection, breeding and better feeding, except for race horses and army mounts.

Farm horses are small and ill-suited for draft purposes. Cattle have not generally been selected and bred for milk or beef production. Milk yields are exceptionally low and beef is of poor quality. The native fat-tailed sheep produce a coarse and low-quality wool. Recently the Veterinary Services of the Ministry of Agriculture prepared a five-year livestock improvement program which outlines an excellent plan for long-term development in this field.

Industrial Plant

The Industrial Revolution is reaching Turkey about 150 years after it occurred in Western Europe and the United States. For centuries before the establishment of the Republic in 1923, the Turkish economy existed virtually unchanged. What little industry had been developed was confined almost entirely to textile manufacturing and such elementary activities as milling. Textile manufacturing remains a leading industry but the country today has a diversified industrial development which, though production is still limited, is of considerable importance. It consists mainly of light industries, including paper, leather and shoes, sugar, tobacco, food processing and wood products, in addition to textiles. The principal heavy industries, on which the State has put determined but not wholly successful emphasis, are iron and steel, metal working, cement, building materials and chemicals. The greater part of these undertakings are state-owned, begun under successive five-year plans of industrialization launched by the State in the 1930's. Essentially these plans aimed at rapid industrialization as the way to national self-sufficiency. The industrial plant is widely dispersed since the location of particular industries and factories was often determined less by such economic factors as the availability of power or the accessibility of markets than by military, political and social considerations.

In general, except for state-owned plants which frequently have costly imported machinery of the most modern type, industrial plants are poorly equipped. In both state and private industry, maintenance of equipment and machinery is apt to be seriously neglected, in large part because of a general lack of adequate skilled managerial and supervisory personnel.

Practically all manufacturing operations are conducted on a small scale, even among the state enterprises. There are relatively few private corporations or joint stock companies. A variety of reasons, discussed in later chapters, accounts for the small size of business units. Chief among them are the scarcity of investment capital and the persistence of the trader psychology so deeply rooted in Turkish life. Expansion by private enterprises has been further discouraged by the absence of a clearly understood economic policy on the part of the Government. Entrepreneurs have been deterred by the fear that state-owned companies might force them out of business by unfair competition or might even expropriate their properties. Large profits during World War II stimulated some growth of private companies but, until the past year or two, the expansion has been minor.

Electrical Energy

Its coal and lignite deposits and the availability of water power provide Turkey with an abundance of the primary sources of electric energy. Coal is the principal source used at the present time. In the years since 1935 tremendous strides have been taken in the power field. In that time generating capacity has been more than doubled, although production and consumption are still comparatively low. In 1949, 739 million kilowatt hours were produced and per capita consumption was estimated at about 37 kw-hr per year. By far the greater portion of total electric power produced is consumed by industry, particularly in coal and lignite mining and in textile and iron and steel manufacturing.

Transportation

Seas surround Turkey on three sides and for a time during the days of the Ottoman Empire Turkey was a great maritime power. Even today a large part of the nation's domestic commerce is carried by small coastal craft. A sizeable seagoing fleet, aggregating 356,000 dead-weight tons in 1949, has been built up in recent years. A large proportion of all shipping, including all passenger vessels, is owned and operated by the State. An extensive port development program is now well

under way which, together with the recent and planned acquisitions to the fleet, should provide adequate shipping facilities for some years to come.

Inland transportation presents a more difficult and costly problem because of the rugged mountains which cut off the central plateau from the coastal area. In the past, lack of adequate transportation has frequently tended to frustrate industrial objectives and has held back agricultural development.

The railway system, largely built by Turkish engineers with Turkish contractors and labor, is now well developed. Entirely owned and operated by the State, it consists of 7,600 kilometers of rail lines. Three trunk line construction projects are well advanced and when they are completed all areas of the country will have rail service and every large city except Bursa will be linked to a main line.

The highway system is not comparably developed. Prior to 1946 the Government centered its attention on railway development and roads were neglected. Recently, however, a comprehensive rehabilitation and development program has been undertaken with the assistance of United States highway experts. Road traffic is light and concentrated in the urban areas.

Reasonably adequate air transportation is provided by the State Airlines. Airport facilities are being improved.

Financial Resources

Turkey's financial resources are severely limited. Since three quarters of the population is rural, low farm efficiency has meant low average income and consequently a small supply of domestic savings available for investment. In addition, Turkey lacks adequate facilities for the mobilization and use of such savings as are made. Financial institutions are few in number and their organization and practices are not adequate for the financing of a program of industrial expansion.

The small number of savings banks, the limited geographical coverage of commercial banks and the absence of

a tradition of using banks, all contribute to keep bank resources small. Personal savings are apt to go into currency or commodity hoards, precious metals or jewels, or real estate, rather than into the financing of industry.

At the end of 1949, there were 42 commercial banks in the country operating a total of 566 branches. These figures include foreign as well as Turkish banks and also the large government-owned Agricultural Bank and a few other banks in which the Government has a financial interest. Total paid-in capital and reserves of all banks amounted to TL 592 million while their deposits were TL 986 million.

In the past Turkey has had no banks whose principal function was long-term industrial investment. Three government-owned institutions have functioned as combined government investing or lending agencies and management holding companies. They are the Sümerbank, the Etibank and the İller Bank. At the end of 1949 their combined loans and investments amounted to TL 712 million and their paid-in capital and reserves to TL 320 million. Though nominally a private organization, the İş Bank, established in 1923 to finance business undertakings, initially acted as an arm of the Government. At the present time, it functions predominantly as a commercial bank. At the end of 1949, its loans and investments totalled TL 215 million and capital and reserves amounted to TL 23.3 million. The recently established Industrial Development Bank, which has just begun lending operations, is the only privately-owned investment bank in Turkey. It has equity capital of TL 12.5 million and a commitment for a loan of TL 12.5 million from the Central Bank. The equity capital is held by commercial banks, private business groups and individuals. In addition, the Bank has obtained from the International Bank for Reconstruction and Development a loan of nine million dollars (equivalent to TL 25 million), which is guaranteed by the Government.

The state-owned Mortgage Bank makes loans on real estate. It had loans and investments of about TL 76 million. The Savings Bank of Istanbul, with earning assets of about TL 25 million, also makes real estate mortgage loans.

The six major insurance companies in Turkey had total reserves at the end of 1949 amounting to TL 46.3 million. During that year they received TL 13.8 million in premiums and paid benefits of about five million liras.

A rudimentary securities exchange exists in Istanbul but trading on it is so small as to be insignificant. There are no institutional facilities to provide consumer credit.

External Economic Factors

Turkey's exports consist primarily of agricultural products, many of them, like tobacco, of a semi-luxury character. Its imports consist primarily of machinery, vehicles, finished goods, petroleum products and industrial raw materials. During the 1930's, by severely restricting imports, the country achieved a consistent small trade surplus. This surplus was, however, offset by payments on foreign debts. During the war years, supply shortages abroad, accompanied by rising prices of Turkish commodities, sharply increased the surplus. As a result of this, as well as of a spurt in exports immediately after the war, gold and foreign exchange holdings reached a peak of \$307 million at the end of 1946. Thereafter, however, heavy purchases of consumer goods to meet deferred demand, rising prices abroad and large imports of capital equipment resulted in a growing trade deficit which lowered Turkey's gold and foreign exchange reserves to about \$200 million, a level which it has maintained for the past 18 months. Exports are now running at about TL 735 million per year and imports at about TL 800 million, the deficit being financed by credits from the United States and other countries and by United States grants.

Until 1938, the Government, with the exception of a loan from the U.S.S.R., assumed no foreign debt other than that resulting from the purchase of foreign properties in Turkey. This was a deliberate policy based largely on nationalistic sentiment. Since 1938, however, Turkey's foreign debt has grown rapidly. At the start of World War II, heavy debts to the United Kingdom were incurred. In the postwar period, extensive loans and credits, largely to support the accelerated economic development program, have been obtained from the

United States and the United Kingdom. Today the foreign debt consists of about TL 730 million of which TL 305 million are owed to the United Kingdom, TL 307 million to the United States, and TL 71 million to the International Bank.¹ Service of the debt imposes a heavy burden on the Turkish economy.

National Income

While Turkish national income statistics are still far from complete, they are nevertheless useful in indicating orders of magnitude. We estimate that in 1948, Turkey's national income amounted to slightly more than seven billion liras, with agriculture contributing nearly one half of the total.

Table II shows the estimated net national income of Turkey for 1948 by sources.

TABLE II
NATIONAL INCOME BY SOURCES, 1948

Source	Millions of Liras	Per Cent of Total
Agriculture, forestry and fishing.....	3,400	47.5
Manufacturing, construction, mining and public utilities	1,000	14.0
Wholesale and retail trade, finance, insurance and transportation	1,901	26.5
Other services	691	9.6
Real estate	170	2.4
Total	7,162	100.0

Source: Central Statistical Office; adjusted by the Mission.

According to this table, per capita income in Turkey was approximately TL 360 in 1948, which was an exceptionally good crop year. At the official rate of exchange, this was equal to about US \$128, or about 10 per cent of the per capita income in the United States for that year. In comparison with neighboring countries, however, Turkey fares moderately well. Estimated per capita incomes for several European and Middle Eastern countries are shown in Table III.

¹ Of these totals, the equivalent of TL 126 million is still unutilized.

TABLE III
ESTIMATED PER CAPITA INCOME IN SELECTED EUROPEAN
AND MIDDLE EASTERN COUNTRIES, 1948 OR 1949

Country	U. S. Dollars
Denmark	689
France	482
Italy	235
Greece	128
Turkey	128
Lebanon	125
Egypt	100
Iran	85

Sources: All countries but Turkey: United Nations Statistical Papers, Series E, No. 1, October 1950; Turkey: the Mission.

Despite the possibility of a substantial margin of error, these figures indicate a very low level of real income in Turkey and emphasize the urgent need for balanced economic development to raise living standards.

CHAPTER III

Resource Use and the Pattern of Economic Development

Judged by Western European or American standards the Turkish economic system is underdeveloped, but a fair evaluation of progress made since the establishment of the Republic in 1923 must take into account the primitive conditions which prevailed up to that time. Any appraisal must also recognize the deterrent effect on economic development of the heavy defense effort necessitated by the course of world events and Turkey's strategic military position. In a turbulent world the country has succeeded in maintaining its national integrity and independence, a proud but costly achievement. So long as it is necessary for Turkey to devote a great many men and large amounts of economic resources to defense purposes, the amount of production available for investment or for civilian consumption will be reduced accordingly.

The past few decades, as the survey in the preceding Chapter shows, have seen substantial accomplishment. Today Turkey possesses considerable manufacturing capacity, including such industries as iron and steel, paper, chemicals and synthetic fibres. During World War II, when the country was cut off from many normal sources of imports, these factories, mostly state-owned and operated, supplied the country with a limited amount of highly essential goods and thus averted some of the critical shortages experienced during World War I.

To supply the fuel necessary for continuing industrial development, coal production has been steadily increased and the expansion program now under way is expected to lower costs as well as to raise production still further. Such essential services as transportation and power, ancillary to industrial development, have been greatly expanded. Completion of the railway development program will link, for the first time, all areas of the country. The launching of a comprehensive highway development program in 1946 opened a new phase of

transportation development and has already had an impact on highway transport rates. A sizeable merchant fleet has been built up from insignificant proportions and an inclusive program of port development is well started. Power is still short almost everywhere but electric generating capacity, which doubled between 1935 and 1947, will probably double again by 1954.

Appreciable progress in education and health has been achieved, although by their nature problems in these fields will continue for years to come. In the field of health, vigorous attacks have checked the inroads of widely prevalent diseases. While opportunities for developing special skills and knowledge are still very limited, a considerable number of engineers and other technicians have been trained, many of them in the best technical schools of Europe and the United States. The nucleus of a trained labor force now exists within the country and can serve as the basis for further expansion. There is also an increasing group of experienced men at the managerial level, although the shortage of responsible managers is still acute. A considerable number of Turkish economists and administrators have become familiar with Western literature and analytical techniques in economic and financial fields. Their independent thought and analysis of Turkish problems are beginning to show results.

The Government has carried out an extensive program of public works and public buildings. In particular, it has transformed the historic Anatolian town of Ankara into a modern, pleasant national capital. Many of the government buildings are perhaps unnecessarily elaborate and costly, but to the Turkish people they are a justifiable source of pride.

In almost every year since 1933, a fairly substantial amount of current revenue has been invested in the development program. In the early part of the period, the program was financed almost entirely from domestic resources. A small loan was received from the Soviet Union in the middle 1930's and fairly extensive aid, mostly for defense purposes, from

Great Britain and France in 1938-1939. In the postwar period, foreign aid in various forms, mainly from the United States, has been received on a large and increasing scale, and the country has also drawn down its accumulated store of gold and foreign exchange.

Despite the progress made, there are a number of signs indicating that Turkey's economic development has not proceeded as steadily, rapidly or smoothly as it might have and that the nation's economic situation in general leaves much to be desired. It is apparent from our survey that only a small proportion of the total population has benefitted from the increases in production which have been achieved. The standard of living of the peasants, who constitute a large majority of the population, has not only failed to improve substantially but in some respects has been adversely affected. During the past 20 years, there has been no significant change in the distribution of population between rural and urban areas, indicating that the benefits of industrialization have not been widely diffused.

Data on both real income per capita and on levels of consumption indicate how little improvement there has been in the standard of living. After allowance for annual variations in national income because of fluctuations in the size of the harvest, there appears to have been no appreciable increase in the per capita real income between 1936 and 1948. In terms of 1948 liras, per capita income in 1936 was approximately TL 330 and in 1948, an exceptionally good crop year, it was about TL 360. This represents an average increase of less than one per cent per year.

On the consumption side, the best available figures show the following: The daily calorie intake per person actually decreased from an average of 2,560 in 1934-38 to 2,170 in 1947-48. Similarly, daily protein consumption declined from 79 to 68 grams and the consumption of fats dropped from 49 to 46 grams per day. During the same period, there was a slight increase from 0.3 to 0.4 kilograms in the annual per

capita consumption of coffee, a decline in annual tobacco consumption from 1.17 to 0.96 kilograms per capita, and no change in the per capita consumption of tea. The consumption of cereals, the basic staple of the Turkish diet, declined from an average of 191 kilograms during 1934-38 to 162 kilograms in 1947-48. The per capita consumption of textiles was the same in 1948 as it was in 1938. On the other hand, from 1938 to 1948 there was a threefold increase from four to 12 per 1,000 persons in licenses for radio sets. It is probable that the declines in the levels of consumption were more than offset by improvements in public health, education and other factors entering into the standard of living.

The economic imbalance of the country is marked. Some parts of the country are almost as primitive as they were centuries ago, while other parts have many of the characteristics of a modern industrial society. In some areas workers have only the most elementary tools while in a few places millions of liras have been spent to procure modern and costly equipment, some of which is so complex that workers have difficulty in operating it. Some of the industrial plants are not properly equipped to use the raw materials available or to produce the goods most needed in the country at the present time.

The policy of etatism has resulted in a mixed economy, part public and part private. The Government is finding it increasingly difficult to carry the whole burden of industrial development and the policy of state ownership seems to be losing popular support. At the same time, the dominance of state enterprise, often subsidized by public funds, has discouraged the growth of private enterprise.

There have been obvious weaknesses in the field of financial and fiscal management. Although Turkey did not participate actively in World War II, it experienced a greater inflation than some of the most active belligerents. Wholesale prices have risen almost fivefold since 1938. This inflation generated a distrust of the currency and has been a deterrent to long-

term productive investment. Banks and related financial institutions have not developed to keep pace with the need for their services and there has been frequent, almost continuous, recourse to inflationary financing from the Central Bank.

Finally, waste and inefficiency are widespread in the Government and state enterprises at clerical and administrative levels. These are the products of cumbersome organization and rigid administrative practices, coupled with a very low salary scale. Despite overstaffing, work is often poorly done because the workers have not been properly trained, and their duties and responsibilities are neither clearly defined nor properly integrated. This is less true of the technical phases of production because in general the factories established by the State have good equipment and competent engineering services. The system of nonmonetary allowances to workers in government enterprises has grown to excessive proportions and provides opportunities for waste and abuse.

In Part Two, in our discussion of various aspects of the economy, we deal with these weaknesses at length and propose ways in which they can be corrected. Here, however, we would like to single out for special emphasis the basic factors, other than defense considerations, which seem to us to be primarily responsible for the unevenness of Turkey's economic progress.

1. *The low level of real income severely limits the amount of resources available for investment.*

A modern industrial economy requires expensive plants and equipment and costly supporting services. Until industrial companies in Turkey reach the stage where they can pay a considerable part of the cost of expansion out of their own funds, the chief sources of investment capital are savings accumulated by the Government through taxes and, to a lesser extent, individual savings mobilized through banks and other financial institutions. The Government is, of course, at every

stage, the principal source of funds for the development of power, railroads, ports, roads and the other public services essential to industrial growth.

In Turkey, private savings are small and they will continue small until there is an appreciable increase in real income. Turkey is further handicapped by a lack of adequate facilities for mobilizing such savings as are made.

2. *Industrial development has been over-emphasized at the expense of agriculture.*

For many years Turkey has believed that its goals of national security and a higher standard of living for the Turkish people can best be realized by building up a diversified industrial system patterned on Western lines. We believe that industrialization as a long-range objective is fundamentally desirable. A strong industrial system would reduce the wide variations in income characteristic of countries like Turkey which depend primarily on agriculture and raw material production. It would provide the means to supply the civilian population with essential commodities if Turkey should again be isolated as it was in two world wars. It would provide some of the sinews of war if the country should have to defend itself.

In its eagerness to industrialize, however, Turkey has underestimated the important relationship of agricultural development to industrialization. Industrial progress in a country such as Turkey depends very largely on increasing the productivity of agriculture and thus raising the income of the farmers. So long as the agricultural economy remains primitive, farm incomes will remain low and the demand for industrial products will therefore remain limited. Under these circumstances, it is not possible to create the broad market which is a prerequisite to any widespread industrialization. Moreover, in the absence of increased agricultural productivity, a very large proportion of the population will have to continue to work on the farm rather than in industry in order to produce

the minimum food requirements of the nation. Only through improving agricultural efficiency can additional manpower be made available for further industrialization.

We do not suggest that Turkey should abandon its goal of industrialization. We suggest rather that the quickest path to that goal is through increased emphasis on agricultural development.

3. *Turkey has had no adequate mechanism to guide investment into the most appropriate fields.*

Under a true system of private enterprise a mistake in investment is wiped out through the bankruptcy process or its equivalent. In a system of public enterprise, where the automatic correction of bankruptcy is lacking, some conscious mechanism is necessary to relate investment and economic needs. In Turkey there has been no such mechanism. It is possible for an unprofitable investment to be continued indefinitely, supported by public funds.

The general outlines of Turkey's recent development programs have been prescribed by the General National Assembly but particular investment decisions and their timing, as well as the management of operations, have largely been left to two state institutions, the Sümerbank and the Etibank. Those organizations have greatly influenced the direction and timing of investments yet they are clearly not appropriate agencies for determining general economic policy. They are naturally interested in maintaining and expanding the scope of their own operations and they are in a good position to do so by financing expansion out of funds under their control. They have emphasized the technological and production aspects of their work to the neglect of the managerial, financial and marketing aspects. As a result, some important industries have been slighted, while others have been developed or expanded which were not suited to Turkey's needs and resources at the time.

Ill-conceived or poorly timed investments have wasted scarce resources, have caused unnecessary and undesirable inventory accumulations and have contributed substantially to inflationary pressures.

4. *Government fiscal policies have obstructed the free circulation and growth of purchasing power.*

Government fiscal policies have distorted economic development and restricted distribution of purchasing power. Government investment and heavy defense expenditures have caused deficits which were covered mainly by borrowing from the Central Bank and the commercial banks. In many cases, the proceeds of this borrowing ended upon the hands of landowners, merchants and other privileged groups, who used them either to buy gold and jewels, to increase inventories of consumer goods, to invest in real estate or to bid up prices of imported goods. These activities have stimulated nonproductive investment, and by using scarce domestic and foreign resources, have hampered Turkey's economic development.

Efforts to reduce the government deficit through taxation have tended to intensify the difficulties. Because the tax system practically exempted commercial profits, farm income and, to a large extent, real estate, the additional taxes were levied primarily on wages, salaries and transactions. These regressive taxes increased the price of goods or reduced the purchasing power of wage earners and salaried employees. Since increases in wages and salaries lagged far behind price rises, the increased taxes fell on a group already hard-pressed. In this manner, the growth of purchasing power required to buy the goods produced by Turkey's new factories was severely limited.

5. *The development of human productivity and efficiency has not kept pace with the growing requirements of government administration and of the industrial economy.*

As Turkey's industrial plant has grown larger and more complex, the demands for training and skills at all levels of activity have steadily increased. These needs have been only

partially recognized in the past. An extensive program for training engineers and other technical personnel was instituted at an early stage but little attention has been paid to the problem of securing skilled management in both public and private enterprises as well as in the ordinary agencies of government. Problems of management and administration are different from, and in many ways more difficult than, the technical problems of production; and they have been growing at an accelerating rate. Turkish officials have had little experience in dealing with them and opportunities for training in this field have been almost nonexistent.

Both on the higher and lower levels of the educational system, there has been insufficient recognition of the needs for specialized training. Raising the general level of knowledge and efficiency of the population is necessarily a long-range undertaking, but more immediate benefits could be realized from the efforts which the Government has already made if greater opportunities for both vocational and professional training were provided in the educational system.

The basic need for further development of human resources is nowhere better illustrated than in the field of health. The direct bearing of health upon human productivity is generally recognized and the Government has carried on vigorous campaigns to control outbreaks of disease. However, a broad attack to prevent the conditions which breed disease and to promote the general health level of the Turkish people has not been possible with an acute shortage of trained medical and public health personnel.

Obviously, all the factors we have mentioned are inter-related and cumulative in effect. It will not suffice, therefore, to concentrate on one or more of the problems to the exclusion of the others. In our view only a broad coordinated program which attacks the basic sources of weakness will bring measurable improvement.

PART TWO

The Mission's Program

Introduction

We have already pointed out that the primary objectives of the Turkish nation are the maintenance of its territorial integrity and political independence and the achievement of a higher standard of living for its people. There is no necessary inconsistency in these objectives. Barring a drastic turn for the worse in the international political situation, we are convinced that Turkey can, with careful planning, coordination, effort and determination, raise the real income of its people and at the same time strengthen its military and industrial potential for defense. The program outlined in succeeding chapters is based on that confident belief.

Necessarily in drawing up a program for economic development we have had to make assumptions as to the conditions which will prevail during the period of its operation. The major assumptions underlying the Mission's program can be briefly stated as follows :

1. We assume that there will be no general war but that the drain on Turkey's resources for defense will remain approximately the same as in 1950.
2. We assume that there will be no world-wide depression which would seriously affect Turkey's export markets.
3. We assume that relative price stability will be maintained during the operation of the program.
4. We assume that there will be an inflow of foreign capital in an amount more than sufficient to balance the scheduled outflow for service and repayment of existing indebtedness.
5. We assume that investment will increase in proportion with increases in real income during the period of the program.
6. We assume that Turkey wishes to encourage the development of private enterprise.

Conditions as they actually develop may, we realize, vary from those assumed in a number of ways. Some elements of our program would remain valid even if all these assumptions proved incorrect. Other parts would have to be substantially changed or eliminated. A few examples will illustrate some of the ways in which changed conditions might affect the program.

The outbreak of a general war would give overriding priority to immediate military requirements. Except for those parts which would contribute directly to military strength, most of the investment program would have to be postponed. Some postponement and adjustment may be necessary even short of a general conflict. The partial mobilization now going on in varying degrees in different countries may have to be stepped up because of a worsening international situation. Tighter controls on strategic materials in the United States and Western Europe would further reduce the availability of iron, steel, machinery and equipment necessary for development. Increased military preparedness in Turkey would require the diversion of additional domestic resources from the manufacture of goods for civilian use to defense production. Concurrently with the decrease in the availability of imports, the demand for certain Turkish exports might increase.

Reduced availability of imports on the one hand and increased demand for exports on the other might relieve Turkey's balance of payments problems, but at the expense of postponing the full implementation of the development program. It would also introduce a grave threat of renewed inflation. If these trends should continue, Turkey would need to redouble its efforts to offset inflation by sterilizing the domestic currency proceeds of new foreign exchange accumulations. Measures to increase and use most effectively the supply of foreign exchange are desirable in any event but they would be particularly important if current earnings could not be directed to the essential requirements of economic development.

Events other than war and mobilization may affect the total resources available for investment. For example, harvests

may be either unusually large or small. Force of circumstances may make it impossible to apply fiscal policies sufficiently stringent to keep inflation under control. There may be a substantial net inflow or outflow of capital. Such eventualities, and many others which might be mentioned, may require drastic and frequent adjustment of the investment program which we recommend.

The investment program we propose includes not only expenditures for capital goods but also expenditures for durable consumer goods and for the development of human resources through education, health and public research. The major objective of an investment program is to increase the productivity of the economy. To achieve this in a country at Turkey's stage of development, the improvement of human resources may be equally as important as expansion of capital facilities. Expenditures to improve the general level of health or for vocational training, for example, can be expected to yield substantial and direct results in the form of increased labor productivity. Similarly, many durable consumer goods, considered primarily as items of consumption in highly industrialized countries, may properly be considered as investment items in less well developed countries. In Turkey, for example, automobiles and sewing machines are used more for productive than for pleasure purposes and an increase in the number of cars or sewing machines might be a significant factor in improved efficiency.

Every intelligent investment program is necessarily based upon some deliberately chosen scale of values or priorities. In making our investment recommendations, we have considered the following factors:

1. The need for the product, service or training at the present stage of economic development.
2. The quantity and quality of the necessary raw materials available domestically.
3. The amounts and kinds of manpower required in relation to the supply.

4. The contribution which the proposed investment would make to national income.
5. The amount of capital required in relation to manpower and value of product, and the relative amounts of domestic and foreign capital requirements.
6. The contribution of the proposed investment to improvement of the balance of payments.
7. The types of skills and managerial ability required.
8. Auxiliary services required and by-products to be produced, i.e., the interrelationship of the activity in question with other types of economic activity.
9. The minimum size of an economical production unit in relation to the Turkish market.

Certain working rules follow from these considerations:

1. Since per capita income is low, the production of low-cost basic essentials should receive preference over the production of luxury items.
2. Since Turkey has relatively little capital and much manpower, projects requiring large amounts of labor in relation to capital should receive preference.
3. Since only limited amounts of foreign exchange are available, projects requiring a high proportion of domestic funds should have preference over those requiring a high proportion of foreign funds.

It does not follow that available investment funds should be apportioned among investment fields strictly in accordance with their ranking as determined by the priority considerations. A consideration which is usually first in importance may yield that place to other factors far down the scale, if those other factors should have an unusually favorable combination. For example, there may be some commodity which is not of primary importance to the economy but which can be produced very easily and cheaply, from resources which would otherwise be wasted, and with no expenditure of foreign exchange. In that event, some investment to produce that commodity might be justified. The relative rapidity with which

given investments will yield results will also necessarily influence the allocation and timing of expenditures. If long term investments such as roads or dams are not balanced by investments in plants or machines which will increase national income in the relatively short run, benefits may take so long to materialize that the effect meanwhile will be to dampen the whole investment program.

Similarly, priorities are relative to amounts. Some expenditures for transportation have a very high priority in Turkey. However, after a given sum has been spent for transportation and the most pressing transportation needs have thereby been met, investment needs in other fields will have precedence over further investments in transportation.

Any program of investment must, of course, be related to a specific period of time. The program we propose is conceived in terms of a five-year period, 1952 to 1956. We have chosen this term of years because it is short enough to permit a realistic and concrete program of action, and yet long enough to enable us to take into account the increases in productivity which the program itself will bring about. We emphasize, however, that there is nothing sacrosanct about the time schedule in itself. In the light of changing conditions and economic trends, adjustments in timing may well become necessary.

In Chapter XIII we have summarized the program in a table of proposed expenditures for 1952, the first year of the program, and for the years 1952-56, the full period of the Mission's program. The figures set forth are intended, however, merely to indicate the direction, magnitude and relative timing of investment which appears most promising under present conditions. It is only by constantly reviewing the investment schedule that Turkish authorities will be able to implement the program realistically and to use the Mission's recommendations to the best advantage.

As we have already indicated, many of the specific measures proposed in the succeeding chapters involve little or no investment. They are concerned rather with means of

utilizing existing facilities more effectively through better production techniques, better training of personnel and better governmental organization and administrative practices. These recommendations can and, in our opinion, should be implemented promptly, irrespective of what resources may prove to be available for investment or what the final composition of the investment program may be. Indeed, better utilization of existing resources is, in the judgment of the Mission, essentially more important to Turkey's further development than expansion of those resources through capital investment.

CHAPTER IV

Coordination of Economic Policies and Activities

In a modern industrial economy, economic activity is exceedingly complex. Yet if production is to be efficient, each individual production unit must be properly adjusted in relation to a great many factors. It must be properly equipped to handle the goods or raw materials which it uses or processes. Its size, organization and processes may depend upon the existence and state of development of related units and industries. The availability of investment funds and capital goods may determine whether the unit can exist at all, and, if so, in what form and size. Changes may frequently have to be made to take account of variations in consumer demand. In a growing and dynamic economy, these factors are constantly changing, requiring a constant process of adjustment by individual units and whole industries. The process whereby these adjustments are worked out is the process of economic coordination.

ECONOMIC COORDINATION IN TURKEY

Before 1933, economic activity in Turkey had reached only an elementary stage of development. There had therefore been little opportunity for the growth of the type of coordination which exists in a competitive industrial economy, where adjustments in economic activity take place automatically through the profit and loss mechanism, with bankruptcy the penalty for the inefficient.

When the Government began to participate in economic activity on a large scale, the situation changed drastically. Large-scale government intervention completely upsets the basis for automatic adjustments and shifts to the Government the major burden for achieving coordination through conscious and deliberate action. Those who planned the government program did not have sufficient information or experience to carry out so complex a task. The result has been poor co-

ordination of economic activity in the country since that time. That poor coordination has shown itself principally in three different aspects.

Coordination of Investments

The first aspect is that of over-all planning for investment in the different fields of economic activity. The early programs for economic development were sound in many respects and included the development of many industries which Turkey needed and could operate successfully. On the other hand, as has been pointed out in an earlier chapter, those programs neglected some important fields of activity and provided for developing or expanding others which were not suited to Turkey's needs and resources at the time.

Failure to recognize the importance of agriculture has already been cited as the outstanding example of neglect. Several industries were started for which there was no pressing need or for which Turkey did not have the necessary raw materials or technical skills. These include the airplane engine factory, the rayon industry and the woolen textile industry. The airplane engine factory was plainly not justified. The rayon industry requires a high degree of technical skill and expensive equipment and does not meet an essential need in Turkey at this time. The woolen textile industry was established with the intention of using domestic wool, but it was found that the local wool is too coarse to be used in cloth for garments. The industry now uses principally imported wool. It is possible that a more carefully planned program might have included some of these industries but on a different scale, in a different form or at a different time.

Coordination of investments can be achieved only through a balanced program for economic development, consistent within itself and adapted to the needs and resources of the country. Such a program must be under continuous study, revision and adjustment and policies must be formulated to help make it effective. Hence a first requirement for its achievement is a competent staff, able to collect, analyze and evaluate all data relating to the economic potentialities and

problems of the country. A second requirement is the existence of some official with the authority and responsibility to evaluate the policies and programs recommended by the staff, to decide which of them to put into effect, and to administer them. Such authority will affect nearly every phase of Government activity and will have far reaching effects upon private economic activity. The person to whom it is given must therefore be the executive head of the Government or someone immediately and directly responsible to him.

Coordination of Expenditures and Resources

The second area in which the Government has failed to achieve proper coordination is the relation of total investment expenditures to available resources, especially during the past ten years. Investment has tended to exceed savings. The government deficits created by the excess spending have in the main been covered by borrowing from the Central Bank. This has increased the money supply and thereby contributed substantially to Turkey's inflation.

This tendency has had serious consequences for Turkey, since continuous and general price inflation tends to prevent industrialists, traders, farmers and the Government alike from planning rationally for the future. It sets in motion forces which distort any investment program. In the first place, it causes merchants and producers to accumulate goods in anticipation of selling them later at considerably higher prices. Inflation also encourages investment in types of enterprises which will produce quick profits and which are not usually favorable to balanced economic development. Furthermore, monetary instability leads to distortions in the distribution of income, penalizing those individuals who hold their money in bonds or savings accounts, government civil servants who live on relatively fixed incomes and those professional groups whose income cannot keep pace with rising prices. Hence, the incentive to save, essential to the mobilizing of funds for investment, is reduced. A capital market cannot develop properly in such an environment.

Monetary and financial instability also produces distortions in the international value of a country's currency, and it is

then necessary either to take drastic and painful steps to stabilize the value of the currency or to face the ultimate chaos which threatens as a currency's value approaches the vanishing point.

The problem is to finance the economic program without causing serious inflation or deflation. It is therefore essential that a fairly close balance be maintained between total investment expenditures and the funds which can be mobilized to finance them without creating monetary instability. This will involve management of the revenues and expenditures of the regular government budget, supervision over the investments made by state enterprises and control of the money supply through the banking system and the Treasury. It will involve also some control or at least influence over the volume and direction of private investment. This can be accomplished, at least in part, through tax policy and through the credit policies of the banking system.

Coordination of Current Operations

The third area in which coordination has been inadequate is in the construction and operation of state industries and in the governmental administration of economic activities. In the iron and steel industry, for example, the size and producing capacity of the different plants were so poorly adjusted to each other that the industry has never been able to operate at any level approaching rated capacity. In nearly all state industries, the marketing function has been seriously neglected. Little attention has been given to the problem of adjusting production to fit consumers' demands. Prices have been high and rigid. As a result, inventories have sometimes accumulated to an amount far in excess of need. As a rule, each state-owned factory maintains its own repair shop and other service facilities, although substantial savings could often be realized by combining them as the monopolies have done. Different parts of the agricultural program are administered by units in the Ministry of Agriculture, the Ministry of Commerce, the Agricultural Bank, the Monopolies Administration and the Toprak

Office.¹ Such a wide dispersion of administrative responsibility makes effective coordination very difficult.

Coordination of current operations involves many problems, some broad and general, others specific and limited. They include coordination among and between the different Ministries of the Government, the state enterprises and private business. The principal means of achieving such coordination are better organization of the agencies, departments or units involved, better administrative practices and procedures, and proper training of personnel.

Obstacles to Coordination

The large amount of financial autonomy possessed by some state agencies complicates the problem of coordination. This aspect of the organization of state enterprises is examined in Chapter VIII. The important point for purposes of this discussion is that, although the Sümerbank and the Etibank are nominally subject to centralized control, they frequently make investment decisions on their own initiative without obtaining higher-level consideration of the merits of their proposed use of funds in relation to other investment needs of the economy. Consequently, investment policy has been made on a piecemeal basis by organizations which are not equipped to perform that function and which have a vested interest in expanding the scope of their own operations.

There are other reasons for inadequate coordination. Few people have appreciated the importance of coordination and still fewer have had any strong motive to press for action to obtain it. The management skills necessary to achieve coordination, especially in the fields of statistics and accounting, are poorly developed. Most importantly, the organization and the administrative practices of the Government make coordination difficult. As is explained in Chapter X, the Government is highly centralized and there is little delegation of authority. Even minor problems requiring the exercise of authority must

¹ A government agency charged primarily with storage of grains, with stabilization of prices of certain agricultural commodities and with the import and export of certain farm produce.

be passed up successively from the lowest levels all the way to a minister or even to the Council of Ministers. There is little opportunity for intermediate officials in this line of authority to make contact or to use any discretion in cooperating with officials at the same level in other organizations or agencies.

It may seem paradoxical that there is so much centralization and so little coordination. With such a concentration of power at the top, there would seem to be an ideal opportunity for effecting coordination at that level. Unfortunately, however, the ministers are so busy, so burdened with detail and so poorly equipped with staff services that they must deal with each problem separately. Day-to-day problems which press for solution leave them no time to consider the interrelationship of the matters with which they deal or to consider the broader and more important policy questions which underlie their current decisions.

METHODS OF ACHIEVING COORDINATION

The Budget

In order to achieve better coordination in the Turkish economy we recommend action in three principal fields of activity. The first relates to the government budget. At present the budget is by far the most important instrument of control existing in the economic field. It includes a general budget and some 16 annexed budgets, which together authorize total expenditures of about two billion liras, or some 26 to 28 per cent of the national income. The gross investments included within those expenditures amount to roughly half of the total investment of the country.

Despite its great importance, the budget has not been developed in a way commensurate with its importance. In fact, it has been seriously neglected as a mechanism of programming and control.

The Budget Office is a part of the Ministry of Finance. It has only six or eight permanent staff members. Additional personnel are transferred temporarily from other divisions of the Ministry of Finance when the budget is being prepared for

submission to the Grand National Assembly. When that task is completed the Budget Office is left with its small permanent staff. This means that it can do little in the way of research or administration. In recent years, largely on the initiative of two or three men, much work has been done in tabulating, organizing and analyzing budget data. This has made available a good deal of information valuable for planning, but as yet very little use has been made of it.

The budget function needs to be greatly strengthened and expanded. The Budget Office should have an adequate permanent staff composed of the best personnel obtainable. It should be continuously engaged in studying, analyzing and planning the revenues and expenditures of the Government. The staff of the Budget Office should devote a substantial part of its work to advising on the administration of the budget. An improved Budget Office would provide the necessary information on government finances and afford facilities for controlling or influencing the revenues, current expenditures and investment outlays of all agencies of the Government. It would thus provide the means for realizing coordination in respect to these activities.

Responsibility for the preparation and administration of the budget should also be clearly defined and assigned. At present each ministry prepares its own estimate of expenses and sends it to the Ministry of Finance. In some countries, such as Great Britain, for example, the Minister of Finance has authority to revise or adjust the figures submitted to him in order to make them consistent or to keep the total within prescribed limits. In Turkey the Minister of Finance has no such power. Any disagreement between him and other ministers must go to the Council of Ministers for decision, a procedure which makes for delay and haphazard budget-making by bargaining between ministers.

The Mission has considered the question of the location of the Budget Office. Determination of this question depends upon a decision as to the assignment of responsibility and authority for budget preparation and administration. As long as the Finance Minister lacks authority and control over the

budget, the Mission does not believe that an expanded Budget Office, performing the functions outlined above, can operate effectively within his Ministry. The present activities of the Ministry are quite different in nature from those of a true budget office, which is necessarily concerned with research, analysis and the shaping of policy recommendations. In the event the Finance Minister is given authority and control such as the Chancellor of the Exchequer exercises in Great Britain, the Budget Office should appropriately remain under his supervision. If, however, as the Mission believes to be preferable, primary responsibility continues to be borne by the Prime Minister, the Budget Office, as the staff agency to the official responsible for the budget and its execution, should be attached to his office.

A technical mission of the Economic Cooperation Administration (ECA) is now making a thorough study of the organization and administration of the Ministry of Finance. That survey will undoubtedly assist the Government in deciding where the budget function can most effectively be placed.

Coordination of Investments

The second major field of activity in which we recommend action is that of planning for general economic development and of directing or influencing investments in accordance with such planning. This includes not only investments covered by the budget, but also investments made by state enterprises and private business firms. Under the plan outlined below, control and direction of public investments, including those of state enterprises, would be direct and specific. Influence over private investments would be much less direct. It would have to be achieved through advice, action by the banking system and other economic and financial measures.

In this field our major recommendation is that the Grand National Assembly give to the Prime Minister the power and staff facilities necessary to formulate a program of economic development and to provide the coordination of investments required to make that program effective. To this end, all agencies, enterprises and ministries of the State should be required to obtain the approval of the Prime Minister before

making any substantial investment, whatever the source of funds for such investment. We do not mean that the Prime Minister should be burdened with the approval of each individual investment, but rather that he should periodically approve a general investment program and that no investment outside the approved program should be permitted except with his consent. To implement this proposal we believe it would be desirable for the Prime Minister to create the position of Deputy Prime Minister for Economic Coordination and to entrust to him these duties, powers and responsibilities.

To provide the means for doing an effective job, we recommend that the Grand National Assembly authorize the Prime Minister to employ an adequate and competent staff to assist him in this area. This might be called the Economic Coordination Staff. If the position of Deputy Prime Minister for Economic Coordination is established, this Staff would be under his direct supervision. Staff members should devote full time to the work and the best men available, without regard to political considerations, should be selected for the Staff. The positions should be made sufficiently attractive in terms of salary and prestige to attract outstanding men.

The Staff would have many duties and responsibilities. It would prepare estimates of national income. It would prepare and revise programs for long-range economic development and schedules of public investment. It would recommend general policies concerning the proportion of resources to be devoted to investment, the allocation of foreign exchange resources and the coordination of public and private investment. It would advise on the approval of specific investment proposals by public agencies. It would at all times endeavour to keep the total of planned investments within the total funds available. Concerning government investments which are covered by annexed budgets, the recommendations of the Economic Coordination Staff approved by the Prime Minister or his Deputy should govern the Budget Office in laying out its over-all budget.

In order that the Economic Coordination Staff may have the benefit of the views of representatives of different sectors

of the economy, both public and private, it would be desirable to form an advisory group to consult with and advise the Staff. The group might include a few outstanding private citizens and representatives from the Grand National Assembly, the Budget Office, the Central Bank, the Ministry of Finance and possibly other agencies. The advisory group should have regular and frequent meetings with the Staff and there should be the fullest possible exchange of ideas and information between the two.

The work of the present Central Statistical Office is closely related to some of the functions mentioned above. For that reason, it should be attached to the Economic Coordination Staff. The Central Statistical Office should also be given the responsibility for establishing policies and standards for all statistical work carried on in the Government.

The concept of a coordinating group of the type described above is not new in Turkey. The Minister of State was appointed in order to coordinate government activities which are affected by foreign economic assistance. In recent months, a temporary and informal committee of Ministers has been established to bring about more coordination in the economic activities of the Government. The proposal made here would provide a more formal and permanent basis for these tentative efforts to achieve coordination, would expand their scope and would provide more adequate staff facilities for supporting them.

The Banking System

The third major field in which action is recommended is the banking system. We recommend that the lending policies of the banking system be coordinated with the investment program as developed by the Prime Minister with the help of the Economic Coordination Staff. The ways in which this might be accomplished are discussed in Chapter XI. The Central Bank, as head of the banking system, will have to take the lead in this matter. The Industrial Development Bank, if it develops as planned, will also be an important factor in influencing productive private investment. Banking policies

will have their principal effect in influencing the direction and amount of private investment.

If the above recommendations are adopted and made effective, they will provide cooperation in the field of broad, general economic policies. The needed cooperation at the level of current operations may be attained through improvements in organization and administration and through the proper training of personnel. Recommendations on these matters are given in Chapters V to VIII and in Chapter X.

Our recommendations for improving economic coordination in Turkey may be summarized as follows:

- (1) Responsibility and authority for preparation and administration of the budget should be clearly defined and assigned. The Budget Office should be strengthened and expanded so that it can give adequate assistance to the official charged with the budget responsibility and the Budget Office should be located accordingly.
- (2) The Grand National Assembly should delegate to the Prime Minister the power necessary to enable him to prepare and make effective a long-range program of economic development. No public agency should be permitted to make any investment except in accordance with an investment program approved by the Prime Minister or pursuant to specific approval of the Prime Minister. The Prime Minister should create the position of Deputy Prime Minister for Economic Coordination, to whom these functions should be delegated.
- (3) The Prime Minister or his Deputy should have the assistance of a competent Economic Coordination Staff. Approved recommendations of that Staff affecting annexed budgets should govern the Budget Office in laying out the government budgets. An advisory group should be established with which the Economic Coordination Staff could consult regularly.
- (4) The Central Statistical Office should be attached to the Economic Coordination Staff. That Office should establish policies and standards affecting all statistical work carried on in the Government.
- (5) The lending policies of the banking system should be coordinated, under the leadership of the Central Bank, with the general investment policies established by the Prime Minister.

CHAPTER V

Agriculture, Forestry and Fisheries

We have already stated our conviction that Turkey has seriously underestimated the role that agriculture must play in economic development. Relatively little effort has been made to increase the productivity of the three million farm families who produce hardly more than their own requirements and who have thus far benefitted little from the country's economic progress. The only partial employment of those families and their low productivity constitute a substantial waste of resources.

The greatest challenge facing Turkey today is to make fuller use of its agricultural manpower and resources by increasing productivity of both land and labor. A successful meeting of that challenge would not only raise farm incomes but would also reduce the proportion of the population that must now work the land and increase the numbers available for non-agricultural labor. The demand for industrial products would also be increased, thus further stimulating industrial growth.

There is another reason, too, for emphasizing agricultural development. At the present rate of population growth, more than 200,000 people will soon be entering the labor market annually. New opportunities for employment must therefore be found in both agriculture and industry and in both cases additional investment will be required. Under present conditions there are cogent reasons why the major portion of this investment should be channelled into agricultural production. Not only will a given investment create more work in Turkish agriculture than in industry, but the rapidly growing population requires a steady increase in food production. Unless food production increases by more than two per cent per year, the already modest per capita income and food consumption will decline; and, unless food production per farmer grows, Turkey will need an increasing number of farmers. Since the best arable land is already under cultivation, the

additional farmers would have to use less land or poorer land. Under such conditions production per farmer may well decline unless determined action is taken to improve farming methods and techniques.

It is sometimes supposed that villagers will not respond to genuine incentives and honest efforts to improve their condition. In our judgment, however, there is ample evidence to indicate that, when the benefits of innovations are effectively demonstrated, the peasants readily comprehend and adopt new methods which are not too drastically different from those to which they are accustomed. Once the peasants are convinced that a genuine policy of agricultural improvement is in operation, their characteristic aversion to new ideas is likely to undergo rapid change. This change will be cumulative as the evolution towards a higher standard of living proceeds.

THE AGRICULTURAL BASE

Present Agricultural Production

Of Turkey's total area of 77.7 million hectares, only about 19 per cent are under cultivation or under tree or vine crops. Since almost a third of this amount is held fallow each year, only about 14 per cent of the country is actually under crop. (See Table IV for land utilization in 1934 and 1949.)

Turkey enjoys a wide diversity of crops supported by the diversity of its climate and soil. All the cereals, many of the oilseeds, cotton, tobacco, sugar beets, tea, silk, opium poppy, legumes, a wide variety of fruits and nuts and many other crops are now being produced. Exports consist primarily of tobacco, cotton and cottonseed, dried fruits and nuts, opium, valonia, licorice and some livestock and livestock products.

Cereal growing, to which about 84 per cent of the tilled land is devoted, forms the basis of agricultural production. The bulk of these crops is grown on the Anatolian plateau, the area best adapted to cereal production. Wheat, at the present time, occupies about 57 per cent of the area sown to cereals and constitutes 55 per cent of the cereal output. Barley accounts for about 25 per cent. The other cereal crops

TABLE IV
LAND UTILIZATION, 1934 AND 1949

Category	1934		1949	
	Area in 1,000 Hectares	Per Cent of Total	Area in 1,000 Hectares	Per Cent of Total
Grains	5,903	7.6	7,527	9.7
Pulses	477	0.6	387	0.5
Vegetables	143	0.2	151	0.2
Industrial crops	497	0.6	814	1.0
Other crops	6	0.0	284	0.4
Fallow	3,674	4.8	4,274	5.5
Total land under cultivation	10,700	13.8	13,437	17.3
Fruit trees	286	0.4	544	0.7
Olive groves	347	0.5	272	0.4
Vineyards	345	0.5	521	0.7
Total tree and vine crops...	978	1.4	1,337	1.8
High quality grasslands.....	3,421	4.4	3,676	4.7
Pastures	2,877	3.7	2,715	3.5
Meadows	38,032	49.2	36,510	47.0
Total meadows and pastures	44,330	57.3	42,901	55.2
Total agricultural area....	56,008	72.5	57,675	74.3
Forests	9,170	11.9	11,892	15.3
Lakes and swamps.....	960	1.2	953	1.2
Other non-productive areas.....	11,097	14.4	7,178	9.2
Total area	77,235	100.0	77,698	100.0

Sources: Central Statistical Office, *Statistical Abstract of Turkey, 1942-1946* (1947) and *Résumés Statistiques, No. 4, Agriculture: 1934-1949* (1950).

include maize, rye, oats, spelt, millet and rice, in that order. Total production of bread grains fluctuates between 2.9 million and 5.6 million tons. In most years Turkey is self-sufficient in cereals. In years of partial failure, imports of wheat have been necessary. In bumper years, limited exports of wheat and coarse grains have been possible.

In terms of area sown, cotton is the second most important field crop. The development of cotton culture started about a century ago. Today about 100,000 tons of cotton and perhaps

twice as much cottonseed are produced on the 300,000 to 350,000 hectares devoted to these crops, chiefly along the Mediterranean and Aegean coasts. This cotton provides most of the raw material for Turkey's textile industry and significant amounts are exported each year.

Tobacco has been, over the years, the most important export commodity. Although produced by private individuals, its production, handling, marketing and export are under rigorous government supervision. The area under tobacco and the output vary widely. The production of tobacco, grown chiefly around Samsun and in the vicinity of Izmir, has risen sharply since World War II and now varies between 70,000 and 100,000 tons annually. The best qualities are sold chiefly to the United States, where they are blended with domestic tobaccos. Poorer qualities are consumed locally or exported to Europe.

As a consequence of vigorous state encouragement of the sugar refining industry in the past 20 years, sugar beet production has increased from 108,000 tons to about 800,000 tons, with the result that Turkey, once a large importer of sugar, has become virtually self-sufficient in that commodity. Turkey is one of the world's chief olive producers, current output being about 200,000 to 300,000 tons. Exports are relatively small due to domestic requirements of edible oils and soap. Hazelnuts, of which Turkey is also one of the largest producers, are an important export. The output of hazelnuts and of other nuts and fruits varies widely with weather conditions. Like cotton and tobacco, they are grown chiefly along the coasts where temperatures are less rigorous and rainfall higher than in central Anatolia.

The production of Turkey's principal crops in recent years is shown in Table V.

Livestock and poultry play an important role, providing draft power, food and industrial raw materials. Although these animals and their products are consumed chiefly at home, they also contribute to the export trade. Eggs, cheese and live animals are exported to near-by countries. Skins, mohair, wool and animal casings produced in Turkey are known throughout the world. Animal dung is an important fuel in the villages.

TABLE V
 PRODUCTION OF PRINCIPAL AGRICULTURAL COMMODITIES, 1934 TO 1950
 (Thousands of Tons)

Product	1934-38 Average ¹	1947	1948	1949	1950 ²
Wheat	3,708	3,246	4,867	2,495	3,874
Barley	2,075	1,512	2,167	1,220	2,021
Corn	587	531	696	609	626
Other grains	934	916	1,311	806	n.a.
Potatoes	181	325	454	471	590
Sugar beets	432	639	726	817	800
Pulses	212	193	259	212	267
Vetch	107	89	118	97	125
Oilseeds	156	161	224	298	380
Cotton fibre	60	51	58	105	147
Flax fibre	3	2	5	2	4
Hemp fibre	8	10	10	11	8
Tobacco	61	102	83	91	85
Onions	98	86	166	183	169
Citrus fruits	247	380	448	n.a.	n.a.
Figs, fresh	146	125	119	n.a.	n.a.
Grapes	885	718	1,332	n.a.	n.a.
Olives	n.a.	274	210	n.a.	286
Other fruit	n.a.	234	361	n.a.	n.a.
Nuts	149	130	121	n.a.	n.a.
Wool (in grease)....	25	32	34	32	28
Mohair	7	6	7	6	5

¹ For all fruits and nuts, average for 1936-39 is given.

² Early estimates.

Sources: 1934-49 crops Central Statistical Office, *Résumés Statistiques*, No. 4. *Agriculture: 1934-1949* (1950); 1950 crop: oilseeds, olives, wool and mohair, ECA Mission to Turkey; other, Central Statistical Office.

Village and Peasant

The rural population lives largely in some 35,000 villages spread thinly over the country. Isolated by poor roads, using primitive tools and techniques, the average peasant ekes out a relatively poor existence in what may properly be described as virtually self-sufficient economy. His cash receipts and expenditures are small.

Data regarding land tenure and the size of land holdings are scanty and unreliable. It would seem that the majority of farms are less than four hectares in size. In 1948, there were 2.5 million holdings (owned or rented in whole or in part), totalling 13 million hectares, ranging in size from less than one to 100 hectares, an average of about five hectares per family. There were also 5,764 holdings between 100 and 500 hectares in size and another 418 estates of over 500 hectares. Estimates of the number of landless families vary from 126,000 to 787,000 and of those with insufficient land, from 0.9 million to 1.6 million. Land reform laws passed in the 1920's and in 1945 have apparently had little effect in increasing significantly the number of peasant owners or in increasing the average size of their holdings. Absence of land ownership surveys, lack of technical personnel, the heavy cost of expropriation and of resettlement, and political factors have limited their effectiveness. More attention needs to be given to a realistic appraisal of the possibilities and problems of settling the poorer peasants in new lands, including those now occupied by the State Farms.

The techniques used by the average Turkish farmer are, in general, very primitive. He still uses a wooden plow and unselected seed; his farm animals are of poor stock, ill-fed, ill-kept and weak. Except on the state-owned farms and the few large farms in south and southwest Turkey, machinery is little known to the peasant. The animal breeding and seed selection stations which the Government has developed in the past two decades have had little influence on farmers generally. The irrigation schemes carried out in that time have been of only local significance. The result is that crop yields per hectare are low and have shown no substantial improvement in recent years.

In many villages the products of the hand loom produce more cash income than do products of the land. With improved instruction, quality control and marketing assistance, the value of Turkish handicrafts could be considerably enhanced, with great benefit to the standard of village life. Instruction and demonstration work in the various home arts and crafts

should ultimately become an integral part of the agricultural program.

OUTLINE OF A PROGRAM

Content

To achieve a rising agricultural productivity, the Government will need to mobilize its resources in support of a well-organized and comprehensive program. Such a program will require, above all, the training of a large and competent body of extension workers willing and able to impart to the farmer the latest proved information concerning better production techniques and marketing practices. An extension service of this kind must be solidly backed by an equally competent research corps, constantly engaged in testing new techniques and adapting them to Turkish conditions, devising more efficient hand implements, developing improved seed and livestock and methods of protecting them, studying and improving marketing methods, and investigating a great number of agronomic, economic and social problems. The research staff will have to work out methods of conserving such scarce or abused resources as forests, water and grazing lands, and the Government will need to take appropriate action to put the methods recommended by the research staff into operation.

The effective application of new production and marketing techniques will require an expanded program of agricultural credit, directed towards the productive use of agricultural resources and closely related to the activities of the extension service.

The program must also, in our judgment, include revision of existing storage and price policies, an extension of the existing program of standardization and the creation of facilities to provide farmers with adequate marketing information.

Administration

To carry out the comprehensive agricultural program, we recommend that a small but able planning staff be established in the Ministry of Agriculture to advise the Minister on the formulation of broad policies and programs affecting agriculture. It would study and recommend integrated policies

relating to research and extension, credit, storage, marketing, prices and other factors concerning agriculture. It would provide a continuing critical appraisal of all agricultural policies in the light of changing conditions and requirements, so that all may be constantly directed towards the increase of agricultural productivity.

This central planning staff should be supplemented by a realignment and reorganization of the agencies and institutions now involved in the formulation and execution of agricultural policies. There are a number of such departments and agencies, responsible to different ministers, and they often act independently of one another. Thus agricultural price policies have been determined and carried out by the Toprak office, the Monopolies Administration, the Ministry of Agriculture and the Agricultural Bank. Efforts to increase production are made by several of these institutions independently of the general policies of the Ministry of Agriculture in that regard. Subsequently, in Chapter VIII, in making recommendations for the reorganization of state enterprises generally, we shall also recommend that the Minister of Agriculture should be ultimately responsible for all operations in the field of agriculture, whether they are carried out by government departments or by independent or semi-independent economic entities.

RESEARCH AND EXTENSION PERSONNEL

The success of an agricultural development program depends basically upon reliable information about superior production methods and marketing practices and upon a competent corps of extension workers to disseminate that information to farmers and to help them apply it. It can never be taken for granted that information concerning production techniques acquired from other countries can be safely recommended to farmers in a new environment until it has been tested experimentally under the conditions in which it is to be applied. If modifications are required, which is usually the case, they must be developed on an experimental basis over a period of time by trained personnel. This is a difficult task for Turkey since the country is deficient in trained research and extension personnel.

The state-supported research institutions and experiment stations are not adequate to provide basic information about production and marketing methods. Not only are these institutions handicapped by the shortage of sufficient technical personnel with advanced training, but such qualified technicians as are available lack facilities for extending their research work beyond the laboratory or experiment station into the countryside. Moreover, state experiment stations and agricultural laboratories are often required to be financially self-supporting, with the result that their efforts are sometimes diverted from research to the production of saleable commodities.

The serious shortage of trained personnel is exemplified by the fact that the entire Ministry of Agriculture has only 10 plant breeders and seven agricultural economists. Similarly, the technically trained staff of the Plant Protection Institute consists of only three entomologists. All agricultural technicians are graduated either from the Agricultural College or the Veterinary College in Ankara. While these institutions graduate about 300 students annually, their curricula are so generalized that even a modest degree of specialization is unobtainable among their graduates unless, as is often the case, they receive post-graduate training abroad. A radical change in curricula and academic standards is urgently needed.

The extension staff is primitive and suffers from similar handicaps in numbers and in competence. The Ministry of Agriculture has in its employ throughout the country roughly 1,300 graduates of the Veterinary College, the Agricultural College or the four Agricultural Vocational High Schools; of these only 250 are classified as extension workers. They are concentrated in the six (of 63) provinces in which extension services have thus far been organized. Some of the remaining 1,050 (of whom 921 are in the veterinary service) are also potential extension workers, but generally they are poorly trained for such work. Probably only a small percentage would want to, or could qualify for the difficult task of working intimately with the peasants. Usually city reared, they know little of village agriculture or peasant psychology, are

unfamiliar with advanced technological developments and farm practices, and are unacquainted with agricultural extension techniques. There are, nevertheless, some very able men among Turkish agricultural technicians. With specialized training, they would be capable of giving leadership in extension work. The importance of agricultural development and the exacting requirements of extension work in rural villages suggest the desirability of providing special incentives as an inducement to trainees to take up extension work as a permanent occupation.

An effective program for the training of research and extension personnel will require assistance from foreign specialists in Turkey and the training of Turkish technicians abroad. Such a program is already under way under ECA auspices but it should, in our judgment, be considerably expanded. In this connection, the Government should take full advantage of the technical assistance programs of both ECA and the Food and Agriculture Organization of the United Nations.

Among the Turkish specialists sent abroad for training, certain of the key personnel holding higher administrative positions should be included, for, as ECA has wisely recognized, top-level officials must be able to appreciate the value of competent training at the working level and be prepared to organize their work so that such training can be used effectively. Younger men sent abroad should be chosen not only for their technical talent, but also for their qualities of leadership and their ability to teach and inspire others when they return.

Only about three million liras were allocated by the Government in 1949 for the training of specialized agricultural personnel. We shall recommend in Chapter XIII that, in 1952, about TL 7.5 million should be added to this sum for the training of research and extension staff, for in-service training of extension workers and for enlargement and improvement of the present extension service. The total of TL 10.5 million could gradually be reduced later as the demand for trained personnel is met.

In summary, the Mission recommends that:

- (1) A small planning staff should be established to assist the Minister of Agriculture in planning and carrying out a comprehensive program to increase production.
- (2) The training of agricultural technicians and extension personnel should be given top priority. This will require reliance on foreign experts for training programs within Turkey as well as the training of Turkish specialists abroad.
- (3) The curricula and academic standards of the Agricultural and Veterinary Colleges should be revised so as to provide specialized training in applied agricultural science.
- (4) The staffs of experiment stations and laboratories should be relieved of the need to engage in production of saleable commodities so that their efforts can be devoted entirely to research.
- (5) Special incentives should be provided to attract technicians into agricultural extension work.

METHODS OF INCREASING PRODUCTION

It was not within the terms of reference of the Mission, nor did the Mission have the time to study in detail or to make detailed recommendations concerning methods of increasing agricultural production. This section is therefore confined to a discussion of certain broad measures and fields of study which the Mission recommends as particularly worthy of consideration in the development of an over-all agricultural program.

Need for Additional Research

Turkey's experiment stations and state enterprises have done some good research work on a few crops. To the extent that the results of their research have been made available to farmers, they have made important contributions to agricultural production. The fact is, however, that many of the vital problems of Turkish agriculture have received little attention.

While the need for research and extension in the technical problems of Turkish agricultural production is paramount, research in the broad economic and sociological problems of

agricultural production and marketing should also receive much greater attention. The effectiveness of the proposed planning staff of the Minister of Agriculture will largely depend upon the continuing availability of basic facts and specialized analyses of the economics of Turkish agriculture. Among the important fields needing research attention by agricultural economists and rural sociologists are: problems of farm management on small and medium-sized holdings; public farm credit, storage and price-support policies; farm-to-market transportation; the organization and operation of local marketing cooperatives; land ownership, distribution and tenure; sociology of the rural population and problems of migratory labor; marketing channels and practices for various farm products; means of increasing marketing efficiency; and the development of agricultural processing industries.

The inadequacy of agricultural research is clearly indicated by the fact that funds allocated for basic research amounted to only about TL 15 million in 1949. The Mission's proposed investment program will include provision for an increase of TL 12 million in this sum in 1952.

Crop Improvement and Techniques

In view of the over-riding importance of finding a method of increasing productivity on the small semiarid farms typical of much of Turkey, we suggest that a thorough study be made of a technique for increasing production which has proved successful under similar conditions elsewhere. This technique involves the substitution of a drill row crop for the normal Turkish method of fallowing.

Because of Turkey's very limited effective moisture supply, fallow is an essential feature of grain farming. In the main wheat and barley growing areas, the practice of alternating cereals and fallow in a simple two-year rotation is almost universal. While the precise amount of rainfall actually retained in the fallow is unknown, it seems probable from studies elsewhere that most of the moisture is lost by evaporation during the long, dry summer. The fallow nevertheless results in increased yields chiefly because plant food is brought

into solution during the fallow year. The beneficial effects are greatest when the fallowed land is kept free of vegetation, which depletes the soil moisture and uses up the plant food that has been brought into solution. Therefore the degree to which the land is kept free of weeds will largely determine the effectiveness of the fallow as a means of increasing yields. This principle of dry farming is generally overlooked in Turkey, apparently because fallow land provides a certain amount of pasturage for livestock and in any case there is usually insufficient draft power to cultivate the land as frequently as necessary to control weeds.

The technique we suggest for making better use of fallow requires the planting of wheat in drill rows, about three feet apart, as a substitute for the fallow. Such a system of cropping requires clean cultivation between the rows of grain. In Turkey, where there is a surplus of farm labor, especially between seeding and harvest time, this could be done by hand. By this method, it would be possible to produce more than half a crop in the fallow year without appreciably reducing the yield of the succeeding crop. If weeds were effectively controlled, the succeeding crop would undoubtedly yield as much after the row crop as after the fallow. In all probability the row crop would be better than the fallow, especially where the fallow is allowed to produce weeds. Success of the row crop method could be further assured by the use of small amounts of fertilizer (preferably ammonium phosphate) applied to the land in the rows with the seed. The small amounts of fertilizer required for this purpose (five pounds per quarter acre) would keep the expense to a minimum.

If a farmer successfully used the row crop method, the productivity of his farm would be increased at least 50 per cent. He would also have some security in bad crop years since the row crop, having clean land between the rows to draw from, will usually produce a reasonably good yield. The attainment of these objectives by any farmer depends primarily on the availability and willingness of his farm labor to do the necessary hoeing between the rows of grain to control weed growth. It will also be necessary, of course,

to persuade the farmer to adopt the new practice, should it prove feasible. Its adoption might be promoted by supplying 45 liters (two and a half bushels) of improved seed free of charge to any peasant who would undertake to grow one hectare in cultivated rows according to directions. The farmer should also be induced to save the seed from the row crop for planting part or all of the next broadcast crop. Thus at small expense for the seed and distribution, good seed could be distributed on a substantial scale. At the same time, the farmer would learn at first hand what is involved in row culture both by way of extra labor and increased productivity.

Another method of increasing the productivity of small farms could be the encouragement of vegetable gardening among farmers in dry-farming areas. Excellent vegetable crops may be obtained under semiarid conditions by keeping the garden small and at a high level of fertility and by fallowing the land two years out of three. Cultivation of such crops would result in a considerable improvement in the diet of the average peasant and would provide him with a small cash crop.

Another major field of investigation is soil productivity. There has never been a reconnaissance soil survey, or even a land-use classification survey of Turkey. The Soils Research Institute at Ankara has made a great many analyses of soil and water samples from various parts of the country and has published a comprehensive set of data on the water and soils of the Çukurova. The soil samples, however, have not been taken in a systematic manner and the resulting information, though very useful, is in no sense comparable to a reconnaissance survey. Such a survey would provide some of the basic knowledge essential to Turkey's agricultural development.

Phosphorus deficiency appears to be extensive. Experiments on state farms have shown notable increases in wheat and barley yields resulting from the application of superphosphates, and phosphatic fertilizers have also significantly increased sugar beet yields. It is quite possible, however, that even better results could be obtained with grains if only one third of the amount of fertilizer now used were applied with the seed. Under dry-farming conditions, too much phosphate

may stimulate vegetation to the point where there is insufficient moisture to permit full development of the grain. Relatively simple experimental tests of this kind should be extended to all major soil zones of the country. This task would not be too expensive and would yield important results.

Production can also be greatly increased through expanded research and extension work on the improvement and protection of crops. Good work has been done in the growing and processing of tobacco and sugar beets, and to a lesser extent of cotton and some other products. Improved seeds of the cereal crops are now produced in large quantities in experiment stations and on state farms, but distribution to farmers has proved difficult. Progress has been made in supplying young stock of figs, sultanas and olives. The work has been seriously handicapped, however, by the entirely inadequate technical staff engaged in plant breeding and field experiments.

Turkey is also extremely vulnerable in the matter of plant protection. Heavy losses from pests and disease are sustained annually, many of which could be avoided if the research and control work in this field were more adequately staffed and organized. The five field stations of the Plant Protection Institute, located at widely separated points, are occupied mainly with the application of pesticides on farms in the areas which they serve. With the aid of technical advisors and more recently by the use of sprayers and dusters supplied by ECA, considerable progress with control measures has been made possible. Much more work remains to be done.

Finally, we suggest that the research and extension services give particular attention to the development of better hand tools and small implements and to methods of persuading the peasant to use them. We have referred to the fact that the average Turkish peasant often has only the simplest of implements. Experience of other countries indicates that small improvements in tools, devised after careful study of soil conditions, could bring important increases in productivity. Such implements can often be manufactured in the village forge.

Livestock Improvement

Improvement of livestock is badly needed if Turkey is to achieve its potential livestock production. These facts are being recognized by the Ministry of Agriculture, and in 1949 the Department of Veterinary Services prepared a five-year livestock improvement program which, if carried out, should make a promising start in what must inevitably be a long-term undertaking. The Ministry of Agriculture proposes to encourage the improvement of cattle, especially for milk production. Imports of male animals are restricted to the Brown Swiss breed, which is considered best adapted to the climate of Turkey and best suited for cross breeding with the small native cows. The five-year program also recognizes the urgent need for more and better feeds for livestock and proposes the establishment of several clover farms.

Feed is basic to any livestock improvement program. To produce more and better feed, we suggest the following possibilities: improving grasslands; water development by the construction of small earthen dams or by wells, where either or both are feasible; inclusion of forage crops in the rotation on the larger farms, especially where conditions are favorable for growing maize and annual and perennial grasses and legumes; and the greater use of oil cake, 95 per cent of which is now being exported. The use of this concentrate, at even one pound (0.45 kilos) per animal per day, from cottonseed, flaxseed or sunflower seed, has a beneficial effect on the health and fleshing of animals. It is especially valuable for animals which are wintered on straw.

The grasslands of Turkey constitute 55 per cent of the total area or about 43 million hectares. Of this at least 16 to 20 million hectares are potentially good grazing areas. This important natural resource has been sadly abused. Grasslands are often heavily overgrazed, so severely in many areas that unpalatable weeds have taken possession of the land. No effort has been made to improve the native pastures by reseedling or by rotational grazing. Although the regrassing of barren hills and mountains presents great difficulties, it should be possible to double or treble the carrying capacity in many areas. This,

in the aggregate, is a problem of great magnitude, but possible of achievement.

Many villages have considerable areas held in common for grazing purposes. In all such cases the most practical way of increasing feed for livestock is through well-established methods of pasture improvement. This is a technical problem requiring the services of experts who have had long experience in grassland improvement and management. Under their direction, experimental areas with controlled grazing could be established, nurseries for the testing of native and foreign grasses and legumes created, and experiments conducted under a variety of conditions to determine the best time and methods of reseeding. Under certain conditions best results may be obtained by fostering the native vegetation. Grasses and legumes which are indigenous to Turkey should be carefully observed and tested for adaption, nutritional qualities, seed production, palatability, ability to withstand grazing and the ease with which they can be established. In these investigations the cooperation of villagers, although difficult to obtain, is plainly essential.

Mechanization

With the assistance of ECA, increasing emphasis has recently been put upon mechanization as a means of expanding agricultural production. When ECA assistance became available early in 1949, there were 3,200 tractors in Turkey, of which 1,200 were in very poor condition. The number likely to be in operation by the middle of 1951 is now estimated at 10,000. No comparable estimates are available of the types and numbers of other power machinery, but these are likely to increase as a result of the requirement imposed by the Government that any farmer purchasing a tractor must at the same time purchase a certain amount of machinery to go with it. Measures are also being taken by the Government and the various selling agencies to remedy in part the lack of spare parts and repair facilities which have in the past reduced the utility of farm power equipment. The lack of trained tractor operators is, however, still a serious problem.

The growth of the use of power equipment has already increased the area of cultivated land to a marked degree. In terms of production the results to date have been substantial, especially on state grain farms and on the larger private grain, sugar beet and cotton farms, where tractor farming has been economically feasible. Under dry-farming conditions on the Anatolian Plateau, the yield of wheat on mechanized farms where complete sets of equipment are used as frequently more than double that obtained by the small farmer using primitive tools and methods.

While mechanization to date has undoubtedly been worthwhile, the size of land holdings and other factors set definite limits to the rate and extent of further expansion of production through power farming. In the case of cereal production, for example, with half the land in crop, the farmed area has to be at least 200 and preferably 300 hectares in size to justify mechanized cultivation. Where labor is cheap and tractors and fuel are expensive, mechanization is uneconomic on farms smaller than this. The 10,000 tractors expected to be in operation soon will more than cover the requirements of such farms, for there are only 6,182 farms larger than 100 hectares in the whole of Turkey. It is estimated that 7,000 tractors will be used on farms in this category. Another 1,000 will be employed on the State Farms and other institutions. The remaining 2,000 tractors will be available for village farmers whose land is too small to justify use of a tractor on an individual basis. Such farmers in any case rarely have the resources sufficient to purchase a tractor and related machinery without involving themselves in greater debt and production costs than they can handle.

To the extent that village farmers can successfully cooperate in the joint ownership of tractors and implements, the use of power equipment is likely gradually to increase. Voluntary cooperation in such enterprises, however, has seldom been successful, for villagers in Turkey are not kindly disposed to cooperation. Mechanization is perhaps more likely to be extended through purchase of tractors and auxiliary equipment by individuals who rent them out, with trained

operators, to small farmers. To the extent that tractors are purchased by men who now own and rent land to villagers, there is danger that the landowners may decide to farm their land themselves, thus displacing the peasants and creating a serious problem of social adjustment. This outcome is already in evidence in the Adana district.

Irrigation

So much of Turkey is semiarid, especially the Anatolian Plateau, which is the country's breadbasket, that water is frequently a serious limiting factor on agricultural production. Fortunately the mountains which surround the interior provide extensive watersheds, rivers and streams which hold practical possibilities for irrigation. Water is now being applied to about 100,000 hectares of land, mainly in small units, but this is small compared to Turkey's irrigation potential. Irrigation should undoubtedly receive high priority. Eventually all of the water that can be economically developed should be made available for crop production.

The possibilities of small-scale irrigation based on earthen dams or on water from underground sources deserve special consideration. One hectare of irrigated land would enable a farmer to have two fifths of a hectare of fruit and vegetables, two fifths of a hectare of alfalfa, and one fifth of a hectare of trees. He could thus improve his diet, raise three to five tons of alfalfa hay annually for livestock and obtain a modicum of security in bad crop years. Multiplied by some thousands, such a development would give an important stimulus to village agriculture. Such small projects have the advantage that they can be developed piecemeal as financial and technical resources permit. Contrasted with large-scale irrigation schemes, the burden would be slight and the benefits more immediate and widespread. The hydrological studies, test wells and survey of small dam possibilities required for such small projects could be carried forward at small expense concurrently with the studies required for larger projects.

Many large and ambitious hydro-development schemes are now under discussion, although only the Seyhan and Gediz projects have been subjected to intensive study by the Gov-

ernment. In the judgment of the Mission, none of these projects should be undertaken at the present time.¹ As is explained in a later chapter, the major reason for this recommendation is the need to apply Turkey's limited resources to projects which will yield the most immediate and widespread returns. From a strictly agronomic point of view there are additional reasons for postponement.

Maximum benefit cannot be obtained from large-scale irrigation without changes in production techniques. For example, in the Adana area, to be served by the Seyhan project, cotton and wheat are sown in a simple two-year rotation. To achieve the full benefit of applied water would require a thorough change in this system. Production would have to be intensified and diversified by the inclusion of legumes, grasses, maize and rice in the rotation and by developing the dairy, poultry and possibly cane sugar industries. Wheat and cotton would then occupy about half the present acreage but their yields would be doubled. Farms in this area are sufficiently large to warrant such a development.

So radical a change in farming demands technical guidance and a background of knowledge and experience not yet available to the Adana farmer. The same is true of the Gediz River basin project. Thus while these projects hold considerable promise of increasing agricultural production through irrigation and flood control, the areas involved are not yet ready for them.

It is not too early, however, to install the ancillary technical services that will be required in these areas if the Seyhan and Gediz projects are ever to be developed. For this reason we recommend that two new experimental stations with research facilities be established near Adana and Izmir. They should be fully equipped and staffed with qualified technical personnel to conduct investigations concerning soils, fertilizers, crops, livestock, insect pests, plant diseases and weeds. Similar stations will be needed in any other areas in which large irrigation schemes are contemplated.

¹ See pages 144-146 on multi-purpose projects.

Agricultural Credit

A major means of increasing production is the provision of agricultural credit. Between 1937 and 1949 credit extended by the Agricultural Bank and its system of credit cooperatives rose from TL 31 million to TL 336 million. This increase reflects the Government's growing recognition of the credit needs of agriculture. The Mission's review of the Government's farm credit policy suggests that the policy may need some degree of reorientation if it is to be most effective in increasing agricultural production and if the amounts spent on agricultural credit are to bear a reasonable relation to total public expenditures on agriculture.

At present more than 90 per cent of the Agricultural Bank's loans to individual producers (including those made through credit cooperatives) are for periods of less than one year and consist largely of crop loans. The effect of these loans has been to reduce the usurious exploitation of the present. A high proportion of them has probably been used to increase the peasant's consumption rather than to increase his production. This is inevitable where consumption levels are so low, and adequate subsistence for agricultural workers is in any case a necessary part of the operating expenses of a farm. However, it remains true that the peasant often lacks the knowledge and skill to put his credit to productive use. Frequently his loan is too small to provide both subsistence for himself and capital needs for his farm.

Various measures can, in this situation, be adopted to minimize the nonproductive use of agricultural credit. One obvious step is to enlarge the size of individual loans rather than to spread them over a wider field, even though this may temporarily necessitate a reduction in the number of recipients of credit. Another is to relate the size of a loan less to collateral security than to the general reliability of the borrower and the productive use he is likely to make of the loan. This is a particularly important factor in connection with the sharecroppers, tenant farmers and very small landholders, who have little or no collateral and who pose a special but neglected credit problem.

If the credit needs of these small farmers are to be adequately met, the staffs of the Agricultural Bank and of the credit cooperatives must be strengthened to permit closer contact with small-farm borrowers. Credit activities must also be coordinated with the activities of the improved extension service already recommended. In other words, research and extension programs should influence the specific use for which and the conditions under which credit is granted to farmers. These steps are essential not only to enable the Agricultural Bank properly to assess the creditworthiness of prospective borrowers but also to assure that loans granted are productively used. Supervision of the use of credit would also be facilitated in some cases by its issuance, not in cash, but in the form of purchase orders on the suppliers from whom the farmer expects to purchase the materials or equipment he needs. Over a period of years these measures would result in increased agricultural output on the small farm worth many times the administrative cost involved.

It must be recognized that productive credit to the smaller farmers can be increased only gradually, as the research and extension services are expanded and their work begins to bear fruit. In the meantime the greatest increases in production are likely to be obtained from loans to medium and large farms. In general the owners of these farms need credit primarily for equipment, installations and other types of capital improvements. Credit for such purposes should be of an intermediate and long-term nature. Special attention should also be given to increasing credits for livestock breeding and production, since only two per cent of Agricultural Bank loans outstanding in 1949 were allocated for such purposes. Loans to large-scale agricultural sales cooperatives should be limited to present levels. Additional credits should be granted to local marketing cooperatives and, where feasible, to village handicraft cooperatives and small village industries producing hand implements and consumer goods.

Provision for additional agricultural credit in the investment program outlined in Chapter XIII reflects the foregoing recommendations. Credit extended to farmers and to credit

cooperatives rose by TL 102 million in 1949. We recommend that farm credit be expanded gradually during the five years of the Mission's program. During the earlier years of this period, major emphasis will necessarily be on credits to medium and large farmers. In the later years, as the research and extension programs begin to produce results, emphasis should be shifted to the smaller farmer.

Price Supports

The Government has from time to time and in various commodities used price supports as a means of encouraging agricultural production. The most important instance of this policy has been the support of cereal prices since 1938 by the Toprak Office as the major means of increasing cereal production. Price supports have also been used for sugar and tea, of which the Government buys the entire output, and for tobacco, of which the Government regularly buys 20 to 25 per cent.

In the view of the Mission, price supports are an uncertain and ineffective means of encouraging production in Turkey. In the case of cereals, we doubt that the maintenance of prices above world levels has had any significant effect on production. On the other hand the inflationary effects of the policy have been serious and the result has been to subsidize cereal producers at the expense of the urban consumer. Subsidization through the pricing system is not very effective because the farmer has too little to sell. His major need is to learn and apply new production techniques. This can best be accomplished through the work of the research and extension services, improved credit policies and, where necessary, direct subsidies for improving farm practices.

We recommend, therefore, that the Government instruct the Toprak Office to permit cereal prices to move down to world price levels as rapidly as production and foreign exchange conditions permit. In all cases, we recommend that the Government carefully reexamine its agricultural price policies and restate their objectives more clearly. Such policies should be established, not by independent or semi-independent

agencies, but by the Minister of Agriculture within the framework of an integrated agricultural development program.

In summary, we recommend that:

- (1) The primary effort of the improved research and extension services should be concentrated on methods of improving the production techniques of the small landowner. In this connection we specifically recommend that consideration be given to: (a) the substitution of a row crop for fallow; (b) the encouragement of vegetable gardening in dry-farming areas; (c) the development of better hand tools and implements; (d) widespread testing of fertilizers throughout the country; (e) development of feed for livestock, particularly the use of oil cake; and (f) establishment of controlled grazing areas and creation of nurseries for testing foreign and domestic grasses and legumes.
- (2) Irrigation should receive high priority, especially small-scale irrigation projects based on earthen dams or underground water. Large-scale irrigation schemes should not be undertaken at the present time.
- (3) New experimental stations should be established near Adana and Izmir.
- (4) The volume of agricultural credit should be increased gradually and should be closely related to research and extension programs. Special care should be taken to assure that farm credits are used for productive purposes. Individual loans should where possible be larger than heretofore.
- (5) Although major emphasis in the next few years will necessarily be on credits to medium and large farmers, the volume and distribution of loans to small farmers should be increased as the research and extension programs begin to produce results. Particular attention should be given to loans for livestock breeding and production, to loans to local marketing and handicraft cooperatives, and to loans for village industries.
- (6) The Toprak Office should permit cereal prices to fall to world levels as rapidly as production and foreign exchange conditions permit. Other price support policies should be reexamined in the light of their objectives and of the general agricultural development program.

MARKETING AND STORAGE

All but highly developed countries suffer in varying degrees from inadequate facilities for transportation, storage, standardization, and market and price information. In these circumstances, there are likely to be gluts in certain regions or seasons and severe shortages in others and, as a result, varying prices. As transportation and storage facilities are extended, the physical requirements for an integrated national market are gradually met. Even the best of physical facilities without standardization and adequate communication of accurate market and price information cannot prevent loss of export and domestic markets, serious exploitation of uninformed buyers and sellers, excessive marketing costs and faulty production decisions. These observations, while generally applicable, are especially pertinent to farm products because they are produced by millions of widely scattered and poorly informed small-scale enterprises, and are by their very nature unstandardized and frequently perishable.

Farm-to-Market Transportation

The transportation system still leaves much to be desired. Turkey is fortunate, however, in having a relatively well-developed railway network covering most of the country and its road transport facilities are improving rapidly. Completion of the public roads program already under way should go far to provide Turkey with an adequate and integrated transportation system. Much of this program is being devoted to major trunk line highways. The need for village and farm-to-market roads should, however, also receive constant attention, for the importance of improved local roads to Turkish peasants can hardly be exaggerated. In their absence the villages have tended to develop self-sufficient economies. The lack of an accessible market for the peasant's products means that he has little incentive to produce a marketable surplus to sell for cash. The inaccessibility of stores offering industrial goods for sale means that he has little opportunity to spend any cash he might have. In short, poor markets mean reduced incentive to produce. Poor roads and communications have also prevented the spread of knowledge and modern ideas into village

life. While provincial and local governments must bear much of the responsibility for local road improvements, the central government should appropriate at least modest amounts for this purpose. Much greater attention should also be given to improving the equipment, schedules and services for rail and coastal shipping of farm products, particularly livestock and perishables. We make specific recommendations relating to transport facilities and services in Chapter VII.

Standardization

Turkey has made progress in the standardization and inspection of farm products. Standardization facilitates buying and selling, particularly at long distances, by providing a yardstick with which to measure and describe significant variations in quality. It helps the producer to get the full price to which the particular grade of his product entitles him and thereby encourages the production of better grades. It provides the basis for merchandising contracts, price quotations, loans on products in storage, and sorting and packing by producers to meet market requirements. It also avoids frequent and costly arbitrations. The Government has recognized these values by creating the Office of Standardization in the Ministry of Economy and Commerce and starting an ambitious program of standardization. It has wisely given priority to export crops, which are important as a source of foreign exchange. It has also appropriately centralized the definition and administration of standards, since nation-wide uniformity is essential to confidence in the official grading system, particularly among foreign buyers.

The present program of standardization and inspection should be extended to all export farm products immediately, and to all major domestic farm products as rapidly as possible. Present standards for export products can be improved and brought closer to recognized world standards. The use of official standards should ultimately be made compulsory for all government agencies, commodity exchanges and cooperative unions. Their still wider use should be promoted through extension work in agricultural marketing and cooperation. There is an especially urgent need for a comprehensive pro-

gram of standardizing cotton, including the varieties of seed planted, ginning and packing techniques and the classification of fiber according to grade and length of staple. The lower grades of tobacco leaf, which face seriously contracting export markets, should also be further studied from this point of view. These changes will require a considerable expansion in both research and field personnel, a marked improvement in specialized training, and experience in foreign markets.

Market Information and Statistics

At the present time there is no marketing service in Turkey to collect and disseminate current information on production, prices, market receipts and demand, nor is there any research or extension work in the field of marketing farm products. As a result, producers, middlemen and Government alike lack essential knowledge about the market and price situation. If such information were generally and regularly available, many maladjustments in agricultural markets would tend to be corrected without the need for direct intervention by the Government.

The publicly regulated commodity exchanges are quite primitive and contribute little to the provision of market information. Transactions are usually individual bargains made on the basis of samples and personal inspection, not by competitive bidding on standard grades of product. Futures trading is almost nonexistent and prices on the exchanges have only a tenuous relation to prices on world markets. Price and quantity statistics on exchange transactions are averages and totals of commodities of uncertain and changing quality. They are of questionable value as sources of market information and, in any case, are not disseminated quickly or widely. While the exchanges are required to use the official metric system of weights and measures, much of the peasant population still uses familiar traditional units, thereby increasing the difficulties of gathering and communicating economic information.

An effective market information service is urgently needed. For maximum effectiveness, such a service should be closely tied in with the standardization program and with research

and extension work in agricultural marketing and prices. To achieve an effective coordinated service, we recommend the transfer of all agricultural marketing research, standardization and regulatory activities of the Ministry of Economy and Commerce to the Ministry of Agriculture. An Agricultural Marketing Service should be created in the Ministry of Agriculture to improve the standardization program in agricultural products; to collect and disseminate crop and livestock estimates and market supply, demand and price information; to forecast the economic outlook; to embrace all other statistical activities of the Ministry; and to assume all regulatory functions with regard to standardization of farm products and commodity exchanges. The ECA Mission under the direction of Dr. Charles Sarle, now in Turkey to render technical aid in statistics, could give invaluable assistance in creating this proposed organization. The Mission includes in its investment program an allocation of TL 1.5 million for the work of the proposed Agricultural Marketing Service in 1952 and a gradual increase in this sum to five to six million liras in 1956.

Agricultural Cooperation

The use of detailed and accurate market information could be encouraged and facilitated if producers more generally organized themselves into local cooperatives for the assembly, processing and sale of their major farm products. At the local level, producers are in sufficiently close contact so that, with proper encouragement and assistance, such local cooperatives could be readily organized. Turkey's approach has, however, been quite different. The Government has developed large-scale agricultural sales cooperatives and has maintained rigorous control over their management and finances.

The Government should not overlook the importance of building the cooperative movement from the bottom up, through a gradual educational process. An adequate research and extension program in marketing could do much to educate the peasants in the advantages and problems of local cooperative enterprises. It would appear particularly desirable to encourage local cooperative yogurt dairies and grist mills, community grain separators, livestock, poultry, and fruit

and vegetable shipping associations, and oilseed assembling and pressing plants. The result would be a more democratic and better managed cooperative movement. If, as a matter of natural growth and development, these local cooperatives federate into large-scale unions, such a movement should of course be welcomed. Educational and promotional activities in the field of farm cooperatives should be part of the Ministry of Agriculture's general program of marketing research and extension.

Grain Storage

Public grain storage policy, carried out by the Toprak Office, presents difficult problems. Recent crop records indicate that bread grain production fluctuates between 2.9 million and 5.6 million tons per year. Although some experts, both Turkish and foreign, believe that mechanization, extension of cultivation and improved yields can assure beyond doubt a crop sufficient for domestic needs and for some exports, it is the conviction of the Mission that Turkey must continue to expect fluctuations in the crop level because of the relative aridity of the area devoted to cereal culture and because of the highly variable weather conditions. While we do not predict a permanent feast-and-famine cycle, we believe that Turkey must expect occasional shortages as well as occasional surpluses. Grain storage policy should be geared to this situation.

If annual domestic production of bread cereals could be fully stabilized at the present average of 4.25 million tons and were all consumed in Turkey, per capita consumption (212 kilos per year) would still not exceed proper nutritional requirements and would decline as the population increases. Stabilization at this level could be attained by imports in years of short crops and exports in years of bumper crops, by the provision of sufficient domestic storage facilities to eliminate the necessity of imports or exports at any time, or by some combination of the two. The second possibility, assuming no further increase in cereal production, would require a minimum storage capacity of 1.5 million to 2.0 million tons, as compared with capacity of 0.6 million tons in prospect by 1954. Clearly, it is neither practicable nor economic for Turkey to provide the

amount of domestic storage facilities necessary for full stabilization. A considerable dependence upon imports and exports will therefore be necessary in any case. Until present levels of cereal production are considerably increased, moreover, any gain in foreign exchange derived from cereal exports is likely to be required at some later time to pay for necessary imports.

These considerations suggest that the present policies and responsibilities of the Toprak Office need to be reviewed with reference to two important problems: (1) Assuming that no further increase in storage capacity is feasible, how can capacity now in prospect be used to achieve the fullest practicable stabilization of cereal supplies? (2) How can cereal production be increased so that exports from average and bumper crops will result in permanent gains in foreign exchange, without deprivation of Turkish consumers? Both problems are closely related to cereal prices. They cannot be simultaneously solved by any storage policy. A storage program can stabilize prices only insofar as price fluctuations are caused by variations in yields. This it can do by stabilizing physical supplies without regard to price changes due to other factors. In addition to physical storage policy, Toprak has the responsibility for holding down consumer prices against general inflationary pressures and for encouraging increased cereal production. The first of these is more appropriately a problem to be dealt with by fiscal policy, the second (as we pointed out earlier) a problem to be overcome by general programs directed toward increasing agricultural productivity. If storage stocks must be manipulated in order to raise prices to producers or to lower prices to consumers, physical supplies may well become less rather than more stable.

It is therefore essential that Toprak's responsibilities in the cereal field be limited to operation of a storage program for stabilizing physical supplies. Even this problem is difficult. With the limited amount of present and prospective storage capacity, it is quite possible to fill or exhaust storage facilities in a single year, leaving no leeway for additional stabilizing operations if a second crop of the same large or small size should follow immediately. Consequently, if Tur-

key's storage program is to maximize the stabilization benefits of existing storage resources, the Toprak Office should ration its storage facilities. For example, it might take as its criterion of storage policy a five-year moving average, ending with the previous crop-year, of domestic cereal production. It might then specify that, in each year in which actual production exceeds (or falls short of) average production by more than 10 per cent, it will purchase (or sell) 33 per cent of the excess (or deficit). Such part of the remaining 67 per cent of the excess (or deficit) might then be exported (or imported) as the situation allows. While this would provide far from complete stabilization, it would maximize the benefits of such storage facilities as do exist.

In summary, we make the following recommendations concerning the marketing and storage of agricultural commodities:

- (1) In its general transportation program, the Government should recognize the importance of farm-to-market roads and improve the equipment, schedules and services for rail and coastal shipping of farm products.
- (2) The Government should expand and improve its present program of standardization and inspection of farm products with special attention to cotton and the lower grades of tobacco leaf. Major non-export farm products should be brought within the program.
- (3) The Government should create an Agricultural Marketing Service in the Ministry of Agriculture to collect and disseminate statistical information on current and prospective production, supplies, inventories, prices and consumption for all major products. This service should include all statistical activities of the Ministry of Agriculture and all regulatory functions relating to standardization of farm products and to commodity exchanges.
- (4) The Government should encourage the establishment of local producer-managed processing and marketing cooperatives.
- (5) The grain storage program should have but a single objective, the stabilization of physical supplies of cereals to the maximum extent permitted by storage facilities.

FORESTRY AND FISHERIES

Forestry

Turkey's forest resources are scarce. Although scrub growth is found in many parts of Turkey, the only existing forests of commercial importance are concentrated along the sea coasts. Even these forests have been threatened with devastation by nearby villagers who have cut trees indiscriminately for sale or fuel and have grazed their livestock, especially goats, without adequate restraints. Where these forest lands have been denuded soil erosion is a major problem, because of the high rainfall, steep slopes and shallow soils characteristic of the coastal mountain ranges.

The Turkish Forestry Service has had control over the felling and marketing of timber only since 1937. Only since 1944, when all private forests were nationalized, has it controlled inspection, planting and tending as well. At present, the Forestry Service has full powers to institute measures for the protection, rational utilization and reforestation of all Turkish forest lands. It should be given encouragement and financial support. To return the exploitation of commercial forests to private enterprises would be both improvident and unwise.

Fisheries

Turkey's fishing industry, centered in Istanbul, is supported by migratory fish, particularly bonito, tunny, mackerel, swordfish, herring and sardines. About two thirds of the annual catch is made during the migratory periods. Of some 500,000 tons of fish estimated to pass annually through the Straits, only 6,000 to 8,000 tons have been landed annually at Istanbul in recent years. This may be compared with an annual average of 29,000 tons in 1939-41. The estimated total fish catch for all of Turkey fell from a peak of 75,000 tons in 1938 to about 20,000 tons in 1948.

Not more than a third of the annual catch is consumed in Turkey. This is due partly to the lack of refrigerated trucks and railway cars, which prevents delivery to the interior, and

partly to the lack of interest in fish for food among inlanders. The remainder of the catch is exported in salted, canned, dried or fresh form. In certain prewar years, Italy took as much as 30,000 tons of fresh frozen bonito and Greece 6,000 to 8,000 tons. Since then the increase in Turkish export prices and the development of the Italian and Greek fishing industries have reduced these exports sharply. Although Bulgaria, Czechoslovakia, Germany and Italy formerly took some exports of salted fish, the Middle Eastern countries are now the principal markets.

Turkey's facilities for catching, handling and processing fish are very limited. The fishing fleets are still primitive, using motor equipment only to tow small open boats to the fishing grounds. These open boats, manned by oars, operate in pairs with a small net or purse-seine between them. Lacking modern equipment, the Istanbul fishing fleets have an effective range of operations of not more than 20 miles. Hence fishermen must wait for the fish to pass their way instead of seeking them out at longer distances. The fishing season is thus shorter than need be and deep-sea fishing is possible only on a very small scale.

In Istanbul, fishing fleets usually sell their catch to retailers at auction in the municipally-controlled central fish market. The market is often glutted, resulting in low prices and much waste, and at times fish are thrown back into the sea. The fishing industry has been handicapped because of inadequate cold storage, freezing and processing facilities ashore. It has also lacked vessels with enough freezer storage space for exporting fresh fish to neighboring countries.

In 1949 the Turkish Government submitted to the Organization for European Economic Cooperation (OEEC) an ambitious plan for developing the fishing industry with ECA aid. This plan was estimated to require TL 75 million in foreign exchange and TL 28 million in local currency over a three-year period. Only a small fraction of this program was approved. During 1949-50, ECA allotted seven million liras in drawing rights for 48 fishing boats, 12 refrigerated transport boats up to 40 tons, five cold-storage plants in Istanbul

and three Black Sea ports, and a canning plant in Istanbul. The Government is also planning a biological survey of Turkish fishing grounds which should be carried out promptly. Administration of the new fisheries program has been assigned to the Toprak Office, which placed orders for German and Danish fishing and transport equipment during 1950. This equipment will be sold to private fleet operators on a 10-year installment plan. According to present plans, Toprak will itself operate the cold storage and processing plants, against the wishes of leading private operators in the industry.

These investments in the fishing industry appear to be a worth while experiment. The amounts involved thus far have been sufficiently modest to have been justified without awaiting the completion of the proposed biological survey. Further investments should certainly await the results of this survey, for until now there have been only informed guesses as to the extent and location of Turkey's fish resources. The findings of a scientific investigation should throw valuable light on the types of equipment, size of vessels and location of processing facilities which should be given priority in any additional program of development of the fishing industry.

There should also be a more thorough study and realistic appraisal of the export prospects for Turkish fish. ECA assistance to the Greek and Italian fishing industries may make complete recovery of Turkey's prewar market for fish difficult or impossible. The development of the Turkish domestic market should not be overlooked. As cold storage and transportation facilities are improved, it may become possible to deliver fish to interior points at prices within the reach of the masses of the people. Every effort should be made to promote domestic consumption of fish as a means of improving the Turkish diet.

If the biological and market surveys both support present optimistic estimates of prospects for an expanded Turkish fishing industry, a cautious expansion of investment in this field should follow. In the process, however, the Turkish Government should encourage private enterprise to develop additional storage and processing facilities.

In summary, we recommend that:

- (1) The Forestry Service should be given full support and adequate financial backing in its program for the protection, rational utilization and reforestation of all Turkish forest lands.
- (2) In the national interest, the Government should retain control of all forest resources.
- (3) The present program for expanding the fishing industry should be carried out but further expansion should await completion of the proposed biological survey which should be carried out promptly. In the meantime, a market survey should be undertaken to appraise the export prospects of Turkish fish and efforts should be made to promote domestic fish consumption.

CHAPTER VI

Industry and Mining

This Chapter reviews the present status of industry and mining and makes recommendations as to investment priorities and other aspects of industrial and mining operations. These recommendations are designed to help the Government not only in planning its own program in these fields but in formulating economic and financial policies affecting private industrial investment. The organization and function of state enterprises, which at present carry on a large part of all industrial and mining activities in the country, are considered later, in Chapter VIII, as is also the role of the State in promoting productive private investment.

INDUSTRY

Present Plant and Production

While Turkish industrial resources are still limited in scope, in the aggregate they are of considerable importance. Since Turkey has never had a complete census of manufactures, our survey of these resources must necessarily be rather general.

The principal heavy-goods industries are iron and steel, metalworking, cement, building materials and chemicals, most of them established under the first five-year plan for industrialization, begun in 1934. Apart from three private bar mills and some small foundries and forges, the entire *iron and steel industry* is operated by the Government itself. The Karabük Iron and Steel Plant includes 42 coke ovens of 300,000 tons annual capacity; two blast furnaces with a combined capacity of 300,000 tons, an open-hearth section with a total capacity of 150,000 tons of ingots, three rolling mills and one plate mill with an annual capacity of 110,000 tons of steel products, and a cast iron pipe factory of 12,000 tons capacity. In addition, the military factory at Kırıkkale has two small open-hearth furnaces and a small electric furnace, an iron foundry, a forge shop and two rolling mills.

The *metalworking* industries are entirely private. Their principal products are iron and steel wire, tools, stoves and an indeterminate amount of other products, both machine and hand-worked.

There are five *cement* factories in Turkey, with a total capacity of about 400,000 tons, of which 28 per cent is in state-owned plants at Sivas and Ankara and the remaining 72 per cent in three privately-owned plants in the İstanbul area. The *brick and tile* industry is largely in private hands, centered in nine factories in Eskişehir with a total annual production of about 30 million bricks and tiles. There are also some private brickyards in İstanbul. State owned plants at Sivas and Kütahya produce about seven million pieces per year while a state plant at Zonguldak has a capacity of 2.4 million. The state firebrick factory at Filyos has an annual capacity of 10,000 tons of refractory bricks and 1,000 tons of mortar.

The principal heavy *chemical products* produced in Turkey are sulphuric acid, superphosphate and coke by-products. Production of sulphuric acid and superphosphate is confined to the state-owned plant at Karabük which has an annual capacity of about 18,000 tons of acid and 16,000 tons of fertilizer.

Among Turkey's major consumer goods industries are textiles, paper, leather and shoes, sugar, tobacco, alcoholic beverages and various food processing industries. In the *cotton textiles* industry, it is estimated that there are 325,000 spindles and 5,700 looms (excluding an estimated 40,000 domestic hand looms). Of these, state factories account for about 46 per cent. Generally, the state plants have more modern equipment than the private plants. In *woolen textile* manufacturing, the state factories, with about 30,000 spindles and 500 looms, have 50 to 60 per cent of total present capacity and plan to increase that capacity substantially. About 10 per cent of existing capacity is for carpet manufacturing. A considerable number of small, privately owned *silk* factories operate in Bursa. In addition, the state owns a *rayon* factory, producing about 300 tons of yarn annually.

Turkish *cotton ginning* is in a primitive state. While there are a few modern, efficient saw gins in the İzmir and Adana

areas, most cotton is ginned in scores of small roller gins, which require much hand labor. Many gins lack bale presses, so that soft bales of less than 100 kilograms are frequently produced and have to be re-pressed into standard bales before export.

The state *paper* factories at Izmit have an annual capacity of 22,000 tons of paper and cardboard.

The majority of *shoes* in Turkey are still produced by hand. The state operates one large leather tannery and shoe factory near Istanbul, with an annual capacity of 800,000 to 900,000 pairs as compared with annual shoe consumption of some 10 million pairs. There are a number of private tanneries in Turkey but no private leather shoe factories. Two private manufacturers of rubber footwear, producing over a million pairs annually, are located in Istanbul.

Sugar, alcoholic beverages, tobacco products, salt and matches are all produced or controlled by state monopolies. The four state *sugar* factories have a total annual capacity of about 120,000 tons of refined sugar and 6,000 tons of unrefined alcohol. Plants of the state *alcohol* monopoly have a capacity of some 20 million liters of beer, four million liters of wine, four million liters of raki and other hard liquors and four million liters of industrial alcohol. The state monopolies are also equipped to produce about 18,000 tons of *tobacco products*, 270,000 tons of *salt* and 60,000 crates of *matches* a year.

Except for sugar and alcoholic beverages, the food processing industries are largely in private hands. The largest such industry in Turkey is *flour-milling*. Both Istanbul and Eskişehir are large milling centers, the latter having three large mills with a total daily capacity of 250 tons, the former probably producing 300 to 500 tons of flour per day. Most of the rural population depends upon small-scale private grist mills, using crude, water-driven millstones. Although still far from fully developed, the *vegetable oils* industry is already of some importance. Olives, cotton, sesame, poppy, flax, sunflower and tobacco seeds are all available raw materials. The extraction of crude oils is usually carried on in hundreds of small privately-owned

local presses of the most primitive design. Except for that part consumed locally, the crude oil is shipped to a few large refineries in the Izmir, Istanbul and Adana areas. Estimated total production of vegetable oils is around 70,000 tons to 80,000 tons. At the present time, the sole hydrogenation plant, located at Izmir, manufactures annually 2,500 tons of vegetable shortening and 1,000 tons of soap, about one third of total domestic production. Another private plant to manufacture margarine and ghee butter will soon be established in Thrace.

Up to now, the Turkish *meat packing* industry has been almost wholly undeveloped. Even the most modern slaughter houses are highly uneconomic in their use of labor and waste large amounts of by-products. ECA has under consideration a program to assist in the financing of several large modern meat packing plants as part of a large program projected by the Government. The *milk processing* industry is in a very backward condition. There are no pasteurizing plants in Istanbul. Factory production of milk products is limited to a considerable number of private yogurt plants, which also produce small amounts of butter, and two private dried milk plants which supply a relatively low-quality, roller-dried product for the domestic chocolate industry. One of these plants also produces a wide variety of packaged cheeses in relatively small quantities.

Despite Turkey's great variety of fruits and vegetables, the *canning, preservation and juice extraction* industries are poorly developed. Handicapped by the high cost of sugar and tin cans, which are manufactured by hand in each local processing plant, the Turkish canning industry consists of a small number of small-scale, relatively primitive plants. *Fish processing* operations are also very limited, with less than 1,000 tons of cold storage capacity, a dozen small canning plants with daily capacities of one and a half to 10.0 tons each, 14 very small salting establishments and a considerable number of primitive drying operations. Cold storage facilities in five Turkish ports and a canning plant in Istanbul, all assisted by ECA financing, are now under construction.

The *wood products* industry, wholly in private hands, produces considerable quantities of plywood veneer, light and heavy plywood and fibre wall plates. Much of the plywood production is exported. The manufacture of furniture is confined to small handicraft shops. A small amount of *window glass* is manufactured by private plants. There are several private *blown-glass* products factories, most of which were established during World War II and merely reprocess broken bottles. The only such plant which uses basic raw materials for glass making is the Paşabahçe factory owned by the İş Bank. Prior to the war this plant enjoyed a monopoly position in the İstanbul area. It produces around 10,000 tons of glass per year. About 600 tons of decorative *pottery* are produced in Kütahya and İstanbul.

As even this cursory review shows, state-owned industrial enterprises constitute a major portion of the total industrial resources. Most of those enterprises have been created since the inauguration, in 1934, of Turkey's first five-year plan, which called for the development of the textile, iron and steel, coke, chemical, glass and sugar industries. Subsequent plans provided for the expansion of existing government factories and the development of new industries, particularly cement, ceramics and rayon. The Government has also engaged in industrial production through the Monopolies Administration which processes tobacco and produces alcoholic drinks, salt, matches and other products. Another group of state-owned factories, operated until recently by the Ministry of National Defense, is now managed by the Machine and Chemical Industries.

The bulk of the Government's investment in industry has been channelled through the Sümerbank. Recent increases in the output of the Sümerbank industries, which have in some cases been spectacular, are shown in Table VI.

Marketing

The distribution and sale of merchandise are still in an elementary stage of development, largely because of the low level of income and hence of purchasing power, the high rate of illiteracy, the remote location of most of the population

TABLE VI
PRODUCTION OF CERTAIN COMMODITIES BY SÜMERBANK INDUSTRIES,
1943 TO 1949

Commodity	Unit	1943	1944	1945	1946	1947	1948	1949
Cotton yarn	1000 Tons	9.1	13.9	10.4	14.7	14.4	14.2	15.1
Wool yarn	"	3.8	3.9	3.8	3.8	3.8	4.1	4.6
Cotton cloth	Million Meters	52.4	69.3	60.9	82.1	93.0	92.0	93.3
Wool cloth	"	3.4	4.3	5.0	5.2	5.4	5.1	5.0
Coke	1000 Tons	183.0	208.6	227.3	262.2	260.1	270.7	292.4
Pig iron	"	55.3	69.8	70.2	77.9	99.0	102.0	112.7
Steel ingots	"	42.7	60.8	63.5	79.9	92.6	101.2	101.0
Finished steel	"	36.0	42.8	85.8	105.5	71.0	n.a.	n.a.
Iron pipe	"	6.2	7.8	4.7	4.6	6.5	7.4	11.0
Leather	"	1.7	2.0	2.0	1.4	1.8	1.8	1.6
Shoes	Million Pairs	1.1	0.9	0.8	0.7	0.7	0.9	0.8
Paper	1000 Tons	10.3	12.5	11.2	17.3*	20.2*	20.0*	19.2*
Cement (Sivas only)	"	26.2	74.7	62.6	74.4	102.4	92.2	100.0
Brick	Million Pieces	0.8	1.1	2.3	2.4	2.6	3.1	3.1
Tile	"	1.0	1.5	1.3	2.4	2.9	3.9	3.6
Rayon	Tons	109	240	262	298	308	287	282

* Includes cardboard.
Source: Sümerbank.

and the absence of large, mass-production industries. The prospective volume of sales is too small to permit the establishment of well-organized, large-scale and integrated sales and service organizations. Tax and labor laws have imposed additional artificial barriers to the creation of large distribution units. At almost every stage of production and distribution operations are small in scale, middlemen are numerous and high margins are relied on to offset low turnover.

There has as yet been little or no integration of the manufacturing and distributing functions, by which some of the economies of larger-scale distribution might be realized. Public enterprises have made some efforts in this direction, but their emphasis has been on production rather than distribution and they have been relatively insensitive to the changing demands, tastes and needs of consumers. Advertising and other methods of sales promotion, market research, the use of trade-marks and brands, efficient and attractive packaging, and a flexible price policy are notably lacking. State enterprises show no greater ingenuity in marketing their products than do private firms. The fact that producers are slow in adapting their production to the demands of consumers is one reason for the prevalence of large and uneconomical inventories of goods.

Although private firms still predominate in Turkish trade, the State has considerably increased its activities in this field in recent years. The State has intervened in part to sell the products of state factories. In most cases these products have been sold to industrial users or to wholesalers. In the case of textiles and shoes, however, the Sümerbank has undertaken sales direct to consumers and for this purpose has set up chains of stores. By the establishment of the Petrol Office, the State has engaged in petroleum distribution. The Toprak Office, whose operations were originally limited to the handling of cereals and flour milling, has grown tremendously until it may now buy, store, process and sell most vegetable and animal products. It is now also in charge of the development of the ECA-sponsored processing and cold storage plants for meats and fish.

Priorities for Industrial Investment

Industry as a whole will naturally claim a large share of any Turkish development program. Before such a program can be laid out, however, we need to establish the relative claims of the various industries to such investment funds as may be available. On the basis of the general principles stated in the Introduction to Part Two, the Mission recommends the following as the most promising fields for development or expansion:

- (1) Processing of agricultural products, especially food processing and cotton ginning;
- (2) Light machinery, tool and metalworking industries such as foundries and galvanizing plants, stove making, simple pumps, plows, hammers and saws;
- (3) Building materials such as cement, brick, tile and glass;
- (4) Leather working and shoes;
- (5) Woodworking industries to make furniture, veneer and plywoods;
- (6) Light chemical industries to make the simple pharmaceuticals, vaccines and serum, soap, insecticides and the like;
- (7) Ceramics and pottery;
- (8) Village handicraft industries.

Textiles would ordinarily appear in a list of this kind. The cotton textiles industry is almost ideal for development in Turkey and it has in fact been developed to a very considerable extent. In this, Turkey has made a very judicious use of available resources. Textiles have not, however, been included in our list because of the possibility that with the projects now under way, the industry has for the time being already been expanded far enough, especially in cotton textiles. A careful survey is required to determine whether additional textile capacity is a priority need. In any case, more attention should be given to the production of low-priced staple and basic materials, leaving the finer and luxury products to be imported. With concentrated research a method for using native wool in making staple and economical clothing can probably be found.

Food processing should be developed gradually, with emphasis on processing perishable foods, using simple methods and supplying basic, staple goods at prices within the reach of low-income families. Milk processing facilities, especially pasteurization plants, are urgently needed in all the larger cities. More expensive processing should be undertaken only for goods which can be profitably exported and only after careful study of the prospective stability of demand.

The light machinery, tool and metalworking industries offer great possibilities if producers will use ingenuity in devising products suited to the Turkish market. A practicable metal plow, for example, simple and cheap enough to displace the peasant's wooden stick, might find a wide market and work a minor revolution in Turkish agriculture if the extension service could get it accepted by the farmer. The same might be true of a simple grain separator to replace the sled used at present. Many more modern cotton gins also are needed. Iron and steel production should be adapted to insure a supply of the right kind of material for these metal-using industries.

The leather and shoe industry is well suited for development in Turkey. Thus far, the state-owned shoe factory is the only large producer of shoes in the country. The principal need is for simple, substantial and inexpensive shoes for the peasants. In addition to new capacity, research to improve the quality and treatment of native hides should make it possible to reduce imports of leather from Europe.

More building materials, especially window glass, are needed. Here again, emphasis should be put on the production of simple and economical materials. We have excluded heavy or complicated products from the chemical industries appropriate to Turkey. We suggest one possible exception, however. Agricultural development will create a large demand for chemical fertilizers, especially phosphates. Some of the raw materials exist in Turkey and some fertilizers are already being produced. The Government should undertake a special study to see if it is feasible to produce an adequate supply of such fertilizers in Turkey at economic prices. If it is, this field warrants investment.

Although the industries we have cited are generally suitable for development, we do not mean to imply that they should all be developed at once on a large scale. Generally, growth should be gradual so that workers can be trained and techniques and practices can be mastered and adapted to the special conditions prevailing in Turkey. In many cases, the growth of one industry will have to be coordinated with the development of related industries.

The priorities suggested above indicate also the industries which should not be developed in Turkey at present. The more important ones are:

- (1) Luxury goods of all kinds;
- (2) Heavy machinery and metalworking industries;
- (3) Heavy chemical industries;
- (4) Cellulose and paper.

In each of these cases either domestic raw materials are unavailable, necessary skills are lacking, capital requirements are high, there is no substantial demand for the product or some combination of these factors is present. In most cases, it will probably be desirable to retain any existing capacity in these industries and to make the most economical use of it, since the equipment is not likely to be readily adaptable to other uses. It may even be necessary and desirable to make further limited investments in order to utilize existing equipment efficiently. Thus, with ECA help, the Sümerbank is investing some TL 19 million at Karabük for a new sintering plant, new coke ovens and changes in a rolling mill. Moreover, if any industry in this list is regarded as essential to national security the Government may decide to maintain it and subsidize it despite its uneconomical nature. If so, however, it should be done explicitly and with a clear understanding that resources are being diverted from productive to security purposes.

Current Investment Programs

Public enterprises alone invested about TL 38 million in industry in 1949. For 1950 and 1951, their investments are estimated at about TL 84 million each year. No reliable data are available on private industrial investment, but it has

probably varied between TL 25 million and TL 40 million annually, making a grand total of TL 110 million to TL 125 million.

Since only partial and unreliable data are available on the plans of private enterprise, our review of current investment commitments is necessarily limited to state enterprises. Some of the commitments of the latter, because of their advanced nature, must be accepted as part of the Mission's program; others, not so far advanced, may be reappraised as to their desirability.

Since the war, investment programs have been formulated for all the major government-owned industries. These programs, however, have been in a constant state of change. Although their time schedules are frequently indefinite and many cost estimates are very tentative, the projects included within these programs indicate the areas and extent of current planning.

Table VII shows the Sümerbank's postwar investment program, totalling TL 173.5 million, as reported at the end of June 1950. Many of the projects are already completed, only TL 66.2 million being required for financing from 1951 on. The Sümerbank program is heavily concentrated in textiles. Including power plants for textile factories, postwar Sümerbank investments in this field amount to TL 104.8 million. Of this sum, TL 64.4 million represent investments in cotton textiles, TL 27.8 million in woolens and TL 12.6 million in hemp and rayon.

The paper factories at Izmit are also being expanded to a considerable extent, as is the Sivas cement factory. The new firebrick factory at Filyos is virtually completed. Three projects for the Karabük steel mill are being undertaken with ECA assistance.

The Monopolies Administration also has several investment projects in process. These include expansion of the Istanbul Brewery at a total cost of TL 7.5 million and salt extraction plants at Çamaltı and Yavşan, which are being erected with ECA assistance. Their cost is estimated at TL

TABLE VII
 POSTWAR INDUSTRIAL INVESTMENT PROGRAM OF THE SÜMERBANK
 AS OF JUNE 30, 1950*
 (Thousands of Liras)

Project	Total Estimated Cost	Already Spent by End 1949	Allocations for 1950	Remaining to be Allocated
Extension of Bakırköy cotton textile factory	10,102	8,971	1,131	—
İzmir cotton textiles combine.....	30,000	3,668	10,971	15,361
Extension of Ereğli cotton spinning factory	4,048	1,718	1,224	1,106
Denizli cotton spinning factory..	7,289	267	1,345	5,677
Erzincan cotton spinning factory	8,605	228	1,708	6,669
Turbine for Nazilli cotton textile factory	532	378	154	—
Derme power plant (Malatya cotton textile factory).....	3,786	3,596	190	—
Extension of Merinos woolen textile factory	26,816	3,053	11,325	12,438
Extension of Hereke woolen textile factory	1,016	328	688	—
Extension of Gemlik rayon plant	6,995	5,647	840	505
Taşköprü hemp processing factory	5,650	993	2,532	2,125
Extension of cellulose and paper industry	25,047	11,573	8,225	5,249
Extension of Sivas cement factory	5,867	1,577	3,256	1,034
Filyos firebrick factory.....	10,950	10,939	11	—
Chemical industry study.....	309	9	—	300
Machine industry study.....	1,122	822	—	300
Diyarbakır felt factory.....	6,256	222	1,400	4,634
Reorganization and extension of Karabük rolling mill.....	4,500	—	1,000	3,500
Extension of Karabük coke ovens	8,781	—	4,555	4,226
Karabük sintering plant.....	5,857	—	2,831	3,026
Total	173,525	53,989	53,386	66,150

* See explanation in text page 101 concerning time period and reliability of data.

Source: Sümerbank.

4.2 million in foreign exchange and TL 5.5 million in domestic expenditures.

Public Information and Research

As in the case of agriculture, it is both necessary and appropriate that the State provide for industry and commerce those basic informational services and facilities that are essential to effective operation of a private competitive system. This includes reliable and comprehensive information on current economic conditions and prospects and on developments in production methods and marketing techniques. It also includes price-reporting, grading and standardization services.

We recommend, therefore, that an Industrial Marketing Division be created in the Ministry of Economy and Commerce. Foreign technical assistance would be helpful in its establishment. This organization should conduct research and publish statistics on marketing channels, prices, terms of trade and costs of industrial products. It should make general surveys of domestic and export markets, sales opportunities and consumer preferences, and promote improved quality control in manufacturing. It should serve as a clearing house through which information about marketing practices and pricing techniques, particularly those followed in more advanced countries, could be made readily available to domestic manufacturers and distributors. Finally, it should develop means of preventing adulteration and mislabelling, in order that the consumer may be better informed and the honest manufacturer protected against unfair competition.

Price and Inventory Policies

In both state and private industry, manufacturers' inventories of finished products are often maintained at a high level. In state industry, an important cause of recent accumulation of inventories has been the setting of prices at such a high level as to retard sales. With the increased availability of imported goods since the war, sales of state factories have fallen off and their inventories have mounted at a rapid rate. For example, stocks of steel products have accumulated at Karabük, because the delivered price of Sümerbank steel at

Istanbul was, until recently, higher than that of imported steel. The situation is aggravated by inefficiency in marketing operations, high administrative costs, the cost of social services and a psychological attitude common among managers of state enterprises, which prefers a stock of goods to a book-keeping entry in the ledger of a state-owned holding company.

Other factors are also involved in the price policies of state enterprises. For example, prices of state textile products have been artificially maintained at high levels to provide the large profits required to finance other operations or investments. The price of domestic coal, on the other hand, has been kept below cost of production, with the Government subsidizing the loss.

No satisfactory production, inventory and price policies can be established for the products and services of state enterprises without a clear definition of the basic purpose to be achieved. The Mission believes that the fundamental aim of the Government in this respect should be to adapt its production to consumer needs and to sell the products of its industries at the lowest price consistent with efficient business operation. Given this principle, it follows that the prices of goods produced by state factories should relate closely to their costs of production. The Government should consider an exceptionally high rate of return in any given enterprise as an indication that prices and profits should be reduced and supplies increased by expanded production or imports. Conversely, as a general rule, an abnormally low rate of return in a particular enterprise should be taken to indicate the desirability of curtailing its operations, instead of subsidizing its losses from more profitable enterprises. Abnormally high-priced goods and goods produced merely for inventory or for inventory speculation represent a partial waste of resources. Possible exceptions to the general rule are industries important to defense and commodities, such as tobacco and alcoholic beverages, produced largely for revenue. Such exceptions should be conscious and deliberate.

In the light of the general criteria for investment priorities, the Mission recommends, in summary, that:

- (1) The most promising fields for industrial development or expansion are, in order of importance: (a) processing of agricultural products; (b) light machinery, metal and tool industries; (c) building materials; (d) leather working; (e) woodworking; (f) light chemicals; (g) ceramics and pottery; and (h) village handicrafts.
- (2) Though textiles would ordinarily appear in such a list as this, the Government should make a careful survey to determine the priority of need for additional capacity before sanctioning new investments in this field.
- (3) Industries producing luxury goods of all kinds, heavy machinery and metal products, heavy chemicals (with the possible exception of fertilizers), cellulose and paper should not be developed at the present time.
- (4) A study should be made to determine whether chemical fertilizers, especially phosphates, can be produced in significant quantities at economic prices. If so, investment in this field would be warranted.
- (5) The Government should adopt these priorities in planning its own industrial investments and in formulating economic and financial policies affecting private industrial investment.
- (6) The Government should review its current industrial investment program in the light of these recommendations and, where feasible, make adjustments accordingly.
- (7) An Industrial Marketing Division should be established in the Ministry of Economy and Commerce to provide the public research and information services essential to both state and private enterprise.
- (8) As a general principle, production of state enterprises should be adapted to consumer needs and their goods and services sold at the lowest prices consistent with efficient business operation. Prices should thus be closely related to costs, and production and inventories should be related to consumer demand.

MINING

Current Production

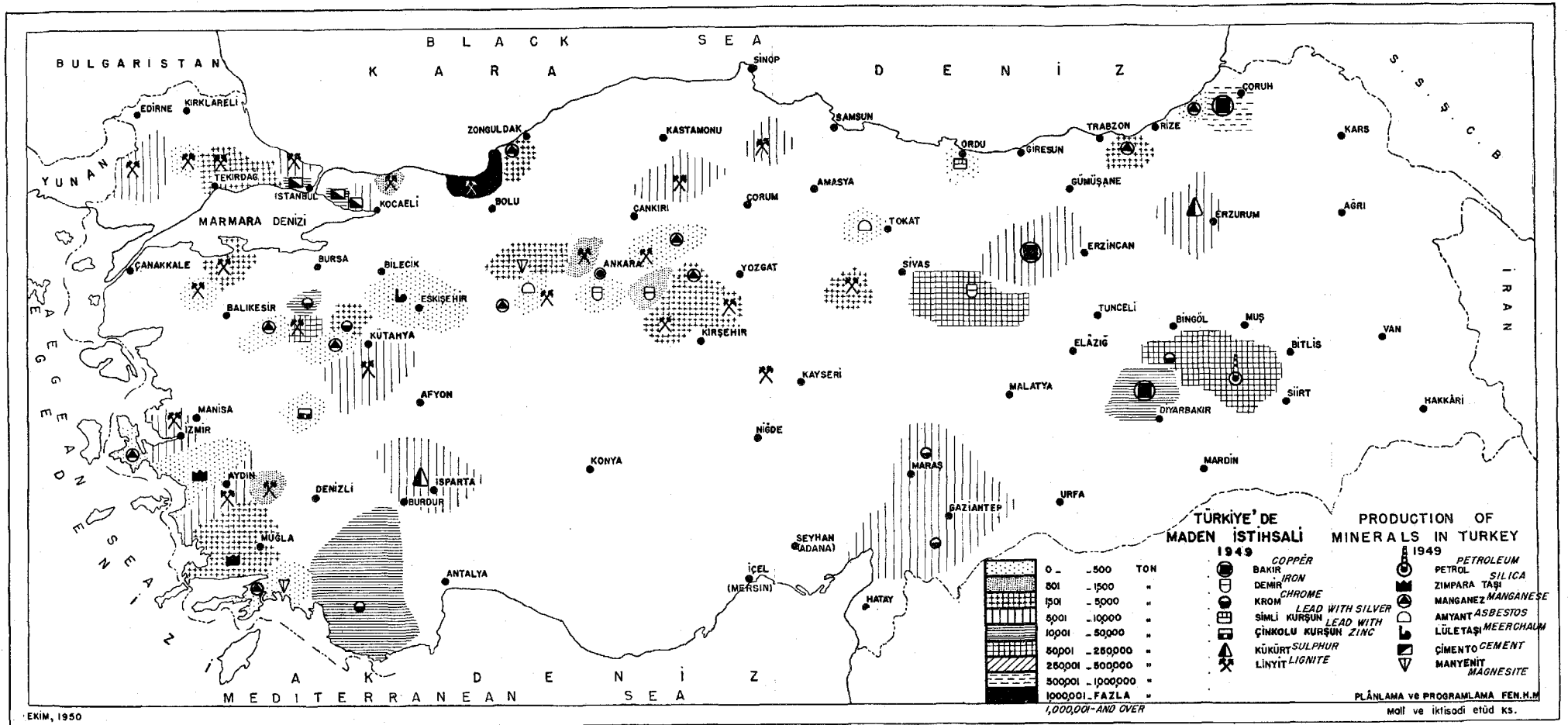
The principal minerals known to be present in Turkey are coal, lignite, chrome, iron, salt and copper. The proven reserves of bituminous coal are believed to be 500 million tons; of sub-bituminous coal, over 125 million tons; and of lignite, very

large. Reserves of iron are estimated to be over 40 million tons; of chrome, several million tons; and of sulphur, about one million tons. Other minerals present in varying amounts and being mined at present include manganese, mercury, antimony, asbestos, magnesite, boracite, emery and meerschaut. Spasmodic production of gold, silver and fuller's earth has taken place over the years.

Except for coal, lignite, chrome, iron and salt, mineral production is relatively insignificant, as is shown in Table VIII. The output of coal has risen from 2.5 million tons in 1937 to over four million tons. Production of sub-bituminous coal and lignite has increased spectacularly from 158,000 tons in 1938 to 1.3 million tons in 1949. Chrome ore production has varied over a wide range in accordance with foreign demand. In 1949 it reached an all-time peak of 433,000 tons. Production of blister copper has in recent years been in the vicinity of 10,000 to 11,500 tons. Production of salt by evaporation from the sea and by extraction from the great Salt Lake (Tuz Gölü) has been a commercially profitable undertaking. Output varies but in recent years it has exceeded 250,000 tons annually.

Although petroleum prospecting has been emphasized in recent years at the expense of general geological survey work, no significant amount of oil has yet been found in Turkey. One small state-operated field in the southeast has been producing from 50 to 60 tons of crude oil a day since 1946. It is estimated that this field has proven reserves of 23 million tons, with a possible reserve of as much as 55 million tons. Because the quality is poor, asphalt and diesel oil are the principal derivatives rather than gasoline, kerosene and motor oil. In the Adana area, surface seepage has raised hopes of finding large oil deposits similar to those in other Near East countries, but exploratory drilling has thus far been wholly unsuccessful.

The State is the largest producer of minerals. In part its operations are a continuation of the foreign concessions which were bought out by the Government after the establishment of the Republic. The remainder are new exploitations, begun by the Government following the inauguration, in 1937, of the second five-year plan, which emphasized mineral and power



EKİM, 1950

TABLE VIII
 PRODUCTION OF PRINCIPAL MINERALS, 1938 TO 1949
 (Thousands of Tons)

	Coal (Un- washed)	Sub-Bitu- minous Coal and Lignite	Iron Ore	Chrome Ore	Salt	Blister Copper	Sulphur	Manganese	Boracite	Emery
1938.....	2,589	158	73	287	n.a.	2.3	3.8	2.2	4.1	8.5
1939.....	2,696	185	231	282	240	6.7	1.1	0.5	15.2	10.0
1940.....	3,019	229	130	170	234	8.8	3.7	0.5	5.3	8.6
1941.....	3,020	301	61	136	251	10.5	2.2	1.4	2.2	5.1
1942.....	2,510	390	19	116	241	8.3	2.7	3.4	n.a.	9.3
1943.....	3,166	625	92	155	266	9.7	3.4	2.7	n.a.	7.8
1944.....	3,560	764	90	182	257	11.0	3.4	1.9	n.a.	0.1
1945.....	3,720	725	126	147	254*	9.8	4.2	5.1	5.0	2.2
1946.....	3,831	604	112	103	206	10.0	3.0	2.4	2.2	8.5
1947.....	3,946	840	149	157	276	10.1	2.7	5.8	3.6	11.8
1948.....	4,023	1,010	192	285	263	11.0	2.6	8.3	5.3	7.9
1949.....	4,183	1,259	211	433	n.a.	11.3	3.1	25.0	7.1	8.9

* Seven months only.

Source: Central Statistical Office.

production. All state mining operations are the responsibility of the government-owned Etibank, which is the sole producer of bituminous and sub-bituminous coal, iron, copper, sulphur and petroleum and the principal producer of chrome and brown lignite.

The mines operated by the Etibank are generally located in remote parts of Anatolia. Their development has been costly, in many cases requiring heavy capital investment in equipment and in power facilities. Transportation of ores is expensive, both from the mine face to shipping points and from the mining areas to ports or markets. Living and working conditions in the mining regions are rigorous and charges for social services to workers are high.

The Zonguldak coal mines constitute the Etibank's largest operation; indeed, they are the largest single industrial or mining project in all of Turkey. As a result of the Government's deliberate policy of keeping the selling price of Zonguldak coal well below the cost of production, the coal company has lost from TL 10 million to TL 20 million annually in recent years; these losses have usually been covered by transfers from other Etibank activities. The efficiency of Zonguldak operations has suffered as a consequence. The management of an industrial operation is not led to efficient and economic practices if its products are to be sold at a price below their cost of production and its losses are to be reimbursed by the Government. The complicated financial maneuvering that has sometimes been necessary in order to reimburse both the mine and the Etibank for losses on coal sales has impeded the establishment of well-organized financial procedures in the coal company. For example, some losses have not yet been funded outright but are covered by loans to the coal company from the Etibank. Finally, the policy of subsidizing Zonguldak coal may well have discouraged the exploitation of both coal and lignite deposits elsewhere.

Private mining is limited to small enterprises scattered throughout the country. Private companies mine chrome, manganese, emery, boracite, meerschaum and lignite, as well as small amounts of other minerals. Lack of transportation

facilities, shortage of capital and the small-scale nature of Turkish mineral deposits are limiting factors. Moreover, under Turkish law private prospecting is an unusually risky business. An exploration permit can be readily obtained from the Government but the permit authorizes only limited amounts of ore to be mined and for only a short time. The holder must then apply for an exploitation permit, which he has no assurance of receiving. In the past the State has frequently refused to license exploitation of a deposit by its discoverer.

Current Investment Programs

In the past few years the Government has made large investments in mining, totalling TL 65 million to TL 80 million annually, and a large part of recent foreign borrowings has been channelled into mining. Table IX shows the Etibank mining investment program for the postwar period, totalling TL 368.9 million. Resources have been concentrated on the production of fuels to meet growing residential and industrial requirements, the production of chrome, copper and manganese for export to dollar areas, and on drilling for petroleum in an effort to develop an oil supply.

Large parts of the Zonguldak coal, western sub-bituminous coal and Divriği iron projects are being financed by ECA. The development program now under way at Zonguldak will cost TL 275 million when completed and is probably the largest investment project ever undertaken in Turkey. Its planning has been an exceptional accomplishment. Basic research for this program was originally carried out by Turkish engineers and later coordinated with studies of foreign specialists. Two of the most serious problems in production of coal at Zonguldak are inadequate washery and transportation facilities. They will be ameliorated when the new installations are completed and in operation. The new equipment will be complex, however, and employees will need careful training to enable them to operate it efficiently. Coal production in this area is expected to reach five million tons in 1953. There are plans for further development after 1953 to raise production to 7.5 million tons by 1957, but these should definitely not be undertaken until the results of present projects can be appraised.

TABLE IX
 POSTWAR MINING INVESTMENT PROGRAM OF THE
 ETIBANK AS OF JUNE 30, 1950*
 (Thousands of Liras)

Project	Total Estimated Cost	Already Spent by 1949	Allocations for 1950	Remaining To Be Allocated
Ereğli (Zonguldak) coal mines	276,856	66,031	35,883	174,942
Western sub-bituminous coal mines	31,084	10,216	15,345	6,523
Divriği iron mines.....	7,338	3,680	2,773	885
Guleman chrome mines....	4,232	2,871	802	559
Keçiborlu sulphur mines..	3,026	181	200	2,645
Ergani copper mines.....	5,035	3,084	1,017	934
Ağaçlı lignite mines.....	3,647	2,847	250	550
Murgul copper mines.....	27,520	21,675	4,567	1,278
Turhal antimony mines....	1,725	—	—	1,725
Bolkardağ-Keban lead mines	8,403	—	—	8,403
TOTAL	368,866	110,585	60,837	198,444

* See explanation in text page 101 concerning time period and reliability of data.

Source: Etibank.

In addition to the Zonguldak coal development, programs of expansion are under way to increase the production of sub-bituminous coal and lignite, chrome, copper, iron and other minerals. Also, during 1950 TL 10 million was allotted for drilling for oil. Most of these projects have received foreign aid aggregating about TL 107 million (including Zonguldak). Foreign exchange expenditures on the Murgul copper mine installations are being financed by a credit from Great Britain, as is a small part of the coal field development. The Export-Import Bank is assisting in financing the Ağaçlı brown lignite mines, a flotation plant at the Ergani copper mines, a chrome concentration plant at Guleman, a washery at the Soma lignite mine and a small power plant at the Tunçbilek lignite mine.

The development of the Turhal antimony mines and the Bolkardağ-Keban lead mines, as well as the bulk of improve-

ments in the Keçiborlu sulphur mines, have not been started as yet. Rough estimates of the sums still to be expended on these projects total approximately TL 12.7 million.

Minerals Policy

It is important that the Government develop a general policy in respect to minerals, as an aid to private mining. Conservation of these resources should be comparatively easy, for all mineral deposits are the property of the State, regardless of the ownership of the land surface, and all exploitations are conducted or licensed by the State. Consideration should therefore be given to the revision of the present laws which restrict both private prospecting and private exploitation.

Our remarks regarding encouragement of private initiative in mining apply particularly to oil, for this field requires very large financial and technical resources and is one of the fields in which private capital may be available. The Mission recommends that, to ensure more rapid and effective petroleum exploration and operation, the Government reconsider its present policy of excluding private interests from this field.

State mining operations reap the benefit of an unusual relationship between the Etibank and the Minerals Research Institute (MTA) which is responsible for general geological surveys and which prospects for and proves reserves of mineral deposits. The Institute's findings are released only to the Ministry of Economy and Commerce and to the Etibank, which has the privilege of exploiting any mineral deposits discovered by MTA. The Etibank reimburses MTA for exploration costs on properties it decides to exploit. Its relationship with MTA gives the Etibank a great advantage over private mining enterprises, which may be denied access to the most promising deposits and, in any event, have to do their own prospecting. MTA, instead of limiting its reports to the Government, should operate as a public service institution and make its findings available through publication to the State and to private investors alike. Every effort should be made by MTA to complete and publish the comprehensive geological surveys now lacking in Turkey.

In summary, since the Government's current commitments for investments in mining, exclusive of the Zonguldak coal development, are relatively small and require new expenditures of only TL 24 million, we make no recommendations concerning them. The Mission recommends, however, that:

- (1) No commitments should be made for development of the Zonguldak coal fields after 1953, until the results of the present investment program can be appraised.
- (2) A minerals policy conducive to private exploration and exploitation should be adopted. The Government should reconsider its policy of excluding private interests from petroleum exploration and operation.
- (3) The results of MTA surveys should be made available to the public.

UTILIZATION OF EQUIPMENT, TRAINING OF PERSONNEL AND LABOR POLICY

In an economy where capital goods are scarce, it is particularly important that all available equipment be utilized with maximum efficiency for its entire potential life. It is equally important that competent administrative and managerial personnel be available to direct trained technical staff and a permanent and skilled labor force. Despite the advances made in Turkey in the past two decades, great efforts must still be devoted to the better utilization and maintenance of physical plant and to the training of personnel at all levels. Improvements in efficiency in both public and private enterprise are as essential to the economic development of Turkey as are increases in the physical capacity of factories and mines and do not call for much, if any, investment of funds.

In recent years progress has been made in increasing the productive efficiency of state factories in terms of productivity per man hour. This was particularly true during World War II, when increased production could come only from better use of available facilities. This progress is in part attributable to the activities of the Prime Minister's High Control Board, which sends specialists to study plant efficiency. In the field of mining, the growth of the Etibank's production in the past 15 years also represents, in part, better use of manpower and

better production management. However, state factories have too often, especially since the war, resorted to expansion of facilities to increase production rather than attending to the more difficult problems of improving administration and management and of increasing worker efficiency by training in better methods. In every factory and in every mine, further improvements in the techniques of operation are needed. Improved production techniques, better training and use of foremen and labor and better relationship between management and workers could probably do as much as substantial new capital investment to increase productivity per man hour.

This condition is undoubtedly as prevalent in private as in state enterprises, although little information concerning productivity in privately owned plants is available. Government policy can have an indirect impact on the use of equipment and the productivity of personnel in private enterprises, partly by the example it sets in its own enterprises and partly by the provision of opportunities for training.

Maintenance and Utilization of Equipment

Machinery is generally not well maintained in Turkish industry. State factories often take better care of their equipment than do private plants, but even there opportunity exists for general improvement in maintenance practices. On the other hand, government plants often fail to make full use of equipment. State factories are generally complete within themselves and 100 per cent standby capacity is frequently maintained in basic operations, especially in the power plants of individual factories. Such services as shop repairs and the manufacture of spare parts are performed in each plant. Foundries and complete woodworking and metal shops are attached to nearly every government factory and mine. Many of the services might be furnished by an independent job shop at a fraction of the cost of maintaining complete shops at each factory. Some plan of coordination of facilities and work to gain better utilization of existing equipment should be devised by state industry. This has already been done in the monopoly factories, where a single repair and job shop serves all the plants.

In public and private enterprises alike, financial provisions for maintenance and renewal of equipment are often inadequate. In fact, paper profits are frequently produced by inadequate allowances for depreciation reserves and maintenance costs. While certain government enterprises have in general set aside sufficient depreciation funds, others, such as the monopolies, are short on reserves for depreciation. Similarly the balance sheets of private factories frequently show only a bare minimum set aside for depreciation. Although this practice is often excused by such plant owners on the grounds that they feared expropriation and therefore carried their plants on the books at the highest possible valuation, funds that should have been allocated to depreciation have undoubtedly often been put to more lucrative use elsewhere.

In general, Turkish industrial enterprises should give priority to better use and maintenance of existing equipment rather than to the acquisition of new equipment. When equipment is not fully utilized, or is improperly maintained, valuable and scarce resources are wasted. New equipment should not be purchased without making certain that existing equipment is being used adequately. By failing to allocate sufficient funds for depreciation and maintenance, costs are underestimated and profits exaggerated. Even more serious, the failure to provide for maintenance and renewal out of current expenditures has a cumulative effect, requiring eventual large-scale diversion of new investment funds to uses which should have been financed out of returns from previous investments.

Training Programs

Industrial enterprises, whether public or private, cannot be efficiently operated unless both management and the labor force are trained and skilled in their respective functions. Apart from the general education of industrial labor, there is an urgent need for in-service training of factory workers. Only the barest beginning has been made in in-service training. Upgrading courses are now legally mandatory for Turkish enterprises with more than 100 employees and, since 1946, the State Employment Service has instituted a number of training courses for industrial apprentices and adult workers.

But further industrialization will demand a greatly accelerated development of practical vocational training, particularly in improving the knowledge and skill of supervisors and foremen.

One of the greatest deficiencies of Turkish enterprise is lack of managerial competence. This element is essential to efficient operation of any undertaking and, in a system of free enterprise, it is the factor through which private firms respond to the invisible controls of the market economy. We mean by management, not only the top-level officials, but also all levels of supervisors, foremen and crew bosses. In Turkey, and particularly in state enterprises, those who direct labor have usually been preoccupied with technology and rarely know the workers' jobs. Between top management and workers there is at present an almost complete lack of liaison. Programs of managerial and supervisory training would help to remedy this weakness.

It is noteworthy, in this regard, that the supply of engineers in state enterprises is considerably better than in private, due to the emphasis given by the Government to such training for its own plants and mines. Indeed, in some of the state plants, a surplus of trained engineers exists. In the Karabük steel mills, for example, there were 63 graduate engineers in July 1950. The Zonguldak coal mines are also relatively well supplied. There, training of engineers and of some skilled foremen and technicians is carried out at the Zonguldak Institute of Mines. Many of the top engineers at Zonguldak are graduates of this school. Since the mines were taken over by the State, the facilities of the Institute have been greatly expanded. Unfortunately, management training is not provided, though Zonguldak is in particular need of it.

There is also urgent need for the establishment of a system for the training and licensing of certified public accountants. This is needed not only to strengthen public confidence in accounting as an inducement to investment, but also to make available to businessmen and to the managers of state enterprises the fundamental information which accounting provides. At the present time, because of the lack of uniformity in

accounting terminology and practice, financial statements tend to conceal and confuse rather than to reveal and clarify.

Both public and private enterprises suffer from a lack of personnel trained in simplified business bookkeeping, shorthand, typing, filing, marketing and advertising. Programs which emphasize the teaching of these techniques and practices on a practical level should be introduced into the educational system.

Labor Policy

A permanent industrial labor force is conspicuously lacking in Turkey, where urbanization has not occurred to any significant extent. Unskilled labor in particular is highly mobile, moving to and from agriculture with the seasons. The recruitment of a labor force for the mines has been a particularly difficult problem because of the remote location of most of the mines and the difficult living conditions there. State factories and mines alike have therefore had to resort to the provision of a number of costly social services and payments in kind, such as food, clothing, housing, medical care and recreational facilities.

At Zonguldak, for example, operations require over 15,000 miners underground and about 2,000 workers above ground. Most of the workers come from agricultural communities and engage in mining during only part of the year. In order to control turnover, the management has adopted a system of rotating two groups of miners at 45-day intervals. The workers are housed in barracks, given three free meals a day and furnished with work clothing. Costs of such social services have been high, averaging 15 per cent of total costs, as compared to 25 per cent for laborers' wages. While average cash wages per worker increased only from 1.11 liras a day in 1939 to 3.01 liras in 1949, social benefits rose from 0.06 to 1.66 liras per day per worker during the same period. Despite these extensive social services, recruitment continues to be a problem. The Sümerbank faces a similar problem. In a recent year, the cost of its outlay for social services was estimated at 60 per cent of the amount it paid as wages.

The cost of providing these social services has affected the prices of government-produced goods. The services have been provided, not only as a protection for the worker, but as a means of attracting workers into industry and mining in a country in which a permanent industrial labor supply is largely lacking. The Mission believes, however, that as a general principle social welfare measures are properly part of the general social cost of industrialization. Problems of social welfare are of general importance and require national planning, coordination and control. We suggest, therefore, that the Government review its policy regarding social services in industrial plants and mines.

In summary, the Mission makes the following recommendations:

- (1) More attention should be given to full utilization and proper maintenance of industrial and mining equipment.
- (2) State factories should centralize such services as shop repairs and manufacture of spare parts, some of which might be provided more economically by independent shops.
- (3) Both public and private enterprise should make more adequate financial provision for current maintenance costs and depreciation reserves.
- (4) In order to provide the skills required by Turkish industry, particular attention should be devoted to:
 - (a) In-service training of workers;
 - (b) Training of all levels of management, including supervisors, foremen and crew bosses; and
 - (c) Training in business administrative services, advertising and marketing.
- (5) A system of training and licensing certified public accountants should be adopted.
- (6) The Government should review its policy in respect to the social services provided in its factories and mines. Consideration should be given to the adoption of general public programs to provide some of the social services now provided by individual state enterprises.

CHAPTER VII

Transportation, Communications and Power

Transportation, communications and power have one important element in common. They all provide auxiliary services important to the development of agriculture, industry, mining and domestic and foreign trade.

Adequate and efficient transportation and communication services permit cheaper and faster movement of farm commodities to markets. They prevent waste through spoilage and reduce the spread between farm and city prices, to the advantage of both farmers and urban consumers. They increase the farmers' incentive to produce by raising the price of their products and by making industrial consumer goods more accessible. They expand the market which an industrial producer can reach and thus facilitate regional specialization and the growth of larger industrial units. Finally, they help to reduce the psychological barriers to the spread of scientific knowledge and modern ideas, thereby facilitating economic growth as well as cultural and political development.

Abundant electric power, reasonably priced, is also indispensable to a modern economy. Not only is it basic to modern industry, but it has many important uses on the farm, in the home and in commerce.

In this Chapter, we shall review the present status, existing programs of development and proposals for additional projects in the fields of transportation, communications and power. We shall also make recommendations on important issues of organization, management and operations.

TRANSPORTATION SERVICES AND PROGRAMS

Insufficiency of cheap transport facilities has been an obstacle to Turkey's economic development. Although considerable funds have been expended on transportation since the establishment of the Republic, it is doubtful that the Government gave adequate recognition to the economic as-

pects of railways, highways and shipping as services vital to the nation's economy. Military considerations, concentration on railways virtually to the exclusion of other means of transport, lack of proper maintenance and management and other factors have resulted in high transport costs and inefficient use of existing facilities.

Since the end of World War II, the Government has launched a variety of programs in the transport field. Foremost among these programs is one for the rehabilitation of highways, which will for the first time give the road system a significant place among the means of transport. Of almost equal importance are programs for training of management and personnel and improvement of maintenance practices in all branches of transport. A program has also been launched to expand the capacity of Turkish ports and to utilize them more fully. All of these programs properly emphasize better and fuller utilization of present facilities rather than the development of new ones. When completed they should permit Turkey's transport system to carry double, and in some cases up to five times, the traffic it now handles, at a cost which that traffic can comfortably bear. They will provide facilities and services adequate to Turkey's needs for some time to come.

In terms of investment resources, over-all transport plans may appear somewhat ambitious. To the extent that this is the case, the accomplishment of those plans may have to be stretched over a longer period of time than is now contemplated. But their eventual realization is necessary to give Turkey a transport system commensurate with its potential for economic development.

The Mission wishes to emphasize, however, that in its opinion substantial expenditures for expansion of facilities can be justified and will prove effective only if steps are taken concurrently to improve the administration and operation of existing transport facilities, to maintain both fixed and mobile equipment more adequately and to provide for a greater degree of coordination of programs and services in the various fields of transport. Many of our recommendations are accordingly directed to these matters.

Railways

Turkey's first railway lines were built, owned and operated by foreign companies. As Turkish nationals acquired technical and administrative training and experience, however, the Government began its own construction program and gradually absorbed the foreign-owned lines. Under the Republic, more than 3,000 kilometers of railways have been built at a total cost of about TL 400 million, most of it from domestic resources. In recent years, funds amounting to TL 54.5 million have been received from the United States Government for railway equipment and services.

Turkey now has a well-developed rail system of about 7,600 kilometers, all of it owned and operated by the Government. This network consists primarily of single track main lines, with few branches, and runs mostly through mountainous regions with many tunnels and steep grades. In 1949, rolling stock consisted of 966 locomotives (68 per cent serviceable), 14,356 freight cars and 1,349 passenger cars (92 per cent serviceable). This equipment, in 1948, carried 50 million passengers and nine million tons of freight. The methods of administration and management of the railways are similar to those of many European countries. The State Railway Lines have generally shown profits in their operations, although the profits have resulted in some measure from inadequate maintenance and renewals, particularly of track and rolling stock. The system is operated entirely by Turkish staff who have acquired experience through the years, are capable and devoted, and show a commendable degree of efficiency.

The Government is now completing its national trunk line system by construction of three stretches of track. Work is under way on the line from Elâzığ to Muş and Tatvan (already in service as far as Genç), which will tap a potentially rich agricultural area, and on the line from Narlı through Gaziantep to Karkamış, which will avoid the by-pass into Syria on the road to Iraq. The narrow-gauge line from Erzurum to Sarıkamış (completed to Horasan) is being converted to standard gauge. These projects will require TL 206 million of invest-

ment in the next five years. We recommend that work on these projects should proceed but, if financial resources be lacking, they could, without serious consequences, be slowed down. When they are completed, the rail network will unite all sections of the country and will link every major city except Bursa.

In addition to these projects, the Ministry of Public Works has in its files a 15-year plan for the construction of 2,300 kilometers of branch lines at a cost currently estimated at TL 800 million, but no action is contemplated on this plan until the situation regarding alternative means of transport has become clearer. The Mission believes that, since current projects will give Turkey an adequate rail system, no new construction program should be considered at this time.

The State Railway Lines are also well advanced on a program to construct or acquire additional workshops, tools, rolling stock and permanent way materials, much of it made necessary by neglect of maintenance and renewals in the past. Given the present railway situation, annual renewal programs should provide for at least 160 kilometers of track and accessories, five locomotives, 25 passenger cars and 300 freight cars. Thus far, TL 92 million have been expended for renewals and new equipment and an additional TL 77 million is scheduled for expenditure by 1955. ECA is assisting in financing this project. These expenditures, already too long deferred, should be carried out.

The Mission also recommends that the Government consider the construction of a telecommunications system connecting all parts of the rail network. The present single Morse telegraph station-to-station system hinders desirable improvements in administration, operation and service. We estimate that a complete telephone circuit for the entire rail system would require expenditure of TL 9.5 million.

Highways

Rugged terrain, lack of skills and the necessity of importing all equipment, fuel and vehicles have made the development of highways slow and difficult. Indeed, not until after World War II did Turkey devote real attention to its high-

ways. In 1949 the country had about 43,000 kilometers of roads, most of them in poor or impassable condition. Of the total, the national highway system, about 21,600 kilometers in length, consisted of 500 kilometers of asphalt, 7,400 kilometers of passable macadam, 4,700 kilometers of ruined macadam, 4,500 kilometers graded and 4,500 kilometers of primitive trails. In addition, there were an estimated 21,800 kilometers of provincial roads of all types.

Since 1947, the United States Government, first through its Military Aid Mission and then through ECA, has given or lent to Turkey about TL 56 million for highway development. During this period, a special mission of the U. S. Bureau of Public Roads has been in Turkey advising on the organization and administration of highway work and training personnel. Early in 1950, a General Directorate of Highways was established in the Ministry of Public Works. This new Directorate is well organized and efficiently administered. It has its own annexed budget and certain revenues are earmarked for its use. Its budget for 1950, exclusive of ECA aid, showed revenues of TL 53 million, appropriations from the general budget of TL 19.5 million and proceeds from loans of TL 10 million, making a total of TL 82.5 million. Of this amount, seven million liras were allocated for provincial highway programs and approximately TL 50 million were devoted to new trunk-line construction and improvement. The remainder was devoted to maintenance and administration.

With the assistance of the United States, Turkey embarked in 1949 upon a nine-year program of highway rehabilitation, divided into three stages of three years each. The program provides for improvement, reconstruction, and maintenance of a national highway system of 23,000 kilometers, at an estimated cost of TL 1,500 million, of which only TL 74 million have thus far been expended. Another program, also underway, provides for the improvement, under the direction of the provincial governments, of the secondary and feeder road system, at an estimated cost of TL 150 million.

These programs are well balanced and technically sound and should remain the basis of Turkey's highway development

plans. The Mission believes, however, that under present circumstances for Turkey to undertake the full nine-year national highway program within the period contemplated would be too costly and would provide a system in excess of traffic needs.

Traffic on the highways, both mechanical and animal drawn, is still very light. There were, in 1949, only 11,300 trucks, 2,540 buses and 7,950 automobiles, a large portion of which were taxis. Traffic density is not likely to increase quickly since all mechanized vehicles, spare parts and fuel must be imported, and foreign exchange available for this purpose is and will remain limited. Thus revenues from highway users will be insufficient to finance any significant portion of the program and, in any event, prospective highway traffic is not sufficient to justify an economic grounds investment in an elaborate highway system. Additionally, the training of personnel, now underway, will take time and must not fall behind construction programs.

For these reasons, although we believe that highway expansion has been properly emphasized and that the nine-year national highway program is well conceived, we urge that the program be constantly reviewed and revised in the light of resources, personnel and needs. Specifically, we recommend that stages two and three of the program be subordinated to the construction of secondary feeder roads and that the whole program be carried out over a longer period of time and in accordance with available resources and traffic needs. The construction of feeder roads should in any case receive greater emphasis because of their vital importance to agricultural development, as described in Chapter V. These roads can be built cheaply, using locally found materials and employing farm labor in slack periods, and require no foreign exchange.

As the highway system grows, private trucking will develop. This is both desirable and necessary if the highways are to be used efficiently. We recommend, therefore, that the Government provide the foreign exchange necessary to

import commercial vehicles of a type and weight appropriate to Turkey's roads.

Ports

Turkey's long coast line provides the opportunity for cheap water transportation. Unfortunately, there are no natural harbors on either the Black Sea or the Mediterranean Sea and no well-equipped ports anywhere. Most ports are open roadsteads with overcrowded and inadequate harbor areas and obsolete and inefficient handling facilities.

Istanbul (including Haydarpaşa on the Asiatic side of the Bosphorus) is Turkey's major port. It is a focus for railway, coastal shipping and ocean-going facilities and an important industrial area. İzmir, Turkey's second port, taps an important agricultural hinterland and has its own industry and inland transport lines. On the Mediterranean, Mersin and İskenderun serve eastern Turkey and parts of Iran, Iraq and Syria. The Black Sea ports are primitive by any standards. Zonguldak and Ereğli, in the west, are primarily coal ports; Trabzon, in the east, taps northeast Turkey and parts of Iran. Between them are a number of smaller harbors serving as feeders in coastwise shipping, of which Samsun is the most important. All Turkish ports together handle only about 4.3 million tons of cargo per year.

New port construction is a function of the Ministry of Public Works, while responsibility for port operation is shared by the State Railway Lines and the State Shipping Lines, except for some small landing stages for which local authorities are responsible. The Shipping Lines, poorly organized and inefficiently operated, are the weakest link in Turkey's transport organization. The agency is rigidly organized, overstaffed and costly. Despite the almost monopolistic position of the Shipping Lines, they have consistently operated at a loss.

Turkey has presently under way a comprehensive program to increase port capacity and operational efficiency. Harbor works are being built at Trabzon, Ereğli and Zonguldak, the last being partially financed by ECA. A recent International

Bank loan of TL 35 million will finance the foreign exchange costs of major construction and improvements at Istanbul, Haydarpaşa, İzmir, Samsun, İskenderun and Mersin. All of these projects should be completed by the end of 1953, except Samsun which will require an additional three years. Their total cost is estimated at TL 173 million. The construction equipment will be pooled for later use in the development of other ports, beginning with Mersin. The Ministry of Public Works also contemplates a 10-year program of building jetties and shelter accommodations at 23 roadsteads along the coasts. The estimated cost of Mersin and these small harbor works is TL 45 million. We recommend that all these projects be carried forward according to schedule. Since they will provide all the port facilities required for shipping in the foreseeable future, no further investments appear necessary.

Shipping

The Turkish merchant marine has been developed largely since the establishment of the Republic. Starting with a small number of vessels purchased from foreign owners, the Government built up the merchant fleet to a total of 356,000 d.w.t. by June 1949; this includes 33,000 tons of tankers, 89,000 tons of combined passenger-dry cargo ships and 234,000 tons of other dry cargo vessels. Most of the mercantile fleet is owned and operated by the State through the State Shipping Lines. Only state-owned vessels may carry passengers and, until 1950, private shipping was severely restricted in carrying intercoastal freight. Foreign shipping is barred entirely from coastal trade.

About half of Turkey's present merchant fleet is made up of new acquisitions. Since World War II, the State Shipping Lines have added 20 tankers and passenger and cargo vessels and six ferry boats at a cost of TL 92.2 million. The tonnage of these ships totals 100,000 d.w.t., as compared with 24 cargo ships totalling 64,000 d.w.t. privately acquired in the same period. In addition, the State Shipping Lines have under contract several new ships costing TL 37.5 million, which are being financed by ECA. No further investment in shipping would appear to be justified until the large recent acquisitions

have been assimilated and until a careful survey is made of the probable future demand for shipping services.

The Mission recommends that closer attention be given to the quality of ships. Some of the vessels recently acquired show defects in construction; others, uneconomical use of passenger and cargo space; yet others, lack of quality in furnishings and fittings. We recommend that, in any future contracts for shipbuilding, the services of qualified shipbuilding engineers be obtained as consultants and that the work of design, supervision and construction should not be left solely to the shipyard.

With Export-Import Bank assistance amounting to the equivalent of TL 11.9 million, the State Shipping Lines is acquiring a new floating dry-dock and new equipment for three of its ship repair yards.

Airlines

The State Airlines operate all air services. There are no definite plans at present for increasing the size of the air fleet, which now consists of 27 DC-3's (of which five are grounded) and five small De Haviland planes. All craft are over-age and will shortly need replacement or conversion. All need additional equipment.

Two investment programs are now under way in this field. The first is for aircraft reconditioning, conversion and equipment at an estimated cost of TL 20 million. This project is essential to enable the air fleet to carry the increased traffic expected when airfield facilities improve. Consideration should be given to the conversion of the DC-3's into Super DC-3 craft as the speediest and cheapest method of treatment. This conversion would put the airways in a position to meet traffic demands for many years. The second program is for airfield construction. Construction and equipment of three international airports, rated as Class B under the standards of the International Civil Aviation Organization, are in progress at Istanbul, Ankara and Adana. This program also provides for extensions to buildings, navigational aid equipment and power supplies at eight provincial airports, Izmir, Afyon,

Konya, Eskişehir, Elâzığ, Erzurum, Diyarbakır and Trabzon. Altogether it will require an estimated investment of TL 65 million, of which only TL 25 million have so far been expended.

Both these programs are, we feel, essential to the efficient operation of Turkey's air services and should be completed. We recommend, however, that, in the light of the probable demands on it, the Adana field be lowered from Class B to Class C.

Recommendations

Government investment programs now under way in the field of transportation are summarized in Table X. Concerning these projects, the Mission recommends that:

- (1) The railway construction program should be slowed down, if necessary, to conform with the amount of resources available for this purpose. To increase operational efficiency, a telecommunications system should be constructed to connect all parts of the rail network.
- (2) The nine-year national highway program should be completed but it should be carried out over a longer period of time and stages two and three of the program should be subordinated to the rehabilitation and construction of secondary feeder roads. The Government should provide the foreign exchange necessary for importation of appropriate types of commercial motor vehicles.
- (3) The ports, shipping and airlines programs should be carried to completion. The airfield at Adana should, however, be constructed as a Class C field. Consideration should be given to the conversion of the DC-3's of the State Airlines into Super DC-3's. Closer attention should henceforth be given to the quality of ships acquired by the merchant marine.

TABLE X
CURRENT GOVERNMENT INVESTMENT PROGRAMS IN TRANSPORTATION*
(Millions of Liras)

	Estimated Total Cost	Expenditure to June 1950	Expenditure Remaining
RAILWAYS:			
1. Narlı-Karkamış construction ..	75	10	65
2. Elâzığ-Tatvan construction	210	113.5	96.5
3. Erzurum-Sarıkamış conversion	90	46	44
Total	<u>375</u>	<u>169.5</u>	<u>205.5</u>
PORTS:			
1. Ereğli construction	20	15	5
2. Trabzon construction	20	10	10
3. Zonguldak construction	25	—	25
4. General port development	108	—	108
5. Mersin and minor harbors.....	45	—	45
Total	<u>218</u>	<u>25</u>	<u>193</u>
SHIPPING:			
1. Ships	37.5	—	37.5
2. Drydock and ship repair equipment	11.9	n.a.	11.9
Total	<u>49.4</u>	<u>—</u>	<u>49.4</u>
HIGHWAYS:			
1. Nine-year trunk program.....	1,500	74	1,426
2. Secondary road program.....	150	—	150
Total	<u>1,650</u>	<u>74</u>	<u>1,576</u>
AIRLINES:			
1. Airport construction	65	29	36
2. Aircraft repair and conversion	20	—	20
Total	<u>85</u>	<u>29</u>	<u>56</u>
TOTAL TRANSPORTATION	<u><u>2,377.4</u></u>	<u><u>297.5</u></u>	<u><u>2,079.9</u></u>

* This table does not include the replacement and renewal program for the railways, now under way with ECA aid, nor does it include the railway telephone circuit which the Mission recommends.

TRANSPORTATION ADMINISTRATION AND OPERATION***Coordination of Transportation***

Turkey's transport system is entering a new phase. The development of road transport will intensify competition between highways, railways and coastal shipping, and between public and private means of transport. Turkey will have a variety of complex problems to solve, such as whether a newly opened district should be served by rail or road; which type of access a newly developed port should have to its hinterland; whether important urban centers should be linked by rail and road along parallel or alternative routes; and whether feeder lines should be by rail or road. Rates and schedules are now inconsistent and conflicting and do not always meet the needs of the country. The existence of development programs in all fields of transport makes the determination of priorities essential. It is thus apparent that the time has come to provide for the coordination of all transportation services.

We recommend, therefore, the establishment of a Transportation Coordination Commission as an advisory body to the Minister of Communications on routes, rates, schedules and safety regulations for all means of transportation. This Commission would also advise on the relative priorities of new investments and of repairs and replacements. To this end, it should be charged with coordinating and reviewing investment plans in the transportation field before they are presented to the Prime Minister under the procedure described in Chapter IV. Ultimately the Commission should also recommend policies regarding such questions as the regulation of private shipping and trucking in the public interest.

The Commission should consist of the heads of the various existing transport agencies, with an independent chairman. Staff work for the Commission would be done by a small permanent staff supplemented by independent experienced experts and technicians from the transport agencies. In any case, the joint approach suggested here would foster common action by all the agencies and should result in savings as well as better service.

The schedules and services of the railways and coastal shipping are in particular need of overhauling to meet the needs of producers and markets. The Railway Lines, for instance, have at times insisted on maintaining schedules fixed for administrative convenience in disregard of the obvious shipping and marketing needs of fruit and vegetable producers. Insufficient rolling stock equipped to protect cargo against freezing or overheating causes excessive spoilage in transit. Schedules are unnecessarily slow because trains make too many stops. Buyers of livestock complain about the lack of feeding stations on the long rail haul from central and eastern Anatolia to western markets and ports. Careful time table research and a willingness to adapt services to economic needs are therefore essential.

Realignment of Functions

A coordinated transportation policy will require reduction in the number of governmental agencies now engaged in this field and realignment of several transport functions.

The first step we recommend is the separation of port administration from shipping services, with the State Shipping Lines set up to run on business lines as a shipping service only. In order to assure proper services and facilities and maintenance of equipment, the ports should be operated by a port authority. While this authority might be local for each port, we believe a national port administration would be more effective. The Government should also consider the eventual separation of the operation of the airlines from the operation of airports. For the present, however, operation of the airports should continue on the present basis.

Division of responsibility for the operation of certain ports, such as Izmir and Iskenderun, between the State Shipping Lines and the State Railway Lines is inefficient and leads to confusion. Ports in many parts of the world have been successfully operated by railway administrations, but the sharing of responsibility for a single port can hardly be justified. We recommend that responsibility for each port be unified under

the State Railway Lines or the proposed port authority or authorities as appropriate in the particular case.¹

If this recommendation is adopted, it would also be advantageous to unite the now divided responsibilities for construction and operation of port and railway services. Construction responsibility now rests with the Ministry of Public Works, while the transport agencies are responsible for operations. If both functions were under the same direction, substantial economies in equipment and materials could be effected. This is particularly important in the case of railways. Major rail construction is approaching its end, and the inclusion of construction in the railway administration would assure another transition from construction to operation and would permit more efficient use of materials and equipment released from older lines in process of repair and replacement.

Organization of Transportation Agencies

Like other state enterprises, the transport agencies suffer from insufficient delegation of authority. They should be given authority to operate on a business budget and to manage their business, within the general policies established by the Minister of Communications, in such a manner as to pay operating expenses, including adequate provision for maintenance and depreciation, out of current revenues. In this connection, we strongly recommend that the chief accountants of the transport agencies be appointed by, and be responsible to the managers of those agencies.

Within the agencies authority is excessively concentrated at the top. Delegation to heads of departments, regions, divisions and sections is virtually nonexistent. While decisions of prime importance should rest with the directors of services, matters of day-to-day operation should be the responsibility of employees of lower rank. In addition, too many inter-

¹ There is no contradiction between the suggestion to separate port administration from shipping and the suggestion that certain ports should be operated by the railways. There is only one railway administration to use the port in inland transport, but there are many shipping lines to use the port in sea transport. It would be unwise to leave port operation in the hands of one of the many shipping lines using the port.

mediate functions and functionaries exist between the agency directors and executive staff members in operating posts.

The State Railway Lines in particular have too large a general administrative staff. Reduction in numbers and the elimination of officials between the divisional officers and the service chiefs at headquarters would produce greater efficiency as well as economy. For example, there is no need for intermediate posts of responsibility between the Station Master and the Divisional Movement Superintendent, nor between the latter and the Operation and Traffic Director in Ankara. Divisional staff offices seem wholly unnecessary. In the lower ranks of the Railway Lines a streamlining of organization seems to be in process but it should be extended to all levels. The same process would be useful in the other transport agencies.

Utilization and Maintenance of Equipment

With few exceptions, insufficient attention has been given to proper use and maintenance of equipment in all the transport fields. Foreign visitors to Turkey, for example, are forcibly struck by the improvidence and recklessness with which trucks, tractors and automobiles are driven, used and maintained. Trucks and tires, which in Turkey cost more than twice as much as in the United States, have an estimated average life only one half to two thirds as long. Economy in the use of fuel and oil is also poor. At best, Turkey is certain to face a serious problem of foreign exchange in maintaining or expanding its present supplies of motor equipment, tires, spare parts, fuel and oil. Mechanical training, the establishment of more machine shops equipped to make major repairs and more adequate and better distributed stocks of spare parts can, in time, partially solve this problem. Meanwhile a nationwide propaganda and policing campaign is essential to assure proper conservation of vital motor equipment. In addition, in the interests of both conservation and public safety, a well enforced system of revokable drivers' licenses, frequent inspection of vehicles for their roadworthiness and detailed traffic rules and regulations is long overdue.

The situation with regard to maintenance and full utilization of equipment and installations is not much better in the case of the state transport agencies. In port administration, for example, failure to draw a clear distinction between a transit shed and a warehouse seriously slows down the movement of goods. The function of a transit shed is to land or dispatch passengers and cargo as quickly as possible. Its whole aim should be to keep traffic moving. The purpose of a warehouse, on the other hand, is to store goods until they are required for markets or for reshipment, and it should be operated so as to earn revenues. Combination of these functions results in congestion, slows down the turn-around of ships and allows port equipment to remain idle while ships wait. To improve the present situation, additional structures should be supplied for storage. If ground space is lacking, a warehouse might be built as a second story to a transit shed. If space is available, it should be built behind the transit shed. In any event, port authorities should levy heavy demurrage charges on cargo left in transit sheds beyond a reasonable time.

This applies with equal force to lighters, which should not be used for storage. Here again heavy demurrage charges would be effective in preventing such misuse. More cargo could be handled, and at less cost, if berth and port equipment were better maintained and wharf space properly used, and if more efficient use were made of equipment and hand labor at the docks.

The railways system particularly suffers from lack of maintenance and renewals. Workshops, locomotive sheds and permanent way shops should be properly equipped with sufficient tools and materials to maintain structures and rolling stock. This needs urgent attention. Such investment should, however, be limited to items needed to make possible fuller use of installations and equipment now at hand. Improvements in management and personnel training are even more essential. They could go a long way towards increasing the number of locomotives in service even without new repair equipment or new repair shops.

The transport services provide an example of the neglect of depreciation and maintenance allowances in the accounts of state enterprises. Failure to finance ordinary maintenance is especially marked in the State Railway Lines. In attempting to minimize railway charges and to keep rates low, the Government has underestimated costs and neglected maintenance and renewal programs. ECA aid has been required to carry out a long delayed track renewal program which should have been provided from current maintenance budgets. The other transport services suffer similarly from failure to appropriate the funds necessary for maintenance and periodic overhaul of equipment. We recommend that adequate provision be made for maintenance of all fixed and movable equipment and that arrears of maintenance and renewals should be made up as rapidly as possible.

In the light of these considerations, we make the following recommendations regarding transportation administration and operation:

- (1) A Transportation Coordination Commission should be established as an advisory body to the Minister of Communications to coordinate the services and investment requirements of all types of transport and to review routes, rates, safety regulations and schedules.
- (2) Certain functions relating to public transport should be realigned:
 - (a) Responsibility for port administration should be separated from shipping services.
 - (b) Responsibility for port operation should rest with a port authority, preferably established on a national basis. In a few cases it may be desirable to place individual ports under the State Railway Lines but in every case there should be a single operating authority.
 - (c) In the case of both ports and railways and functions of construction and operation might advantageously be combined.
- (3) The heads of the transport agencies should be given full authority to operate as business entities, within the general policies established by the Minister of Communications. The chief accountants of the trans-

port agencies should be directly and fully responsible to the heads of the agencies. More authority should be delegated by the agency chiefs to their subordinates.

- (4) Careful attention should be paid to fuller utilization and maintenance of all fixed and movable equipment. To this end:
 - (a) Adequate maintenance expenditures and depreciation allowances should be made.
 - (b) Heavy demurrage charges should be levied to discourage use of transit sheds or lighters for storage.
 - (c) A system of highway traffic control and regulation should be instituted as quickly as possible.

TECHNICAL ASSISTANCE

The transport agencies, from top to bottom, take considerable pride in their achievements since the establishment of the Republic. It is therefore not surprising to find in the executive ranks some feeling of resentment towards the numerous foreign missions and individual experts who have surveyed the transport system in recent years and the individual foreigners who now hold advisory positions in the various agencies.

There can be no doubt that foreign technical assistance can do much for Turkey's transport agencies and services, but we urge that closer attention be given to the kinds of experts and the purposes for which they are obtained. Where assistance is given to new organizations, as in the case of highways, teams of foreign experts with some executive but mostly advisory powers have shown themselves to be very beneficial. In older organizations, the utmost caution is necessary. Experts must have a varied experience, an appreciation of local conditions, and the ability to adapt themselves to those conditions; otherwise they will find themselves surrounded by an atmosphere of suspicion and much of their work will be frustrated.

In the older transport organizations, particular stress should be placed on visits by Turkish transport experts to systems abroad, from which they could learn the particular

features which could with benefit be adapted to their own. Care is needed in selecting the staff to make those visits. We suggest that they should not, in the first instance, be made by younger officials who on their return would have the difficult task of convincing their seniors of the desirability of the new methods. It would appear more desirable to have senior executives make the initial visits, accompanied by executive assistants and perhaps junior officers. On their return, their teamwork in actual operation would assure beneficial results. Such visits should not be concentrated in any one country, for no nation can claim leadership in all fields of transport.

COMMUNICATIONS

All communications facilities in Turkey are owned and operated by the Government. The Turkish postal service has developed steadily in the past and has kept pace with public demand. Mails are carried regularly to and from all areas inside and outside the country. There are 832 post offices in towns and villages, 31 branch offices in rural areas and about 500 postal agencies.

A multi-channel trunk telegraph and telephone system connects the principal cities and towns of Turkey with branches serving outlying places. Thirteen towns have automatic exchanges, four others have semi-automatic systems and a number of towns and villages have manual exchanges even though these often have but a single telephone. Telecommunications with foreign countries based on radio telegraph and telephone are improving. Radio broadcasting is relatively well developed in Turkey. It is financed by a tax on radio sets, which brings in revenues nearly sufficient to meet expenditures.

Postal, telegraph and telephone rates in Turkey are relatively high in comparison with many other countries, but costs of operation are also high. Telephone revenues are well above ordinary operating and maintenance expenditures, but the other services operate at losses because of the necessity of maintaining regular service to remote districts. A slight increase in postal and telegraph rates should be considered, in view of the annual operating deficit.

About TL 15 million is being invested each year in expansion of telephone, postal and telegraph services and present plans call for continuance of this rate of investment for about 15 years. The program thus financed includes modern public facilities in principal post offices, light mail vans in rural areas, gradual expansion and modernization of the telephone network with automatic exchanges in the large cities and modern manual switchboards in rural areas, a radio transmitter and receiver for Ankara, equipment for telegraph and telephone maintenance shops, and telephone apparatus for additional subscribers. The program properly emphasizes improvement of telephone service in Istanbul and extension of telephone service into the rural areas, Turkey's two main telecommunications needs. Investments for this program should certainly continue at the current rate.

A proposed development program in radio, which will provide for two new stations in southeast and northwest Turkey, is estimated to cost a total of nine million liras over a period of three years. The Mission recommends that this program also be carried through.

ECA has recently sponsored a survey of the personnel and equipment required to improve Turkey's telephone system. Training programs with foreign technical assistance have been undertaken by the Postal, Telephone and Telegraph Administration during the past few years. These programs have shown encouraging results and should be continued.

Our recommendations on communications are:

- (1) Present development programs should be continued.
- (2) A slight increase in postal and telegraph rates should be considered.
- (3) Training programs already inaugurated should be continued and, if possible, expanded.

ELECTRIC POWER

Present Capacity and Production

The use of electric power in Turkey dates from 1913. The growth of capacity and production since then is shown in Table XI. In 1923, when the Republic was established, gen-

erating capacity still mounted to only 33,000 kw., but the following 25 years witnessed a spectacular increase. By 1935, capacity had grown to 126,000 kw., and the production of current to 160 million kw-hr. Twelve years later, in 1947, capacity had approximately doubled. By 1949, the total installed capacity of Turkey's power plants was 374,000 kw. and the production of electrical energy amounted to 739 million kw-hr.

The bulk of this electrical current was generated by relatively small industrial and municipal plants. Of the total installed capacity in 1949, 166,000 kw. were in municipal power plants and 208,000 kw. were in industrial plants. The former accounted for slightly more than half the output of energy. Only two plants in each category had a capacity greater than 20,000 kw. each. Almost all the power was thermal in origin, 70.7 per cent deriving from bituminous coal, 16.4 per cent from lignite, 6.6 per cent from fuel oil, 2.3 per cent from other fuels and 4.0 per cent from water power. These plants are not united by any grid system to permit pooling of power and the more efficient use of generating facilities. Even where there are several generators in one city they are usually not interconnected.

Despite the rapid growth of capacity and production, both the number of consumers and the average consumption of current are very low in Turkey. Industry used 71.6 per cent of the total electric power consumed in 1948, domestic users consumed 12.6 per cent and the remainder was distributed among a variety of purposes. The combined population of all cities and towns supplied with electricity was 3,900,000, of whom about 2,000,000, or about 10 per cent of the total population, enjoyed the benefits of electrical facilities. Per capita consumption of electricity in Turkey was about 37 kw-hr per annum, as compared, for example, with 49 in Greece, 50 in Lebanon, 62 in Bulgaria and 496 in Italy.

Electric rates are high by American and European standards because of high generating and distributing costs and substantial taxes imposed both by the central government and by municipalities. In 1948, for example, municipal electric

TABLE XI

DEVELOPMENT OF ELECTRIC POWER, 1913 TO 1949

Year	Total Number of Plants	Installed Capacity (kw.)	Production (1,000 kw-hr)	Municipal Plants		Industrial Plants		Total Number of Subscribers (1,000)
				Per Cent of Total Capacity	Per Cent of Total Production	Per Cent of Total Capacity	Per Cent of Total Production	
1913.....	7	17,322	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1925.....	17	33,424	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1930.....	90	78,007	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1935.....	157	126,153	159,691	n.a.	n.a.	n.a.	n.a.	n.a.
1940.....	258	216,965	396,899	46.0	54.7	54.0	45.3	275
1945.....	274	245,938	527,808	43.6	48.3	56.4	51.7	355
1946.....	272	247,520	562,676	43.8	49.5	56.2	50.5	367
1947.....	283	251,355	625,008	44.1	49.7	55.9	50.3	384
1948.....	289	305,494	676,390	39.8	49.8	60.2	50.2	409
1949.....	307	374,292	739,000	44.3	50.5	55.7	49.5	n.a.

Source: Electrical Study Institute.

plants paid TL 9.5 million in taxes, compared with TL 10.3 million paid for fuel. The high taxes have often been condemned in strong terms. So long as there is a general shortage of power, however, there must be some means of rationing the limited amount, and every effort must be made to conserve and use it as efficiently as possible. In this respect, the taxes may not be entirely harmful. Moreover, rates to consumers, despite their present high level, have not increased nearly as much as prices generally during the past ten years. Some municipal plants are hard pressed financially and do not have sufficient funds to replace worn out equipment. Better maintenance and renewal policies are needed, as well as fuller utilization of capacity.

Development Plans

Turkey has substantial commitments in the power field in the next several years. The completion of a grid for north-west Anatolia will require an estimated TL 25.5 million. The construction of the Sarıyar hydroelectric plant is estimated to cost TL 106.3 million. Six to eight million liras annually will be needed for a variety of small municipal and industrial plants. These commitments should raise total capacity to over 500,000 kw. by 1954 and would represent a doubling of the capacity of 1947. State investment expenditures on power reached about TL 22 million in 1949. The projects now in hand would require raising this amount somewhat.

The power grid, the first of its kind in Turkey, is a development of major significance and will service Turkey's most important industrial and mining areas. In 1949, a large steam generating plant with a capacity of 60,000 kw. was completed at Çatalağzı in Zonguldak area, but it is operating far below capacity because of lack of demand in the immediate area. A transmission line is being built to link this plant with Istanbul. The recently authorized Sarıyar hydroelectric plant with a capacity of 80,000 kw. will be linked with this system to provide a grid which will connect Zonguldak, Istanbul, Karabük, Ankara, İzmit, Kırıkkale and other cities. It is estimated that, when this system is completed, the area served will have adequate power until 1960. ECA has assisted with

the foreign exchange cost of the transmission line, and up to the middle of 1950 it had allocated TL 19 million for that purpose. It will also finance part of the foreign exchange costs of the Sarıyar project. Twenty-three million liras have already been allocated for this purpose.

Three general types of power projects are now being considered in Turkey. The first is composed of relatively small municipal and industrial plants, usually powered by diesel or steam engines. Present plans call for an increase of 20,000 kw. in municipal plant capacity and 35,000 kw. in industrial plant capacity during 1950-52. The annual investment will run from six to eight million liras.

The second type consists of medium-sized hydroelectric projects (4,000 to 7,000 kw. capacity), sometimes connected with irrigation or flood control projects. In a few cases these use natural waterfalls or facilities for diverting water-flows without expensive dams. At least six projects of this kind have been surveyed in the following areas: Sivas and Kayseri (Sızır project); Erzurum (Tortum project); Elâzığ (Gölcük project to serve Ergani and Guleman mines); Konya (Göksu project); Trabzon (Değirmendere project); and Tarsus and Adana (Kadıncık projects). These will probably cost on the average about TL 10 million each. They are widely scattered to serve different parts of the country.

The third type consist of large, multi-purpose projects for power, flood control and irrigation, estimated to cost between TL 100 million and TL 200 million each. In this category, work is getting under way on the Sarıyar Project. Other projects which have been actively considered are the Seyhan, the Gediz and the Büyük Menderes projects.

Analysis of the relative merits of such multi-purpose projects is difficult since careful study is required of the breakdown of costs and returns related to each of their aspects, i.e., power, flood control and irrigation. While construction of a large dam and power station might create power capacity for which there is no present demand, such a project might nonetheless be justified by the benefits to be gained from use

of the dam in irrigation or flood control. Conversely, where demands for power are large enough to warrant construction of a dam, the installation of irrigation facilities may be justified which would not otherwise be contemplated. Thus, coordinated financial and economic analysis is essential to the planning of any multi-purpose project. Despite the progress which has been made in such planning by the Electrical Study Institute, which serves both the power division of the Etibank and the Irrigation and Reclamation Department of the Ministry of Public Works, lack of coordination between agencies responsible for power, irrigation and flood control remains an obstacle to the careful preparation of multi-purpose projects.

There is no doubt that cheap and abundant electric power is an important feature of an industrial economy and, in the proper circumstances, can do much to promote industrialization. We believe, however, that Turkey should be cautious in making new commitments in the power field for the next few years. Expansion is already proceeding at a fast rate and it will take time to absorb the increased capacity provided for in the existing programs. Power plants require large outlays of capital, which is scarce, in relation to the amount of labor, which is plentiful. They constitute an especially heavy drain on foreign exchange resources since practically all equipment must come from abroad.

Additional factors apply in the case of the large multi-purpose projects. Any one of them would create generating capacity which would for some years be in excess of demand in the area it would serve. In the face of pressing demands for investment funds in other sectors of the economy, it would be uneconomical to build capacity which would be partially idle for several years. After several years, when present commitments in other sectors of the economy have been met and when Turkey's balance of payments situation may be more favorable, more foreign exchange for new investment in power may be available. In the meantime, the Government will have the opportunity to do the agricultural research necessary to insure maximum benefits from the irrigation aspects of the

multi-purpose projects. By that time it will also be possible to make a better judgment of the potential demand for power.

For the present, we recommend that any undertakings beyond current commitments should be limited to small plants to meet the most pressing demands. Should the location of such small plants be used for a multi-purpose project later, their equipment could be moved elsewhere or used for stand-by purposes.

Coordination and Management

At present the Etibank is nominally responsible for government-owned power installations. The only large-scale power plant now in existence is Çatalağzı, which is linked to the coal fields and, therefore, naturally falls under Etibank supervision. However, with the building of the Sarıyar and possibly other hydro-electric plants, the present allocation of responsibility would appear inappropriate. These new plants will have little relation to Etibank mining enterprises. More importantly, they will require close coordination of irrigation and flood control with power facilities. It would seem desirable, therefore, that all public power plants, except those owned by municipalities, should be placed under a single operating authority. The Ministry of Public Works might perform this function through a General Director for State Power Plants. The Etibank would then be responsible only for state mining enterprises.

Since coordination is absolutely essential in the fields of power, irrigation and flood control, a Power, Irrigation and Reclamation Commission should be created to advise the Minister of Public Works on policy matters in these fields. The Commission should have as members the General Director of Irrigation and Reclamation, the proposed General Director for State Power Plants, a representative of private power interests and one or more representatives of the public at large. All development projects should be reviewed by this Commission. Studies of services and rates, as well as of the regulation of power grids, should also be made by this group. We further recommend that the existing Electrical Study

Institute be placed in the Ministry of Public Works to carry out basic research on projects planned by the Ministry on advice of the Power, Irrigation and Reclamation Commission.

Our recommendations on investment and policy relating to electric power may be summarized as follows:

- (1) The Government's present power program, the north-western grid and the Sariyar Project, should be completed, as should the currently projected small industrial and municipal power plants. Additional undertakings should be limited to small plants to meet the most urgent demands for power. New large-scale multi-purpose projects should not be undertaken for the next several years.
- (2) A single operating agency in the Ministry of Public Works should be responsible for public power installations other than those operated by municipalities. The Etibank should be concerned only with mining enterprises.
- (3) A Power, Irrigation and Reclamation Commission should be created to advise the Minister of Public Works on policy in these fields and to help coordinate planning of new developments. The Electrical Study Institute should be placed in the Ministry of Public Works.

CHAPTER VIII

Organization of State Enterprises and Encouragement of Private Initiative

The preceding discussion of the various important sectors of the Turkish economy has indicated the substantial role played in almost every sector by state-owned enterprises. In this Chapter we consider how the organization and administration of existing state enterprises can be improved so as to enable them to use their considerable resources more efficiently. We also consider means by which the Government can appropriately carry out its stated policy of encouraging the development of private initiative.

We are not here concerned with the much-debated problem of choosing between public and private activity as alternative means of conducting the nation's economic activity. It is plain that, no matter how much encouragement is given to private enterprise, the State will not for a considerable time be able to relinquish certain of its public undertakings, even if it should wish to do so. Our recommendations, therefore, necessarily concern those matters of organization, administration and economic environment which, in the judgment of the Mission, are most important to assure that all resources, whether public or private, are effectively mobilized for the further economic development of the country. The policies and practices recommended should eventually and increasingly produce an appropriate balance and relationship between private and public enterprise.

ORGANIZATION OF STATE ENTERPRISES

Regardless of the decisions eventually taken on the role of the Government in economic activity, some reorganization of existing state enterprises is essential to the more efficient use of the resources they employ. Such reorganization is also essential to the proper functioning of a sound investment program and as a basis for intelligent decisions as to the sale of state-owned enterprises.

Present Forms of Organization

There is no standard organizational plan for enterprises owned by the Government. The Sümerbank, Etibank, Agricultural Bank, Toprak Office and the newly formed Machine and Chemical Industries, for example, follow a general plan prescribed by the Law for State Economic Enterprises. The Sugar Factories are subject to this law, but are also organized along the lines of a private joint-stock company. The monopolies (chiefly tobacco, alcoholic beverages, salt and matches) and the several transport and communications agencies, on the other hand, are General Directorates under the Ministry of Customs and Monopolies and the Ministry of Communications respectively. There are substantial differences among the various enterprises as to legal status, operational authority and financial independence.

The two principal types of organization are that laid down in the Law for State Economic Enterprises, best illustrated by the Sümerbank and Etibank, and that prescribed for the transport agencies. From the point of view of effective business operation, the former is the better because it gives the individual enterprises greater independence.

The organizational plan prescribed by the Law for State Economy Enterprises provides for a General Economic Commission, presided over by the Prime Minister and including the Ministers of Finance, Economy and Commerce, Exploitations and Agriculture, members of various committees of the Grand National Assembly and directors of various state banks and enterprises. The Commission annually reviews the financial and operational performance and general programs of all enterprises in which the Government owns more than 50 per cent of the stock, excepting the monopolies and transportation and communications agencies. The Prime Minister's High Control Board carries out an annual audit and inspection of each and reports to the General Economic Commission.

The Sümerbank, Etibank, Agricultural Bank, Toprak Office and Machine and Chemical Industries each has a Board of Directors appointed by the Council of Ministers. Under the Board is a general management, usually consisting of a Gen-

eral Director and two assistants, one technical and one administrative. The General Director is an ex officio member of the Board of Directors. Managers of individual plants or offices are responsible directly to the general management.

The Sümerbank and Etibank, which are typical of the economic entities in this category, are independent of the government budget. They prepare their own operational budgets. Their financial operations are subject to careful post-audit by the Auditing and Control Board, as well as to general review by the General Economic Commission, but their accountants have no relation to the Ministry of Finance and there is no item-by-item approval of their expenditures by the Ministry. They operate under special civil service laws and are free to hire and dismiss personnel as they see fit.

In contrast to the State Economic Enterprises, the monopolies and the state transportation and communications agencies are organized as General Directorates under their respective ministries. Each has a Board of Directors made up of officers of the organization. They must apply to the Assembly each year for an annexed budget. Their revenues must be turned over to the Treasury. Funds for operational expenditures, investment and depreciation are provided annually in their budgets. The Court of Accounts post-audits all expenditures under these budgets. The chief accountant of each organization is appointed by the Minister of Finance. Although he is nominally responsible to the General Director of the enterprise, the accountant is actually quite independent and in effect makes policy through his power to approve each expenditure of the organization. In many cases, the *Barem* (the civil service laws and practices) applies to the monopolies and transport agencies, although numerous exceptions to the system have evolved.

This brief comparison of the two types of organizations illustrates only the general points of difference. There are many special provisions applying to individual agencies, such as the revolving fund created to give the monopolies the permanent operating capital required for their operations. Such measures are at best temporary expedients and often

further complicate operations. Because their capital derives from two sources, for example, the monopolies are subject to three types of audit: by the Court of Accounts for budgetary appropriations, by a special joint Committee from the Ministry of Finance and the Court of Accounts for the revolving fund, and by inspectors of the Ministry of Customs and Monopolies for general operations. The accounting system is extremely complicated since expenditures under the budget and revolving funds are recorded separately. There is duplication in auditing and the three groups of auditors seldom coordinate their work.

Neither of the two organizational plans which we have outlined is entirely satisfactory. The monopolies and the transportation and communications agencies are so subject to government interference that it is difficult for them to operate as business enterprises. They spend much time justifying appropriations for ordinary operations. On the other hand, the system under which the State Economic Enterprises operate lacks general policy control, especially over investments.

We noted in an earlier Chapter the absence of governmental control over the investment activities of the Sümerbank and the Etibank, which are the major State Economic Enterprises. As has been pointed out, both institutions were created to help carry out the Government's development plans, the Sümerbank in industry and the Etibank in mining and power. Both are state-owned holding companies and have minor banking functions. The paid-in capital of the Sümerbank stood at TL 109.5 million at the end of 1949, and that of the Etibank at TL 68.7 million. The two companies are also authorized to discount Treasury-guaranteed bills at the Central Bank. At the end of 1949, for instance, TL 96.1 million of the Sümerbank's bills were outstanding, in addition to TL 11 million of bills under the Sümerbank's normal banking discount privileges. (Table XII shows the sources from which the Sümerbank obtained funds to finance its expansion.)

Profits of Sümerbank enterprises have habitually been retained as additions to capital or as surplus and special reserves. The Sümerbank has never paid the State any interest

on investment capital, nor has it returned any capital funds to the Treasury. Depreciation funds set aside by individual industrial plants are also retained by the holding company and may be reinvested as the Sümerbank deems advisable. Thus the Sümerbank has substantial funds for expansion at its disposal.

Some Sümerbank factories have operated at a loss, especially during their early years. In such cases there has been a tendency to increase investment in an attempt to bring down costs of production. It has also been customary to cover the losses of some plants with the profits of others. Demand for funds to cover losses, as well as for new investment needs, has led the Sümerbank to expand profitable industries and to enter others where prospects of profits are good, irrespective of the importance of such industries to the economy as a whole. In addition, some plant managers have tended to build personal empires by expanding their enterprises. The result has been a large, cumulative and uneven growth of state industries financed by the State but along lines largely determined by the enterprises themselves.

Like the Sümerbank, the Etibank has retained its net earnings and reserves. It has not, however, been as financially successful as its sister institution, with the result that, until recently, it has been constantly short of investment funds and has often lacked even working capital (see Table XIII). So far as investment funds are concerned, the situation has been improved in the past few years by the large amount of foreign financial aid devoted to Etibank enterprises. The shortage of working capital has been relieved by the provision of government funds through emergency practices made possible by the fact that the Etibank, like the Sümerbank, is empowered to engage in banking activities. In 1949, for example, the Treasury deposited some TL 15 million in the Etibank to cover losses on coal production, pending appropriation of funds from other sources.

The State's enterprises are bureaucratic and top heavy. Authority is heavily concentrated at the top and is not sufficiently delegated to lesser officials and employees. We referred

TABLE XII
GROWTH OF SÜMERBANK CAPITAL AND LIABILITIES, 1933 TO 1949
(Millions of Liras)

Years	Increments to Capital				Total Capital and Liabilities (At year-end)					Total
	Retained Earnings	Allocations from Budget	Special and Misc. Sources	Total Capital Additions	Paid-In Capital	Reserves	Depreciation Accounts	Discounts at Central Bank	Deposits and Other Current Liabilities	
1933-35 ...	2.1	5.1	10.7 ¹	17.9	17.9	1.9	0.1	n.a.	22.3	42.2
1936-38 ...	2.5	14.5	6.2 ²	23.2	41.1	2.4	5.7	4.4	32.4	86.0
1939-41 ...	1.6	5.2	0.1 ²	6.9	48.0	8.3	18.3	53.6	19.5	147.7
1942-44 ...	6.4	16.4	—	22.8	70.8	61.0	39.3	72.3	20.3	263.7
1945	6.3	2.7	—	9.0	79.8	77.6	47.5	52.1	14.7	271.7
1946	10.4	3.0	—	13.4	93.2	100.5	61.4	36.0	17.5	308.6
1947	3.8	—	—	3.8	97.0	114.0	68.2	103.0	23.4	405.6
1948	2.6	—	—	2.6	99.6	137.2	75.8	106.2	47.4	466.2
1949	9.9	—	—	9.9	109.5	139.2	84.2	107.1	52.8	492.8

¹ Value of factories turned over to Sümerbank at beginning of operations.

² Proceeds of Russian loan.

Source: Sümerbank.

TABLE XIII
GROWTH OF ETIBANK CAPITAL AND LIABILITIES, 1935 TO 1949
(Millions of Liras)

Years	Increments to Capital				Total Capital and Liabilities (At year-end)					
	Retained Earnings	Allocations from Budget	Special and Misc. Sources ¹	Total Capital Additions	Paid-In Capital	Reserves	Depre- ciation Accounts	Discounts at Central Bank	Deposits and Other Current Liabilities	Total
1935-38 ...	0.1	1.8	2.6	4.5	4.5	0.3	1.2	1.8	6.4	9.7
1939-41....	1.1	0.0 ²	1.5	2.6	7.1	6.3	4.8	23.8	7.9	42.8
1942-44....	3.6	25.4	4.5	33.5	40.6	14.4	19.8	30.0	20.9	125.7
1945.....	1.1	8.1	0.0 ²	9.2	49.8	13.5	23.5	30.0	29.7	146.5
1946.....	0.5	2.0	0.0 ²	2.5	52.3	17.0	29.5	30.0	34.5	163.3
1947.....	1.4	2.0	0.1	3.5	55.8	21.8	36.6	43.0	46.5	203.7
1948.....	1.2	3.0	0.3	4.5	60.3	33.9	43.7	59.4	54.8	252.1
1949.....	4.8	3.5	0.1	8.4	68.7	41.4	55.7	69.6	76.2	311.6

¹ Value of mines owned or purchased by Government and Treasury receipts from private mining concessions turned over to the Etibank.

² Less than TL 50,000.

Source: Etibank.

in Chapter VII to these characteristics in the transport agencies. They are equally typical of the industrial enterprises. Channels of communication are unnecessarily complicated and routine activities are hampered by restrictions and paper work to such an extent that productive efficiency is seriously impaired. Factory employees, as far down as minor clerical staff, are hired and dismissed by the central office of the holding company, not by the factory management. The Sümerbank's head office also intervenes in the purchase of raw materials and supplies as well as in the marketing of products of individual factories. As a result, plant managers can exercise little initiative and tend merely to carry out orders from above. Top Sümerbank management, on the other hand, is hampered by lack of information on operations and over-burdened with paper work. In the accounting systems of public enterprises, terminology is not uniform, so that financial statements can rarely be read and interpreted correctly without consulting the responsible accounting department. Heavy administrative charges add to costs of production and unnecessarily raise the prices of finished goods.

Responsibility for Investment Policy

A more detailed analysis than the Mission was able to make and the continued advice of experts will be required in order to construct a satisfactory general organizational plan for state enterprises. We can, however, suggest a few specific changes which would be helpful. The primary objective of an organizational plan for state enterprises should be to separate responsibility for investment policy from responsibility for operations. No coordinated investment program for the country as a whole can be realized while important state institutions have the power to determine their own growth. It is clear that policy decisions should be made at a high governmental level, but it is equally clear that substantial authority over activities other than investment should be delegated to the managers of individual economic enterprises. A system which incorporates these principles should result in better use of resources and will aid in the analysis of the value and efficiency of individual enterprises.

The Mission therefore recommends that all investment decisions respecting state enterprises should be coordinated and approved under the system proposed in Chapter IV. In other words, subordinate organizations should be relieved of the power to make their own investment decisions and this power should be concentrated in the Prime Minister or in his Deputy for Economic Coordination, acting on the advice of the Economic Coordination Staff. All enterprises should turn over to the Treasury their net profits after making adequate maintenance allowances. Depreciation funds should be clearly earmarked in the accounts of each firm. Individual factories, mines and transportation agencies should recommend to their parent organizations what investments in new plant or facilities they believe desirable, but the final decision on such recommendations should be made by the Prime Minister or his Deputy. In this connection, the banking activities of the Sümerbank and Etibank should be terminated.

Adoption of this recommendation as to the responsibility for investment decisions will obviate the need for the present General Economic Commission. This unwieldy body should be abolished. The Control Board should continue to audit and review operations and programs of all enterprises owned by the Government or in which it holds stock, but the Board should report to the Prime Minister. Its reports should be published and made available to the public.

Responsibility for Activities Other Than Investment

Final responsibility for the general operations of public enterprises should also reside in a high-level authority. The Mission believes that the various Ministers should fulfill this function, namely the Minister of Exploitations for all industrial and mining enterprises, the Minister of Communications for transportation and communications agencies, the Minister of Public Works for government-owned power installations, and the Minister of Agriculture for the Toprak Office, the Agricultural Bank and the State Farms.

It would seem desirable that industrial and mining enterprises be divided into four groups within the Ministry of

Exploitations, namely Sümerbank Industrial Enterprises, Eti-bank Mining Enterprises, National Defense Industries (the present Machine and Chemical Industries) and Revenue Enterprises (monopolies and Sugar Factories). This would clearly distinguish between those enterprises which compete with private industry and mining, those which are subsidized for national defense purposes and those which are operated purely for revenue.

There does not seem to be any strong justification for continuing the present Ministry of Customs and Monopolies. It should be abolished and its customs function transferred to the Ministry of Finance. Each monopoly retained should be run as an economic entity. An excise tax on monopoly products can provide the Treasury with certain revenues while allowing the factories to base their prices on costs of production. The Sugar Factories are a case in point. If revenue from Sugar Factories is indispensable to the State, their revenue contributions could be maintained by an excise tax on sugar. Should it be decided to keep the Sugar Factories under state ownership, the stock owned by the İş Bank should be purchased by the Government and the factories placed under the division of Revenue Enterprises of the Ministry of Exploitations.

We suggest that each of the four offices of the Ministry of Exploitations should be headed by a permanent General Director with a Board of Directors of which he is a member. Each Board would review the operations of its related enterprises, approve the budgets of individual plants, select factory managers and generally supervise activities in its field. The General Directors and members of the Boards should be chosen for business ability and should be free from political interference. The expense of the Ministry of Exploitations and of its directorates should be met by appropriations in the national budget in order that independent accounting may be instituted for each factory and mine.

Delegation of Authority to Individual Plants

Operation of public enterprises has in general been hampered by the fact that they do not have sufficient independence

to operate as business entities. A substantial amount of authority should be delegated to managers of individual undertakings. This would increase their efficiency as well as give wider experience to the managers. Only through such a delegation of responsibility can good managers be developed and incompetent ones weeded out.

The managers of individual enterprises should have the authority to operate on the basis of a business budget as approved by the responsible Minister. This means that each plant or agency should pay its current operating expenses out of current revenues. Other powers which should be delegated to individual factory managements are freedom to buy raw materials, to hire or dismiss personnel, to set wage rates on the basis of local labor market conditions and to market their goods and services under general price policies approved by the responsible Minister.

In summary, we make the following recommendations on the organization and policy of state enterprises :

- (1) Investment decisions affecting state enterprises should be taken by the Prime Minister or his Deputy in accordance with the procedure proposed in Chapter IV, although individual enterprises should be encouraged to initiate investment proposals. The General Economic Commission should be abolished. Reports of the High Control Board should be available to the public.
- (2) Net profits of state enterprises should be paid directly into the Treasury. Adequate depreciation funds should be clearly earmarked in the accounts of each enterprise.
- (3) Final responsibility for operations of state enterprises other than investment should lie with the various Ministers. The Ministry of Exploitations should include four divisions: Sümerbank Industrial Enterprises, Etibank Mining Enterprises, National Defense Industries and Revenue Enterprises. The Ministry of Customs and Monopolies should be abolished and its customs functions transferred to the Ministry of Finance.
- (4) The manager of each enterprise should have sufficient authority to conduct his enterprise as a business entity.

STATE PROMOTION OF PRIVATE INITIATIVE

The past two decades have witnessed a much more rapid development in the public than in the private industrial sector. Private industry has lagged in part because of the direct impact of governmental policies and activities, but not all the shortcomings of private enterprise are attributable to the State.

The nature of the Turkish entrepreneur has affected the kind of skills he has developed and hence his ability to engage in production, especially in the industrial field. His mechanical and technical competence are seriously inadequate. While state enterprises have concentrated on the training of engineers and technicians, private enterprise suffers from a lack of such trained personnel. On the other hand, the business management and marketing practices of private firms are generally superior to those of state enterprises simply because the private entrepreneur has to make correct decisions or go out of business.

Turkish private enterprise has a distinct trading complex. Many of the important factories are owned by families who originally acquired their wealth in trade and whose attitude is that of the merchant rather than the industrialist. A high return on investment and quick return of capital are expected as a matter of course, with the result that industrial investment is relatively unattractive. Such investment as does take place in industry is too often speculative. The desire for a quick turnover and high profits and the fear of inflation have blocked long-term investment commitments. The pursuit of profit through small margins earned on a large volume of production is practically an unknown concept.

If private enterprise is to play its proper role in Turkey's economic development, the Government will have to adopt positive measures of encouragement. The development of an entrepreneurial class willing to invest funds over a long period and to submit to the rigors of competition depends primarily on the energies, initiative and growing experience of private individuals. The leadership and cooperation of the State can, however, assist that process by elimination of the obstacles and inhibitions to initiative resulting from the economic activities and policies of the State. Clear-cut legislative and admin-

istrative decisions by the Government will remove many of them. The obstacles arising from the character and psychology of Turkish private enterprise itself will require greater effort but can in time be overcome if the Government helps create a general climate in which private investment can flourish.

Scope of State Enterprise

A first step in overcoming the obstacles created by the State should be to dispel the prevailing uncertainty as to the intended scope of public enterprise.

From the establishment of the Republic until 1942, private industry in Turkey was aided and protected by the Government through tax exemptions, special transport rates and preferential buying and selling by the Government. Many of the existing private industries owe much of their development to this assistance. Since 1933, however, the effects of this encouragement have been increasingly offset by the tremendous expansion of state enterprises. Private producers in general have grown increasingly apprehensive of expanding state operations and the possibility of expropriation. In the past two decades they have seen the State enter many fields and have become acutely aware of the tendency towards self-expansion among the major state economic organizations. As a result private enterprise is justifiably cautious of entering or expanding in any major field, whether or not public enterprise already exists there.

Events since World War II have somewhat allayed this anxiety, but it continues to retard private industrial development. In May 1950, the Prime Minister declared that the Government intended to limit its active participation in industry to fields of a public utility character and "basic" industries. We believe, however, that the Government should specify more clearly the particular industries which fall into these exceptional categories, explicitly reserving all other fields to private enterprise.

It should be noted that state competition has not always had an adverse effect on private enterprises operating in the

same field. In the textile industry, for example, the Government's selling price has become the market price and, because of the high costs of production in state plants, private firms have made substantial profits by selling at that price. Furthermore, the types of goods produced by state factories have often received greater protection against imports than other goods and this has, of course, aided private enterprises in competition with those state factories. It would seem that fear of state competition has not been as important a deterrent to private investment as fear of expropriation, discrimination or the creation of a monopolistic position by the State.

Sale of State Enterprises

Prompt action on the transfer of at least some state plants or mines to private ownership would undoubtedly be valuable as a tangible demonstration of the Government's intention to limit its economic activity. We wish to emphasize, however, that the disposal of state plants poses difficult questions which need careful study and considered judgment. Availability of private capital for the purchase of government enterprises is likely to be limited. Should the Government decide to provide credit facilities for this purpose, it would have to face the problem of devising means and conditions of credit extension consistent with general financial stability. It will also not be easy to arrive at fair prices for the enterprises to be sold, for the complexities of Sümerbank and Etibank organization and financing make it difficult to untangle an individual enterprise from the web of its parent organization. The recommendations we have made concerning the reorganization of state enterprises should help in this respect. Once capital is found and a price agreed on, the Government will have to decide how to use the proceeds of sale, a decision which may have important effects on the general economic situation. Decision as to the status of officials and employees of state enterprises and of the social welfare measures affecting them will have both political and economic implications. Such questions as these cannot be superficially answered. In any case the Mission believes that, at this stage, increased industrial and mining efficiency and the development of new indus-

tries are fundamentally more important than a change in the ownership of certain existing plants.

Discrimination Against Private Enterprise

Equal in importance to the definition of the scope of state enterprise, as an encouragement to private initiative, would be prompt elimination of government practices which give public enterprises advantages over their private competitors. Among these are cheap and relatively plentiful credit, priority in obtaining import and export licenses and foreign exchange, guaranteed markets and privileged sources of raw materials.

Public enterprise enjoys a distinct advantage in obtaining investment funds. In fact, there has been distinct discrimination against private industry in this respect. Through borrowing, high taxes and high profits from the sale of state-produced goods, the State has controlled the bulk of Turkish capital and made it available to state enterprises. Private industries must compete with high profit, short-term commercial operations for the remaining credit available. Many state enterprises can borrow extensively at a low interest rate (one per cent) from the Central Bank. Private plants must pay from 8½ to 12 per cent interest on 90-day loans from private commercial banks, when and if they can arrange loans. State enterprises also have an advantage in obtaining foreign exchange permits for the importation of capital goods or raw materials. Theoretically, all applications for exchange permits are treated equally, but there is no clear-cut system of rationing and in fact state institutions frequently are given preference.

State enterprises also often receive preferential treatment in purchasing scarce goods from other government factories. For example, the Sugar Factories receive all of the Karabük superphosphate production. Similarly, some government enterprises have a favored selling position in relation to private competition. Public enterprises have been known to pay a higher price to state-owned brickyards than to private brick manufacturers. Sales from one government agency to another are sometimes more easily and quickly arranged than are similar sales to private firms.

Equitable treatment of all enterprises in these matters would not only eliminate unfair competition between state and private enterprises, but would also remove political considerations from the calculations of the private entrepreneur. Private economic enterprises now have to work under many bureaucratic regulations and decrees. As a result, Turkish businessmen are frequently more concerned with obtaining an exchange permit or with influencing the administration of government regulations than with producing goods economically and marketing them efficiently. Moreover, since state institutions are the largest purchasers of goods, political influence is frequently important in marketing operations. With the removal of discriminatory regulations and practices, energies now devoted to courting political favor could be directed to improvement of efficiency in production and marketing. Elimination of the special privileges now enjoyed by state enterprises would also put greater pressure on both public and private firms to operate at lower costs and to sell at lower prices.

Private Associations

In the more developed parts of the world, it is an accepted principle that free private associations of farmers, manufacturers, workers and merchants contribute to the growth of leadership, initiative and enterprise. The advantages such associations can offer Turkey have largely been lost, for they have been made instruments of state policy, organized and controlled by the Government. Labor unions have operated under severe restrictions, strikes and lockouts have been prohibited by law, and government arbitration has been compulsory. Similar controls have been imposed on the Chambers of Commerce and Industry and the Unions of Industrialists and were not relaxed until 1950.

The oldest Chambers of Commerce in Turkey originated as private, voluntary associations, but in 1925 the Government took them over, organized many others and required all businessmen with a capital of more than TL 5,000 to join. Thereafter, the Minister of Commerce appointed a Secretary General of each local unit, who had the power to veto any decision

of the membership. During the recent war years the Government also organized Unions of Industrialists to coordinate the policies of public and private enterprises. All private industrialists were compelled to join and any conflicts arising between them and public enterprises were settled by the Minister of Commerce. While a few private voluntary business associations also exist, their membership is small and their influence minor. The major business associations have thus been semi-official organizations, created to implement public policies affecting business (e.g. exchange controls) and to facilitate government controls over private business practices and policies. They have not been an effective channel by which businessmen might make their own wishes known.

Early in 1950, the Chambers of Commerce were again made private autonomous organizations, independent of government supervision and control. The Government is to be commended for this decision. The complete liberation of such organizations from the tutelage of the State could have a considerable beneficial effect in industrialization. We believe, therefore, that the Government should give serious attention to eliminating controls over labor unions, cooperatives and business associations. The Ministries of Labor and Economy and Commerce should do all in their power to promote the development of such private organizations as part of the general policy of encouraging private enterprise.

Economic and Financial Measures

The shortage of long-term investment capital available to private enterprise has been a serious barrier to industrial development. This situation has been aggravated rather than relieved by the activity of the State.

Limitation on investments by the Government and pressure on its enterprises to operate more efficiently would undoubtedly make possible greater accumulation of capital in private hands and its subsequent investment in mining and industry. The State can actively contribute to this process by its credit policies. We do not mean, of course, that the Government should make credit and foreign exchange available indiscriminately to private enterprise. Rather, the Gov-

ernment should make credit and exchange available by selective rationing and in accordance with its program for the general economic development of the country. Techniques of doing so and recommendations for their use are discussed in Chapters XI and XII.

The Mission wishes to note that in 1950 the Government took a major step towards assisting the private entrepreneur to obtain long-term investment capital. With the technical advice of the International Bank, it joined with private firms and individuals in fostering the creation of the Industrial Development Bank, the first private bank in Turkey devoted exclusively to industrial investment. By its pledge to make available a loan from the Central Bank, the Government has made it possible for the new bank to add to its local currency resources; and by guaranteeing a loan from the International Bank, it assisted in providing the new bank with foreign exchange resources. These actions by the Government are highly commendable and illustrate ways in which it can help alleviate the shortage of long-term capital for private enterprise.

No measures by the Government can, however, be of any avail unless the general financial environment is such as to instill public confidence both in the financial stability of the country and in the general economic and financial policies of the Government. To this end, we offer, in Chapter XI, specific recommendations on financial organization and policy.

Danger of Monopoly

Apprehension has often been expressed in Turkey over the monopolistic tendencies of private enterprise. This fear has, in fact, been frequently cited as a reason for the need of extensive government participation in industry and trade. We believe that the long-run aim of the Government should be the development of private *competitive* enterprise. That view seems to be generally prevalent in Turkey today.

In our judgment there is, at present, little danger of the harmful aspects of private monopoly—certainly not enough to require government action to prevent it at this time. Nevertheless, it would be desirable for the Government to encourage in every feasible way the entry of new firms into all appro-

private fields of economic activity. If it does so, ventures which are initially monopolistic, not by intention but because they are pioneers in the field, will attract competition, resulting in greater productivity and lower prices. Should it be necessary to take legal steps to prevent collusive agreements among competitors on matters of price and production, this should be done through public regulation of business practices rather than through direct state intervention in production or distribution, as has been the case in the past.

In this connection, it should be recognized that the Government itself, through its controls over imports, over the capacity of state-owned factories and over the establishment of new private firms, has a far greater power to keep up prices than the most powerful private monopoly. There is great temptation to use that power in order to increase public revenues from state industries. As previously recommended, the general policy of the Government should be to fix prices of state-produced goods at as low a level as is consistent with efficient business operations.

In summary, we make the following specific recommendations with respect to encouragement of private initiative:

- (1) The Government should define more clearly the intended scope of the State's direct participation in industry, mining and commerce.
- (2) Prompt sale of certain state enterprises would demonstrate the Government's intention to restrict its economic activity, but such sales require careful consideration of many important economic, social and political questions.
- (3) The Government should put private and public enterprise on an equal competitive basis by abolishing the special privileges which public enterprises now enjoy in obtaining credit, foreign exchange, import licenses and raw materials and in selling their products.
- (4) Direct controls over associations of farmers, workers and businessmen should be eliminated.

Recommendations on economic and financial measures required for the encouragement of private enterprise, including measures concerning the provision of credit and foreign exchange, are contained in Chapters XI and XII.

CHAPTER IX

Education and Public Health

A population handicapped by poor health and possessing only traditional knowledge and rudimentary skills cannot produce efficiently. Rising levels of health, general and specialized knowledge, and technical skills are essential both to the general well-being of a people and to their economic and cultural growth.

Among the most important barriers to economic development in Turkey are the scarcity of enlightened farmers in agriculture, the shortage of skilled labor and competent management in industry, the lack of qualified executives in business, the scarcity of efficient administrators in government, and, in society at large, the insufficiency of independent and scientific thought and physical vigor and the higher productivity which they yield. Therefore, improvement of public health and education should be high on the list of Turkey's priorities.

The returns on investments in education and health, though manifold in their ramifications, are not saleable or negotiable and are of little direct interest to private investors. Through their effects on the general level of human productivity, the benefits of those investments do accrue, however, to the individual and to the private businessman as well as to the nation as a whole. Probably no other type of investment, public or private, will produce a greater return per unit of outlay. A generally literate, vigorous and skilled people are not so spectacular or tangible a symbol of progress as a hydroelectric plant or a steel mill, but their value is infinitely greater.

EDUCATION

The Mission did not attempt an intensive survey of education in Turkey, yet as a result of our studies of Turkey's economy, economic policy and public administration, and of our talks with educators, we were greatly impressed by certain aspects of the educational system in which we feel remedial action would be desirable. The Mission recognizes that

changes in the educational system of a society still based largely on a primitive village culture may be difficult and must in any event be gradual. The comments that follow are therefore not meant to be recommendations for immediate action, but rather suggestions for more detailed study by the Government. We strongly urge the Government to obtain the services of foreign specialists for a thorough reexamination of the content, methods and organization of Turkish education.

It is apparent even to the casual observer that the educational base of Turkish society is not yet adequate to support large-scale economic development, particularly industrialization and mechanization; nor is it sufficiently broad or appropriate in its content and method to support the democratic process to which the Turkish people have committed themselves. Turkey has made rapid advances in education in the past 20 years, but the extent of independent and scientific thought and of specialized training remains dangerously small. The problem is twofold: lack of focus on the needs of the country and inadequate educational expenditure. The order in which these factors have been cited indicates their relative importance. Before substantially increased educational investment can be justified, proper use must be made of present facilities and a sound foundation laid for the use of additional funds.

Educational Methods

The raw materials of a free and productive society are inquiring minds, personal and independent inquiry, and individual initiative. These elements have not received appropriate stress in Turkish education. On the contrary, teaching in Turkish schools has, by and large, emphasized formalistic learning. This seems to be true from the earliest grades through the university level and called forth a warning from the Rector of Istanbul University that "the tendency to remain tied to the professor's statements is still dominant" and that knowledge "acquired by memorizing and applied like a cliché" will not enable the young Turk to accomplish what is expected of him.

The authoritarian character of the teaching process is reinforced by an educational hierarchy built on rigid lines with strictly defined channels of authority and a strict and military-like subservience of students to teachers. The school system, while it has undoubtedly spread a certain amount of information, has not adequately trained children to think or sufficiently stimulated scientific inquiry. It seems essential, therefore, that the content, organization and teaching methods at all levels of Turkish education should be revised in order to encourage greater freedom of thought and inquiry and that educational administration should be made less authoritarian.

Decentralization of Control and Finances

One aspect of the authoritarian character of education is the virtually complete absorption by the central government of all responsibility for the educational system. Provincial governments once carried complete responsibility for the financing of primary and middle school education. However, the inability of local governments to provide the necessary funds and the effort of the central government to exploit all major sources of revenue reduced local financial participation to only 14 per cent of all educational expenditures in 1948. Educational policy, the administration of all schools and the construction of all but primary and middle schools are under the direct supervision of the Minister of Education. There is no local control over either personnel or policy.

The revolutionary origin and character of the Turkish Republic made this process of absorption and centralization both necessary and desirable. It may indeed still be difficult or inexpedient to permit much responsibility for policy to revert to local communities. We believe, however, that the time has come to examine the centralization of education and to review the degree to which local communities should be permitted and encouraged to participate. The stimulation of individual initiative and enterprise is closely related to the opportunity for the development and expression of community initiative and responsibility. If the latter are to be encouraged, local and provincial governments should carry a greater part

of the financial and administrative load of the activities that affect them directly. One of these is education.

For instance, the Government might explore the possibility of returning to the local community the responsibility for paying a larger share of the expense of primary education. If receipts from the provincial and municipal land and building taxes are increased, as recommended in Chapter XI, local governments would have the means of doing so which they have hitherto lacked. The ultimate goal should be greater local control over school administration. This shift will necessarily be very gradual and is undoubtedly in the distant future. Increasing the financial responsibility of local governments is a step in that direction.

Specialized Training

A second major characteristic of Turkish education that impressed the Mission is its failure to provide adequate vocational, technical and administrative training, which is now the principal educational need of the country. A nation whose productivity is low needs to provide opportunities for acquiring technical and managerial skills, improving techniques and increasing efficiency. Such things can be imported but the effects of imported management and skills are limited and slow to spread. If Turkish education is to contribute to national development, it must provide the more advanced and more specialized training. In Chapter V we emphasized the urgency of training the competent research and extension corps which are absolutely necessary for the development of agricultural productivity. In Chapters VI and VII, we noted that Turkey's present physical facilities are not being used to their fullest and that its economic development will be hampered because of the shortages of trained personnel in almost every field of endeavor from administration to applied science, from accountancy to engineering, from factory labor to management. We shall stress later the same shortages and the same need for training in public health and in public administration.

Despite these needs, the major educational effort of the Government has thus far been on the expansion of primary schools¹ and the increase of literacy. Half of all educational expenditures are for such schools and three quarters of the teachers teach in them. The percentage of children of primary school age actually attending school rose from 30.9 to 58.3 per cent from 1933 to 1949, while the percentage in schools beyond the primary grades changed little during that period. Only eight per cent of primary school students continue their education beyond that level. There are, of course, good economic reasons for this great gap between primary and middle schools in a relatively poor agricultural country.

We do not wish to minimize or to underestimate the literacy or importance of primary schools. We believe, however, that the time has come when the Government should give greater attention to strengthening schools beyond the primary grades and to provide opportunities for greater numbers of carefully selected students to continue their education in the middle schools and *lycées*. Moreover the emphasis in the expansion of such secondary schools should be on technical and vocational training. Turkey already has a number of technical middle schools and technical *lycées* for training industrial and agricultural workers. These schools received an increasing proportion (rising from 5.5 per cent to 12.5 per cent) of the total expenditures on education during 1935-48. Turkey's needs for trained craftsmen and mechanics, nevertheless, remain far in excess of present training facilities. The Government should also seek to provide more financial assistance to permit a much greater number of promising village boys to attend such schools.

College and university training in Turkey suffers from an excessive number of students in relation to the facilities and faculty available. The greater economic gap in education occurs after primary school. Those who can afford to continue their education beyond that level normally proceed to the college

¹ Primary schools include grades one through five, ages seven through 11; middle schools, grades six through eight, ages 12 through 14; *lycées*, grades nine through 12, ages 15 through 18.

level. Classes are now far too large for available teaching staffs and laboratory accommodations. More rigorous selection by competitive entrance examinations is greatly needed both to improve the quality of the student body and to reduce its size so as to relieve the pressure on teaching facilities. At the same time, more scholarships for the promising but poor students would remove one obstacle to college attendance among the more impoverished sections of the population and help to inculcate a more democratic spirit among college graduates.

The curricula, standards and facilities of colleges need urgent attention and greater emphasis on specialized training in fields of greatest importance to the country. For example, college and university students engaged in the study of law far outnumber those in engineering, agriculture, science, government administration and medicine. In the latter fields both the facilities and the number of students are highly inadequate and the courses given are not sufficiently specialized. Courses are few and inadequate in such important subjects as industrial engineering, business management, cost accounting and personnel administration.

The quality of professional education is very uneven. Turkey is well supplied with competent engineers who received their education abroad, particularly in Germany. As a result, its own technical universities are relatively well equipped to offer high-quality professional training in the engineering field. On the other hand, as we pointed out in Chapter V, the agricultural colleges give all students the same general training and offer few opportunities for specialized study. Similarly, legal training appears to be poor and students are far in excess of either needs or teaching resources. Since many law students take legal training simply as a stepping-stone to government employment, it would be desirable to divert a substantial part of this student body to courses of study in public and business administration. This would require the establishment of more chairs, faculties and courses in public administration, business administration and industrial management. The Faculty of Political Science of the University of Ankara, which

has been a major source of government administrators, would be an excellent place to begin this development.

Improving Village Primary Schools

A third problem to which the Government needs to direct attention is the quality of teachers, particularly village primary school teachers. We stress the latter, because they are the only contact with formal education which the overwhelming majority of Turkish children have and because of the influence they wield as a result of their important role in the village community. At present these teachers are trained in 21 village institutes, which provide five years of education beyond the primary school level. Entrance is by competitive examination, all expenses are borne by the Government and all graduates are required to serve for 20 years as village teachers. While the village institutes appear to be doing an excellent job within their present limited resources, their graduates are assigned their first teaching post when they are only 17 to 20 years old. They lack the maturity, training and prestige to do the job expected of them.

Improvement in the training of the village teacher is essential. Consideration might be given, for instance, to the adoption of a system in which outstanding primary school graduates would receive middle and *lycée* training at government expense, followed by two or three years of training in pedagogy and agriculture at a more advanced type of teacher institute or at normal schools comparable to those at which town and city teachers are trained, and one or two years of required military service. The teacher would then enter the village school at a more mature age and with the benefit of a better education and would thus command greater prestige. His longer, more diversified training and more mature judgment, would permit him to make a greater contribution to village education and to hold out more effectively against the influence of traditional village ways.

The Mission recognizes that the backwardness of village life may place social and psychological obstacles in the way of carrying out such a change in the primary school system

except very gradually. We recognize, too, that a potential village teacher, given the greater training we suggest, may become unwilling to confine himself to village life. We believe, however, that the importance of improving primary education makes it essential that new methods of training teachers be thoroughly explored.

Educational Expenditures

Despite the large increases of recent years, the present level of expenditures for education is clearly inadequate. Per capita expenditure for all public education has risen from TL 1.4 in 1935 to TL 10.5 in 1948 and expenditure per child in school, from TL 34 to TL 111. Similarly, the share of the national budget devoted to education rose from four to 12 per cent between 1936 and 1950. But these increases were largely offset by inflation. The increase in per capita real expenditure was only 46 per cent, while the expenditure per school child actually declined by 41 per cent between 1934 and 1948. In terms of purchasing power, the growth of the central government's expenditures from TL 10 million in 1936 to TL 176 million in 1950 represented a less than three-fold increase. Most of that increase was the result of shifting the burden of financing education from local governments to the central government.

Unfortunately, the limited resources available for government investment necessarily restrict the possibilities of greater expenditures on education. Some increase is nevertheless necessary if the educational system is to provide the kinds of training required by the Turkish people. Such increases should be devoted to expanding technical middle and high schools, vocational training and the training of specialists at the college and university level. For such purposes, a cautious expansion of educational outlays is clearly desirable.

Financial limitations require making the most of present resources and effecting economies in current operations and plans. For instance, wherever space and teaching staff are already adequate, present resources should be fully utilized by more rigorous enforcement of compulsory attendance laws

and by increased use of local schools as centers of adult education. New school construction plans should provide for buildings of less expensive design. Where local road conditions permit, bus transportation might be used to bring children to a centrally located school. In such areas, preference should be given to building a single new school at a central accessible point, instead of constructing several smaller schools in the individual villages to be served. This would achieve economies of construction and operation. It would also result in better teaching staffs and equipment and wider social contacts among children of different villages.

In summary, we believe that the educational foundations of Turkish society could be greatly strengthened if the following recommendations were adopted:

- (1) The content, methods and organization of teaching at all levels should be thoroughly reexamined with the aid of foreign specialists.
- (2) In reviewing the educational system, the Government should explore the possibility of:
 - (a) Encouraging greater freedom of thought and inquiry at all levels of education and reducing the authoritarianism characteristic of the educational system;
 - (b) Returning to local governments a larger share of the financial burden of primary schools;
 - (c) Placing greater emphasis on the training of students in the skills and professions most urgently required for Turkey's development program.
 - (d) Shifting the central government's emphasis to the middle and higher educational levels where facilities need greatest expansion and greatest qualitative improvement;
 - (e) Tightening the entrance requirements of colleges and universities and raising their academic standards;
 - (f) Revising the present system of training village teachers so as to provide older, more mature and better educated personnel for primary schools.

PUBLIC HEALTH***Need for Public Health Services***

Public health and medical services have a history of barely 30 years in Turkey, yet even this brief period has witnessed great achievements. In health, as in other fields, the Government has made an impressive effort to make up for lost time. The expansion of hospital facilities, the increase in the number of physicians, nurses and hospitals, and the attacks on tuberculosis, malaria, trachoma and other diseases common in Turkey are all evidence of progress.

Despite these achievements, health services and medical facilities are still inadequate to meet the needs of the Turkish people. Seventy per cent of Turkey's 20,000 hospital beds are concentrated in Istanbul. Only 13,000 of the beds are available for the treatment of ailments other than tuberculosis, mental diseases and leprosy; and two thirds of these are in the metropolis, leaving wholly inadequate provision for the 19 million persons outside Istanbul. On the basis of a modest goal of three beds per 1,000 population, Turkey still needs an additional 47,000 beds for general purposes and 33,000 special beds. Similarly, Turkey's 22 operating health centers and the 18 now in construction or planned for completion by 1952 are but a fraction of the Government's goal of 1,000. Even these institutions are inadequately staffed. A fifth of Turkey's 7,500 doctors are in the armed forces and another fifth are in the Istanbul area. Outside the armed forces and five major provinces, there is but one doctor per 4,139 of population, and most of them are in towns. The rural population, particularly in the remote parts of the country, is thus virtually beyond the reach of medical assistance. There are only 600 trained nurses in the country and they are equally badly distributed. The nation's output of both physicians and nurses cannot cope with the need and in both cases the quality of training is far from satisfactory. Tuberculosis remains a serious national problem. Malaria, trachoma and venereal and other diseases are still prevalent. Public sanitation is grossly inadequate. It is indicative of the level of health service in Turkey that no reliable statistics

are available regarding birth, death and infant mortality rates or the incidence of disease. Despite the advances of the past three decades, Turkey still has a long way to go in improving the health of its population.

The background of Turkey's public health problem is a familiar one, common to a large part of the world. Poverty, with its attendant evils and problems, is the source of the difficulty and Turkey's low per capita production and income are the root causes. A permanent solution can be achieved only when the nation attains a much higher standard of living and can afford the volume of health and welfare services now considered essential in more developed countries. Until then, efforts must be circumscribed by the limits of Turkey's resources and must be concentrated on the more urgent and serious conditions which affect the working capacity of the population or which take a large toll of human life.

The speed with which Turkey has sought to move in public health is one cause of many of the present difficulties. In their haste, the Turkish people have neglected some of the essential intermediate steps in the development of their services, not realizing that large schemes of development, even in health, must start with less ambitious and spectacular beginnings. Modest facilities scientifically operated and widely distributed are more effective than monumental and costly buildings. The quality of services and personnel is more important than their numbers if steady and effective improvement is desired. Existing facilities need to be effectively used before new facilities are launched. There are thus steps to be retraced and basic problems to be overcome before Turkey can hope to advance more rapidly in the field of medicine and public health.

In general, the deficiencies in Turkey's public health services may be summarized as follows. First, the country suffers from a scarcity of well-trained medical and health personnel. Second, public health efforts have been concentrated on the cure rather than the prevention of disease and insufficient attention has been given to environmental sanitation. Third, the scientific approach to problems of disease

prevention and control has not been sufficiently emphasized. Finally, public health administration has been poor and unintegrated.

Technical Training

Despite the urgent need for expansion of medical services, Turkey can not profitably spend large amounts of money for new hospital construction and expanded services, even if funds were available, until there are more adequate facilities for training medical and health personnel and technical assistants. The highest priority should therefore be given to the training of technical staff, both to complete the establishment of existing institutions and services and to provide the staff needed for the new ones that must some day be created. It cannot be too greatly stressed that progress in the future depends on the ability to produce necessary technical staff, for without this staff no amount of investment can solve Turkey's health problems.

The need for new and better training facilities for nurses and allied staff is especially urgent. Hospitals now employ 75 per cent of the 600 professional nurses in the country, but for proper staffing they need at least twice as many. An ultimate fivefold increase of hospital beds and the needs of dispensaries, health centers and a public health nursing service would bring the requirement for nurses to at least 11,700. Yet present training facilities are turning out only about 65 new nurses per year. Turkey thus has an enormous training problem ahead which must take priority over all else.

To supply the need for trained nurses, the Mission calculates that about TL 70 million would have to be spent over a 20-year period. Existing training schools should be enlarged and new ones opened in connection with nearly all the larger hospitals of the country. The major difficulty in this connection is the provision of trained teaching staff, which now exists only in the Red Crescent Society's Nurses School at Istanbul. Employment of foreign nursing instructors and the sending of Turkish nurses abroad for special training would help to speed the training program. Serious consideration might also be given to employing male nurses to serve male hospital

patients, at least as a temporary expedient, for a large number of female nurses leave the profession after a few years and the social traditions of Turkey make it difficult to obtain enough female recruits. A concerted campaign to break down such barriers and to improve the conditions of service are essential if more and higher quality personnel are to be recruited and retained.

The development of a system of public health nurses, with at least one for every 5,000 people, should also be incorporated into the training program. Such nurses, of whom there are now but few in Turkey, would, in addition to general training, receive special instruction in home nursing, infant and child care, school health inspection, home hygiene, and the improved use and preparation of local foodstuffs. A nursing service of this kind should be an important part of the nation's health services, particularly in rural areas where there is likely to be little else in the way of home medical assistance. An early start should therefore be made in training nurses for such a service and particular care must be taken in selecting recruits. Because of the need for expanding maternity service as part of a future system of public health centers, immediate plans should also be made to increase the number of midwives trained both in the special School for Midwives and in the two practical training schools for village midwives.

Three schools in Turkey now graduate an officer called a "sanitarian," who is a partially trained sanitary inspector and a partially trained medical aide. These functions need to be separated and the curricula of the schools for sanitarians should be revised accordingly. One course should be designed to turn out a medical assistant who can perform minor medical functions, including vaccination and diagnosis of the commoner communicable diseases, and simple dispensing and treatment. Such assistants will be important in the development of health centers, in which they can frequently serve in place of a permanent, fully trained doctor. A separate course for sanitary inspectors should place primary emphasis, at a thoroughly practical level, on disease prevention, food inspection and environmental sanitation. If properly trained, sanitary inspec-

tors could save much time of health officers and could assure the proper inspection of sanitary conditions and the systematic abatement of nuisances. It is important to get these courses of study under way quickly.

Additional training facilities are needed for X-ray and laboratory technicians. At present, radiographic work in Turkey is of poor quality despite excellent and often over-elaborate equipment. The services of a competent radiographer should therefore be obtained to train X-ray technicians for hospitals and tuberculosis dispensaries. Nurses, who can ill be spared from their proper duties, and even partially trained hospital servants, are frequently employed in laboratories. A special course of instruction for laboratory technicians should be instituted in the central laboratory of the Institute of Hygiene in Ankara. The course should include modern techniques of diagnosing tuberculosis.

There is also a pressing need for more doctors, but improved quality of medical training and a shift in its emphasis are of even greater importance. As in other professional education, teaching and laboratory facilities at the Medical Faculties of Istanbul and Ankara are insufficient to provide adequately for the student body. In recognition of this fact, it is intended to restrict annual admissions considerably. Additional facilities are urgently required.

Medical training in Turkey places insufficient emphasis on hygiene and the basic principles of disease prevention, with the result that medical graduates have an insufficient appreciation of the value of preventive medicine. This is a particularly serious failing in doctors employed by the health service, about a third of the total. Greater emphasis should be placed on the teaching of public health throughout the qualifying medical courses. The general pattern of diseases should be presented to the student in relation to the economic and social structure of the country and without too much detail of public health organization and practice, as this is more appropriate to post-graduate work for specialists. Every doctor will then have a broad general perspective of public health and the value of preventive methods.

No ordinary medical curriculum can, however, adequately train public health officers for their specialized work. It is, therefore, of great importance that postgraduate training for public health officers be re-established as soon as possible. Such special training was once given at the Institute of Hygiene in Ankara, but the course had to be discontinued when the premises were required by the medical faculty of the new University of Ankara. A comprehensive course along modern lines is needed, adapted to local conditions in Turkey. For this purpose, it would be desirable to obtain the services of a specialist in public health to reorganize the Institute and to draw up a suitable syllabus. The Institute should grant a diploma in public health, which should be a prerequisite for all appointments to major positions in the public health field.

The provision of more and better training facilities for public health personnel will not in itself ensure a larger number of recruits. It is essential that present low salaries be raised sufficiently to attract men and women into training. Public health administrators and officers should receive salary increases sufficient to compensate them for their inability to engage in private practice. If this were done, fewer doctors would be reluctant to adopt preventive medicine as a career. The Government should consider the desirability of paying higher salaries to new recruits for its medical staff and banning them from private practice, thus assuring full-time attention to official duties. Nurses and other public health employees also receive wholly inadequate pay. Though it is a general problem, low government salaries are especially serious in the field of public health.

Preventive Medicine

The second major requirement of Turkey's medical and public health program is to change its emphasis from cure to prevention. Those who have preached the importance of prevention have thus far made little impression on their colleagues or on the Government. Since it is unlikely that Turkey will be able to afford for many years to come the standard of hospital accommodations now enjoyed by more developed countries, the incidence of preventable disease must be held at as

low a level as possible. In this manner, it will be possible to make better use of the limited hospital accommodations which are now, or are likely to become available. The emphasis recommended here is essential because Turkey is just commencing to build up a medical profession and a state health service. Now is the time to lay sound foundations and to develop a scientific outlook on the nation's health problems.

Closely related to the emphasis on cure rather than on prevention is the serious lack of attention to the simpler problems of environmental and general sanitation. Much of the preventable disease now prevalent in Turkey is directly attributable to low standards of hygiene. To a large extent they are responsible for the high incidence of trachoma, typhoid fever, worm infections in children, gastro-enteritis in infants and other diseases. There is little routine sanitary inspection in any real and effective sense and little attempt to abate nuisances in either towns or villages. Until recently, little has been done regarding water supplies outside the larger cities and few such supplies receive adequate inspection or protection. Aside from small sections of Ankara and Istanbul, there is no modern sewerage in Turkey.

These conditions require immediate attention. In proportion as that attention is effectively given, the pressure on curative facilities will be relieved and the general standard of health raised. As fast as sanitary inspectors can be properly trained, their energies should be applied to the abatement of nuisances, public education on the value of clean surroundings, the protection and improvement of water supplies, better methods of sewage and refuse disposal, and inspection of housing and food. Urban communities should be provided with water purification plants, or at least emergency chlorination plants. Regular inspection and frequent bacteriological analysis should be made of all major supplies of water, and such analysis should be supplemented by inspection of supplies from source to consumer so that contamination may be prevented all along the line. In small rural communities, purity is more important than piping and water sources should be carefully chosen and protected. Greater attention to the effective enforcement of

regulations regarding septic tanks and cesspools and to the controlled collection and dumping of refuse, is vital in towns and hardly less important in villages. Disposal in villages is now haphazard and left to the individual. If villagers were taught to treat refuse on a selected site by the method of composting, they could dispose of it in a sanitary and harmless manner and at the same time provide valuable organic material for their land. Such measures would do much to promote public health with minimum capital requirements.

We do not wish to imply that prevention of disease has been entirely neglected in Turkey. Such problems as tuberculosis and malaria, among others, have been attacked with vigor, even if the measures taken have not always been as successful as they might have been. The absence of a scientific outlook on these problems, as well as the failure to build up an adequately trained subordinate staff, has been a major reason for the limited success. Infant mortality due to intestinal complaints, for example, is understandably high in view of the lack of sanitation facilities, but the indiscriminate use of sulphaguanadine in villages to control it is merely a palliative measure which does not strike at the root of the condition and hence must be continued indefinitely. Similarly, in the malaria control program, the simultaneous use of almost every known method of control makes it difficult to say definitely which method produced the results, which method would in given circumstances be most effective and which would be cheapest to use in the future. As personnel trained scientifically and with due attention to preventive medicine become available, we may expect a more effective attack against disease.

Tuberculosis

Tuberculosis is Turkey's largest single public health problem. Its annual death toll of about 2,000 per million people is comparable to that of England and Wales some 50 years ago. The disease takes its heaviest toll in the working and reproductive years of life, and in urban rather than rural populations. In the future, increasing urbanization and a movement of young people from rural to urban areas are thus

likely to be serious factors influencing the spread of the disease. Overcrowded housing and malnutrition also favour the spread of the disease.

The major effort to combat tuberculosis has until recently been carried on by voluntary associations which receive public grants-in-aid but remain free agents in the control and operation of their institutions and finances. Their efforts have been sporadic and, combined with lack of trained staff, inadequate isolation facilities and imperfect diagnostic techniques, have produced little or no reduction in incidence or mortality. Both may, in fact, be increasing. Many of the existing tuberculosis hospitals are unduly luxurious. Those who can pay the comparatively high fees charged in certain instances usually come from homes in which isolation would be relatively easy. In general, diagnostic techniques are poor and unstandardized. Diagnosis is not usually made until the disease is already well advanced and cases have been sources of infection for some time, and inadequate facilities exist for isolating them from their healthy associates. Existing tuberculosis dispensaries are not functioning as real control centers for the communities they serve. They do not provide sufficient home visiting, supervision and aftercare to prevent many cases from breaking down, becoming further sources of infection and destroying the value of previous institutional treatment.

The tuberculosis service should be reorganized and extended as rapidly as trained staff becomes available. The Minister of Health has recently established a special section under the Director of Hygiene to deal with tuberculosis, but there is little evidence that it will be adequate for its purpose. Turkey needs urgently a competent, experienced central directorate capable of organizing a workable plan of control based on the special characteristics of the disease. In view of the size of the country, regional organization appears to be essential, with perhaps 20 experienced regional directors in charge of all tuberculosis activities in their respective areas. They should ensure coordination of the work of clinic, hospital and aftercare services. The importance of such teamwork in tuberculosis control cannot be too greatly emphasized. More

simple and cheap accommodation for open cases is urgently required, and dispensary facilities must be increased and extended to the areas not yet served. For the sake of more effective control, the Government should assume direct responsibility for all tuberculosis services, relying on the private associations for assistance in the social work, rehabilitation and aftercare which will be necessary in a comprehensive scheme.

Turkey may need foreign assistance in the establishment of such a unified plan of control. For that purpose, it would be wise to secure the services of a tuberculosis specialist with administrative experience to conduct a survey and organize the service on a proper basis. At the same time, a few selected members of the present staff should be sent abroad for training to fit them for senior appointments in the service at headquarters or in the regional organizations. The special training in radiography and in laboratory techniques of diagnosis, which we recommended earlier, will be particularly important in the campaign against tuberculosis. A central laboratory for diagnosis should be attached to the laboratory of the Institute of Hygiene and should function as the main laboratory for the whole country and as a training center.

Malaria

Malaria is widespread and is still an important problem, particularly in the coastal areas. Much progress has been made in lowering the incidence of the disease despite a somewhat haphazard use of various systems of control. Anti-malarial drugs, drainage, larvicides and DDT as a residual insecticide have been used more or less simultaneously. The first method can, on the basis of experience elsewhere, be ruled out as a means of controlling malaria on a nation-wide basis. The others should be investigated carefully by a malariologist and an entomologist in order to assess their respective effectiveness and to develop a control program which is both practical and economical. These specialists should also cooperate with agricultural experts in investigating the breeding of mosquitos in rice fields, so that present bans on rice growing near towns

may be eliminated. The malaria control service is at present a separate section of the Ministry of Health, with its own Director General. It might more appropriately be placed under the Director General of Hygiene, who should be directly responsible for all health services.

Other Communicable Diseases

The situation regarding communicable and infectious diseases is varied. Since 1939, the Ministry of Health has greatly reduced the incidence of trachoma, prevalent in south-eastern Turkey. More modern methods of treatment could, however, be adopted with advantage and much more attention paid to environmental sanitation in the area. Mobile epidemic units are already being used in Turkey in connection with epidemic disease generally. They have proved effective and are probably the cheapest and most effective means of control in a country very short of hospital beds for isolation purposes. In the control of venereal diseases, general dispensaries and out-patient departments of general hospitals would probably be more effective than the present specialized clinics, which many people are doubtless reluctant to use. Convenient facilities for early diagnosis and prompt treatment, wider distribution of more carefully designed propaganda and more attention to the social aspects of syphilis would also be desirable. The incidence of typhoid fever, while declining in recent years, will remain high so long as sanitary standards are relatively low. Typhus fever has also declined notably and, with modern insecticides, should not again assume epidemic proportions. The incidence of smallpox is very low, undoubtedly because of extensive vaccination. The considerable unexplained increase in anthrax in the past 10 years calls for investigation.

The General Program

Each of the recommendations we have thus far made for the improvement of public health is adapted to a particular need and is self-contained, but we envisage them all as integral parts of a comprehensive health program adapted to Turkey's

requirements and to the limited resources available. The objective of the program would be to bring some medical and health assistance, however simple at first, to as many of Turkey's people as possible without imposing too great a burden on the nation's resources. In that program, the hospital and the hospital bed, which now loom so large in Turkish plans, would be simply part of a balanced group of facilities designed to improve the health of the nation as economically as possible. There is little prospect for many years to come of an expansion of general medical services and hospital accommodation of the size desired by Turkey. In the meantime, public health planning must be along other lines.

The Mission's long-term program envisages a system of regional hospitals, each with special facilities for maternity services, tuberculosis and the like, and each serving as the focus of the health activities of its region. Dependent upon each regional hospital would be a network of health centers serving the surrounding area. In the early stages, these centers would be simple in function, providing elementary medical and surgical aid, prenatal, maternity and infant-welfare services, and sanitary inspection. As conditions permitted, the scope of the center could be increased to include public health nursing and medical care of school children. Radiating from these centers would be a village maternity and welfare service. Ultimately, such special services as those for the treatment and control of tuberculosis and venereal diseases, which are now operated as separate entities, would be incorporated into the centers. In their final form, the centers would embrace all public health activities in the areas they serve.

An organization such as this, combining medical and public health services and the principles of curative and preventive medicine, would reach more people at less cost than any other system. In a country like Turkey in its present stage of development, it would lay a solid foundation for the future. Its influence would be enormous in promoting a better way of living, for it would reach the homes of the people and particularly the women and children.

Organization of Ministry of Health

Unfortunately, Turkey now lacks the effective organization and administration required to plan and carry out the broad program we envisage. The Ministry of Health is at present poorly equipped to prepare well conceived programs and to organize their effective execution. The tradition that the Minister of Health and his permanent undersecretaries must be members of the medical profession is firmly established. Medical training is a desirable attribute, but unless at least the undersecretaries are also outstanding administrators, their interest in professional affairs and details may obscure their vision of broader matters of public policy and its direction. Moreover, unless they have training and experience in public health administration, they are likely to underemphasize the importance of preventive medicine.

The present organization of the Ministry is complex and overcentralized. Matters of minor importance must be handled at a very high level. Provincial Directors of Health are caught between bureaucratic restraints imposed by the Ministry and the political and administrative control of the provincial governors to whom they are subservient. They have only nominal control even over the centrally directed special services, such as the campaigns against malaria, tuberculosis, venereal diseases and trachoma. In such circumstances, responsibility and initiative cannot be developed in the lower ranks of the service.

Accordingly, we recommend that an experienced foreign public health administrator should be attached to the Ministry for a minimum period of five years. This specialist, who should have demonstrated his administrative ability, preferably in some other underdeveloped country, would advise the Minister of Health on the organization of the Ministry and its services and would help to work out the kind of general public health service we have outlined and the prerequisite programs of training and construction.

Expenditures

The expenditures required to give effect to the foregoing recommendations will be considerable. In 1949, about four per cent of the budget of the central government, and slightly more than five per cent of all government budgets, were devoted to public health purposes, amounting to a total at all levels of TL 97 million. This expenditure was only TL 4.8 per capita, or less than is required to maintain one person in a hospital for one day. This sum is obviously inadequate and must be increased if satisfactory standards of health are to be achieved. An eventual expenditure of 10 per cent of the total revenue would not be unreasonable. Yet in Turkey's present situation, such increases must be gradual, not only because of the limitations imposed by Turkey's resources, but also because much of the new expenditure must be for new staff, which will take time to recruit and train. It is our firm conviction that capital expenditure should in no case be sanctioned for any scheme until its staff and maintenance are assured.

We especially emphasize restraint in capital expenditures for new hospital construction. The only exceptions should be hospital extensions required as part of the training program and for the urgently needed simple and economical tuberculosis pavilions attached to general hospitals. Construction of general hospitals and health centers should be carried out gradually, according to the integrated, long-term public health plan previously recommended. Achievement of present hospital construction goals would, at current prices, require the investment of TL 50 million a year for the next 20 years in buildings, exclusive of interest charges. Even more important, annual operating and maintenance costs would ultimately reach TL 174 million. Obviously, available funds will fall far short of these tremendous amounts. Hence, the most careful planning and economy are of paramount importance in these construction programs.

Even today's level of expenditure could be more effectively used. For instance, the Ministry of Health has no central buying or distribution agency for the many items of equip-

ment and supplies required for its services. Its piecemeal method of purchase and supply results in great diversity in type and quality, and greater cost. The adoption of bulk purchasing and of a central medical store would facilitate the introduction of a much needed cost accounting system. We have also found evidence of neglect and hence waste of equipment. While maintenance costs should be kept low, reasonable standards of efficiency require that equipment be kept in good repair if it is to have an average period of serviceability. Projected buildings could be made less elaborate and expensive than many existing structures, but they should be designed to permit extension as circumstances permit.

To increase the health and productive efficiency of the Turkish people, we offer the following recommendations:

- (1) The Ministry of Health should develop an integrated, long-term public health plan, based on a system of regional hospitals and a subsidiary network of health centers to serve the surrounding territory. The principal purpose of the health centers should be disease prevention and health education in the broadest sense. To assist in laying out this program and to advise on a more efficient organization of the Ministry, the services of an experienced foreign public health administrator should be secured by the Ministry for a least five years.
- (2) Highest priority should be given to the training of technical staff. First attention should go to the training of nurses. Other immediate needs are: expanded and improved schools for midwives; a training course for X-ray and laboratory technicians, with special attention to diagnosis of tuberculosis; and the training of two separate types of health officers (medical aides and sanitary inspectors) instead of sanitarians. As rapidly as qualified inspectors become available, a sanitary inspection service should be established and extended.
- (3) Greater emphasis should be put on public health and the principles of disease prevention both in the medical schools and in state health programs. The Institute of Hygiene in Ankara should be reorganized with the help of a foreign specialist and its diploma in public

health should be required for appointments to all public health posts. Salaries of public health personnel should be raised sufficiently to induce adequate numbers of men and women to work in the field of preventive medicine.

- (4) With regard to specific services: the tuberculosis service should be reorganized with the aid of a foreign tuberculosis specialist and expanded as soon as trained staff is available; a central laboratory should be set up in the Institute of Hygiene to function as the main laboratory for diagnosis of tuberculosis for the whole country and to serve as a training center; the Government should assume responsibility for all tuberculosis hospital dispensary services; the malaria control service should acquire the services of a malariologist and an entomologist; in the control of other communicable diseases, mobile epidemic units should be more widely used.
- (5) Further capital outlays for construction of hospitals and health centers should be held in abeyance until trained staff is available and a long-term integrated plan of construction and maintenance is worked out. The only exceptions should be hospital extensions required as part of the expanded training program and urgently needed tuberculosis pavilions. Every effort should be made to economize on the construction and operating costs of institutions and services.

CHAPTER X

Public Administration

In previous chapters, we have made recommendations on organization and management in several parts of the Turkish Government and its enterprises. In view of the extensive role which the State must necessarily play in carrying out the development program proposed in this Report, it has seemed appropriate to the Mission to go further and to comment also on certain more general aspects of Turkish public administration. We have not attempted to make an intensive analysis of the problem for this was not within our terms of reference. Our examination did suffice, however, to convince us that the time has come for a comprehensive and thorough study of the organization and administration of all governmental activities. We strongly recommend that the Government arrange for such a study to be made, utilizing for the purpose both Turkish and foreign specialists in public administration.

The best approach to such a study, in our judgment, would be through the appointment of a nonpartisan Commission on Public Administration consisting of competent and distinguished citizens from both the Government and the public. Its purpose would be to study all aspects of government administration and to make recommendations for its improvement. The Commission should have a competent Turkish staff and a consulting staff of foreign experts. Both staffs would study the methods by which the best of foreign experience in public administration can be adapted to Turkish conditions and would lay out long-range plans for its increasing absorption into Turkish practice.

In anticipation that a study along the above lines will be undertaken, we have made several recommendations concerning urgent and important problems of public administration. These recommendations will need to be adjusted and varied as Turkish experience requires. That process would be a function of the proposed Commission.

AUTHORITY AND DECENTRALIZATION

Delegation of Authority

In the executive branch of the Turkish Government, authority is heavily concentrated at the top. Concentration of power without proper delegation of authority can lead to weakness rather than to strength. Failure to delegate power can result in a creeping paralysis of government in which decisions of the most minor character are successively referred to the next higher level until they reach the top. This situation has developed in Turkey as the scope and responsibilities of the Government have grown and become more complex. Civil servants will not act without approval of their superiors and insignificant matters find their way to a minister for decision. Even ministers too often feel that they must consult the Council of Ministers on operational as well as policy matters. As a result, the Council's time is frequently taken up with matters of detail on which the ministers may not be well informed, to the neglect of more important policy matters. The Council of Ministers, for example, must authorize the sale of stock of a private corporation to the public. Even appointments of certain officials and authorizations of per diems for official travel outside the country require a decree of the Council.

Group responsibility is often substituted for individual responsibility. Documents must be signed and countersigned by several persons at the expense of much delay and confusion. Top officials are thus subjected to an almost unbearable pressure of work while lower ranking civil servants feel that safety lies in letting a group or the man above take all decisions. These tendencies are reinforced by the present government regulations which impose on officials personal financial responsibility for errors, including those of subordinates.

It is clearly necessary that measures be taken to reduce the over-centralization of governmental authority and to assure that only important policy matters are brought to the higher levels for decision. Division of responsibility and authority is essential to the proper carrying out of policies and programs. The coordination of economic policies, which

we have recommended in Chapter IV, can be successful only if questions of detail are decided at lower levels and if the policy-making levels are not clogged with masses of minor problems.

The achievement of better delegation of authority, however, is a problem which requires much thought and conscious effort on the part of civil servants. There is no easy road to, or legislative panacea for, its accomplishment. The top executive must of his own accord pass on authority to his subordinates and the latter must be persuaded to accept individual responsibility for making decisions. Changes in present laws, so as not to penalize unduly mistakes and errors in judgment, would be helpful in this connection. The regulations now in effect fail to distinguish between simple failure of judgment as opposed to bad intentions.

The creation of clearly defined channels of authority would also relieve a difficult situation which now exists among officials in the provinces and which impedes the effectiveness of government operations. Under present regulations, all instructions to representatives of the central government in the provinces must be channeled through the provincial governors, who are also appointed by the central government. This requirement slows down the transmission of orders and results in a multiplication of work. Orders should go directly from the various departments in Ankara to the departmental officials in the field. The governors need not be in the line of authority in all activities, although they should be kept informed of all activities of the central government in their provinces.

Central and Local Government

Over-centralization also creates problems in the relations between the central government at Ankara and provincial and local authorities. For administrative purposes, Turkey is divided into 63 provinces (*il*), which are in turn divided and subdivided into districts (*ilçe*), counties (*bucak*) and villages (*köy*). At each administrative level except the village, there is an official appointed either directly by the Council of Ministers or by the Prime Minister or by their appointees.

An administrative hierarchy of civil officials thus reaches down from Ankara almost to the individual village. In addition there are locally-elected officials: the village headman (*muhtar*) and village council, the municipal council (which usually elects the mayor) and the provincial council. But the decisions of these locally-elected officers and councils are frequently subject to the veto of centrally-appointed officials. The result of such control is wasted effort and many points of conflict, especially between provincial governor and council, provincial governor and city mayor, and village headman and county director.

The Turkish constitution provides that "the provinces are administered according to the principle of decentralization and division of functions." In practice the "division of functions" has left little of significance for the local authorities to do. One reason for this has been the increasing centralization of finances. If the central government is to avoid an unbearable financial burden, and if local initiative and responsibility are to be encouraged, local and provincial authorities must be helped to carry a greater part of the financial and administrative burden of governmental functions.

PERSONNEL

Personnel administration, whether public or private, is fundamentally a problem in the organization of human effort. The Turkish people have in their traditions and approach to life a basic attitude towards government service which is healthy. Throughout the Government, striking examples may be found of the best type of devoted and competent public servant. But the Government is a large enterprise and like all large organizations it has developed a number of undesirable traits and practices. Some of these practices have grown to a point where they not only slow up the whole process of government but threaten to defeat the efforts being made to develop the economy.

Inefficiency and waste seem to be common. They arise from emphasis on form rather than on substance, both in the selection of personnel and in the performance of duties, and

from the low salaries paid to civil servants. Recruitment often has no relation to need with the result that many government offices are overstaffed. Duties are poorly defined and insufficiently coordinated. The inefficient are protected by rigid personnel laws and regulations designed to protect personnel rather than to promote efficient administration. Advancement is not based on merit.

The Civil Service Law regarding conditions of service and pay for regular civil servants, known as the *Barem*, was originally intended to promote good personnel management, but through narrow interpretation and inflexibility in application it has become an obstacle to good administration. The safety and protection given to the civil servant are so great that it is very difficult for a government official to be dismissed. Even the highest ranking civil servant, if found unsatisfactory for his position, is usually given another job. On the lower levels, several years of continuously adverse performance ratings are required before dismissal is possible. If the official who dismisses an employee is overruled by higher authority, he becomes personally liable to a suit for damages. Promotion depends primarily on seniority rather than on demonstrated merit. Because of the premium on university training, it is nearly impossible for an ambitious worker without a degree to rise to a supervisory position however great his ability.

Pay scales at all levels are low by comparison with private enterprise. Although salaries have risen during the past 15 years, their purchasing power has declined. At the higher levels the decline has been from 50 to 60 per cent; at the lower levels, from 20 to 40 per cent. The result has been to reduce financial incentive and to put a premium on mediocrity. A complex system of special subsidies and allowances further complicates the picture. Inadequate allowances for government personnel and services hamper work in the provinces. Agricultural extension workers and health officers are allowed a mere pittance for travel expenses, making it financially impossible for them to do their jobs as well as they should.

A complete revision of the civil service system would appear to be in order. To this end, the Government should arrange for a careful study of the civil service to be made by Turkish and foreign specialists. Among the problems which should be considered are:

- (1) provisions for a job classification plan;
- (2) development and maintenance of an adequate system of pay and retirement and of disability insurance;
- (3) development of programs of recruitment and promotion;
- (4) procedures for removing incompetent personnel; and
- (5) development of in-service training programs.

We recommend that a permanent Central Personnel Agency be established as part of the revision of the civil service. Such an agency would devise common policies and procedures for all matters affecting government personnel and would effect continuous revision of the civil service system in the light of developing needs and conditions. It should be placed high enough in the Government to enable it to integrate and review personnel policies and practices in all departments.

The development of a two-party system in Turkey has introduced the problem of assuring continuity of operations and efficiency of administration despite changes in the political complexion of the Government. It is the strength of such a system that at top policy levels individuals serve at the pleasure of an elected government. But it is important that below such levels positions be unaffected by political changes. There should be safeguards against political interruption of administrative functions. Such safeguards can be created by developing permanent staffs of skilled personnel whose selection and tenure are based solely on ability. Regular employees should not have to fear for their future because of the outcome of an election. At the same time any civil servant who runs for political office or participates actively in party affairs should be required to resign his position. A career civil service such as this will be especially needed in carrying out a long-range program of economic development.

STAFF SERVICES

An executive in the higher levels of any large organization requires not only subordinates who will interpret and carry out his orders, but also assistance in acquiring and interpreting information needed for policy decisions, as well as various types of auxiliary operational services. Such services, not directly connected with lines of authority, are known as "staff services". Staff aid facilitates the work of the executive by furnishing facts and advising action. On a lower level it also provides such services as stenography, accounting, filing, printing and duplicating, office transportation and supervision of buildings and grounds. Where a number of departments use some of the more important services, a centralized staff unit available to all is often more economical and more efficient than scattered, smaller units.

In the Turkish Government, operations have already been improved by the development of staff organizations. The Electrical Study Institute, the Minerals Research Institute, the High Control Board and the Central Statistical Office are examples. Throughout the Government, however, there is need for further improvement of staff services and the development of more staff organizations. In earlier Chapters we have recommended the creation of an Economic Coordination Staff, an expanded Budget Office which will carry out true staff functions, a policy planning staff in the Ministry of Agriculture and advisory commissions in the fields of transportation and power. We have also recommended that the Central Statistical Office should establish policies and standards for all statistical work carried out in government departments.

The need for staff services goes far beyond these recommendations and the Government should explore the possibility of expanding the use of such services. The Grand National Assembly would also find staff services in the form of a research and reference organization useful in its operations.

Certain auxiliary types of staff services are used by all departments of the Government. Consideration should be given to combining some of these services in a single agency designed to serve the entire Government. Precedent exists

for such centralization, as for example the State Printing Office which was set up to serve all departments. A similar agency or group of agencies might well be created for other services required by all departments, such as procurement and storage of office equipment, supervision of buildings and grounds, and operation of cars and trucks.

In particular, the purchasing of supplies could be greatly simplified and substantial savings realized by the establishment of a central procurement agency. Where this staff function has already been centralized within individual departments of the Government, greater efficiency has been attained; in one organization, for example, steel plates, formerly purchased on a haphazard local basis, are now bought through a central agency at much lower prices.

MISCELLANEOUS

Financial Administration

Although all governmental departments and agencies should be closely scrutinized in order to improve the effectiveness of their operations, we wish to draw particular attention to financial administration, which we consider of critical importance.

The Government's financial operations are unnecessarily complicated. The budgeting of state expenditures, concerning which we have made recommendations in Chapter IV, is the most urgent problem of financial administration at the present time, but there are also other problems. Many of them arise from the fact that the Government's financial operations are not well organized and often do not serve the purposes for which they are undertaken. The Ministry of Finance is charged with a variety of functions, including treasury, budget, revenue, disbursement, foreign exchange and some auditing operations. It is not well organized, it is rigid in its operations and some of its activities overlap and conflict with those of other government departments and with the Central Bank.

A study is now being made, under ECA sponsorship, of the organization and administration of the Ministry of Finance. The Mission urges that, as soon as the results of this study are

available, the Government take steps to reorganize the Ministry and to improve its efficiency.

Accounting

We have pointed out in Chapter VI that accounting practices in Turkey lack uniformity and often do not provide executives with the information they need to make intelligent decisions. This is very evident in public administration. Many government organizations follow their own systems of accounts, while others compile accounts in accordance with complicated directives. A general study of accounting in the Government should be undertaken to devise a uniform and simplified system.

The relationship between accountants of other government departments and the Ministry of Finance deserves particular examination. We have recommended, in Chapter VII, that the chief accountants of the transport agencies should be responsible only to the heads of these organizations and should not also be responsible to the Minister of Finance. This recommendation applies to all government organizations since the primary purpose of accounting should be to serve the manager of the organization in which it is carried out. If proper budgeting and post-audit of government expenditures are provided for there should be no need for item-by-item control of expenditures by the Ministry of Finance through its accountants in other departments. The Court of Accounts already performs a post-audit of all expenditures under the general and annexed budgets. This responsibility should be clearly defined and extended to cover expenditures of all departments and agencies of the Government except those audited by the High Control Board.

Training

The ability to organize and administer activities, whether governmental or private, is generally acquired through actual experience. In recent years, however, universities in other countries have developed program for training specialists in public administration as well as in business management. These training programs are generally of two types. The first

is an ordinary course of university studies emphasizing problems and techniques of organization, administration and management. The second type of training is designed to build on the experience of people already engaged in these activities and is essentially an adult training program in which employees of both the Government and business corporations study the latest techniques in these fields.

Training programs of both types might prove valuable in Turkey. We have already stressed the need for the development of supervisory skills for industry, mining, transportation and public health. The need is equally great in public administration and our recommendations on education, in Chapter IX, reflect that fact. Turkish universities should, with the advice of foreign specialists, institute chairs or departments of public administration and management to serve both undergraduate students and more advanced specialists in these fields. In-service training for the lower and middle ranks of the civil service should be introduced. We consider such in-service training of special importance because it should result in the creation of a competent group of civil servants from which top executives may be drawn.

In summary, to improve the functioning of the Government, we recommend that:

- (1) The Government should establish a nonpartisan Commission to study all aspects of government organization and administration with the assistance of both Turkish and foreign specialists.
- (2) Among the problems urgently requiring attention are:
 - (a) Better delegation of authority and division of responsibility for policy and operations;
 - (b) Encouragement of local and provincial authorities to carry a greater part of the financial and administrative burden of government functions;
 - (c) Thorough revision of the present civil service system and establishment of a career service. A permanent Central Personnel Agency should be established to integrate and review personnel policies and practices in all departments;
 - (d) Expansion of the use of staff services.

- (3) Specific steps to improve administration should include: reorganization of the Ministry of Finance in the light of the ECA study now being made; institution of a standard and simplified system of government accounting; making the chief accountant in each agency responsible solely to the head of his agency; extension of the responsibility of the Court of Accounts for post-audits to all departments except those audited by the High Control Board; establishment of both university and in-service courses for training in public administration and management.

CHAPTER XI

Financial Organization and Policy

The continued economic development of Turkey can be achieved on an efficient basis only if there is general monetary stability during the process of development. In general inflation does not make any additional resources available to an economy; in fact, by the very price and profit distortions it creates, it usually diverts resources into less essential and less useful activities. Inflation has the twofold disadvantage of undermining the community's desire to save as well as making it less likely that savings will be channeled into the most productive purposes. For these reasons, the more limited are the resources available to a country for investment, the more costly will be the wasteful effects of inflation. The desire to maintain a rapid pace of investment in the face of limited resources is readily understandable and it is therefore particularly important that a country anxious to achieve rapid development should adopt monetary and fiscal policies conducive to the most efficient use of available resources and thus to the acceleration of the development process.

A DECADE OF INFLATION

Turkey has experienced monetary instability during the past decade. Both the money supply and prices have increased approximately fivefold since the beginning of the war, with most of the increase occurring during the war years 1939-44, when prices rose from 101 to 459 (1938=100).

Causes of Inflation

The basic cause for both the wartime and postwar inflation was the expansion in personal and business incomes without a corresponding increase in the supply of goods and services available for domestic utilization. The expansion in incomes was accompanied by a parallel increase in the money supply which rose from TL 307 million to TL 1,534 million in the period from the beginning of 1939 to the end of 1949. Slightly

more than half of the money supply is in the form of currency—primarily Central Bank notes—and the remainder in the form of demand deposits in banks. The increase in the decade was almost evenly divided between currency and deposits.

The following table shows the sources of money supply increases since the beginning of 1939.

TABLE XIV
INCREASE IN MONEY SUPPLY BY SOURCES, 1939 TO 1949
(Millions of Liras)

Source	1939-46	1947-49
1. Net monetized gold and foreign exchange.....	+ 245.1	-233.7
2. Central Bank	+ 570.3	+214.2
3. Commercial banks	+ 311.8	+ 99.0
4. Ministry of Finance.....	+ 12.4	+ 8.2
Total	+1,139.6	+ 87.7

Source: Basic data furnished by Central Bank and Ministry of Finance and arranged in this form by the Mission.

While the net inflow of gold and foreign exchange was an important cause of inflation in 1939-46, internal financial policies were far more important. Heavy investment expenditures were carried out by the Government, financed to a considerable degree through Central Bank borrowing, at a time when defense expenditures were consuming an ever-growing share of the nation's resources and when total availability of resources was reduced by the export surplus. In the period since 1946 there has been a substantial import surplus, financed both by drawing down foreign exchange reserves and by foreign assistance. This was deflationary. However, internal monetary, budget and fiscal policies have more than offset the effects of the import surplus and the total money supply has continued to grow. Heavy deficits incurred by the Government and by state enterprises since 1946 have been financed by new credit expansion by the Central Bank and commercial banks in the amounts of TL 234.3 million and TL 150.1 mil-

lion, respectively. The result might well have been a continuation of the sharp price rises that occurred during the war years if the credit expansion had not been offset by the large import surplus.

Consequences of Inflation

The effects of the inflationary process have been detrimental to the economy. Salaried people and others on fixed incomes have been severely affected. The saving habits of these groups, an important factor in financing balanced economic development, were undermined, as individuals saw their savings decline in value. At the same time the anticipation of rapid and continuous price rises stimulated speculative investments and inventory accumulations rather than long-term investment in productive projects. This was reflected in part in the channelling of a disproportionately large amount of savings into luxury residential construction. Domestic inflation also stimulated imports and held down exports, with a resulting adverse effect on the balance of payments. Finally, despite the burdens imposed by the inflation on a large segment of the Turkish people, the ratio of real investment to the gross national product did not increase appreciably in the postwar period as compared with 1936, even though substantial amounts of foreign assistance were received to help finance investment.

Every reasonable effort must be made to avoid a continuance of the inflationary policies of the past decade if Turkey is to achieve sound economic development on a scale within its capabilities. This means that monetary, budget and fiscal policies must all be well conceived and properly fitted together.

PUBLIC FINANCE AND FISCAL POLICY

Receipts and expenditures of the Government, through its general and annexed budgets as well as through its economic enterprises, are responsible for a considerable proportion of the total money flow in the economy. As a result, the financial operations of the Government play a crucial role in determining monetary stability.

Budget

Normally the budget accounts of a government indicate the extent of its inflationary or deflationary impact upon the economy. In Turkey, however, the budgetary system is particularly complex because it involves several separate categories of budgets and accounts. Of these the most important is the general budget of the national government. In addition, there are annexed budgets of such governmental activities as the monopolies, post office, railways and others; the accounts of autonomous state economic enterprises such as the Sümerbank and the Etibank; and the budgets of the provinces, municipalities and villages. The combined expenditures of all these instrumentalities have constituted a higher proportion of the national income during and since the war than they did prior to it. This rapid growth in public expenditures, unmatched by an equal growth in receipts, has unquestionably been a basic factor in generating the inflationary spiral.

An adequate appraisal of the Government's financial operations in order to determine the extent of their inflationary or deflationary effects can be made only by considering all the elements of all these categories of budgets and accounts. Unfortunately no consolidated summaries of this kind are presently available in Turkey. The importance of considering the total financial position of the Government, rather than the position of the general budget alone, is shown by the fact that, according to very rough estimates made by the Mission, the consolidated net cash payments on government account in 1949 were about TL 120 million even though the net cash payments of the general budget were only TL 27.1 million. Nor is it enough merely to consider the position of the general and annexed budgets alone since in 1948, for example, their combined deficits were less than half of the total deficit after taking into account the financing of state-owned enterprises.

The Mission has already recommended that the present Budget Office be strengthened substantially. We consider it essential that this expanded Budget Office should supervise the preparation and maintenance of consolidated government financial accounts. These accounts are necessary for the

formulation of appropriate fiscal policies which will enable the Government to carry out the desired rate of economic development without the harmful effects of inflation.

Public Debt

When consolidated budget data are not available, an estimate of the approximate size of the budget deficit can be obtained from the increase in the public debt. The increase in the internal public debt in Turkey during the decade from 1939 to 1949 was about TL 1,000 million. In addition, there were rather substantial bookkeeping profits in 1947 as a result of the devaluation of the lira, which were used to reduce the public debt. On the other hand, some of the increase in debt may possibly reflect bookkeeping transactions rather than actual cash outlays, such as the transfer to the public debt of debts previously carried by the autonomous economic enterprises. In any event, the increase in the debt indicates the general order of magnitude of the drain of the Government's various operations on the resources of Turkey which were not met out of ordinary receipts.

Basis of Fiscal Policy

The Mission considers it to be of the utmost importance that the inflationary budget and fiscal policies followed by Turkey during the past decade should not be continued. A sound fiscal policy should be based first on a comprehensive estimate of the expenditure needs of the Government and government-owned enterprises, including investment outlays, in the light of competing requirements of the private sector. It requires, secondly, a program of taxation and public borrowing which will finance these expenditures entirely from ordinary revenues and receipts or from domestic savings and foreign borrowings. The need of budget equilibrium in Turkey stems largely from the very limited possibilities of covering deficits in a noninflationary manner. Less than 10 per cent of the total public debt has been purchased by individuals out of their savings. Most of the remainder has been absorbed by the banks and has given rise to new money. Furthermore, because a large proportion of the peasantry is outside the

monetary system, newly created money is concentrated in a relatively small area and tends to exert strong pressures on the demand for goods and services. Thus deficits exert strong inflationary pressures.

Because of the foregoing factors, any substantial rise in particular government expenditures, if it is not to have serious inflationary consequences, must be balanced by either a reduction in other government expenditures, an increase in taxation so as to reduce private expenditures, government borrowing from the public for the same purpose, or foreign assistance. The first two methods would tend to reduce government deficits and the second two would provide non-inflationary ways of financing deficits.

Quite obviously the Mission could not attempt a full examination of present government expenditures to determine which are essential and which could be reduced. We suggest, however, that the Government itself should make such an examination. Every lira saved by reducing nonessential expenditures is another lira available for more important needs, including investment. Neither have we reviewed in detail the present taxation system with a view to finding ways of increasing the revenues it now yields. We have, however, examined it in terms of its impact on economic development and offer recommendations on this subject later in this Chapter.

It is obviously essential that such deficits as occur in the future must be limited in magnitude to the means available to finance them in a noninflationary manner. Though some foreign assistance may be expected, the Government will have to rely primarily on domestic borrowings to bear the brunt of financing its deficits. It is vital, therefore, that a larger market for public securities be developed among non-bank investors. Since such a development will depend both on monetary stability and on a growing level of personal savings, the Government must exercise the budgetary restraint which is the prerequisite of both conditions. For the period of the Mission's program, we have estimated in Chapter XIII the amount of investment expenditure which we believe the Government can finance in a noninflationary manner.

In summary, we make the following recommendations with regard to public finance and fiscal policy:

- (1) The Government should maintain consolidated financial accounts covering its operations and those of all its agencies.
- (2) As the basis of a sound fiscal policy, the Government should prepare estimates at regular intervals of its proposed expenditures, including investment expenditures, and of the total financial resources that will be available to finance them.
- (3) Total expenditures of the Government and of all its agencies should be limited to the amount which can be paid for out of ordinary revenues and receipts or financed by domestic borrowing from the public or from foreign assistance.

MONETARY AND BANKING POLICY

Unsatisfactory budgetary and fiscal policies are the most important causes of monetary instability. The manner in which they have operated through the monetary and banking system has tended to intensify the inflationary effects of the policies adopted. In this operation, the role of the Central Bank has been of fundamental importance.

Central Bank

Established in 1930 and patterned in its broad outline after the central banks of Western Europe, the Central Bank of Turkey stands at the apex of the Turkish banking system. The Government owns one fourth of the stock and appoints two of the eight directors. The Government also appoints the general director, the assistant general director and the chief accountant. The powers and functions of the Central Bank are similar to those of most central banks. It issues the currency notes of the country, acts, along with the Agricultural Bank, as fiscal agent for the Government, rediscounts commercial and agricultural bills, makes advances to the Treasury or on Treasury-guaranteed bills and engages in limited open market operations. It has been primarily the Central Bank's advances to the Treasury or on Treasury-guaranteed bills which have formed the direct link between the deficits incurred

in government finances and the inflationary expansion of the money supply.

Treasury-Guaranteed Bills

In 1938 legislation was enacted by the Grand National Assembly authorizing the Central Bank to discount and to make advances on bills issued by the various state economic enterprises, provided that the Council of Ministers approves the issue and the bills are guaranteed by the Treasury. This legislation greatly increased the possibility of inflationary recourse by the Government to the Central Bank. Although maximum limits were assigned to the bills which would be issued by each state enterprise, these limits were subsequently raised in many cases by amendments to the basic statute. In general, authority to issue bills to the authorized maxima rests with the Council of Ministers, although the Minister of Finance has power to grant or withhold the Treasury guarantee. While the Central Bank's discount rate is four per cent, the Treasury has arranged to have three per cent remitted by the Central Bank. The cost of money to the state enterprises is thus reduced to only one per cent. The enterprises in turn lend this money to their subsidiaries at five and six per cent, thus earning a substantial profit on funds borrowed from the Central Bank.

Treasury-guaranteed bills issued by the state enterprises were originally designed to provide short-term working capital for the enterprises, but in fact the funds have often been employed for long-term construction and the purchase of machinery. At other times they have covered operating losses. Although the bills are nominally of nine months' maturity, they have been renewed almost automatically. The low rate of interest has permitted excessive inventory accumulation, a problem which has been discussed earlier.

Between the end of 1938 and the end of July 1950, the total outstanding bills of state enterprises increased from TL 30 million to TL 770 million, which gives some indication of the inflationary effects of permitting the discounting of such bills by the Central Bank. During this period there

were declines in the amount of bills outstanding only in 1945 and 1949. Although during 1949 the Minister of Finance was able to curb the expansion of this form of credit, it grew again and with even greater speed during 1950. From the end of 1949 to the end of July 1950, the amount rose from TL 612 million to TL 770 million. Moreover, the Toprak Office, which had TL 128 million in bills outstanding at the end of July 1950, estimated that it would require additional credit of TL 200 million in this form to finance purchases of the 1950 cereal crop.

We recommend that the use of Treasury-guaranteed bills by state enterprises be discontinued. Agencies now using these bills should obtain their required funds from the Treasury. If the funds are to be used for investment purposes, they should be made available only after the request for investment funds has been approved by the Prime Minister under the procedure recommended in Chapter IV and appropriate budgetary authorization has been given. If funds are required to meet operating deficits, they should be obtained in accordance with regular budgetary procedures. Finally, if funds are required for appropriate short-term purposes, the Treasury should be authorized to advance them. The Toprak Office, however, which requires large and varying amounts of short-term funds, should discount its bills with the Agricultural Bank. The latter might find it necessary to rediscount them with the Central Bank in order to meet the demands upon it, but this should be done only within definite limits. Moreover, the Toprak Office should be required to repay advances for the purchases of crops as rapidly as the products are sold. Any losses suffered by the Toprak Office should be covered by appropriations from the budget.

Of government entities, only the Treasury and the Toprak Office should be authorized to issue short-term bills. This centralization of authority will facilitate control of demands on the Central Bank to meet the Government's financial requirements, as well as control of the actual issuance of floating debt. Centralizing the demands for Central Bank credit would not, of course, eliminate the inflationary effects of such credit as is

made available. It should, however, make it possible for the Treasury to assure that Central Bank advances and discounts are limited in fact to legitimate short-term needs and are not used to finance long-term investment or to cover operating deficits. The result would be to help shift the emphasis of the operations of the Central Bank away from supplying credit to the Government and its enterprises and towards its intended role as a banker's bank.

Rediscounting Commercial Paper

The Mission believes that the present Central Bank rediscount facilities for legitimate short-term requirements of private enterprises are inadequate. The present law limits commercial rediscounts to 90 days and agricultural bills to nine months. This does not provide adequate credit for the working capital needs of industry and agriculture. Relatively few commercial bills of private firms are in fact rediscounted. In 1949, for example, the rediscount ceiling for ordinary commercial paper for all banks was TL 40 million while at the same time the Central Bank was holding over TL 600 million of Treasury-guaranteed bills from state enterprises, as well as substantial amounts of other bills of these enterprises. The Mission recommends that the Central Bank should have power to finance appropriate types of commercial and agricultural paper with maturities up to one year and that no specific quantitative limit be placed on such financing. Rather, the total amount of bills issued by private enterprises which the Central Bank would be willing to rediscount, together with the rate to be charged for rediscounts, should serve as instruments for controlling credit and monetary policy within the country.

Techniques of Credit Control

To obtain the most effective results from the use of rediscount policy as a primary means of credit control and monetary policy, the Mission believes that the upper limit of rediscounts which any individual commercial bank is permitted to obtain should be a uniform percentage of its capital and reserves. This method of rationing limited rediscount

facilities would assure inter-bank equity. Changes in the rate charged for rediscounts should, of course, also be used as a technique of controlling expansion or contraction of credit, but it is believed that, with economic circumstances as they are in Turkey, changes in the rediscount rate without changes in the rediscount ceiling would not be very effective. The demand for rediscounts in Turkey is not very sensitive to the interest rate and consequently any attempt to use rediscount rate changes alone to control credit would require very drastic and frequent changes in the rate.

Additional powers should be given to the Central Bank to assist it in achieving its primary function of controlling the supply of money in the public interest. Open market operations, normally one of the most effective and flexible credit control techniques available to monetary authorities, are of no real importance in Turkey at the present time because there is neither a money market nor a market for government securities. In addition, the Central Bank at present is limited by statute in the amount of open market operations in which it can participate. As long as no effective open market exists, this limit is not of much importance. However, it may be hoped that a public market in government securities will be created as a result of various measures taken in the next few years and accordingly the limit on Central Bank participation in open market operations should be eliminated. Power to change reserve requirements against demand deposits, within specified limits, should also be given to the Central Bank. If this is done, consideration should also be given to the desirability of requiring that the government bonds held by the commercial banks as legal reserves against deposits be kept on deposit with the Central Bank.

These techniques of monetary control would make it possible for the Central Bank to exercise appropriate quantitative control over the volume of credit available within the economy. In a country like Turkey, seeking to achieve rapid economic development, techniques of qualitative control are of equal importance. The power to vary minimum requirements for paid-in capital and reserves according to the types of assets

owned by banks would permit the Central Bank to adjust banking operations to the needs of the economy. The Central Bank would set varying requirements for different kinds of assets and these could be changed if it became desirable to encourage commercial banks to change the nature of their loans and investments. Other selective methods of controlling credit, such as absolute ceilings on different types of portfolio assets or on the rate of increase of these different assets, might also be considered. However, before the Government puts into effect specific techniques of qualitative credit control, it would be advisable to secure the advice and guidance of banking experts who have introduced these measures in other countries, so that the problem can be considered far more intensively than the Mission was able to do.

Interest Rate

Just as the rediscount rate is not an effective technique of rationing rediscount facilities in Turkey, so the interest rate charged by commercial banks does not effectively ration commercial credit. The demand for funds at current maximum interest rates, fixed by law at $8\frac{1}{2}$ to 12 per cent, is vastly greater than the supply of funds. The unofficial money lending rates are sometimes as much as twice the legal maximum. In setting the appropriate rate of interest, a balance must be struck between the objectives of having a high enough rate to stimulate savings and a low enough rate not unduly to increase costs of desirable investment activities. Unless the rate of interest is to be determined by the free flow of market forces, which may not be possible in Turkey at this time, it would be desirable that the maximum rates of interest be determined by the Central Bank at levels consistent with its other policies for controlling and regulating the supply of money and credit. The Mission's analysis of the Turkish economy does not indicate that there is at present any economic justification for changing the prevailing interest rate structure.

Commercial Banks

Private banking facilities and resources are extremely limited in the country as a whole. Banking practices are

founded on a strictly commercial basis; that is, except for those granted by the Industrial Development Bank, loans are made almost exclusively to finance commerce or trading rather than the production of goods. The banks have been particularly active in financing foreign commerce. Private firms not engaged in trade can get little help from the banks to meet their needs for working capital.

Turkish banks have not had much success in attracting savings deposits in recent years. This has been due in part to the inflation, which has discouraged savings deposits, and in part to the greater attractiveness of other investments, which may yield 10 to 15 per cent as compared with four to six per cent paid on savings deposits by the banks. As the level of income rises, however, there should be more individual savings; and the elimination of price inflation, coupled with proper promotional activities by the banks, should result in a substantially increased volume of savings deposits.

A clear differentiation between the functions of commercial and savings banks would be helpful. The commercial banks would receive demand or sight deposits and would make relatively short-term loans to finance production and distribution of goods. They would transfer funds, collect checks and facilitate the making of payments. Savings banks would receive true savings deposits not subject to immediate withdrawal, which would be invested in relatively long-term securities or mortgages. The same banking institution could exercise both functions but there should be a clear earmarking of the assets and liabilities pertaining to these functions as well as of the capital and reserves held for each of them. In this way differing reserve, capital and portfolio limitations could be placed upon different types of assets.

It follows from these recommendations that institutionally the banking function should not be combined with other functions. The principal function of both the Sümerbank and the Etibank is to develop and operate state enterprises and they were given banking powers incidentally. There have been many proposals for other similar "banks". The result of merging a banking function with what is in fact an indus-

trial holding company is to provide an easy and inflationary method of financing which can be used too freely. If the recommendations which we have made for changes in the techniques of financing various state enterprises, including the Sümerbank and the Etibank, are adopted, it would no longer be necessary or desirable for these enterprises to exercise banking functions. Rather the banking function would be reserved for those institutions whose purpose is to provide better banking facilities for the community.

Another major function of banks is to provide services which facilitate payments, the settlement of accounts and the transfer of funds. In advanced countries, checks drawn upon bank deposits have generally replaced currency as the principal medium of exchange. Checks are more efficient in many ways. They obviate the need for counting and handling currency, thus saving the time of much clerical help; they avoid the risks inherent in handling large amounts of cash; they save the expense involved in moving cash from one part of the country to another; and often they serve as a receipt for payment.

Checks are not extensively used in Turkey. One banker estimated that only 10 per cent of all payments in Istanbul and two per cent in Ankara were made by check, and even these were primarily exchanges between banks. In Ankara only four banks are members of the clearing house. A vigorous program to encourage check utilization by the public should be inaugurated by the commercial banks, the Central Bank and the Government. Various means might be used. For instance, salaries of higher government officials could be paid with checks. It would be of foremost importance, however, that banks should encourage check payments. A large share of the responsibility for the slow development of the use of checks rests with the banks themselves. In some cases bankers are not convinced of the importance or the desirability of introducing check payments. The relatively light penalty for forgery is usually cited as the principal deterrent. It is difficult to say how important this factor is but in any case it would be well to provide heavier penalties. Beyond that,

a vigorous program of education is necessary before the extensive use of checks will develop.

Bank Supervision

Bank examination in Turkey is in a very rudimentary stage of development. For the most part, the bank examiners of the Ministry of Finance limit their function merely to listing the government bonds owned by the banks to determine whether the banks have bought their full quota. If the Central Bank is granted the powers we have recommended to enable it effectively to control money and credit supply, it will be essential that the Central Bank have authority to conduct bank examinations. The accomplishment of either quantitative or qualitative credit control will require examination of the portfolios of the banks within the country. Accordingly, we recommend that the bank examination function be entrusted to the Central Bank.

In summary, our recommendations with regard to monetary and banking policy are:

- (1) The use of Treasury-guaranteed bills by state enterprises should be discontinued. Investment funds required by state enterprises should be provided, and any operating deficits met, from funds provided by the Treasury in accordance with regular budgetary procedures. The Treasury should also make advances to meet the appropriate short-term needs of all enterprises except the Toprak Office. The latter should obtain its short-term requirements from the Agricultural Bank, which within definite limits should be able to rediscount with the Central Bank. The Toprak Office should be required to repay advances for the purchase of crops as rapidly as the products are sold.
- (2) The Central Bank should have power to rediscount appropriate types of agricultural and commercial paper with maturities up to one year and with no specific quantitative limit.
- (3) In order to control more effectively the volume and use of bank credit:
 - (a) Rediscounts should be equitably rationed by setting an upper limit for each individual bank in terms of a uniform percentage of its capital and reserves.

- (b) The statutory limitation on the Central Bank's power to engage in open market operations should be eliminated.
 - (c) The Central Bank should have the power, within specified limits, to set and change minimum reserve requirements against demand deposits.
 - (d) The Central Bank should have power to vary minimum requirements for paid-in capital and reserves for commercial banks, according to the types of assets they own. Consideration should also be given to granting the Central Bank other powers of qualitative credit control, such as power to set absolute ceilings on different types of portfolio assets or on their rate of increase. To assist in the establishment of qualitative controls, expert foreign advice should be obtained.
- (4) The Central Bank should have power to set maximum interest rates at levels consistent with its general monetary policies.
 - (5) A clear differentiation should be made between the functions of commercial and savings banks and they should be subject to regulations and controls consistent with their types of activity.
 - (6) The banking function should be reserved for institutions whose primary purpose is to provide banking facilities to the community. The Sümerbank and the Etibank should be deprived of banking powers.
 - (7) More extensive use of checks should be promoted by a campaign to inform the public of their advantages, by paying the salaries of higher government officials with checks and by increasing the penalty for forgery.
 - (8) The function of bank examination should be strengthened and entrusted to the Central Bank.

TAXATION

By means of taxation, the Government not only provides revenues for its own operations but also limits the volume of private expenditures for both consumption and investment and influences the direction of private investment. The tax structure thus has an important impact on the allocation of resources and on economic growth.

The Mission has noted the substantial improvements made in the tax system in 1949 through the adoption of new personal and corporate income taxes. The personal income tax will bear far less heavily on wage and salary incomes than heretofore. It will also decrease considerably the number of businessmen whose taxes were previously determined on the arbitrary basis of rent paid for places of business. Businesses of a type which necessarily involve relatively low profits will receive more equitable treatment. Furthermore, by making more personal enterprises subject to effective taxation of their actual income and by lowering the corporate income tax rate from 39.9 per cent to 23.5 per cent, the new personal income tax law will help to remove an important obstacle to the use of the corporate form of business organization. On the whole the new laws are basically sound and logical. For the most part, the principal problem they present is administrative. Their success will depend largely upon whether during the next few years the Government can gain the confidence of the great mass of taxpayers, while dealing firmly with evaders.

There remain certain important defects in the tax system which constitute an obstacle to economic growth and therefore require the urgent attention of the Government. The first is the exemption of small firms from the transactions tax. As soon as an industrial firm uses more than two horsepower of motive power or employs more than five people, it becomes subject to a heavy tax on its output, yet it must continue to compete with smaller firms which remain exempt from the tax. The transactions tax is also faulty in having an excessive number of commodity exemptions, which facilitate evasion and create inequities. It is cumbersome and inexact since, despite certain crude provisions for reduction on goods which are processed more than once, taxes on the same goods are frequently duplicated or pyramided. Finally, it is unduly burdensome not only in rate but also because of the complex system of records and reports which it requires.

Second, when a firm comes to employ 10 workers, it becomes subject to the social security taxes, on employer and employee, which amount to a total of 13 to 15 per cent of wages

and salaries. As in the case of the transactions tax, this provision is an important obstacle to the smooth and normal growth of small firms. Furthermore, these taxes involve rates which are excessive for a country in Turkey's stage of economic development. The taxes provide for retirement pay and benefits for accidents, occupational disease, sickness and maternity, but not for unemployment compensation. A careful study of Turkey's social security system is warranted. It is quite possible that the present system is not well adapted to Turkey's situation and may be setting up claims against the future which will be difficult to meet.

Third, the present tax on corporate dividends seriously interferes with retention of corporate earnings for financing further growth and development. Under present Turkish law, there is a 15 per cent withholding tax on corporate profits remaining after payment of a flat 10 per cent corporate tax. Administrative interpretation has held, however, that for personal income tax purposes, stockholders will receive credit for this 15 per cent only if dividends are paid in the same year in which they are earned. Already Turkish corporations, in part because the stockholders determine dividend rates, pay out an excessive part of their earnings. This interpretation will bring further pressure from stockholders for still larger payments out of current earnings, forcing corporations to go into the capital market each time they wish to expand their operations.

Fourth, the numerous tax exemptions accorded to buildings create a strong artificial demand for investment funds in the real estate field and thereby reduce the amount of funds available for industrial and commercial development. New buildings are completely exempt from the buildings tax for a period of from three to 10 years. The personal income tax provides relatively high exemptions for rental incomes and for capital gains on real estate. It likewise permits deduction from the income from tax-exempted buildings of an amount equivalent to the taxes which would be payable were the buildings not exempt. The rental income from real estate owned by foreign corporations is also exempt from the corporate tax. The law

governing the assesment and reassessment of property greatly favors the owner at the expense of the Government. Even without such special inducements, real estate would be attractive to Turkish investors, requiring as it does no special skills, while providing prestige and a hedge against inflation. With the exemptions and special treatment described above, housing, particularly of the luxury type in the major cities, has undoubtedly attracted an excessive amount of investment and one result has been to limit, and thus to raise interest rates on, investment funds required by industry.

Fifth, and closely related to the previous point, is the exemption of farm income from the income tax. This would not be objectionable if the great mass of small farmers were granted an exemption. But such an exemption should be kept low in terms of income since farmers automatically receive a substantial special exemption as a result of the fact that a large part of their income is in non-monetary form. There is plainly no justification for exempting from the income tax those farmers who enjoy substantial monetary incomes.

At present, farmers pay only two types of direct taxes, the national animals tax and the provincial or municipal land and buildings tax. The former is a crude and primitive tax per head rather than *ad valorem*. The latter constitutes a major source of income for the provincial and municipal governments. However, because of the special exemptions for buildings and the lack of a general reassessment of lands, the real value of the revenues from the land and buildings taxes has been sharply reduced by inflation. As a result, the relative financial position of local governments has been seriously weakened, furthering the already strong trend toward financial centralization. Current proposals to transfer even these taxes to the central government threaten to accelerate this highly undesirable trend. However, if methods of collection by the central government for the account of local governments could be devised, such a transfer might be justified on the grounds of efficiency and resulting increases in revenues.

To reverse the trend toward centralization and to remove a heavy burden from national finances, we believe that local

revenues should be increased to the point where they are at least as large in real terms as they were before the war. This can best be achieved by reassessment of land values, elimination of the numerous exemptions accorded to buildings and raising the level of road taxes to their prewar magnitude or even above. These steps would enable the local authorities to pay the salaries of elementary school teachers, to cease relying on grants-in-aid from the national government except under unusual circumstances and to speed up the execution of the badly needed secondary-road building program described in Chapter VII.

Sixth, Turkey's ubiquitous stamp taxes are an impediment to economic activity. Despite their large number, they produce only a small amount of revenue. At the same time, they create enormous trouble and uncertainty, involve excessive costs of compliance and interfere in innumerable ways with the efficient conduct of business. A total of 98 categories of acts, many of them including a number of individual acts and subject to 79 exemptions, are taxed at rates ranging from one fourth kuruş (TL 0.0025) to TL 150. Many of these annoying stamp taxes could be completely abolished without appreciably reducing public revenue.

Finally, despite recent tax reforms, the tax burden is still unevenly distributed and heavily concentrated. Thirty years ago about a third of all tax income came directly from farmers, the broad mass of the population, and were produced by the tithe and animals tax. Now the tithe has been abolished, the animals tax is insignificant in total yield and farmers are exempt from the income tax. A very large part of the tax increases of the past 15 years has been imposed directly upon recipients of wages and salaries or upon commodities of which they are the principal purchasers. While total tax revenues are only about 17 per cent of gross national product, the average salary earner pays from 25 to 30 per cent of his income in direct taxes in addition to the taxes incorporated into the price of the goods he buys. This is obviously a dangerously high level. We firmly believe that the tax load should be more evenly distributed. Elimination or reduction of exemp-

tions now granted to certain groups would allow an increase in government revenues and achieve a more equitable distribution of the total tax load. We believe that the taxes on wage and salary earners who now bear the brunt of the tax burden should not be increased until their fellow citizens are made to bear a comparable load.

In recent years, the personnel of the Ministry of Finance has been strengthened and many desirable changes have been made in the Ministry's inspection and enforcement procedures. Yet there is still much room for improvement. Procedures could be further simplified and standardized and the more onerous fiscal controls eliminated. At the same time, the Ministry of Finance should be given greater power to enforce conformity with, and penalize evasion of, existing laws and regulations. The survey of the Ministry now being undertaken under ECA auspices should contribute to this end.

In summary, we make the following recommendations concerning Turkey's tax system:

- (1) The transactions tax should be thoroughly revised by removal of the exemption of small firms, by a drastic reduction in the number of commodity exemptions, by reducing the rates, by eliminating duplicate taxation of the same goods and by simplifying administrative provisions concerning compliance.
- (2) The present numerous exemptions of buildings should be drastically reduced. More revenue should be obtained from the land and building taxes, the revenues from which should continue to accrue to provincial and municipal governments. The animals tax should be put on an *ad valorem* basis and combined with the land and buildings tax.
- (3) Farmers who enjoy substantial monetary incomes should be subject to the income tax.
- (4) The present tax on corporate dividends should be made a true withholding tax, payable only when and as dividends are actually paid out.
- (5) The rates of existing social security taxes should be reduced and a careful study made to determine if the present social security system has resulted in an overcommitment of Turkey's future resources.

- (6) The number of categories of acts subject to stamp taxes should be greatly reduced and the remainder simplified and clarified.
- (7) The tax burden, the brunt of which is now borne by wage and salary earners, should be more equitably distributed.
- (8) Tax administration should be improved by simplification of procedures and elimination of nonessential forms of fiscal controls. The powers of the Ministry of Finance to enforce existing tax laws should be strengthened.

CHAPTER XII

International Economic Position

FOREIGN TRADE

Although Turkey's foreign trade plays a very small role in world trade and amounts to less than 10 per cent of the country's national income, foreign trade is vital to the economy. Turkey's general self-sufficiency in foodstuffs and modest standard of living make it possible to keep imports at a relatively low level but some essential consumer goods must be imported and the economic development of the country requires imports of essential machinery and equipment. Turkey exports a variety of agricultural commodities, many of which are semi-luxuries. The postwar development program has raised imports far beyond previous levels while exports have remained relatively small, resulting in substantial import surpluses. Until Turkey's productive capacity is appreciably expanded, exports will remain limited.

Exports

About one third of Turkey's exports are foodstuffs; one half to two thirds are raw materials and semi-manufactures; and less than six per cent are manufactures. The distinctive feature of Turkey's exports is its heavy reliance on four commodities, tobacco, cotton, nuts and raisins. Together they account for between 60 and 65 per cent of postwar exports, with tobacco alone being responsible on the average for 30 per cent of the total until 1950, when cotton exports increased substantially in importance. With the exception of cotton, these commodities are of a semi-luxury character and are particularly vulnerable to poor business conditions in importing countries. The remaining exports include a broad variety of agricultural products such as oil cake and oil seeds, opium, cereals, eggs, mohair, skins and furs. The composition of Turkish exports has shown a high degree of stability over the years, except for the growing importance of chrome and a marked decline in exports of raw wool owing to the growth of the domestic

textile industry. On the other hand, cotton exports took first place in 1950, exceeding in value those of tobacco, and offer great promise for the future. The value of all Turkish exports rose from TL 145 million in 1938 to TL 738 million in 1950, but, as Tables XV (A) and (B) show, most of the rise was attributable to an increase in prices rather than to an expansion in the volume of exports.

Although postwar exports, especially in the past year or two, have been very favorable in terms of the sales of cotton, tobacco and chrome, there have been unfavorable trends in several other established export commodities, particularly raisins, hides, skins and valonia extract. Earnings from these exports fell substantially in real terms.

The production and marketing of leaf tobacco need special attention. Tobacco is particularly well adapted to a country with a high ratio of manpower to capital resources, offering as it does large employment opportunities in both fields and warehouses. Before World War II, private dealers, under the supervision of American experts, had attained satisfactory standards of grading and processing tobacco. During the war the standards deteriorated and since then have not returned to the prewar level. An even more serious threat to Turkish tobacco exports arises from competition in the European and Mediterranean markets, which take the lower grades of Turkish tobacco. A continued market for these grades is essential to Turkey. Furthermore, Turkey cannot afford to neglect development of the strong market potentialities in the Middle and Far East, where both population and cigarette consumption are expanding rapidly. Among the adverse factors which must be faced in these non-American markets are the increasing competition from Greek tobacco, especially in Egypt, and the shift in European tastes toward Virginia tobacco. Unless there is a renewed emphasis on the marketing of Turkish tobacco abroad, a substantial decline in the volume of tobacco exports may result.

Cotton exports also offer Turkey a good prospect of earning additional foreign exchange in Europe. Production exceeded goals in 1950 and there are expectations of consider-

TABLE XV(A)
 SELECETED EXPORTS BY VOLUME, 1937 TO 1938 AND 1947 TO 1950
 (Thousands of Tons)¹

	1937-38 ²		1947		1948		1949		1950	
	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index
All exports	3	100.0	3	94.9	3	99.5	3	128.4	3	124.7
Tobacco	40.9	100.0	42.3	103.5	49.2	120.3	77.6	189.9	50.8	124.2
Cotton	18.8	100.0	0.1	0.0	16.0	85.1	31.6	168.0	77.9	414.4
Raisins	55.9	100.0	32.1	57.4	40.1	71.8	63.9	114.2	79.9	142.9
Hazelnuts	24.1	100.0	23.2	96.1	20.9	86.5	31.5	130.7	27.6	114.5
Livestock	462.1	100.0	577.8	125.1	305.0	66.0	589.7	127.6	559.0	121.0
Chrome	203.3	100.0	183.8	90.4	309.6	152.3	353.2	173.8	353.6	173.9
Hide and skins	4.5	100.0	4.3	95.2	6.2	137.5	4.4	97.0	6.4	142.2
Valonia and extract	40.1	100.0	27.2	67.8	33.4	83.1	29.8	74.4	n.a.	n.a.

¹ Except livestock, which are in thousands of head.

² Annual Average.

³ Total volume cannot be determined since separate commodities measured in different units.

Source: International Monetary Fund, *International Financial Statistics*; Mar. 1951; Central Bank of Turkey, *Bulletin*, Nos. 72-73, July to Dec. 1949; and Central Statistical Office, *Dış Ticaret Yıllık Hülâsası*, Dec. 1950.

TABLE XV(B)
 SELECTED EXPORTS BY VALUE, 1937 TO 1938 AND 1947 TO 1950
 (Millions of Liras)

	1937-38*		1947		1948		1949		1950	
	Value	Index	Value	Index	Value	Index	Value	Index	Value	Index
All exports	141.5	100.0	625.2	441.8	551.0	389.4	693.9	490.4	737.6	521.3
Tobacco	41.6	100.0	179.5	431.5	173.0	415.9	259.0	622.6	170.8	410.6
Cotton	7.9	100.0	0.0	0.0	33.7	426.6	75.8	959.6	195.9	2,479.7
Raisins	10.1	100.0	27.1	268.3	28.6	283.2	46.3	458.4	58.2	576.2
Hazelnuts	11.6	100.0	42.9	369.8	30.9	266.4	43.6	375.9	52.2	450.0
Livestock	3.0	100.0	26.5	883.3	16.6	553.3	32.5	1,083.3	24.0	800.0
Chrome	4.5	100.0	14.1	313.3	25.8	573.3	30.3	673.3	30.0	666.7
Hides and skins....	3.9	100.0	14.6	374.4	18.4	471.8	12.6	323.1	15.5	397.4
Valonia and extract	2.5	100.0	7.4	296.0	9.5	380.0	12.5	500.0	n.a.	n.a.

* Annual average.

Source: International Monetary Fund, *International Financial Statistics*, Mar. 1951; Central Bank of Turkey, *Bulletin*, Nos. 72-73, July to Dec. 1949; and Central Statistical Office, *Dış Ticaret Yıllık Hülâsası*, Dec. 1950.

able further expansion. Production is therefore not likely to limit an expansion of cotton exports; expansion depends rather upon improvements in the standardization of cotton lint. There is a lack of confidence abroad in the quality and uniformity of Turkish cotton. Since sales cannot be made according to recognized world grades, export sales by sample and trial shipment are necessary. The standardization problem goes much deeper than the lack of standard grades, however. Irregular staple lengths, poor ginning and baling, and the lack of uniform grading, wrapping and labeling cause waste in manufacturing and delays in handling. A marked expansion of cotton exports is therefore heavily dependent upon a coordinated program for improving quality from the field to the factory along the lines discussed in Chapter V.

Imports

Turkish imports include a wide variety of articles with an overwhelming emphasis on manufactured goods. On the whole, greater changes have taken place over the years in the composition of Turkish imports than in exports since, as a result of the industrialization drive, imports of machinery and equipment have increased greatly. The development of domestic production has virtually eliminated imports of sugar and reduced substantially the volume of textile imports. Continued emphasis by the Government on economic development and national defense has caused petroleum and rubber products to rise in importance.

Because of limited foreign exchange resources, the total value of Turkish imports in the prewar period was never very high, and in 1938, the peak import year of the 1930's, it reached only TL 150 million. Since 1947, imports have been substantially above prewar volume and reached a value of about TL 800 million in both 1949 and 1950. Imports at this level were paid for by the increased value of exports, by utilization of gold and foreign exchange reserves which had been built during the war and by foreign loans and grants. The trend of imports since 1937-38 is shown in Tables XVI (A) and (B); these Tables, however, understate the increase

since the data do not include the substantial volume of aid received under the American Military Aid Program. The development of the roads program, the extensive importation of motor vehicles and the mechanization of military transportation combined to increase petroleum requirements disproportionately. This drain on exchange earnings has been growing persistently and represents an important problem which will have to be solved if international financial balance is to be achieved.

The Trade Pattern

Before the war about three quarters of Turkey's exports went to its principal European trading partners, France, Germany, Italy and the United Kingdom, with Germany becoming overwhelmingly the largest customer in the late 1930's, when it took as much as 43 per cent of all Turkish exports. During the same period exports to the United States were about one eighth of the total and sales in the Eastern Mediterranean and Balkan areas were about the same. Europe was even more important as a seller to Turkey than as a buyer of its products. Between 82 and 85 per cent of imports came from Europe before the war, with Germany, by 1938, supplying 47 per cent of the total. In the prewar period, the United States supplied only three to nine per cent of Turkish imports.

This trade pattern was substantially changed by the war and the events which followed it, particularly in terms of the source of imports. The relative importance of Western Europe as a supplier fell considerably in the years immediately following the war, primarily as a result of the elimination of German supplies. The inability of Europe to meet Turkey's needs caused it to rely heavily on the United States and other Western Hemisphere countries. In 1947 one third of all Turkey's imports came from the United States and even in 1950 more than 25 per cent of imports were purchased in the United States as compared with an average of only six per cent in prewar years.

TABLE XVI (A)
 SELECTED IMPORTS BY VOLUME, 1937 TO 1938 AND 1947 TO 1950
 (Thousands of Tons) ¹

	1937-38 ²		1947		1948		1949		1950	
	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index
All imports	³	100.0	³	114.8	³	123.5	³	140.0	³	164.2
Machinery	26.4	100.0	28.1	106.2	43.5	164.5	58.2	220.3	72.6	275.0
Iron and steel.....	189.0	100.0	106.7	56.5	100.2	53.0	114.0	60.3	215.9	114.2
Petroleum products	213.4	100.0	262.7	123.1	330.7	155.0	478.8	224.4	506.7	237.4
Cotton textiles....	12.0	100.0	10.6	88.2	7.3	61.0	5.8	48.1	5.9	49.2
Wool and woolen yarn	1.7	100.0	6.5	388.8	5.4	320.2	5.8	345.8	3.3	194.1
Timber and products	31.7	100.0	23.4	74.0	104.2	328.4	182.5	575.1	128.4	405.0
Vehicles	7.9	100.0	32.8	413.8	15.4	195.1	12.1	153.1	17.7	224.1

¹ Except vehicles, which are in thousands of units.

² Annual average.

³ Total volume cannot be determined since separate commodities measured in different units.

Source: International Monetary Fund, *International Financial Statistics*, Mar. 1951; Central Bank of Turkey, *Bulletin*, Nos. 72-73, July to Dec. 1949; and Central Statistical Office, *Dış Ticaret Yıllık Hülâsası*, Dec. 1950.

TABLE XVI (B)
 SELECTED IMPORTS BY VOLUME, 1937 TO 1938 AND 1947 TO 1950
 (Thousands of Liras, c.i.f.)

	1937-38*		1947		1948		1949		1950	
	Value	Index	Value	Index	Value	Index	Value	Index	Value	Index
All imports	132.1	100.0	685.0	518.9	770.1	583.3	812.6	615.9	799.9	605.5
Machinery	19.1	100.0	72.3	378.5	136.2	713.1	174.0	911.0	184.9	968.1
Iron and steel.....	23.3	100.0	70.3	301.7	75.0	321.9	87.2	374.2	97.8	419.7
Petroleum products	5.8	100.0	29.4	506.9	43.8	755.2	62.8	1,082.8	58.7	1,012.1
Cotton textiles ..	17.1	100.0	118.2	691.2	80.0	467.8	61.8	361.4	49.4	288.9
Wool and woolen yarn	4.5	100.0	34.2	760.0	44.2	982.2	49.8	1,106.7	27.1	602.2
Timber and products	1.8	100.0	4.7	261.1	21.2	1,177.8	36.3	2,016.7	18.7	1,038.9
Vehicles	5.0	100.0	54.5	1,090.0	41.2	824.0	37.8	756.0	44.0	880.0

* Annual average.

Source: International Monetary Fund, *International Financial Statistics*, Mar. 1951; Central Bank of Turkey, *Bulletin*, Nos. 72-73, July to Dec. 1949; and Central Statistical Office, *Dış Ticaret Yıllık Hülâsası*, Dec. 1950.

In order that Turkish exports may earn gradually increasing amounts of foreign exchange in the future, it will be necessary that Turkey develop a stable pattern of trade with countries whose economies are complementary to its own. The recent increase in trade with Germany and Italy is a step in the right direction. Attention must also be given to the marked year-to-year irregularities in trade with individual countries. Although some of the shifts were caused by circumstances over which Turkey had no control, many others could undoubtedly have been avoided if Turkey had followed the policy of building stable overseas markets and establishing close ties with individual importers. Sales of raisins, figs, tobacco and cotton in the smaller European countries are sometimes large but are highly sporadic. Part of this intermittent trading pattern may be explained by the dominant role which the government-sponsored agricultural sales co-operatives play in certain commodities. Apparently too much emphasis is placed upon haphazard sales in bulk lots to those outlets which offer the most advantageous short-run terms, without sufficient regard for the longer-run importance of developing satisfied steady customers among foreign nations and individual importers.

COMMERCIAL POLICY

Turkey's commercial policies during the past two decades have largely followed the policies of its more important trading partners. During the 1930's and up to the end of the war it relied almost exclusively on bilateral clearing and payments agreements, on quantitative restrictions and on compensation trading.¹ Indeed, Turkey used the latter technique more extensively than most other countries. Since the end of the war, however, and especially since the inauguration of the European Recovery Program, Turkey has been moving more and more toward liberalization of trade and multilateralism under the European Payments Union.

¹ Compensation trading is a barter-like transaction whereby an exporter uses the foreign exchange proceeds of his sale to import a product previously agreed upon. He may himself import the commodity or sell his right to do so to a third party.

Tariffs

In 1929 Turkey adopted a protective tariff which imposed rather heavy import duties. The purpose of the tariff legislation was not only to promote industrial development by protecting domestic industries, but also to halt the drain on Turkish foreign exchange resulting from the trade deficit incurred in every year since 1923. After the September 1946 devaluation of the Turkish lira, the tariff rates, which were specific rather than *ad valorem* in character, were revised. Under the Turkish customs law, an increase proportional to the reduction in the gold value of the Turkish lira was mandatory, and a general increase of 156.65 per cent was consequently announced by the Ministry of Customs and Monopolies on December 9, 1946. However, a number of exceptions were made. The duties on over 350 of 860 items on the tariff schedule were left completely unchanged and the increase on a number of items were smaller than the specified percentage. In November 1949 a new customs law went into effect which codified and modernized customs procedures but made no changes in duties or method of assessment.

Turkey participated in the recent tariff discussion at Torquay. The Government has expressed its approval in principle of the policy of reducing tariffs. However, there is no indication of action along these lines as yet. Given the present cost structure of many of Turkey's infant industries, it would probably be unwise not to afford them some measure of protection against the more efficient industries of developed countries. These tariffs, however, should not be allowed to become a protective umbrella for permanent inefficiency. Following the infant stage, both state and private industries should be expected to reach a level of efficiency in which they will no longer need artificial protection. Any other approach to this problem would lead to penalizing the Turkish consumer and keeping down his living standard. Moreover, tariffs should not be used to build up those industries which are always likely to need protection from external competition. The only justifiable departure from this principle is in the case of industries essential to national defense.

Trade Restrictions

In 1931, Turkey instituted a system of import quotas and embargoes designed to limit imports and to overcome a serious and persistent trade deficit. These controls grew quickly in extent and reached their peak during World War II when, because of world supply and shipping shortages, it was necessary to confine imports to strictly essential supplies. In 1946 the regime of controls was substantially liberalized but heavy deficits in late 1947 resulted in a new tightening of import restrictions. Since the establishment of the European Recovery Program and the creation of the European Payments Union, however, many import commodities have been freed from quantitative restrictions and from the need for import licenses, and import procedures have been simplified. Judging from 1950 trade, Turkey's participation in the liberalization scheme of the Organization for European Economic Cooperation (OEEC) has not caused a dangerous increase in imports.

Rigid export controls were also applied to all Turkish products during the war. Since then many of the restrictions have been removed. By 1950, export prohibitions applied to only a few basic foodstuffs and export license requirements were lifted from all commodities except tobacco, chrome, copper, opium, wool, pistachios, butter and a few others. The principal reason for continuing to license these commodities is to avoid re-export by other countries which might result in the failure of Turkey to earn dollars and gold.

While prohibitions on exports may be justified in certain emergency conditions, they are generally uneconomical, often lead to the waste of resources and should be avoided. In general, domestic supplies should be assured by increased production and through the operation of the price system, rather than through embargoes. Foreign exchange which might be earned from prohibited exports could be used to import commodities to substitute for the exported goods or to acquire additional consumer goods at prices which will usually result in increased availability of resources to the economy as a whole.

Bilateral Agreements and Compensation Trading

Bilateral trade and payments agreements, inaugurated in 1932, have been the main instrument of trade control. The sphere of such agreements expanded until in the late 1930's they provided the framework for 80 per cent of Turkish trade. High internal and export prices, greatly out of line with world prices, also led Turkey into extensive compensation trade. After the war, Turkey negotiated trade and payments agreements of the type common in the soft currency area, which generally provided for limited credit ceilings, beyond which settlement in gold or free foreign exchange was required. Compensation trade continued to flourish, however, because of the difficulties of finding markets for many of Turkey's high-priced exports. But by the end of 1949 compensation transactions were restricted to exports of hazelnuts and figs and by 1950 trade carried out on a compensation basis was less than five per cent of total trade.

On balance, it is doubtful that Turkey benefited from bilateral clearing and payments agreements and from compensation trading. Although Turkey did succeed in disposing of over-priced export surpluses, to do so it had to pay excessive prices for its imports. Moreover, the type of commodities imported were frequently determined, not by domestic requirements, but by what the trading partner found as surplus and stood ready to make available. These practices protected inefficient methods of production by assuring exporters high-priced markets for their products instead of requiring them to keep pace with the latest scientific and technical developments in order to be able to compete successfully in international markets. Finally, it must be remembered that the fundamental need for such export cushioning arises from a basic disequilibrium between internal and world prices. The need of maintaining price stability, which we have already emphasized, is as important for promoting healthy and vigorous foreign trade as it is for protecting the domestic consumer.

FOREIGN EXCHANGE POLICIES

Government intervention in the foreign exchange market began in the early 1930's as one of a number of measures taken

in an effort to improve the country's deteriorating trade and payments position. Initially the lira was supported at a rate of 10.30 lira to the pound sterling. When sterling went off the gold standard, the rate was fixed at one lira to 12.06 French francs, until the latter also left the gold standard in September 1936. Thereafter, the value of the lira was maintained in relation to gold at the rate existing before the United Kingdom left the gold standard, until the devaluation of the Turkish currency in September 1946. Actually, the official rate for much of the period prior to 1946 was nominal because of a series of premiums on exports to various countries (averaging 40 per cent) and surcharges on imports from various countries (averaging 45 per cent).

Devaluation

In 1946, the various exchange rates were consolidated and the Turkish currency was devalued by over 50 per cent. The new rate, 2.80 liras to the U. S. dollar, was approved by the International Monetary Fund in June 1947. Devaluation attacked the problem of Turkey's extremely high export prices that had theretofore been met only partially by the premium schemes. The first effect of devaluation was a large increase in exports and an export surplus. By mid-1947, however, the trade balance became unfavorable. Since then, Turkey has tried to improve its trade situation by numerous agreements, controls and reduction of the prices of export commodities. The lira has been maintained at the same official rate since 1946.

Fearing adverse repercussions on internal prices, Turkey did not participate in the general devaluation of European currencies in September 1949. The result was to make the import of essential development supplies as well as of consumer goods cheaper and to ease the internal burden of servicing Turkey's sterling debt. Although it was feared that maintenance of the value of the lira in the face of general devaluation might impair Turkey's ability to export at competitive prices, these fears have not as yet materialized since, with few exceptions, Turkey found buyers in 1950 for most of what it had to sell.

Exchange Controls

Turkey's first major exchange control law was passed in 1930. Exchange controls have been in effect ever since and although they have sometimes made foreign trade administratively onerous, they have enjoyed a reasonable degree of success in limiting imports in accordance with governmental policies. However, as in many other countries, exchange controls have not been fully effective in Turkey. Compensation trading has been used, at least occasionally, as a means of escaping exchange control. Likewise, undervaluation of exports and overvaluation of imports are believed to have taken place, with exchange escaping abroad or into the black market where it is sold at a premium of about 30 per cent above the official rate. Probably the greatest shortcoming of the exchange control has been the haphazard manner in which import licenses were indiscriminately granted when exchange was available, with the result that exchange for essential purposes was soon found lacking. We strongly recommend, therefore, that instead of the present sporadic issuance of exchange licenses, an annual foreign exchange budget be formulated to assure effective use of foreign exchange resources in carrying out Turkey's development program. We further recommend that the aid of the International Monetary Fund be sought to work out the best means of instituting such a budget and solving other important foreign exchange problems.

Gold and Foreign Exchange Holdings

At the end of World War II, Turkey's gold and foreign holdings were substantial. Central Bank balances rose from the equivalent of \$38 million at the end of 1939 to \$307 million at the end of 1946. During 1947 and 1948, however, the adverse trade balance reduced these holdings by a third. Since then foreign assets have remained stabilized at approximately \$200 million, a reserve that can no longer be considered unduly large. In fact, it would be wise to retain this amount (approximately nine months' import requirements) virtually intact, as a protection against contingencies such as a sharp fall in the quantity of exports, which might cause a drastic

curtailment in imports and serious disruption of the economy. Under the circumstances, it is not wise for Turkey to obtain any significant amount of funds to cover the external costs of its development program by further reducing its holdings of gold and foreign exchange.

FOREIGN DEBTS

When agreement was reached in 1928 on the division of the debt of the Ottoman Empire, Turkey assumed a total foreign debt obligation of 107.5 million gold lira, which had a value at that time of about \$473 million. This debt, after being refunded and adjusted downward, was finally retired in 1949. Although some new debt was assumed through the issuance of new bonds for the purchase of foreign interests in railroads, ports and other utilities, the total foreign debt declined to TL 188 million in 1938.

In 1938 and 1939, Great Britain and France made two large loans to Turkey, mainly for defense purposes. Between 1938 and 1944, the foreign debt approximately doubled. In 1946, it was again doubled, in terms of liras, by the Turkish devaluation, which also increased substantially the domestic burden of servicing the foreign debt. These increases were partially offset in 1949 by the devaluation of the pound sterling and other currencies. At the end of 1950, the foreign debt stood at TL 730 million (of which TL 126 million were not yet drawn down), or the equivalent at official exchange rates of about \$260 million. The largest portion of the debt is made up of obligations payable in U. S. dollars, equivalent to about \$135 million. These include \$109.6 million owed to the United States Government and International Bank loans of \$25.4 million. Next in magnitude is the total debt owed to the United Kingdom, equivalent to U. S. \$109 million. The major portion of this, about \$74 million, is payable in Turkish liras and represents Armament Credits,¹ Gold Loans and Clearing Liquidation Loans granted in the early part

¹ We have used the sum of \$55 million for the Armament Credits although this is not the complete amount claimed by the United Kingdom. The amount is to be currently under negotiation.

of World War II. The remainder of the debt to the United Kingdom, equivalent to \$35 million, is payable in pounds sterling. The rest of the debt is owed to Switzerland, France, the U.S.S.R. and Sweden.

During 1950 the foreign debt required an annual interest charge of about TL 15 million and amortization of approximately TL 37 million. These payments will be substantially larger in the next few years. By 1952 the amount of interest payments will be about TL 19 million and the amortization, TL 48 million. Total service payments on the foreign debt amounted to seven per cent of Turkey's exports in 1950 and, at the same level of exports, would amount to nearly 10 per cent annually during the next five years. This is a heavy burden on the economy and prudence would dictate against increasing it substantially. Moreover, amortization payments of TL 50 million to TL 60 million annually, which have the same economic effect as an export of capital, would clearly impede the carrying out of a development program.

In Chapter XIII, where we make recommendations concerning an investment program for Turkey for the period 1952-56, we assume that as a result of foreign grants, loans or investments, of adjustments in the existing foreign debt or of some combination of the foregoing, service of the foreign debt during 1952-56 will not constitute a net drain on Turkey's resources and that there will, in fact, be a net inflow of resources. If forthcoming maturities of recent short-term loans as well as those contracted before and during the war for national defense purposes could be extended on an equitable basis, this would reduce the burden of debt service during the developmental period. New loans for productive purposes could also be undertaken as the existing debt is repaid. To the extent that Turkish balance of payments prospects improve, Turkey's ability to service additional debt will increase.

DIRECT FOREIGN INVESTMENTS

Turkish development would be stimulated considerably in the future if the country could attract additional direct foreign

investments. Not only would such investment provide additional amounts of foreign exchange, but it would also bring with it the advanced techniques and managerial know-how which Turkey urgently needs. In order to attract a greater flow of foreign equity capital, however, it will be necessary for Turkey to undo much of the damage caused by a period of extreme nationalism and consequent antagonism toward foreign investments.

In 1937 assets belonging to foreign nationals and proceeds and profits derived from property or investments owned in Turkey by foreign firms or persons were blocked and their transfer abroad was authorized only in the form of exports of certain specified commodities such as carpets, wine, tobacco and raisins. Some liberalization of these terms has since occurred and in March 1950 the Ministry of Finance was authorized, up to a limit of TL 300 million, to guarantee long-term loans obtained abroad for development purposes and to guarantee remittance of dividends in foreign exchange or in Turkish products. Although this law is a step in the right direction, it is too vague and leaves too many uncertainties to have much stimulating effect on foreign investments. The many restrictions still in force continue to deter private foreign capital from venturing into Turkey in substantial amounts.

In addition to confusing or hostile legislation, the most serious economic deterrents to private foreign investment are the instability of the price level and the questions raised in the minds of investors concerning the prospects for maintenance of the exchange rate of the lira. The persistence of deficits in the balance of payments and the absence of a satisfactory foreign exchange budget, on the basis of which all transactions are carried out, have undoubtedly given rise to fears that even if investments in Turkey produce satisfactory results in terms of liras, protracted delays in obtaining transfers of earnings might ensue. In the event of devaluation of the lira, substantial losses might be sustained, not only in transfers of earnings but, even more important, in the repatriation of the principal.

There is no doubt that the establishment of an environment attractive to direct private foreign investment in Turkey would advance the time when investor confidence would be strengthened and foreign interest in portfolio investments in Turkish securities correspondingly increased. Turkey could then enjoy the advantages of additional foreign resources without incurring the rigid obligations of annual interest and repayment charges of loans.

There are always obstacles to direct investment in a foreign country by private firms or individuals. In the case of Turkey those obstacles are increased for Western European and American investors by wide differences in language, legal systems, and economic and financial practices. If Turkey wishes to overcome those obstacles, it will have to make a strong effort. Even so, success would not be assured, but the possible benefits of success are sufficiently attractive to justify the attempt.

BALANCE OF PAYMENTS

Information on Turkey's balance of payments is inadequate since official estimates are unavailable for the years prior to 1946 and even the postwar data are somewhat incomplete. Table XVII, however, gives the basic data for the balance of payments for the years 1947-49.

Prior to 1947, Turkey's international financial position was strong. In the years from 1940 through 1946, Turkey had an export surplus averaging TL 76 million with a resultant accumulation of gold and foreign exchange assets which totalled \$307 million at the end of 1946. During 1947 a drastic shift in Turkey's foreign trade balance occurred. The quantity of imports rose by 83 per cent over the preceding year whereas exports increased less than 15 per cent and the import surplus amounted to TL 60 million. In 1948, the import surplus rose to TL 219 million, due both to a further rise in Turkish imports and a fall in export prices. In large part, the continued rise of imports during 1948 was due to the inflationary increase in the money supply. The import surplus recurred in 1949, but was only slightly more than half of the 1948

TABLE XVII
BALANCE OF PAYMENTS, 1947 TO 1949
(Millions of Liras)

	1947	1948	1949
GOODS AND SERVICES:			
Exports (f.o.b.)	656.7	551.0	693
Imports (f.o.b.)	-637.1	-880.5	-872
Trade balance	19.6	-329.5	-179
Transportation and insurance.....	-55.3	-88.6	-93
Other	-25.9	-17.9	-45
Total	-61.6	-436.0	-317
OTHER NON-COMPENSATORY TRANSACTIONS:			
Private donations	2.1	18.2	8
Private capital movements.....	3.8	-6	—
Turkish aid	2.8	202.7	157
Compensation for Iraqi oil fields.....	2.5	2.4	—
Official amortization	-91.3*	-45.8	-53
Gold subscriptions: IMF, IBRD.....	-32.5	—	—
Total	-112.6	176.9	112
ERRORS AND OMISSIONS.....	27.0	50.8	-1
SURPLUS OR DEFICIT(-)	-147.2	-208.3	-206
COMPENSATORY OFFICIAL FINANCING:			
Official grants	—	—	124
U. S. credits.....	28.0	36.7	} 38
U. K. credits	—	18.4	
Czechoslovakian credit	—	4.3	
IMF advance	14.0	—	—
Payments agreements	-102.5	171.0	-35
Other short-term balances.....	25.1	-43.9	56
Gold	182.6	21.8	23
Total	147.2	208.3	206

* Includes interest on foreign debt.

Source: International Monetary Fund, *International Financial Statistics*, April 1951.

total since rigorous import licensing reduced many of the nonessential imports.

The rise of exports in 1950 to TL 738 million and the drop in imports (c.i.f.) to TL 800 million is a salutary development which gives promise that the gap will eventually be closed and Turkey's international financial accounts balanced. However, it should be noted that from the end of World War II until the end of 1950 Turkey has received about \$241 million

in loans and grants from the United States Government and \$25.4 million in loans from the International Bank, and has utilized approximately \$73 million of its own gold and foreign exchange. Since it is doubtful that external resources of this magnitude (including the unutilized portions of loans already granted) will be available for carrying out a development program during the next several years, acceleration of the development process will require vigorous internal action.

The Mission is of the opinion that the over-all solution to the problem created by the import surplus lies less in curtailing the importation of particular products than in a revision of domestic investment and credit policies. As long as investment and other expenditures exceed the value of resources available to Turkey, there will be inflation and with it increasing pressure to import and a declining incentive to export. The key to the solution of this problem lies in the type of economic coordination proposed in Chapter IV, one important phase of which is the task of keeping total investment within the limits of available resources. As we have already suggested, the work of the Prime Minister's Economic Coordination Staff in this field should be supplemented by an annual foreign exchange budget.

LONG-TERM TRADE PROSPECTS

The longer range outlook for Turkey's balance of payments will depend largely on the strengthening of the economy. Turkish agriculture, industry and transportation must become more efficient. Production and distribution costs must be cut to bring prices of export commodities into line with world markets. A larger volume of agricultural, mineral and manufacturing products must be produced. If economic development progresses toward the achievement of these objectives without in the process generating a strong inflationary domestic demand for the increased output, and if high levels of production, employment and consumption are maintained by Turkey's major trading partners, Turkey's prospects for achieving an equilibrium in its balance of payments appear quite favorable.

In summary, the Mission recommends that Turkey take the following action to strengthen its external financial position:

- (1) A vigorous effort should be made to develop stable foreign markets in those countries whose economies are complementary to the Turkish economy. Achievement of this end would be assisted by adoption of the recommendation already made that Turkey should improve the quality, grading and packing of its export commodities, particularly tobacco and cotton.
- (2) Although protection of certain infant or defense industries may under present circumstances be necessary, tariffs should not be permitted to become a permanent protection for inefficient industries, nor should they be applied to industries unsuited for development in Turkey.
- (3) The Government should formulate an annual foreign exchange budget. Means of instituting such a budget and of solving other foreign exchange problems should be thoroughly examined with the assistance of the International Monetary Fund.
- (4) Turkey should take steps to eliminate the restrictions on private foreign investment and to create an environment favorable to it.

CHAPTER XIII

An Economic Development Program and its Financing

In laying out a development program, consideration must be given to (1) the amount of the total resources likely to be available for development and (2) the best way to use those resources so that rapid, efficient and balanced growth of the economy will result. This Chapter is devoted to those issues.

GENERAL CONSIDERATIONS

The Mission has made no effort to draw up a definitive plan of specific targets for investment in every segment of the economy, covering both private and public development expenditures. Comprehensive planning in Turkey is neither desirable nor possible.

The Mission has confined itself to the recommendation of a development program for the public sector of the economy. In this sector the allocating functions of a free market are not applicable. Deliberate and conscious formulation of the Government's over-all investment program is necessary, for the Government's program will be determined by arbitrary and unrelated decisions made by various governmental agencies and enterprises. The Government has direct and immediate control over its own investment as regards both total expenditures and their allocation. It can expand or contract its investment as its resources permit and it should allocate investment expenditures—whatever the total amount may be—among the various sectors of the economy in accordance with the relative priorities of the various projects being considered. Finally, formulation of an over-all program of public investment is necessary to assure the provision of adequate public service facilities, such as power, transportation, communications and the like, which are necessary to accelerate the growth of competitive enterprise within the private sector of the economy.

The Mission has therefore made two estimates, on the basis of the limited data available, as to the resources that are likely to be available for noninflationary investment in 1952, the first year of the Mission's program. One estimate is based on conservative assumptions, the second on optimistic assumptions. We also outline tentative programs for the use of those resources, which we hope may be of assistance to the governmental authorities responsible for formulating the definitive public development program. Since the data involve large margins of error and since many unforeseen contingencies may arise to invalidate our assumptions, we have made no effort to project public development expenditures annually into 1956, the fifth year of the Mission's program. We do, however, estimate the range of total resources which the public sector may expect to have at its disposal during the five-year period and we suggest reasonable investment allocations as a first guide for the Government in laying out a program for that period.

We have not attempted to formulate a comparable program for the private sector of the economy since it is not possible, short of the imposition of undesirable authoritarian controls, to direct the use of all private savings. A large portion of private investment is achieved without its even entering into the monetary system of the country. A large part of the remainder is financed outside institutional channels. The degree to which the Government can control or even influence the use of private savings is thus strictly limited. Moreover, a detailed program for private investment would be manifestly inappropriate because it would require the substitution of the subjective judgment of those who formulate the program for the impersonal, objective forces of the market place. A strong competitive economy can be achieved only when resources are allocated among alternative uses by a system of free market prices; that is, when changes in relative prices and profitability, responding to shifts in demand and costs, induce parallel changes in investment expenditures. In no other way, in our judgment, can an optimum allocation of investment resources be secured so that the Turkish people can purchase

the goods they want at minimum cost. For these reasons a specific program for private investment is necessarily precluded.

This is not to say that we consider private investment as independent of, or unrelated to, the public investment program we are suggesting. Private investment is essential to Turkey's economic development and is intimately related to government investment and government policy in many ways. The Government should exercise care that its investment program does not infringe on the resources available for private investment. In formulating its own program, the Government will also have to take into consideration the estimated amount and direction of private investment. As we have already pointed out, the Government can exert influence over a significant portion of private investment by means of fiscal and credit controls and tax policies of the kind outlined in Chapter XI. In a properly functioning and freely competitive economy, the Government should not interfere with the private investment mechanism. But when a country is emerging from conditions in which inflation and custom have affected investment patterns, the use of fiscal and credit controls to channel private resources into the most productive uses is appropriate. It is also a responsibility of the Government to make sure that its credit and fiscal policies are such that total investment, both public and private, does not exceed the limits set by the amount of resources available for investment.

Thus, while the Mission presents no detailed targets for private investment, we do indicate a total amount which, together with the amount projected for government investment, we believe can be financed in a noninflationary manner. We also recommend the directions in which the Government should encourage private investment to move, within the limitations of the Government's ability to exercise influence on it.

RESOURCES AVAILABLE FOR DEVELOPMENT

We have already pointed out that, if inflation is to be avoided, the total volume of spending in an economy, whether for investment or for consumption purposes, must be limited

to the resources available from foreign and domestic sources. It is clear that the amount which is devoted to investment at any given time should not be so large as to result in restricting consumption unduly. These principles have necessarily guided us in projecting the amount of resources that we estimate can be made available for development during the course of the next five years.

Total Domestic Resources for Development

To estimate the order of magnitude of the resources that may be available in 1952 and 1952-56 from domestic sources, the Mission has used as a starting point the amount of domestic savings and investment in 1949, for in that year investment was generally financed in a noninflationary manner. The Mission's estimate of total investment in 1949 is necessarily not precise because of the uncertainty of many of the elements which go into the calculation. We believe it reasonable to conclude, however, that investment outlays in that year amounted to roughly TL 1,000 million. Since about TL 144 million were provided from external sources, we estimate domestic savings in that year to have been slightly more than TL 850 million.

In a country like Turkey, where productivity is so low that most of the annual production must be consumed in order to maintain a minimum living standard, it is difficult to increase savings by reducing consumption. The larger part of any increase must necessarily come from a rising level of output, which would make possible both increased consumption and increased savings. The Mission has assumed that total output will increase by 3.0 to 3.5 per cent per year and that the same percentage of total income will be saved as at present. On these assumptions, the savings available for investment will also increase by 3.0 to 3.5 per cent per year. If the recommendations of this Report are adopted, such an increase in investment can, in our judgment, reasonably be expected. Over-all consumption will be increasing at the same rate. Since the population is increasing annually at the rate of two per cent, the rate of increase in per capita consumption will be only about 1.0 to 1.5 per cent per year.

On the basis of these assumptions, we estimate that gross investment resources available from domestic savings should be in the neighborhood of TL 940 million in 1952 and TL 5,000 million for the five-year period, 1952-56. These sums indicate the order of magnitude of the domestic resources at 1949 prices, which we calculate that Turkey will be able to devote to investment during the period of the Mission's program. They include the development resources of both the public and private sectors and the resources which flow through financial channels as well as those which are carried out by effort alone.

Resources of Public Sector

Table XVIII shows our estimates of the domestic resources available for public investment. In making our projections, we have again used the experience of 1949 as a guide. The Government's public development expenditures in 1949 amounted to about TL 528 million. Of this total, TL 142 million was provided by foreign assistance, without which the investment program would have had to have been drastically reduced or would have had serious inflationary consequences. The remaining public development expenditures, roughly TL 386 million, were provided from domestic resources by revenue receipts and internal borrowings of the Government.

On the basis of calculations made by the Mission, we estimate that some TL 425 million to TL 525 million might be available from domestic resources for public development outlays in 1952, the first year of the five-year program which we have projected. We have purposely used a wide range, since we are basing our figures on projections over a three-year period after 1949, which, by their nature, are subject to a fairly wide margin of error.

The most important single source of this estimated total of domestic resources is the surplus of government receipts over current account expenditures (government savings), which we estimate amounted to about TL 129 million in 1949. We believe that government savings should rise to TL 145 million in 1952, although they may conceivably rise to TL 175 million. To realize an increase even to TL 145 million will

TABLE XVIII
ESTIMATED DOMESTIC RESOURCES AVAILABLE FOR PUBLIC
DEVELOPMENT EXPENDITURES, 1949, 1952 AND 1952 TO 1956
(Millions of Liras)

	1949 (Actual)	1952 (Estimated Range)	Five-year Period 1952-56 (Estimated Range)
1. Surplus of government receipts over current account expenditures:			
a. General and annexed budgets.....	129	145 — 175	775 — 925
b. Provincial, municipal and village budgets.....	43	45 — 60	250 — 350
2. Self-financing of state economic enterprises.....	125	125 — 135	575 — 650
3. Funds supplied by pension funds.....	80	90 — 100	450 — 500
4. Purchases of government bonds by individuals, insurance companies and corporations.....	13	20 — 40	100 — 200
5. Funds supplied by banks.....	-4	0 — 15	0 — 50
Total.....	386	425 — 525	2,150 — 2,675

SOURCE: Estimates made by the Mission on basis of information supplied by the Government and its various instrumentalities.

require not only the return of certain educational expenditures to the local governments, as recommended earlier in this Report, but also more effective tax administration and a closer scrutiny of current expenditures to eliminate non-essential outlays. Even with such action, our projection of savings might be seriously reduced by an unanticipated rise in defense expenditures, by a reduction in tax collections resulting from a bad harvest, by difficulties in administering the new income taxes or by any of a number of other contingencies. Conversely, effective tax administration and a rising national income resulting from development programs now under way might increase the central government savings available for investment in 1952 to as much as TL 175 million.

We anticipate no great increase in savings from provincial, municipal and village budgets. Indeed, the return of certain educational expenditures to local authorities may reduce our estimated minimum savings of TL 45 million. Given the uncertainties of our estimates, however, it is possible that savings from these budgets may rise to a maximum of TL 60 million in 1952.

The second major source of development funds is the earnings of the state economic enterprises which presently operate outside the government budgets. Of the estimated TL 125 million of resources raised by these agencies from their own funds in 1949, the Sümerbank produced TL 52 million and the Etibank TL 24 million. The balance came primarily from the earmarked taxes of the İller Bank and the earnings of the Petrol Office. The greater volume of sales and the more efficient operation of state enterprises, which would follow from our previous recommendations, should provide increased funds for investment purposes from this source in 1952. We estimate that the sum may be between TL 125 million and TL 135 million. However, a reexamination of the pricing policies of these agencies in line with our recommendations will undoubtedly decrease the earnings of certain state enterprises after 1952. We have therefore projected a slightly declining volume of resources from this source during the five-year period.

A third source of funds for public development is the sale of government securities to the public pension funds, the major market for long-term government bonds. Their purchases rose from two million liras in 1947 to an estimated TL 80 million in 1949. Barring a major revision in the policies of these funds, they may be expected to absorb about TL 90 million to TL 100 million of the public debt annually.

Purchases of government bonds by individuals, insurance companies and corporations are still on a small scale. In 1949, the sum was TL 13 million. This was composed in large part of purchases by corporations in amounts equivalent to five per cent of their net earnings, as required by law. The annual increase in the reserves of insurance companies is invested to a considerable extent in government bonds, but these reserves are small in amount. Purchases by individuals in recent years have been very limited because of the more attractive returns available from other types of investment. However, the greater financial stability and vigorous marketing policies, a demand for government securities by the public might be created. We estimate that TL 20 million to TL 40 million could be contributed annually to the public development program from these sources during the period 1952-56.

The Government did not resort to bank borrowing during 1949. The net increase in loans from commercial banks of TL 23 million was more than offset by a retirement of TL 27 million of credit from the Central Bank. As a matter of policy, it is recommended that the Government refrain from substantial bank borrowing in the future. This would leave the resources of the banks at the disposal of private borrowers.

In addition to the foregoing domestic resources, we are assuming that there will be some net foreign assistance available above the amount of foreign resources needed to service the present foreign debt.

In view of the uncertainties of both domestic resources and foreign assistance, we believe that TL 450 million is a reasonably conservative estimate of the total resources, domestic and foreign, which will be available for public investment in 1952. An increase in public savings beyond our projected level for

1952 or an increase in foreign assistance would of course make a larger volume of development outlays possible. We do not believe, however, that the total resources are likely to exceed TL 575 million in terms of 1949 prices. With these considerations in mind, we have outlined two public investment programs for the year 1952, one providing for investment of TL 450 million and the other for investment of TL 575 million. The actual amount of government investment which will be most appropriate to Turkey in 1952 must be determined by the Government's economic coordination and budgetary authorities in the light of their best estimates of private investment, domestic savings, and foreign assistance.

As noted earlier in this Chapter, the margins of error in the sums with which we are dealing are so large and the uncertainties of the next several years, in matters such as national defense needs and the amount of foreign assistance, are so great, that an annual projection of the resources available for public investment would be of little value. We believe, however, that we can reasonably assume that the total resources available for public investment over that five-year period are likely to be somewhere between TL 2,250 million and TL 2,875 million including both domestic and foreign resources. The projection of resources in each year and their allocation must be made by the Government in the light of close and continuing scrutiny of all relevant factors including estimated private investment.

It should be noted that our estimates of total resources available for public investment in 1952 (TL 450 million to TL 575 million) contemplate no significant increase over the level of 1949 (TL 528.6 million) and may in fact require a reduction in the public development outlays of the past few years. The main reason for this is that since the end of World War II external resources have permitted an exceptionally high rate of investment. We pointed out in Chapter XII that it seems likely that the external resources which Turkey will have at its disposal over the next several years will be somewhat less than those available since 1945. However, the anticipated loss of external resources should be offset,

at least in part, by an increase in resources for investment available from domestic sources. As is apparent from Table XVIII, our recommended program assumes an increase of 10 per cent to 33 per cent in the amount of domestic resources applied to public investment in 1952 over the amount of such resources so applied in 1949. We believe that any greater increase in domestic resources devoted to public investment would impose too heavy a burden on a people whose standards of consumption are already low and would create the danger of serious inflation. Even increases of the magnitude suggested will require vigorous and coordinated internal action along many lines.

Resources of the Private Sector

We estimate that the domestic resources available for private investment are likely to be between TL 415 million and TL 515 million in 1952 and between TL 2,325 million and TL 2,850 million in the period 1952-56.

It is not possible to state in detail the means by which private investment will be financed for the available data are too scanty. We estimate that 13 per cent (TL 62 million) of private investment in 1949 was financed by bank credit, a small fraction of one per cent by foreign aid and the remainder (TL 408 million) by self-financing, private loans and depreciation allowances. By 1952 considerably more funds should be available through the banking system for private investment. It may reasonably be expected that bank credit to private borrowers may amount to between TL 90 million and TL 100 million in 1952 and perhaps to between TL 500 million and TL 600 million in 1952-56, without producing inflation. These estimates assume that the Government will not borrow from the banks to any significant extent. If it should do so, private loans would have to be reduced.

The amount of resources available for private investment from personal savings and depreciation allowances cannot be measured precisely. Large amounts never go through financial channels, particularly in the agricultural area. Many private loans are contracted surreptitiously at illegally high rates of

interest. The data on private depreciation practices are almost nonexistent. On the basis of the data available, however, and of the analysis made by the Mission, we have estimated that financing available from private loans, self-financing and private depreciation allowances are likely to amount to between TL 315 million and TL 415 million in 1952 and between TL 1,725 million and TL 2,250 million in 1952-56.

As in the case of resources available to the Government, these estimates are subject to wide variation and may perhaps be supplemented by foreign loans or investment. We believe it reasonable to assume that, in all, TL 440 million to TL 540 million will be available for private investment in 1952 and TL 2,500 million to TL 3,000 million in the five-year period 1952-56.

In the light of the Government's policy of encouraging productive private enterprise, we believe that these sums are reasonable amounts to set as goals for total private investment expenditures. Their achievement would require a rising level of private investment during the period of the program, a development which should be a consequence of rising income levels as well as of the general policies we have recommended to the Government. We believe, too, that these sums are in reasonable balance with those estimated to be available to the public sector. If used for appropriate productive purposes, they would provide a great stimulus to economic development. The Government, as part of its over-all development program, should use every effort to stimulate productive private investment of the magnitudes suggested above.

PUBLIC DEVELOPMENT PROGRAM

In earlier Chapters of this Report we have indicated the criteria by which we believe development expenditures should be judged and we have made broad recommendations for the development of the various segments of the Turkish economy. In the light of those previous recommendations, we recommend that the Government prepare a program for public investment in the year 1952 and during the period 1952-56, along the following general lines:

TABLE XIX
GROSS PUBLIC INVESTMENT; 1949, 1952 AND 1952 TO 1956
(Millions of Liras)

Purpose	1949* (Actual)	1952 (Recommended Range)	Five-Year Period 1952-56 (Recommended Range)
Agricultural Development	27.5	50- 60	350- 425
Public Health and Education (New training programs).....	10- 15	75- 100
Transportation:			
Railroads	91.8	45- 60	200- 225
Highways	58.6	55- 70	350- 475
Ports and Shipping.....	56.3	50- 60	200- 225
Airways	15.7	15- 20	75- 100
Other	2.6
Total Transportation	225.0	165-210	825-1,025
Communications	21.7	15- 20	75- 100
Public Works	103.0	70- 90	350- 450
Electric Power	22.4	45- 60	250- 350
Industry	37.9	40- 60	150- 200
Mining	79.6	55- 60	175- 225
Other	6.1
Total	523.2	450-575	2,250-2,875
Local Government— unallocated	43.2		
Inventories	-37.8		
Total	528.6		

* The items in this column were arrived at by apportioning all investment items (except those relating to national defense) in the general and annexed budgets and all investment expenditures of the state economic enterprises. Adjustments have been made to compensate for transfers from one of these budgets or accounts to another. In the case of highways an addition was made to cover foreign contributions and taxes earmarked for highways, neither of which are believed to have been covered in the Budget.

Source: Estimates made by the Mission on the basis of information obtained from the various budgets and from the balance sheets of the state economic enterprises.

Before discussing the contents of the Mission's program, we call particular attention to certain of its characteristics.

1. The recommended targets in each sector are given in round figures. They indicate orders of magnitude rather than precise quantities.
2. The figures are for gross investment. In certain fields, the sums include amounts for maintenance and replacement; in others, they do not. This difference in treatment was necessary because the available data on public investment made it impossible to separate maintenance and replacement in every field. However, our recommended program follows in this regard the same pattern as that prevailing in 1949, as shown in Table XIX.
3. Development expenditures in public health and education represent, not capital investment in the ordinary sense, but increases in current expenditures over the level prevailing in 1949 to provide for new training programs.
4. Although the investment expenditures of local governments have not been allocated in 1949, due to lack of information on their use, their expenditures are included under the various categories in the Mission's program.
5. Because there is no basis upon which to make estimates, we have not provided for changes in the inventories of such state institutions as the Toprak Office. Such inventories may be large and their annual change may require significant adjustments in the program.

It is apparent from Table XIX that our recommended program provides for an allocation of resources somewhat different from that which prevailed in 1949. The shift in emphasis appears in 1952. It grows stronger over the course of the five-year program. This reallocation of resources is made necessary in part by the need to adjust the present imbalance in the Turkish economy, to which we have several times alluded. Thus we have considerably increased the amount of resources allocated to agriculture and reduced the amount devoted to railways. Change in emphasis is necessary also because of the limited purposes for which we have assumed public investment will be undertaken in the future. Thus our program is heavily weighted in the area of basic services, which are not likely to be undertaken at present by private

enterprise. We have anticipated a declining level of new government investment in industry and in mining, both because public programs in these fields are nearing completion and also because they are fields in which private enterprise can be expected to expand. Conversely we have provided for an increasing level of investment in power, since this facility is essential to private expansion, and yet private enterprise is not likely to enter it to any great extent. If private enterprise does not expand, the Government may have temporarily to increase its expenditures in such fields as industry in order to keep up a steady pace of economic development.

Agriculture

Our Report has stressed the importance of agriculture. We believe that agricultural development should have top priority in the allocation of public investment resources because it provides the greatest opportunity for increased productivity and because it is an essential prerequisite for industrial development. Agricultural development will provide the greatest employment of manpower for the least capital investment. It will reduce the number of men required to produce food and other essential farm products and thus release manpower for industrial development. It will provide a better diet for the whole population. It will make increased exports possible and thus increase foreign exchange earnings. It will provide additional raw materials for industry and, by raising rural income, expand the market for industrial products.

We have allocated TL 50 million to TL 60 million to agricultural development in 1952. This expenditure is divided among several uses. The training of research and extension staffs is of first importance. In 1949, about three million liras were spent for such training. In 1952, these expenditures should be increased by an additional TL 7.5 million at least. Although training costs are normally considered as current expenditures, we have included the recommended increase for 1952 in our investment program because of the long-term effect we believe it will have in raising the level of agricultural productivity. An additional TL 12 million should be added in

1952 to the 1949 expenditures for research and surveys, which are second in importance only to the training of technical personnel. This sum should also finance the construction of the new experimental stations recommended for the vicinities of Izmir and Adana, estimated at three million liras. The creation of a new Agricultural Marketing Service will require perhaps TL 1.5 million. There remains TL 29 million from the minimum program of TL 50 million recommended for 1952. This sum will have to be allocated by the Government among the remaining uses, which include small amounts for grain storage facilities and for land distribution, maintenance and replacement requirements of state agricultural installations, new equipment for state agricultural institutions and additions to the capital of the Agricultural Bank, should they be required. We have recommended a gradual expansion of agricultural credit, but the Agricultural Bank may well be able to increase its credit from its own resources, without recourse to budgetary contributions.

Our program for the period 1952-56 assumes an increasing rate of agricultural investment by the Government. As the expanded training program for technical personnel begins to bear fruit, agricultural credit can be devoted to more productive uses than is now the case and the volume of credit can expand accordingly. Similarly, as more technically trained personnel become available, the amount of funds devoted to research can be increased and the extension service can be expanded. We believe the increased development expenditures recommended for agriculture will have a far-reaching effect in raising the productivity of the great mass of the Turkish population and will have beneficial ramifications throughout the economy.

Public Health and Education

The Mission believes that the training of personnel in the fields of public health and education is the second most important use to which development resources can be put at the present time. As we have noted earlier, such expenditures are ordinarily made from current rather than capital account. In the case of a country in Turkey's present stage of development,

however, increases in such expenditures can justifiably come from development resources because they can be expected to yield substantial results in greatly increased productivity, which will be reflected throughout Turkish economic life. We therefore recommend that expenditures for training in each of these fields be at least five million liras above the level devoted to those purposes in 1949. These sums should be increased even further during the course of our program. We wish to emphasize that these allocations of funds are not intended for the building of schools, hospitals or other fixed installations. Expenditures for such purposes, which are of less importance than training and should for the present be kept low, are discussed later under the heading of Public Works.

Expenditures for training in public health should be used in the manner recommended in Chapter IX. Of greatest importance is the training of nurses and allied technical staff. Expansion is also required in the training of doctors and public health specialists. Not until such staff is trained and available will it be desirable to expand physical health facilities to the level Turkey needs. Expanded training programs in education should also be directed, as recommended, to the fields in which Turkey is now most seriously short, namely, technical personnel at the middle and higher levels of education.

The sums we have allocated for training may seem small in relation to Turkey's long-term needs. They are small because expenditures in these fields require more careful thought and planning per lira than in any other field and because foreign assistance will initially be required for that planning. Also they must at the start be low because recruitment of appropriate personnel is likely to be slow. Finally, training is cheaper than almost any other use to which resources can be put and at the same time, the results in increased skill, health and hence productivity are probably greater per unit of expenditure than in any other field.

Transportation

We recommend a reduction in the development resources devoted to transportation in 1952, compared with 1949. Never-

theless, more than one third of the recommended Government development expenditures are allocated to the various fields of transportation. The need for such large expenditures is explained by the fact that transportation is a basic service in which under present circumstances private capital will make little investment, but which will make a major contribution to the development of agriculture and to the expansion and more efficient operation of private industry, mining and trade. Moreover, heavy maintenance and replacement expenditures are included in our estimates because of the large amount of fixed assets in railways, ports and highways.

The recommended expenditures are intended for use in the programs outlined in Chapter VII. When those programs are completed, Turkey will have a modern transport system adequate to its needs. At least two of those programs (railways and highways) should be slowed down both because of the limited resources available and because of the doubtful need for such a great expansion in so short a time. The railway maintenance and renewal program needs to be carried forward vigorously, but the new railway construction projects can, without serious loss to the economy, be spread over a longer period than presently contemplated. In the case of highways, we have recommended that, when the first stage of the national highway program is completed, emphasis should be shifted to the feeder roads urgently needed by the rural population. In general, expenditures on railways, ports and shipping should decline as present programs are completed in the next five years. As this occurs, expenditures on highway development may be increased.

Investment in transport rates a high but flexible priority. Funds to meet minimum needs should be given high priority. As additional funds become available either from increased resources or after the minimum requirements of other sectors of the economy have been met, transportation should again receive high priority in the allocation of investment funds.

Communications

As recommended in Chapter VII, our allocations for communications are intended to permit development in this field

at roughly the same pace as in the past few years. The stress of this program is on expansion and improvement of telephone services. Should only the minimum resources be available, the radio broadcasting project should be postponed.

Public Works

This category covers a wide variety of investment expenditures. The most important are for irrigation, municipal utilities and services, such as streets, municipal transport, sewerage, drinking water and garbage-disposal facilities, schools, hospitals and health centers, and government buildings. Many of these provide basic services and facilities of great importance. As Turkey's population increases, as the country becomes more industrialized and urbanized, and as personal incomes rise, the need for investments in these fields will become more acute.

There are certain categories of public works in which savings can be made and expenditures postponed without impeding economic development. Reduction is both possible and desirable in the construction of public buildings and monuments. Fortunately, the Government's program for the construction of major office buildings in Ankara is very largely finished. Like many of the Government's hospitals, health centers, schools and other public buildings erected in recent years, they have been unnecessarily elaborate and costly. Public buildings of all types projected for future construction should be subjected to close scrutiny. Savings can be effected by switching to more economical types of structures, standardizing equipment used in these various buildings, unifying purchasing procedures and paying closer attention to maintenance. For the foregoing reason we have drastically reduced expenditures in this field below the level of 1949.

Reduction in the immediate future is possible also in the construction of hospitals. Despite the need for more hospitals, it would, as we have pointed out, be useless to construct them when there are not even enough nurses and technicians to staff existing facilities. The hospital building program should therefore proceed slowly until the training programs

previously recommended are turning out the necessary personnel. New construction should be sanctioned only for hospital extensions required as part of the training program and for tuberculosis pavilions annexed to existing general hospitals. These should be of simple and economical construction.

On the other hand, greater stress should be placed on municipal services, especially on providing safe and adequate supplies of water and proper sewer and garbage-disposal facilities for the many towns and cities which do not now have them. Improvements in these fields are essential to the health of the nation and would improve the general sanitary situation, which has been so much neglected in Turkey. As recommended in Chapter V, experiments in small-scale irrigation should be carried out on a broad front to determine the methods best adapted to the country. Many of these projects can be financially self-supporting if charges are adjusted properly. This is especially true of municipal water and transportation systems and irrigation projects.

It is not feasible to recommend specific amounts of investment for each category of public works. It will be an important task of the recommended Economic Coordination Staff to make such specific allocations in the light of its careful weighing of a great variety of factors, including available resources, supply of skilled personnel and relation to other sectors of the economy.

Power

Since public power facilities are not likely to attract private capital in the near future, the Government must continue investment in this field. Power is an essential public service, the shortage of which has undoubtedly been a limiting factor in industrial and mining development. For that reason the Mission's program provides for a doubling of power investment in 1952 over the level of 1949 and anticipates increasing expenditure thereafter.

We have, however, recommended caution in power expansion. The Government's present commitments in this field, the northwestern grid and the Sarıyar project, should be ful-

filled. Power expansion beyond this should be restricted to relatively small plants needed to satisfy only the most urgent municipal or industrial needs. New large-scale hydroelectric projects should be postponed because prospective demand for productive uses does not justify their heavy cost and their drain on foreign exchange resources. The Mission believes that the expenditures recommended allow for an appropriate expansion in the light of present and anticipated requirements.

Industry

The Mission anticipates that industry will be the main field of expansion of private investment. Public investment in this field should therefore decline rapidly. Accordingly we have provided for a reduced level of government expenditures in industry during the life of the Mission's program.

Presently outstanding government commitments for investments in industry will be almost insignificant by 1952. Maintenance and replacement needs will, however, require large expenditures. Although these will be reduced as the Government sells its industrial enterprises to private capital, we believe that such sales will take time and that, in any event, the Government will probably have to continue to operate its heavy and more complex industries for at least some time to come.

In our recommended program, we have not anticipated any expansion of state industry beyond present commitments. Given the Government's policy towards encouragement of private enterprise, no such expansion could be justified except in industries which are maintained as government monopolies or in factories which are deliberately established for other than economic reasons. It may be, of course, that private capital will not live up to expectations. In that event the Government may feel impelled to resume its industrial expansion but only after every sincere effort has been made to encourage private investment in needed industries.

We have included in the Government's development program in industry the sum of five million liras for the establishment of an Industrial Marketing Division in the Ministry of Economy and Commerce, as recommended in Chapter VI.

Mining

In mining, as in industry, we have recommended a declining rate of investment by the Government. By 1952 virtually all of the Government's outstanding commitments in mining will be for Zonguldak and that project is scheduled for completion in 1953. Thereafter expenditures for expansion should be substantially reduced. Should new mineral resources be discovered or if world conditions indicate possibilities of larger exports of minerals, more investment resources may have to be diverted, to mining. It is the Mission's belief, however, that mining is an appropriate field for private investment and that such investment will grow if the Government adopts a new minerals policy along the lines recommended in Chapter VI.

Included in the Government's investment expenditures are the needs of MTA, whose geological and mineral survey work should be pressed forward. Included also are small amounts for petroleum exploration, which expenditures should be watched closely and kept to a minimum unless they produce definite evidence of the existence of important oil resources. They could be reduced substantially if the Government adopts the recommendation in Chapter VI that private interests should be permitted to participate in petroleum exploration.

Need for Flexibility

We believe that the public development program we have outlined is integrated in that the investments in each field are related to those in other fields and to those anticipated in the private sector of the economy. They have been distributed among the various fields in relation to their importance. The program is also appropriate to the level of economic development prevailing in Turkey and is within the limit of the resources that are likely to be available in the next five years. A variety of contingencies may arise to invalidate our assumptions as to the amount of available resources and the amount of private investment. They may actually be greater or smaller than we have estimated. In that event, the considerations on which our program is based will provide a

guide to the kinds of adjustments that ought to be made. Other events occurring outside Turkey may also dictate the need for adjustments. Accordingly, the allocations we have suggested are not designed as a rigid program to be followed precisely, but rather as a general guide to indicate the broad areas into which investment funds should be directed.

If the amount of investment funds should be larger than now appears probable, investments in addition to the amount recommended could be undertaken. In such an event, it would be desirable to allocate them in appropriate amounts to (1) highways, (2) electric power and (3) public works, in that order. On the other hand, if the amount of funds should be less than indicated, the necessary reductions should be made in (1) public works, (2) railways, (3) industry, (4) highways and (5) electric power, in that order. In no event should training and research programs be reduced.

PRIVATE DEVELOPMENT PROGRAM

We have estimated that private investment in 1952 will range between TL 440 million and TL 540 million and during 1952-56 between TL 2,500 million and TL 3,000 million. For reasons already stated, we neither can nor wish to allocate these sums in a detailed or precise way. The Government should, however, seek to influence these private investment resources in accordance with the broad recommendations for development made in this Report.

Much of private investment, probably more than half, will be self-financed without recourse to financial institutions or carried out by effort alone, as it has been in the past. This portion is represented chiefly by construction and improvement of village houses, improvement of farm lands, and the like.

The greatest portion of private investment, whether entailing the use of money or not, probably goes into agriculture. The resources so applied should undoubtedly be increased. The Mission has recommended in Chapter V, however, that the gradual expansion of agricultural credit should be closely related to the work of the research and extension services so

that such credit will be productively used. Until the work of those services begins to bear fruit, increases in credit should be devoted primarily to true capital additions, such as acquisition of tractors, machinery and other farm equipment. Private investment in agriculture, whether for equipment or improvements to land and buildings, should amount to several times the sums devoted by the Government to agricultural development.

Of private monetary investment in 1949, considerably more than half (about TL 140 million) was devoted to urban residential construction. The remainder went to industry, trade and transport. The concentration on construction has been the result of generous tax exemptions accorded this type of investment as well as of general economic and social factors. The Government should seek to reduce the incentives to investment in urban construction and to divert it into more immediately productive channels. As recommended in Chapter XI, tax exemptions for buildings should be drastically reduced, those that remain should be restricted to the most economical types of dwellings for low-income groups and taxes on buildings should be increased. The general monetary and fiscal measures we have recommended may also slow down the flow of private capital into real estate. The result of such measures should be both to divert resources into other fields and to make available a greater amount of less expensive housing accommodations. Efforts to restrict residential construction should be maintained until the many more urgent needs of the economy have been met.

On the other hand, the Government should take energetic steps to attract private investment into industry and mining with the purpose of achieving up to TL 80 million of investments in these fields annually. Many of our previous recommendations would help towards this goal. Elimination of the many discriminations under which private enterprise now labors, assurances against expropriation, better access to information, rationing of foreign exchange consistent with economic development policies, reasonable taxation, expanded

credit facilities and selective credit controls, among others, should attract substantial private capital to these fields.

In Chapter VII, we have noted that the shortage of vehicles will for some time to come prevent full use of the highway system now under construction. The Government should make available sufficient foreign exchange to assure the importation of commercial vehicles of a weight and type suitable to Turkey's needs and to the quality of its highway system. Encouragement should also be given to expanding private investment in distribution and marketing facilities.

FOREIGN EXCHANGE REQUIREMENTS

We have made no attempt to break down either the public or the private investment program as between foreign and domestic currencies, partly because of the difficulty of forecasting Turkey's foreign exchange resources with any degree of accuracy and partly because of the lack of data on the foreign exchange requirements of the specific projects that will make up the program. We do not believe, however, that shortage of foreign exchange will be an obstacle to the investments we have recommended. The foreign exchange requirements of most of the government projects for which commitments have already been made, which constitutes a large proportion of the public program, have already been met, or will be within the next year or two. This is notably true of the programs in industry and mining, shipping and port development, power and highway expansion and improvement. Further, we have recommended a rationing of foreign exchange resources which, if effectively carried out, would assure their sufficiency for this program. Finally, we have assumed a net inflow of foreign capital. It is possible, of course, that our assumption as regards foreign exchange resources will not be realized. Should this happen, projects requiring a high proportion of foreign exchange, no matter how important they are, would have to be subordinated temporarily to projects requiring mostly local currency. Here again, reference to the general considerations for selection of investments will provide a guide to the adjustments that would have to be made.

CONCLUSION

The Mission has recommended an investment program based on a rising level of domestic resources. It calls for savings which the economy can reasonably be expected to provide while still permitting a modest growth of consumption. Within the over-all total of development resources, we have recommended an increasing proportion of private investment. We have allocated the resources available for public investment among the various sectors of the economy by reference to the contribution such expenditures can make to the creation of an environment conducive to economic development in general and to the growth of private enterprise in particular. These purposes have made necessary an allocation of public resources somewhat different from that which has prevailed in the past. We have not recommended a specific allocation of private development resources but have indicated the directions in which the Government should seek to influence them. If these recommendations are carried out, we believe that Turkey's economic development will be balanced and will not result in financial instability.

Our general recommendations for economic development and the investment allocations made in the Mission's program make no provision for monumental projects of the kind that are often, but in our judgment erroneously, associated with economic progress. The absence of such projects from our program is the result of the Mission's considered judgment that, at Turkey's present stage of development and with the limited resources available to it, economic progress can best be accelerated by a variety of small projects spread widely over the country and designed to raise the living standards of large segments of the population in a relatively short time. Turkey's past concentration on large projects which benefitted only limited portions of its population has contributed, as our Report emphasizes, to an unbalanced economy, and to sporadic and localized development. We are convinced that more modest and more dispersed efforts, which directly and immediately affect the people as a whole, will provide a more enduring foundation for rapid economic development.

The execution of a program along these lines will require diligent effort and constant vigilance. It will require close coordination of all the Government's economic activity, constant review and analysis of trends in domestic and foreign economic conditions, perhaps frequent adjustment of annual programs in response to changing circumstances, and intelligent formulation and application of fiscal, monetary and tax policies.

The Mission believes that the adoption of its recommendations for a program will provide a foundation for steady and balanced progress designed to overcome simultaneously the many interlocking barriers which have in the past retarded development. It will also lay a sound basis for an improvement in the standard of living of the Turkish people which will generate within itself both the momentum and the resources for still further development.

The Economy of TURKEY

JOHNS
HOPKINS