

## *Chapter 9*

### RECOMMENDATIONS

#### AMERICAN AID TO TURKEY

THE FIRST PREREQUISITE for practical American help in the development of the Turkish economy is a reassessment of the economic objectives and the function of government in that development. This reassessment should be guided by the basic democratic principle that rights pertain to the people of the country, not to the government as such, and that whatever responsibility and authority the government may exercise are those conferred on it by the people.

The government has the opportunity to establish the conditions favorable to economic growth, by an appropriate system of laws and taxes, besides economic undertakings which may be helpful, including such things as the creation of credit facilities and the construction and operation of physical works. There is no sphere of production, service or regulation which the government may not legitimately enter, provided the public interest is better served by its action than it would be by the use of individual resources. It is not necessary to draw a line between the field of the state and that of private endeavor. What is essential is that individuals or private establishments should not fear the impairment of their rights by arbitrary, capricious or discriminatory acts on the part of agents of the state.

The state should reduce the obstacles to economic achievement far enough so that the individual citizens can cope with them. As the capacity of the people to provide their own economic needs in a particular field grows, the state might well withdraw and apply its specialized faculties to similar

preparatory work in other fields. The state will, of course, always perform functions which cannot be undertaken, or cannot be so well carried out, by private initiative. Among these are education, public health, the postal system, police and fire protection, public works, regulation of utilities and many other activities.

At the present moment, though Turkey has great possibilities for economic development, it is not a field ready for private initiative, either domestic or foreign. It is impossible to recommend specific localities or industries for American investment, or to draw up detailed schedules of needed imports—so many electric generators, so many plows, so many tractors.

#### *Starting on a Small Scale*

A list of plants needed for light and heavy industries would include almost everything a growing country requires, excepting only those articles that might better be imported. There is relatively little manufacture now. It is of less consequence to guess when the demand for cement will grow from 300,000 tons a years to a million than to bring about the establishment of one plant making high-grade cement at low cost, and selling it at a profit. We know only that Turkey needs far more cement than she is getting. How much more depends on many incalculable factors.

If we should assume that Turkey could use as much farm machinery per man or per acre as the United States, then the opportunity for manufacturing it could be calculated. Turkey has next to none at present. But many pages of tables on this subject would be as insubstantial as bubbles of champagne. Turkish farmers need first of all at least one factory making plows, pitchforks or wagons. The rest will develop in time, as roads, irrigation canals and food-processing plants are built.

A modern fifty-ton jobbing iron foundry in Turkey could operate night and day on firm contract work for a year ahead,

on the basis of demand which already exists. There is no foundry there which is worthy of the name; Turkey is not yet living in the Iron Age. How many tons of cast iron could be produced and sold in the next five years is anybody's guess. Guesses that are worth recording could be made only by those who had set up business and had begun to fabricate and distribute the products.

Enterprises of this sort could start once the government had met the prerequisites by removing obstructions imposed by laws and taxes and had ceased to use whatever economic surplus exists for an overambitious program of state-directed "five-year plans."

### *Management and Know-How*

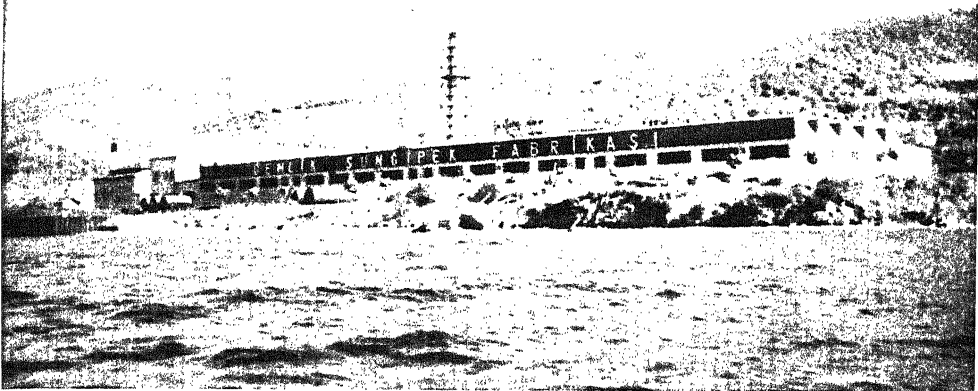
Once the government had cleared the way, the primary requirement of Turkey would be, not capital, but skilled management to operate the essential plants. Capital without management is sterile; without know-how capital is as useless as steam without an engine. The availability of capital is a meaningless term taken by itself; capital must be available to management and technical skill.

The job of management begins long before a plant is completed and ready to be taken over from its builders after the first test run. Most industrial enterprises which have failed were doomed before they produced a single article. This is true of many Turkish establishments. Preparation for success by an experienced managing staff means operating the project on paper before anything else is done. In their minds, the managers and technical men find the raw material and move it to the mill, obtain the men and train them, manufacture and distribute the product, collect the revenue and pay the bills. In this way, future mistakes of design or routine are avoided. When all foreseeable needs are envisaged and ways are devised to meet them, the risk of failure is reduced to the risk of the unknowable. Experienced men, facing only this risk, can usually survive even adverse developments.

One of the first concerns of good management is to set up an organization appropriate to the enterprise and to allocate within it responsibilities and authority. The organization must be shaped to take account of men, equipment and services, and must outline a form or mode of procedure of the sort adapted to the particular undertaking. Here is where know-how first manifests itself. It is through a good organization that management achieves its results. Therefore management must be free to set up its own mode of procedure, to make its own decisions and to direct the use of the available facilities. It can only be hampered by arbitrary or irresponsible interference with its internal operations. Any controls or regulations which are necessary in the public interest should be applied externally as limiting conditions. Management is trained to deal with surrounding circumstances and to surmount obstacles, but in order to do so it must be free from politics or caprice within the scope of its own function. The manager should be expected to apply his own effort, skill and resourcefulness and to stake his personal interests on the outcome. In the simplest case, an individual enterpriser may be both manager and organization. If a larger and more complicated undertaking induces the owner to put his capital in the hands of a company manager, the same principles apply.

#### *Mutual Obligations in Foreign Investment*

If American capital and management in combination are invited to operate in Turkey, they should be on their good behavior. To make headway with many of Turkey's problems will require the concentration of capital and skill that the modern corporation provides. But concentrations that have the power to overcome great obstacles also have enough power to constitute a hazard to the public. The presence in a single institution of abundant capital and men with high capacity, all subject to the direction of a single management, may outweigh safeguards set up for the public good.



**ARTIFICIAL SILK MILL** at Gemlik brings modern methods of textile weaving to a land whose handicrafts have been noted for centuries.



In America, the gradual development of giant corporations has been paralleled by the growth of public controls and a social discipline which limits their power for harm. The corporations in turn have developed capacity for offense and defense, against both competition and public controls. The great pressures which have been developed to accomplish tremendous feats in production and distribution need firm walls to hold them to their proper work. In America the government and society in general are familiar enough with the possible abuses of corporate power so that as a rule they can hold the steam of great private enterprise within the walls of the cylinder where all it can move is the piston. Turkey, without similar experience, might conceivably provide a field for uneconomic and antisocial exploitation.

Among the aids which Turkey may receive, American enterprise has much to offer, but if it is to be demonstrated there, it should show the best it can do, not the worst. Competition should not mean the extermination of the weak, but rather a fair chance for all, fair prices and the absence of abuses. No American enterprise should exercise a monopoly, either by itself or in combination with Turkish interests. The application of capital must carry with it, not restrictionist practices or industrial warfare, but the efficient development of resources and the provision of opportunity for smaller enterprises, down even to the lowest level where the laborer can become a capitalist through wise use of savings from his wages. Wages, hours, conditions of work, housing, food and care of health must be such as to call forth the best efforts of the men.

Turkish authorities have it within their power to establish conditions which will attract foreign investors who have a sense of responsibility and a feeling for the public interest, rather than mere speculators. Private enterprise cannot make its contribution without earning enough to offer a fair return to the investor and to pay for good management. But beyond this, the profit expected by those considering a busi-

ness venture depends on the amount of risk which will probably be incurred. If the risk of loss is great there must be a chance of correspondingly large profit or there will be no inducement to undertake the job. Business opportunities which involve a high risk are attractive only to an adventurous type of "venture capital" and a kind of enterprise which is not suited to present Turkish requirements. In order to attract sound and conservative investors, the risk must be kept reasonably low. If this is done, the Turkish people will not have to pay to foreign investors an excessively high rate of profit as a compensation for extravagant risk.

### *Eliminating Political Risks*

In Turkey the risks which must be incurred by new business are only to a small degree physical or commercial; they are almost entirely political. Raw materials are at hand, direct manufacturing costs need not be high, potential markets are almost untapped and no field suffers from "excess capacity." The risks consist of foreign exchange control, export and import regulations, price control, taxation and the like. Unless the prospective investor can satisfy himself in advance that these factors permit the earning of a reasonable profit, he will either turn his attention elsewhere or expect a very high return.

Faced with Turkish laws and customs which leave power to make arbitrary decisions with government officials, the conservative and conscientious investor will turn elsewhere. The unscrupulous man or company will resort to the age-old protection against arbitrary power—bribery. This is an ugly word, but to write so bluntly is no aspersion on the character of the Turkish people; in every country and in every period, the possession of arbitrary power by officials has gone hand in hand with corruption.

The best protection for both the Turkish people and the responsible foreign investor would be so far as possible to establish the conditions affecting foreign private investment



by general laws passed by the National Assembly. At the beginning it will be desirable to make special agreements with particular enterprises before an adequate code can be passed, but in such cases ministerial fiat, not necessarily binding on future Ministers or the government itself, is not enough. The making of such agreements should be authorized by the National Assembly, and the detailed decisions necessarily left to executive discretion should be open to review by the courts, as a protection against arbitrary action.

One part of the project analysis made in advance by experienced managements will be to determine what conditions are essential for the success of the particular enterprise. After the first few enterprises typical of various fields are set up, a broader basis for general legislation will be laid.

### *General Principles*

The principles which should govern American aid to Turkey can be recapitulated as follows:

1. Economic development for the benefit of the Turkish people requires recognition of the right of the individual to both economic and political freedom, subject to government controls in the public interest and supplemented by state economic activities where necessary. This implies that:
  - a. Government funds should not be used in commercial undertakings for which private capital is available with equal or better effect.
  - b. Private enterprise must be conducted with proper regard to the public interest.
2. American resources (capital, skill or material) should not be diverted from other productive fields for use under conditions which inhibit productivity in Turkey. This implies that:
  - a. American resources should not be used in Turkey, even though conditions have been made favorable for their effective use in a particular case, if at the

- same time Turkish resources which could accomplish the same purpose continue to be used unproductively elsewhere within that country.
- b. American capital (or capital goods) for use in Turkey must be administered by men possessing the technical skill or experience which is essential to its effective utilization.
3. Assurances of orderly political, social and economic intentions, and of orderly administrative procedure, must be embodied in the law, and there must be full access to just courts in the event of disputes. This implies that:
    - a. Special agreements of importance, when necessary for the protection of private interests pending reforms in existing laws, must be given the authority of special laws, and not rest solely on the authority of a particular official whose fiat is subject to arbitrary nullification.

#### GOVERNMENTAL NEED FOR SKILLED ADVISERS

Before the recent war, Turkey made extensive use of foreign advisers, principally from Germany, Russia and Great Britain. Since 1940 the government has had to rely almost exclusively on Turkish specialists. While they have excellent professional education, most of these technicians have not had the requisite experience to guide the economic development of the country. Until this lack is supplied, the need for foreign advisers will continue. Since Turkey must in the next few years rely principally on the United States for resources previously supplied from Europe, there will be a need for American experts, who are familiar with American standards and practices. These are very different from those of European countries.

Examples of this need in various fields follow.

*General Consultants*

Engineers with broad economic and industrial background are needed to study the over-all needs and resources of the nation, its present state of economic development and the priority which should be given to various fields of work, based on reliable estimates of cost and of results. Engineers with qualifications necessary for this type of service are available from American consulting firms. Generally speaking, they are not likely to be found in the permanent U. S. government service, though many of them have been called in by the government from time to time.

*Experts in Public Works*

Engineers and other experts with appropriate specialized experience are needed to work with the Ministry of Public Works, the Ministry of Transportation and Communications, the Ministry of National Economy and other agencies of government, to guide detailed studies of particular projects, and to assist in organizing and executing such projects. This refers particularly to road building and maintenance; railway construction and operation; irrigation and drainage projects; municipal water-supply and sanitation systems; telephone, telegraph and radio systems; harbor and dock developments; and other undertakings generally classed as public works. In many instances, the technical adviser would help to engage a qualified contracting firm to perform the detailed work, and would protect the government against poor construction or excessive charges.

Engineers qualified in most departments of public works could be found in the U. S. government service. In the past, U. S. government experts have been loaned for reasonable periods to another government. While men with high qualifications for investigation and design might be secured from government sources, it is probable that similarly qualified engineers drawn from private practice would, in most cases, be more experienced in dealing with contractors or in direct

supervision of construction forces. They are likely also to be better qualified for creating and training an efficient administrative and working organization than are technical experts whose chief experience has been in government service.

### *Technical Specialists*

Geologists, mineralogists, chemists, architects, and other experienced specialists are all available in the United States, in some cases from the government and in all cases from private professional ranks, for short-term or long-term employment. While the U. S. government has always shown a willingness to assist in the selection of experts for other governments, the history of such selections does not warrant full confidence in this method. The most satisfactory method for Turkey, in most cases, would be to make use of a well-qualified private consultant who could make the selection of specialists on the basis of demonstrated ability. As the acquaintance of Turkish officials and technologists with American specialists grows, the selection of consultants will become simpler.

Formation of Turkish professional societies and interchange of ideas and publications with corresponding American organizations would increase the familiarity of Turkish technologists with all fields of American technical advancement. Closer collaboration between Turkish and American technical colleges would offer a similar gain. In view of the probable transition in Turkey from European technical tradition and practices to American, the lack of effective collaboration between the professional societies and colleges of the two countries ought to be remedied as soon as possible.

### *Agricultural Experts*

Agricultural and livestock experts with long experience in American practices are needed in Turkey. Many of the Turkish experts are excellently trained in theory, but to the

man without experience—regardless of his theoretical training—each departure from established habit is an experiment, and each experiment represents not only a cost of time and money, but a risk of losing the confidence of those who expect prompt results. The experienced expert, on the other hand, can go directly from existing local methods to an already proved practice which requires only minor adaptations. Much of the “experimentation” now to be observed in Turkey is far behind common farm practices in other parts of the world.

The U. S. government could furnish to Turkey, as it has to many other countries, scientifically trained agricultural experts with long experience in actual farming, fruit growing and livestock production, and in the extension services Turkish farmers need so badly. Equally well trained men are available also, in the United States, in private agricultural occupations.

#### *Public Health, Education, Economics*

Technical experts are needed in public health, to introduce, without delay, not only the improvements made in America but also those which have come from the intensive experience gained in six years of war. They are needed in education, especially to gain the benefits of American experience in vocational training, and to assist in adapting the technical programs in the higher schools to prepare students for work with Americans.

Expert advisers are needed also in certain divisions of government which deal with financial and commercial matters important in a prospective Turco-American relationship. It is for Turkey to say what her practices will be, but before she decides on the form and details of an income tax, for example, it would be well to know what kind of tax will seem effectual and just to those whose capital she hopes to attract. This is equally true of banking practices, laws governing the formation and conduct of business enterprises and

the regulation of foreign exchange. In all such matters, it is important that the Turkish government be at least as well advised concerning American ways as she used to be concerning Russian and German. At present there is a decided lack of this understanding.

### *Methods of Obtaining Advisers*

To provide the Turkish government with experienced technical advisers, two ways are open, both typical of American practice. Engineering firms and private consultants in various technical fields can offer their services there as they offer them here. Or—and better to begin with—the long-established professional societies, the most distinguished of which are already prepared for just such coordinated effort through the Engineers Joint Council, could open channels between so vital a demand and so rich a supply.

In the nontechnical but specialized fields of business and finance, a similar course may be adopted. Nothing is more typical of American enterprise than the great national associations of men in various fields of business—manufacturers, bankers, accountants, purchasing agents, insurance men and shippers. A delegation composed of selected representatives of such organizations, conferring with responsible Turks in Ankara and other important commercial centers, would open channels first for advisory services and later for broader collaboration.

It is not a "trade mission" that is suggested here. The need lies deeper than that. Much of what we have to contribute toward what Turkey urgently needs is in the heads of the Americans who made the same contribution to America and are making it every day. The object is not to spread American influence but to offer the Turks whatever they are capable of making their own. It would not be in accord with the American spirit to try to transplant a wholly alien system to Turkish soil, as the Russians and the Germans did during the thirties. No part of the Turkish economy is emptier both of native

qualities and of real value than that which now bulges with Soviet and German ideas. It may be that the ideas which have flourished in America are more adaptable to Turkish aspirations.

#### GOVERNMENTAL NEED FOR FOREIGN CREDITS

Does the Turkish government need more foreign credits than have already been obtained? A brief summary of its problem will indicate the answer. The needs considered in this section are exclusive of those which may exist in connection with state economic enterprises of the type conducted by Sümer Bank and Eti Bank. The military program may also be excluded. It seems reasonable to suppose that no additional dollar requirements will arise from military needs during the next year or two, or, if they do, that they will be met by a special credit for that purpose.

#### *Public Works*

Public works requirements are very great. Turkey's most critical need, so far as public works expenditures are concerned, is for transportation facilities. Out of the recent \$100 million military grant, \$5 million was allocated to road-building equipment from the United States, most if not all of which has now been delivered. Before such machinery can be used to full advantage, several other things must be done. Operators must be trained to run it and mechanics to maintain it, with shops equipped for the purpose; engineering studies must be made to determine which roads warrant first attention and what type of construction and maintenance is justified. And over all this, to make it possible, a Road Administration must be created, with competent personnel. All these steps are under way. Except for the doubtful practice of selecting road machinery before learning what work it would be called on to do, and the haste with which it was delivered before its care and operation were arranged for, Turkey's current need with respect to roads has been ade-

quately met. No further substantial dollar requirement is likely in the near future.

### *Transportation and Communication*

Turkey's railway system is in deplorable condition, and there are shortcomings which dollars will not correct. A recent Export-Import Bank credit of \$25 million has been drawn upon for locomotives and other badly needed rolling stock and track material. What is required next is engineering and operating skill, and a great deal of maintenance work. Much of this should come ahead of the new construction which is proposed in the five-year plans. In charge of all this is needed one real "railroad man"—American style—who knows what railways are for as well as how to run them. He would have to reorganize the Railway Administration before reorganizing the railway system. According to report, such an experienced man has already been obtained. Whatever additional skill he requires is a need of the first order, and can be met in the same way, by selecting and employing experienced men—and following their advice.

Here again, military considerations may compel a program which cannot be justified on economic grounds. If so, its financing should not be confused with that required to serve the economic needs of the country.

When competent studies have been made to determine *what* should be done to put the Turkish railway system in order, foreign exchange may be required for additional new equipment. Until such studies are made, however, nothing but guesswork exists upon which to appraise the need, and it is by no means certain that they will show a dollar loan is required. Turkey has requested a loan from the Export-Import Bank in which appears one item of nearly \$14 million for a factory to build locomotives at the rate of 125 a year. An essentially agricultural country which has not yet begun to build its own steel plows and modern farm wagons is not yet ready to build locomotives. As long as Turkish authori-



ties are thinking in these terms, our dollars and manufacturing machinery can be used much better at home.

Turkey has recently used dollar and other foreign credits for the purchase of merchant steamers. Additional purchases are not a pressing necessity. American resources should not be spared now merely to enable ownership of existing merchant vessels to be transferred to the Turkish government.

A related need is the modernization of harbor and dock facilities, which will not be urgent until production for export and purchasing power for imports have both increased above their present level. Studies of such projects should be under way, however, for the possibly rapid growth of commerce could be blocked by the inadequacy of port facilities. A moderate program of port improvement is already begun. Port design and the construction of modern facilities for freight handling and storage are matters for experienced specialists. Before an intelligent program of such work can be devised for Turkey, the more basic program of what Turkey is going to produce, and where, and how it is going to be moved, must have begun to take definite form.

Port development in connection with the modernization of the Zonguldak coal operations is, according to report, an illustration of wise procedure. A firm of American consultants has arranged for the necessary engineering work at the mines to be followed by that in the harbor.

The Turkish State Airlines has used substantial dollar credits for the purchase of equipment for this excellent institution. As far as civilian needs are concerned, this system could delay any substantial further development while the remainder of the economy catches up with it. Some foreign exchange will be necessary for replacements and current modernization, but any large expenditures for such purposes in the near future would have to be justified by military considerations. This applies also to any heavy investments in new airfields and their equipment.

Since the war, foreign credits have been used to finance

a progressive modernization program for telephone, telegraph and radio which promises to bring these vitally important services at least to a point where they no longer hold back advancement in other fields. For the time being this is enough to ask.

### *Water and Irrigation*

An adequate water supply is needed to provide irrigation for the farmer and potable water for the people. Here, again, the first need is not for dollars but for engineering studies. There now exist at least two elaborate irrigation projects which have stood for many years three quarters or more completed and lacking only simple lateral canals to let the water out to the farms. What is needed for additional projects is an engineer who will determine, in all important and accessible agricultural areas, what the returns would be in new or increased crops from appropriate investments in irrigation systems. To do this would require no higher mathematics, but it would require a realization of what an irrigation system is for—and what an engineer is for. Following this, if dollars are needed, the need can be demonstrated and supplied. Without this, dollars would be useless.

As for municipal water-supply systems, the prior need is for competent engineering. A simple report setting out this need, with all the relevant facts, would require no computation of returns. Throughout the country, adequate bathing and toilet facilities and proper disposal of sewage are lacking. It is evident that when the five-year plans were introduced to Turkey no advanced concepts of public health and sanitation came with them. Nothing would stand higher on an American's list, and nothing should stand higher on Turkey's. For the necessary equipment foreign exchange would be required, though not necessarily a loan. But if a loan were requested, supported by expert study, the objectives at least would require no defending.

*Agriculture*

Agriculture should be benefited by the public works discussed previously. Without instruction and assistance, however, it is hardly to be expected that the majority of Turkish farmers, long bound by ignorance and tradition as well as by physical limitations, will quickly take advantage of the wider opportunities when they come. To provide the assistance is a duty of the Ministry of Agriculture. New and better seeds will be required, new types of crops to meet export demands, new varieties of fruits better adapted to canning, new fiber crops for industries, fertilizers, measures for disease and pest control and much else that calls for skilled and experienced guidance rather than for foreign funds. Larger-scale operations will call for modern equipment, which, at least to begin with, must be purchased abroad. Even the first steps toward expanded production will require simple modern implements, not now manufactured in Turkey. What these requirements will represent in dollars may or may not have been estimated, but in any case it must be small compared with the new wealth it will help to create.

An interesting light is thrown on the ideas held by the Ministry of Agriculture concerning its functions by the items for agriculture in the recent Export-Import Bank loan application. The forestry division requests \$2 million entirely for sawmills, plywood fabrication, distillation of turpentine, creosote production and other finished-product manufacturing. The Agricultural Works Administration asks nearly \$2 million, all for processing agricultural products—including a raw rubber plant. Under Agricultural Equipment Administration is listed \$23 million, to provide, among other types of implement factories, one plant to make 3,000 tractors a year. There is unquestionably a need in Turkey for some of these plants, or will be when Turkey discovers its 16 million farmers and helps them go to work. But at this stage, some part of the total \$28 million asked for should undoubtedly be spent, and spent quickly, for steel plows, hay balers and

threshing machines, and some more for farm wagons, wheelbarrows and pitchforks.

The lack of tractors has not yet become a limiting factor in Turkey's agricultural development. The use of tractors requires facilities for their repair, which are to be found nowhere in Turkey today. Farming with tractors, generally speaking, is warranted by one or more of three conditions: short seasons, with a consequent need for speed; lack of farm labor; vast areas to be cultivated. Outside of a few state farms, Turkish farm lands are characteristically small holdings, as a result of the land tenure system. As agricultural life is stimulated and new land is brought under the plow, tractors unquestionably will be necessary—for all three of the conditions just stated will face the Turkish farmer before many years have passed. But today many thousands of tons of wheat and corn may be left to rot on the ground, as members of this survey saw—at a time (during 1946) when Americans were conserving food to enable it to be shipped to Turkey's back door. It is not tractors that Turkey needs now, nor dollars to buy or build them.<sup>1</sup>

### *Public Health*

Much of the necessary equipment for health centers, rural clinics, laboratories and other facilities for combating endemic and other prevalent diseases can be purchased only with dollars. In total this sum will not exceed a few millions and scarcely raises the question of a foreign loan. The equipment itself may be in short supply, but subject only to assurance that the Health Administration is completely organized to do the work, these needs should be supplied. Here is an opportunity for aid, through counsel and guidance at least, from one of our great health foundations as well as

1. Some tractors might be needed for mechanized wheat production in case of war, and some for ditching or local irrigation work. But these could be imported at lower cost than the investment necessary to set up tractor production.

from our government, as part of the technical service which comprises Turkey's greatest need today.

### *Summary of Governmental Need for Dollars*

A review of the remaining divisions of the Turkish administration, excepting only National Defense and the state economic activities, reveals some justifiable dollar expenditures, yet the total is nominal in comparison with the Turkish balance of gold and foreign exchange. The conclusion, therefore, is justified that if any administrative division has failed to achieve the normal aims of a republican government in serving the people of the country, its failure to do so cannot be laid to the lack of dollar credits. The Turkish budget is adequate to *finance* every measure which is necessary to enable a vigorous economic growth in the country, and the foreign exchange on hand, including unused credits, is likewise adequate to meet the budgeted needs for dollars. In fact, in comparison with the postwar financial condition of many other countries, Turkey's "reserve" of gold and foreign exchange seems exceedingly conservative, and could easily be reduced to pay for needed imports when that need arises.

As far as the government administration is concerned, the present need is not for dollars, but for a reorientation of its objectives and efforts, and for technical and other expert counsel to make those efforts effective. The resulting improvement in basic conditions, and the increased agricultural production, would create a new source of foreign exchange, which among other benefits would finance the balanced industrial growth Turkey needs to mature as a nation.

### INDUSTRIAL OPPORTUNITIES

If foreign capital as well as foreign advice and experience are to be called in to participate in the development of Turkish industry, there are many possible arrangements. Perhaps the best of these would be companies jointly owned by Turkish and American interests, the Turks contributing lira

capital and national resources, the Americans dollar capital and skilled services. In such cases, the arrangement might include a provision which has proved welcome elsewhere, that a certain part of any future profits be laid aside to retire all or part of the American investment, so that in due time, after Turkish management had been trained in successful operation of the enterprise, it might become wholly or predominantly Turkish.

Another method would be for a wholly owned American concern to enter a given manufacturing field merely as a demonstration on a limited scale of what American methods might accomplish. If this example were successful, knowledge of its practices would be available to others, and Turkish companies might benefit accordingly. Or a wholly owned Turkish enterprise might employ an American staff for management and technical direction.

Whatever the method, the important objective is to start a few industrial plants in accordance with sound principles. The experience of going concerns would indicate in detail how laws and practices would have to be modified in order to provide an atmosphere in which Turks would be free to exercise their own initiative. Examples of good management would stimulate imitators and competitors. Once the favorable atmosphere was created and the object lesson of successful operation provided, new opportunities would be seen in many directions, and new surplus wealth would be created to take advantage of these opportunities.

Whether any particular field is at present pre-empted by government or is not occupied at all, the same methods of American participation will be applicable. A wholly owned state enterprise can do little but employ American experts or contracting companies, unless its character is to be changed. But it would be quite possible for the government to be a joint owner of a given enterprise with either Turkish or American private capital, provided the proper legal safeguards were assured. Of course, American private capital



COLLEGE IS A TIME FOR LEARNING, as will be seen from the interested, thoughtful faces of these young students in the liberal arts department of the University of Istanbul.





and management could easily cooperate with Turkish private capital.

It was not possible in this survey to examine particular projects as thoroughly as a potential foreign investor would insist on doing before deciding whether to risk his money. Nor was it even feasible to estimate how much investment would be required in any given instance, for that would depend on the scope which the Turkish government would allow the enterprise, and the terms of any understanding which might be reached. One cement plant, for instance, could be built to operate in the American way, but whether it would be necessary to construct a wholly new one would depend on whether the government would be willing to turn over one of its plants for the project, and if so on what terms. The possible investor would have to discover also how far suppressive controls would be removed. In the case of steel or coal, the opportunity for practical development would be limited only by the willingness of the government to allow that development to be made. The amount of the possible investment would vary according to the size of the project.

A number of illustrations will be sketched to show how American capital and management might be utilized in specific fields. These do not by any means cover the possible opportunities, but they support the conclusion that opportunities exist.

### *Zonguldak Coal Mining*

Eight years of state operation have made negligible improvement in the quantity of clean coal produced and none at all in its costs. It seems extremely doubtful whether state management can successfully carry out the vast program of modernization which will be necessary, or operate the enterprise efficiently after it has been put in order. On the other hand, the Turkish government can truthfully assert that the performance of the former private concessionaires was in-

tolerably poor, that the average coal-mining performance in England over the past few decades has been but little better and that the social conditions which characterize both English and American coal-mining practices suggest that the adoption of Western management might be a mixed blessing at best. Several middle courses are open.

Turkey has already taken steps to obtain American engineering services to study the situation and make recommendations as to necessary improvements. It is understood that the consulting engineers engaged by the government will obtain the expert services of leading coal-mining and equipment specialists. No better first step could have been taken. This one should have been taken much earlier.

The recommendations of these American engineers and experts will lead to a progressive program of mine rehabilitation, including facilities for shipment of coal, which will furnish a dependable basis upon which a dollar loan can be made. The need for dollar credits would be spread over a number of years and would represent a type of financing within the intended purposes of both the Export-Import Bank and the World Bank. If the work were programmed, as it should be, to make increased production promptly available for export into areas of the world where it is needed, this added reason could be advanced in support of the request.

But mere installation of new equipment would scarcely be enough to give assurance of success. Experienced operating management, to make efficient use of this equipment, would also be required. How far this could be accomplished, within the existing political framework, would rest with the Turkish government; but it should not be wholly disregarded in fixing the terms of the loan.

The great area over which the Zonguldak coal deposits are found, and the wide dispersal of present developments among the several districts, would make it possible to adopt the plan just outlined in one or more of these districts, and to contract with an American company to operate in one or

more of the others. Such a contract might take any one of an indefinite number of forms, but, essentially, would provide the conditions under which private enterprise could perform at its best, with jointly shared benefits. Such a plan, adopted for a term of years commensurate with the financial and other obligations assumed by the American contractor, would not interfere with the developments which could reasonably be expected under the government-operated project. The area is of such a size, and the reserves already established so great, that both types of undertaking could proceed without interference, and with double the advantages.

Here is an opportunity for a combination of American skills—coal mining, coal handling, port development, shipping and marketing—to energize American capital and to demonstrate in Turkey the American way of creating wealth from the latent resources of the country. Here is an opportunity, too, for Turkey to learn how these things are done by Americans, without the fear that they must give those resources away or invite the other evils which the capitulations recall.

### *Steel and Related Industries at Karabük*

The Karabük steel mill and its related plants present more than a problem of efficient management. In no proper sense of the word is there an "industry" here to be managed.

The problem of Karabük is one of a large-scale salvage operation. A study by skilled and experienced engineers would disclose what parts of the present plants, alone or in combination, would produce the greatest benefits in terms of present needs. Such a study might disclose that the coking stills, if operated alone, would make by-products of great value for domestic use and for export, and produce a net profit which now is spent wastefully in the remaining operations. Or, the coke ovens plus the blast furnaces might prove to be even better, supplying the country with pig iron, possibly with a surplus for export. Turkey needs a foundry, and

shop facilities to go with it, which can turn out heavy castings and manufacture freight cars and agricultural equipment. In Karabük will be found these facilities, and all the necessary auxiliaries, but as long as the obsession prevails that every advancing country must have its own steel mill, the foundry is used to service steel production instead of to make desperately needed goods. Step by step, in every combination, the equipment assembled at such cost, but of which so little use is made, could be tested by experts for maximum value as a means of developing Turkey.

Here is the place to apply the methods of technical economic analysis—peculiarly the field of the American engineer-manager. What is the *basic investment*, that simplest provision in capital goods which will produce a result of value? What added benefits result from each possible increment of capital? What new products could be made, or what reductions in cost, or what other justification exists, for each proposed expenditure of capital, material or labor? What are the demands for products and the alternate sources of supply, and at what comparative costs? What can be foreseen of the future and of the trends in critical factors? What are the contingent circumstances on which success depends; what are the risks to be faced, and what safeguards can be taken against them? What period of time or what quantity of output will be required to create as much new wealth as is consumed in the undertaking, and how does this criterion compare with alternate uses of the same resources? Questions of this kind, applied step by step and to various combinations, disclose the limits within which each part of each project must be kept to avoid waste of creative resources. The observation applies alike to state and private enterprise. The only difference is that a nonmonopolistic private enterprise cannot exist on any other basis, whereas—for a *limited time*—the state can consume more than it produces, placing the burden of loss on the people.

*Salvaging the Karabük Establishment*

In the end, American private capital and skill, jointly with Turkish, might yet make Karabük an important industrial center. Its location is unfavorable for a steel mill, but perhaps less so for lighter manufactures. The initial investment would have to be largely written off, as in the case of any salvage operation, and a new evaluation made on the basis of new use. Each factory or chemical project established could be charged with its appropriate share in the usable value of the existing investment, represented not only by mechanical installations but by the community development, power and water supply and other auxiliary services contributing to the new production.

Precisely *what* manufacturing industries might advantageously be located at Karabük is almost impossible to predict. The facilities already available, outside of the steel mill itself, would go far toward enabling many new industries to be successful, by relieving them of the burden of providing their own auxiliary needs. A supply of labor, already trained in certain crafts and housed in a developed community with all necessary facilities, availability of electric power, gas and water, engineers and laboratories, shops for all mechanical needs, a variety of partially processed materials and by-products from other industries, all these and many other advantages would go far toward compensating for the disadvantage of location. Such developments, moreover, would hasten the day when the economy of Turkey could support a resumption of steel manufacture, on a scale which would make it feasible.

To dedicate Karabük to the real needs of the Turkish people would be a challenge to the courage of the officials who hold this trust, no less than to the skill and ingenuity of the Americans who might assist in bringing the change about. That courage is not lacking in Turkey has been proved by much greater achievements, and that skill may be found in

America has been demonstrated time and again. The decision, however, must rest with Turkey.

### *Petroleum Development*

The prospect of finding substantial quantities of oil in Turkey is no more than fair, so far as is known today. When the new boundary was drawn on the south, the great oil region of Mosul and other promising oil areas were left in Iraq and Syria. During the past decade, the Turkish government has continued halfhearted efforts to find oil in various parts of the country, particularly in the great sedimentary area adjacent to the Syria-Iraq frontier. Only recently (1946), under the able direction of the American-trained Director of the Mineral Research Institute (MTA), have steps been taken to employ American geophysical experts and experienced drilling contractors to undertake the search for oil in a modern and adequate way.<sup>2</sup> Adequacy, here, is a relative term. If Turkey's need for oil were of critical importance, there are better ways of finding it, and developing it when found, than to place sole reliance on the thin resources of a government bureau which depends heavily upon a single chief, however competent he may be.

The search for and the development of oil usually involve long and systematic effort directed by men having a combination of special skill and experience which is seldom found outside the oil companies, which have learned their lessons at great cost. Oil exploration and test drilling, carried out in the way which has discovered almost all the great oil fields of the world, involve risking large sums in each venture

2. Much publicity has recently been given to an alleged "discovery" of oil in southeastern Turkey. The news referred to the first well driven by the American contractors on a structure which had been producing small quantities of oil for many years under Turkish government production. This well is reported to have produced about 300 barrels a day at the beginning, as compared with about 30 obtained from Turkish wells on the same structure. More recent reports indicate that the new well quickly declined because of the relatively small quantity of oil so far located in the underground reservoir. Its only significance has been to demonstrate the superiority of modern American drilling practices.

undertaken. An oil company maintains a revolving fund of risk capital for this purpose, and in the long run can expect with considerable assurance that enough ventures will prove successful to restore what is lost on the others. By this process, most of the world's oil has been found, and by it, the cost of seeking oil is spread over all its consumers. It is the process through which a particular country can arrange for oil exploration in a thorough and scientific way, without cost to itself if no oil is found.

If the search is successful, then heavy capital investment becomes necessary, and skill and experience also. These things can be provided by the oil company. Under such a plan, the cost of these services is paid out of the oil production itself, through an equitable division of profits after costs and capital charges have been met. Under modern forms of contract, the mutual rights and obligations of the oil company and the state are defined in terms which guarantee to each a just share in the new wealth created.

The state can proceed alone, as Turkey has done to date, and risk the necessary capital on the single chance that enough oil to repay the cost will be found. In case it is, the resulting benefits need not be shared with anyone. As is always true when a stake is placed on a single throw of the dice, the risk is much greater when the state works alone. To this must be added the risk that the conduct of the exploration will lack the essential ingredient of experienced over-all guidance, regardless of how competently the several specialized functions are separately performed by contractors. These risks must be weighed by the officials responsible for the use of public funds and for the direction of the program, against the rewards and risks of development by an experienced private company.

It is not necessary to adopt either course exclusively. The state could continue prospecting in the area which it is now exploring, and at the same time offer the opportunity to private companies to develop other fields. The chances of

important discoveries are only fair; it is not probable that oil will be available for export. Oil companies which are ready to undertake the task should take the initiative in making proposals to the government, in order to demonstrate that their experience and services are available on reasonable terms.

The reason for thorough and adequate prospecting is not only, and perhaps not chiefly, the possibility of profit. The fact that oil is needed for domestic uses, in transportation and isolated demands for power, is important. Motor trucks, water pumps and small power plants, all dependent upon oil products, are essential in the very beginnings of Turkey's program of economic development. Although oil can be imported at moderate cost from near-by producing countries, a well-executed plan of exploration might show Turkey to be at least self-sufficient in this important source of energy.

#### *Shipbuilding and Ship Operation*

A country favored, as Turkey is, with a long coastline bordered by well-populated and productive plains and coastal valleys can make use of coastwise shipping for a large part of its interregional freight movement, most of which originates and terminates in areas tributary to seaports. With the stimulation of production for export, opportunities for ship-owners to make offshore hauls to reach the foreign markets will be added to the coastwise trade. All this, at present, is virtually denied as a field for private enterprise by the discriminatory laws discussed in Chapter 4. With a relaxation of those laws, and the substitution of reasonable controls under a shipping franchise, a highly profitable field for private investment would exist not only in ship operation but also in facilities for building and repair. The construction of small wooden vessels, suitable for coastwise service and offshore traffic with Turkey's maritime neighbors, was formerly an important industry, particularly along the Black Sea Coast, where suitable timber is available.



Some steel vessels could still be bought in the world market from tonnage built during the war, and much shipbuilding and ship repair equipment is lying idle, in both the United States and Canada. The fishing industry alone, in the Black Sea, the Aegean and the Mediterranean, if organized and equipped to take the important place it should hold in the recovery of the country, would support a substantial activity in shipbuilding and repair.

To extend dollar credits to the Turkish government for the purchase of ships is not in accordance with the principles which guide this survey, in view of the severe discrimination against private capital which could take a useful part in the development of Turkey's maritime industries. Shipbuilding and repair, and even harbor developments and dock and warehousing facilities, go hand in hand with ownership and operation of private merchant vessels. No further dollar funds should be diverted from more important needs to subsidize this ineffective state monopoly. If Turkey needs a merchant fleet and other related facilities, the people should at least have a chance to provide these things themselves. Private capital could scarcely lose, except through political risks, and the coastal inhabitants of this great peninsula have the sea in their blood. American shipbuilders, ship operators and port builders should examine this field with the Turks, and join forces with Turkish businessmen to develop the maritime industries with benefit to both and to the growth of Turkey. If this effort falls short, government aid for the purpose may be called in.

### *Food Preservation*

Generally speaking, Turkey is without the means of preserving any of the potentially abundant food products of the country. Even if adequate transportation existed, food supply would be limited by seasonal production. Except for a few cereals and certain kinds of fruit which have inherent resistance to spoilage if dried under proper conditions, Turkey's food must be consumed while fresh. The principal centers

of population and the most densely settled rural districts are almost all in regions where equable year-round conditions enable a local supply of freshly grown food to be maintained. On the highlands of eastern Anatolia, however, the winter diet is restricted to types of food which can be kept through the cropless months in simple storage places or by natural refrigeration.

The lack of preserving facilities means also that in the warm season, when fresh food is most abundant, it spoils quickly, particularly meat, fish and soft fruits. This prevents a sufficiently varied and nutritional diet. A few important centers, notably Ankara, may get limited supplies of such food from a distance, in refrigerated railways cars, but such facilities are not available over the country as a whole. Nor are they adequate even in Ankara.

The export of food is limited to those products, like figs and hazelnuts, which require almost no processing for preservation beyond drying in the sun. Inability to export perishable food, although it could be produced in abundance, is one of the greatest economic handicaps under which Turkey suffers today. Refrigeration, processing and packing, with adequate storage facilities, are necessary to complete the system if Turkey's vast food-producing potential is to be realized.

The field of food preservation is unusually well adapted to private enterprise. The processes and installations required are relatively simple and harmonious with the level of the economy in which they would be introduced. The necessary plants can be large or small, and designed for a wide range of raw products as they become available. A single plant could process all the varieties of fruits which mature in a particular locality from early spring to late in the fall, and between these crops could preserve the early and late vegetables which are planted between the rows. In the livestock regions, the meat-packing plants could maintain uniform production by scheduling the times at which the livestock is

"finished" for slaughter. Small plants for food processing offer opportunities for local investment which have the distinct advantage that the investors know what the plant is for and what it means to their own prosperity. Such plants should be of a size, in each case, commensurate with current needs. Expansion or modification to meet increasing or changing production is relatively simple.

### *Mass Production in Food Preservation*

While the processes and installations in most food preservation operations are not complicated in themselves, skill and experience are as necessary here as in any other modern technical undertaking. This technique, in all its branches, has been highly developed in the United States, and no experimenting is necessary in Turkey. While local plants could be owned and operated as independent enterprises, a food-preserving industry could benefit from an over-all organization, for many reasons, including the following:

1. To maintain uniformity in type and quality of product
2. To make technical and other experienced guidance available to those with limited organizations
3. To coordinate production with the demands of the market through the proper use of storage and to deal with the specialized problems of distribution and competitive selling, particularly in the export trade

This over-all organization might be self-contained in a large-scale undertaking, but to bring its benefits to small or independent enterprises an association of some kind would be necessary.

Refrigeration and storage are suitable either for separate operation as independent private enterprises or for community use through cooperatives or an industry association. The manufacture of containers is an essential auxiliary. Can manufacture, using modern automatic or semiautomatic machinery, requires only moderate investment, but successful operation demands skill and experience which, in the begin-

ning at least, must come from the United States. The large American manufacturers who make machinery for this purpose can also supply engineering service for plant design and special operating men for instructing Turkish staff. In can manufacture there is an advantage in large-scale production, which makes it advisable to concentrate the facilities in a minimum number of factories, no one of which is less than the minimum size which will enable most economic operation.

Another auxiliary service would be specialized transportation, by both motor truck and refrigerated railway car. These functions could scarcely be left to the chance that independent truck operators or the State Railway Administration could be relied upon to provide the necessary service. An independent company, however, could be formed with food transport as its primary purpose.

Seasonal or longer-term supply contracts between food processors and producers could be made, for all food crops and animals. This would facilitate sound financing of producing operations, permitting the purchase of facilities for improved production. Prices, of both processed and raw products, would of course fluctuate with circumstances, but preserved and stored food stocks would no longer be subject to violent seasonal price changes or be forced so often to seek distress markets because of temporary unbalance in the trade.

Once the food has been locally processed and packed, the transportation problem is diminished to a marked degree. Preserved food can be accumulated during transportation peaks brought on by other traffic, and moved to its destination in small lots or large, as transport capacity is available. A constant reserve of packed food could always be available to even out the transport demand, whether by truck or rail or ship.

#### *Joint Enterprise in Food*

A joint Turkish-American enterprise could help to start such an industry. The American contribution in most cases

would include a limited amount of capital for part or all of the equipment which must be purchased in the United States. Its more important contribution would be the full range of experience, both technical and managerial, which would come with the American staff. The Turkish contribution, in addition to the necessary Turkish capital, would be the endeavor on the part of the Turkish government, the investor, the company staff and the food producer to make the undertaking a success.

Despite its importance both to the people themselves and as a source of foreign exchange, no state enterprise has yet entered the field of food preservation. So far as is known, no special laws or regulations exist which constitute conspicuous barriers to private undertakings in this sector. Such state institutions as do operate in adjacent fields, such as Toprak and the tea monopoly, or such laws as govern special aspects of food supply—for example those applying to the formation and conduct of cooperatives—cannot be barriers to the establishment of the food-processing enterprises just discussed. In any case, it must be assumed that the Turkish government would take the necessary steps to remove such barriers as might be met. Of course, the general obstacles to private enterprise, and particularly to foreign interests, would have to be removed before this program would warrant serious consideration.

The type, location and capacity of each installation or facility involved in this project must be determined by careful study conducted by competent men. This industry, despite its great possibilities, could be as great a failure as any other, if the lessons of experience elsewhere were disregarded in Turkey. Political considerations and fictitious social aims would have to be set aside, and the criteria of sound economic and technical practices permitted to fix all operating conditions of importance. Only simple safeguards should be required to protect the national and public interest against abuses from private interests.

The commercial opportunities open to enterprise in this field can scarcely be estimated in advance. It is safe to say that they are vast. The field embraces the entire range of food materials produced in Turkey—fruits, vegetables, meat and fish, poultry, eggs and dairy products, such derivatives as animal fats and vegetable oils, and various food specialties.

The possibilities outlined here should come high on the list for detailed study of American opportunities in Turkey, and high also on the list of what Turkey sets out to accomplish *for*, though preferably not exclusively *by*, herself.

### *Manufacture of Simple Agricultural Implements*

The equilibrium long established in Turkish agriculture between no roads, no tools and no surplus production cannot be succeeded by an equilibrium on a higher level unless all the necessary factors are provided in due proportion.

If we except the state farms, there are almost no tools of modern type used on Turkish farms. Most farm implements are simple to manufacture. Modern plows, cultivators, disc harrows, mowing machines, and hand tools such as shovels, wheelbarrows and even iron pails, form part of the essential equipment which is required for a swifter tempo of farm life and a higher level of production. A glance at the pages of a large American mail-order catalog of a few years ago will show what the farmer needs to multiply his effectiveness in every department of rural life. A fraction of the hundred thousand artisans who now hammer out crude implements of medieval design for medieval uses, if put to work in a modern plant—and a simple plant at that—using American factory practices under American supervision as long as this were required, could supply Turkish farmers with the tools they need in order to benefit from new road systems and to supply new market demands.

There is no need to make estimates here of the costs of such plants, or of the prices at which the implements could be sold. Nor is it necessary to estimate how many modern

farm wagons, plows or pitchforks would be required. In Turkey there are few.

Those who have learned to manufacture them in the United States have learned also how to determine what combination of implements can be manufactured to best advantage in a single plant, and where to draw the line, under prevailing conditions, between what should be manufactured locally, what merely assembled there and what imported in its finished form. The first such undertaking could safely be of sufficient size to enable efficient production of a few common types of implements. As a result of this experience the plant could be extended and additional ones built in accordance with the developing market demand.

### *Cement Manufacture*

Cement has become so universally used in standard modern construction that its consumption in a country is not a bad index of general economic advancement. In a group of nations which represent a high level of development, including Czechoslovakia, Argentina, Germany, the United Kingdom, the United States, France, Italy, Sweden and Belgium, the consumption of cement per capita (immediately prewar) ranged between 200 and 300 pounds a year. In typical countries less advanced economically than the first group—Hungary, Rumania, Yugoslavia and Mexico, all approximately the same in population as Turkey—the per capita consumption of cement ranged from 60 to 80 pounds a year. In Turkey the rate is less than 35 pounds a year.

If we take the existing manufacturing capacity in the country as 300,000 tons a year (although it is questionable whether the existing plants could maintain a sustained production at that figure), and estimate that during a five-year period of active economic progress the per capita consumption will increase to three times its present figure (or to approximately 100 pounds a year), we might accept as a rough approximation that Turkey will require an additional cement-

manufacturing capacity of 600,000 tons. A recent Sümer Bank estimate placed the existing plant capacity at 400,000 tons a year and gave one million tons as present potential demand, thus arriving at the same figure of 600,000 tons a year for needed additional plant capacity.<sup>3</sup>

The materials necessary for cement manufacture can be found in almost every part of Turkey. These include limestone and clay of acceptable quality, and coal or lignite for fuel. If political difficulties can be overcome, cement manufacture offers an excellent opportunity for American participation.

### *Brick, Roofing Tile and Other Building Materials*

For general building, brick and other burned clay products are second only to cement in importance. Most of the present manufacture of these products is in the vicinity of Eskişehir, in west central Anatolia, where both good clay deposits and coal for fuel are found. Present production is by private enterprise. It represents only a fraction of the quantity of both brick and tile which would be required if there were in Turkey today even a modest rural housing program aimed at replacing mud, stone, thatched or rough board shelters of a primitive type with simple modern dwellings, and a program for replacing dilapidated frame houses in the towns and cities with modern buildings.

The annual production of building brick is about 15 to 20 million. Roofing tile production is approximately the same. A two- or three-room dwelling requires about 10,000 bricks and 1,000 roofing tiles. The maximum possible brick housing program is therefore something like 2,000 dwellings a year. In the western portion of Turkey, where most of the population lives, clay and fuel for brick and tile are abundant, while timber is limited.

Turkey's population is increasing at about 400,000 a year. Even assuming eight persons to a house, this means a demand

3. See footnote on page 98.



for 50,000 dwellings annually. Government figures show a total of 3.5 to 4 million houses in Turkey. Taking the lower figure and assigning a life of 50 years to a house, we reach a replacement rate of 70,000 houses a year. Even without including the 100,000 houses which have been destroyed by earthquakes during the past seven years (with another 108,000 damaged), the foregoing figures indicate a need for building material so far in excess of supply that the only question is where to begin to fill this need at least cost and greatest speed.

Other materials are of course available. Some timber could be utilized, although in the rich agricultural regions of the west, watersheds should not be divested of timber any faster than reforestation takes its place. Compositions, such as mixtures of cement and asbestos or other natural minerals, are commonly used in other countries and can be manufactured at low cost where suitable ingredients exist.

Slag from the blast furnace operations at Karabük has been accumulating since the plant went into operation. It can be used to mix with cement for an excellent building material. Also, the molten slag can be blown into "mineral wool," which is a valuable insulating material. In certain localities unburned clay brick (adobe), with suitable outside coating, makes an acceptable building material.

The entire field of housing is one which requires expert study before a comprehensive program can be developed. This discussion is limited to the need for manufactures which will be required before any substantial program can even be started.

Lime can be manufactured cheaply in almost any part of the country. Glass for windows also would be needed, in quantities vastly beyond present manufacturing capacity. Paint is almost unknown in Turkey, even where timber houses are the rule. One reason for its nonuse is discussed in connection with taxation, but another reason is that paint of standard quality is not manufactured in significant quantity

anywhere in the country. Roofing paper could be produced from the coal-tar by-products obtained from coking coal (at Karabük and Zonguldak). Plywood and wallboard are now produced on a small scale in several private factories; they could become important as building material if manufactured in large quantities.

The list of products for house building is limited only by the ingenuity of those who attack the problem. Turkey is rich in raw materials and the potential market is vast. The United States has pioneered for the world in devising and producing building materials of low cost and high utility, adapted to every condition of climate and type of construction. It is American skill, ingenuity and experience in this field, more than dollar capital, which is needed now in Turkey. The real requirement is for mass production at low cost.

#### *Foundries for Iron, Steel and Other Metals*

Castings are made for special purposes at the steel mill in Karabük, and several of the larger state-owned enterprises operate small foundries for their own needs; for example, there is a small but well-equipped one in the shop of the Sümer Bank textile mill at Kayseri, and another in the railway repair shop at Sivas. None of these, however, is available for general use, nor have they capacity to supply more than their own minor demands for castings. None is equipped for casting steel (except as means are occasionally improvised at Karabük). A certain amount of light casting is done in small bazaar shops, but this can be disregarded. There are no modern commercial foundries in the whole of Turkey.

No statistics are available as to the potential demand for castings in Turkey—nor are any required to support the conclusion that the need for foundries is great. How Turkey could have gone on for so many years pursuing a program of "industrialization" on the advanced level suggested by some of the state factories without adequate facilities for casting metals is difficult to understand.

The modern iron foundry established in Istanbul a few years ago, which was obliged to close its doors because experienced men could not be found for its management or operation, had plenty of orders. The owner of this establishment exhibited correspondence to a member of this survey group imploring him to undertake very large commitments for the production of cast iron wheels for railway and mine cars, and simple castings needed in great quantities for railway and mine use and for many other common purposes. Unfortunately, the proprietor had undertaken first to produce large bronze ship propellers. By the time the war was ended, he had completed only one and both his working capital and his enthusiasm were exhausted.

A desperate need of the country could be met by American skill and experience in foundry management, through the establishment in one or more principal centers of modern foundries. One of these should be at Karabük, where advantage could be taken of other facilities already available there. Another should be at Istanbul. These foundries should be run as private undertakings, responding to the real demand for their product and supplying it at low cost.

In addition to producing castings for existing demands, a high-grade foundry could make castings which could be used as partially processed material for other manufacturing industries. Simple centrifugal pumps for irrigation purposes, for example, are no more difficult to manufacture than the agricultural implements discussed earlier. Road rollers and rock crushers for road and other construction work could be produced in quantity with only the most elementary skill.

### *Municipal Power Systems*

Every city in Turkey is in need of additional electric generating and distributing capacity. Municipal systems are the only sources of power available to private persons and industries, unless private generating plants are built as part of the factories themselves, as in most of the state manu-

facturing plants. Detailed studies for expansion have been made by Turkish engineers, but because private electric systems have been absorbed by the state, and an ambitious program of expansion is announced by the central government, private capital is unwilling to take the risk of new ventures in this field. The Turkish government has stated that it will protect and support such private developments, but in fact it has done nothing to correct the conditions which inhibit private investment.

The total present generating capacity in Istanbul, Ankara and Izmir is 83,000 kw. (see Chapter 6), which, according to estimates made by the state engineers, is approximately one half what the present demand would be if capacity were available to supply it. The need for substantial new capacity is all too evident.

American manufacturers of all the types of equipment needed could afford to send competent engineers to make their own examinations, and prepare proposals for each project, setting out its technical and financial aspects. If the Turkish government chose to go ahead, the American manufacturer could aid in arranging a loan for the dollar requirements from (or guaranteed by) the Export-Import Bank. It may be assumed that a detailed examination by an American engineer of recognized competence would be prerequisite to favorable action by the bank, at least for an initial undertaking of this character.

An American engineering firm of high standing might perform the same function if the Turkish government would agree to pay for the necessary investigation. In both cases the risks of development, which would be slight, would be borne by the Export-Import Bank. Its normal procedure would require appropriate assurances from the Turkish government that the conditions stipulated in the engineer's report would be met.

If an American manufacturer or engineering firm would carry through one such project directly with the Turkish gov-

ernment, the way would be paved for subsequent projects to be arranged in similar fashion by groups of Turkish private investors.

The criticism may be made that to proceed with the expansion of generating and distributing capacity in one or more of the principal cities before making the general power surveys recommended in the following paragraphs invites the very lack of foresight which has been condemned elsewhere. The main object of the suggestion for strengthening the municipal systems, however, is first to correct promptly a situation which should not be allowed any longer to obstruct important current development, and second to establish an important means of collaboration between Turkish and American interests in connection with relatively small projects, as a first step toward similar relations on much larger ones. The most serious lacks in the municipal systems might be corrected in a year, whereas to defer these steps until the other studies have been made would invite serious breakdowns in the economic life of these important centers.

### *National Power Network*

At least the main characteristics of a national power development program should be worked out and kept in mind while intermediate steps are taken in response to current requirements. Engineers of the Electrical Energy Institute have prepared such a general program for inclusion in the current five-year plan, but there is doubt whether that study was based on sound economic principles. What appears to be needed is a review of the present national network plan by competent American engineers. Preferably such a study as this should be made by consulting engineers who act on behalf of the Turkish government itself, rather than as part of a construction contract in which the engineers have an interest of their own to be served. Such professional detachment is particularly important in making basic studies on which long-range development policies are to be based.

The general program embraced in a preliminary study need not include detailed analyses of individual power stations, but should indicate the magnitude of prime energy resources (water power, coal and lignite) in various localities, establish the principles on which progressive development should proceed, make provision for the accumulation of necessary data and assist the government to improve the administrative organization which is responsible for this important aspect of the national economy.

### *Power for Northwestern Anatolia*

The need for electrical energy for present as well as future developments in northwestern Anatolia—a relatively advanced and densely populated area—makes it appear highly probable that at least in this district early attention must be given to large-scale power development and interconnected systems. For this reason, a detailed investigation in this district, by competent and experienced American engineers, is classed as a present need. Ideally, the general plan should come first, but the work already done by the Electrical Institute can offer a guide for the survey, in view of the critical scarcity of power in Istanbul and other cities of the area.

### *Manufacturing Industries in General*

The industrial activities discussed in the preceding sections are those which are important chiefly for their effect in *stimulating production*. These can be distinguished from both light industries aimed at satisfying consumer wants in general and heavy industries which regularly provide the machinery or raw materials for industrial use, once industry has become established. Since this study is concerned chiefly with the possible American contributions toward advancing the economic welfare of the Turkish people, and since that economy is at present characterized by stagnation, the initial stimulation of productive activity has a high importance. Other aspects of economic and social progress will follow inevitably.

There is a sufficiently wide range of opportunities in the types of new activity which will stimulate production directly to absorb all the American resources and attention which are likely to be available in the near future. It is not likely to be helpful, therefore, to develop at length in this survey the opportunities for manufacturing articles in Turkey which would be valuable only to satisfy increasing consumer demands, or to replace articles now imported, for the sole purpose of saving foreign exchange. Much less is it important as a part of this study to analyze the still more remote industrial function of manufacturing heavy producer goods. All these activities are to be encouraged—and, generally speaking, in the order just named—but these stages in Turkey's economic development must come in proper sequence.

Until Turkey's 20 million people have started to produce local surpluses for exchange within the country plus an overall surplus for export, no new purchasing power will be created with which to satisfy new wants. Soap and paint cannot be sold until the prospective buyer sells his beef, grain and tomatoes. If selling these requires refrigeration for the beef, transport for the grain and a canning plant for the tomatoes, then this is where real industrialization begins.

Toilet soap can be manufactured in Turkey, with substantial benefit to both manufacturer and consumer, as soon as it can be paid for. This is an example of innumerable goods, many of which are now produced on a minute scale by home or bazaar craftsmen. It will be the function of modern industry to produce them in abundance, with better quality and at lower price. The main stream of new demand, as it swells with buying power, will follow the natural pattern of men's wants. Food, clothing, tools and building material will come before soap, and this before storage batteries and cellophane. This principle applies regardless of how the curve of demand may be skewed by the existence, at any particular time, of groups with widely differing purchasing power. When the technical and financial analysis of prospec-

tive plants for the manufacture of "luxury" goods becomes the important type of problem in Turkey, an economic survey like this one will no longer be needed. Its place will be taken by the market analyses and technical and financial studies which are a part of modern industrial practice.

### *Unrealistic Projects*

This brings us to a brief consideration of the long list of manufacturing enterprises which are conspicuous in the current five-year plan as reported to the authors by Sümer Bank and Eti Bank—enterprises which will be part of the basis of any request for a foreign loan.<sup>4</sup> Generally speaking, there is not one of them that could be recommended to American investors. What is there about Turkish thinking that appears to make them attractive there?

Turkey now produces 4,000 tons a year of nitrate ash for fertilizer. Sümer Bank has proposed a new plant which would produce 60,000 tons a year (along with other nitric products). The "financial analysis" accompanying this item indicates the total cost to be 37 million liras (\$13 million) of which \$6 million would be required in foreign exchange. If the 60,000 tons of nitrate were purchased abroad, so it is explained, it would cost \$2 million a year—thus the new plant is credited with a saving which would repay the \$6 million loan in three years.

Turkey would probably not buy abroad the 60,000 tons in any case, and the hypothetical "savings" might easily be wasted. Aside from such considerations, it would be interesting to know how the 37 million liras of investment would be returned to the Turkish people or the country's treasury. In the case of fertilizer, this must be accomplished only through crop improvement. Actually, the need of fertilizer in Turkish agriculture is not yet of pressing importance—although some day it may be—because there is no way of distributing a larger agricultural product.

4. See footnote on page 98.



Unless the results just outlined are realized in practice, the investment must be justified on other than commercial grounds. Since many other Turkish state plants of far less intricacy than this have averaged less than half capacity and admittedly operate at a loss, this project scarcely deserves even these few lines, except to illustrate the type of manufacturing which Turkey needs *not to have*.

Another proposed manufacturing plant, to produce airplane engines, Diesel engines and various other types of complicated machinery in Ankara, falls in the same class, as do the projected locomotive-manufacturing plant and many others to which attention has been called previously. Men who propose or defend such undertakings are not likely to be regarded by Americans as good business partners, nor is a government administration which allows public funds to be spent on such projects likely to be regarded as a source of security for foreign investments.

In general, with regard to new manufacturing industries in Turkey, it does not appear that their lack, *except for those which provide the people of Turkey with the means of an increased personal production*, is what is holding back progress today. While there undoubtedly are some undertakings which, if pursued in Turkey with typical American enterprise, would prove profitable to investors under favorable conditions of taxation, foreign exchange control, etc., profit alone is not the basis on which American participation will be helpful to Turkey in this stage of its development.

#### MISCELLANEOUS SERVICES

The need for technical services, in public health, certain fields of education, engineering and managerial technique and the like, has already been discussed.

It should be emphasized here that it would be to the advantage of the Turkish government to retain on a consulting basis a highly qualified engineer or engineering firm, to analyze *on behalf of the Turkish interest* the broad implica-

tions of each major project, and to take charge of the detailed planning which determines its adequacy and economy. If such study and supervision are left entirely to contractors whose own interests are affected by the size, the cost or other features of the undertaking, economic utility to the nation is not likely always to be the sole criterion by which the nature of the undertaking is decided. Any Turkish private undertakings would similarly benefit by independent advice.

Although in its narrower sense managerial skill, as the term has been used in this book, relates to a modern commercial enterprise, it also includes certain specialized techniques which are common to many types of business. There are experts in the field of merchandizing who can guide Turkish enterprises to short-cut much trial and error in determining the potential demand of consumers for various commodities, and in organizing the distribution and sale of goods with greatest effectiveness. This is a field in which Americans have excelled in their own country, and while there is valid objection that the so-called "high pressure" marketing methods have produced much waste in the American economy, such excesses are not likely to characterize the beginnings of a Turkish marketing system aimed at moving a maximum of needed goods from producer to consumer.

Advertising and sales promotion, in certain of their forms, are an essential part of American merchandising practice. Here again unpraiseworthy aspects of the American system are glaringly obvious to the most casual observer. Yet, sales promotion activities in America are in large part responsible for the high living standards of the mass of the population, for they create and sustain the high demand which makes possible mass production and low costs. Like "high pressure" sales technique, advertising must be regulated in the public interest to avoid misrepresentation. It will be a long while, however, before advertising is likely to produce in Turkey, as it has in America, a popular demand for goods of spurious or fictitious value. The Turkish people have great need for

the type of education which sound advertising provides. It is in the minds of the people that the desire for better living must begin.

A great service would be rendered if appropriately selected American books and magazines were made more available. American popular literature reflects, and in some measure produces, the alert and facile adoption of new information and ideas which is a national characteristic. Not all the ideas thus disseminated are worthy of cultivation, even in America, but in a healthy community the good crowds out the bad. Such publications would find a wide reading in all the Turkish cities and most of the larger towns, where English is spoken by many and is being studied by an increasing number in the schools. Many Turkish publications would pick up much from such American sources if the material were made available to them. The newsstands and bookstores are active in Turkey.

Among the auxiliary services for which needs exist in varying but important degree are purchasing agencies, staffed by experienced Americans who know what is available in the United States and how to get it. (See Chapter 8.) Insurance agencies, with American connections, and branches of American banks, would also greatly facilitate the broader economic developments which are the objective of Turco-American collaboration.

The establishment of servicing facilities for the maintenance of American equipment, both warehouses of stock for prompt supply or replacement and shops for repair, would be useful. Another service which might become a large-scale industry in itself, and for which American experience and enterprise would be immensely valuable in the beginning, is freight hauling by motor truck, with all its own auxiliary services such as repair shops and warehouses. The organization and management of such services would require careful study, but the opportunity for developing a much needed and a profitable service would justify whatever effort it took.

*Possibility of Tourist Trade*

Few countries in the world, even including those whose names have become symbols for vacationing and scenic beauty, can equal Turkey in appeal to travelers, and it is doubtful whether any can surpass her in the natural and historical attractions which form the basis of the tourist trade.

It is too little known that Turkey, besides her natural endowments of climate, which ranges from Mediterranean to Alpine, and her rich variety of physical attractions, including seashore, towering mountains, forests, lakes and streams, also comprises the largest part of the ancient territory with which our classical memories are associated. What is now Turkey was Greece in the times of Homer. Here was Troy, in the plains of Ilium. Here are the ruins of Ephesus and Pergamum and of many other cities of classical Greece. Here Strabo was born, and Diogenes. Here passed Xenophon with his Ten Thousand, and later Alexander on his conquest of western Asia. Here it was that Alexander cut the Gordian knot. Here, deep in Anatolia, near Zile, Caesar overcame Pharnaces—the victory of which he said, "I came, I saw, I conquered." In Tarsus, where excavations are now exposing the remains of cultures that were old in the early Egyptian dynasties, St. Paul was born, and from here he set out on the expeditions which produced his Epistles to the Galatians and the Ephesians, forefathers of the present Turks.

Istanbul itself—Constantinople in olden days—with its monuments of imperial Roman power and of later Byzantine splendor, could alone justify the claim that Turkey possesses supreme historical interest and architectural beauty.

The importance of tourist trade is not its commercial importance alone, great as that might be, but the benefit which would come from a growing familiarity on the part of Americans and others from the West with Turkey and the Turks. Economic surveys are valuable in their way, and joint investments in theirs, but no understanding between peoples is so

complete and so compelling in times of stress as the understanding that comes with personal association.

It needs to be known in Turkey that American tourists do not need luxury hotels to attract them. Plain, clean lodges with good beds and good food would be enough and would be simple to provide. The country is already well served by airlines. With present railways and roads now being improved, most of the regions of greatest tourist attraction are reasonably accessible.

Promotion of tourist trade would require removal of political obstructions, as well as establishments for tourist living and transport between points of interest within the country. The state could well collaborate with private industry in all this. American assistance would be required primarily to guide the Turks in their appeal for American visitors. Airlines and passenger ship companies, as well as travel agencies, could all find interests of their own to be served by collaboration in such a program.

### CONCLUSION

This survey of Turkey, made with the limited intention of discovering how Americans can best help in the economic development of the country so that the Turkish people may benefit, leads to a few broad conclusions.

Turkey is a nation of large and unusually varied resources, both natural and human. It has rich mineral deposits, great sources of mechanical power, favorable climate, a strong agricultural base, people of high potential competence, ample land. It occupies a position central for trade by land or sea.

This country remains, by the standards of western Europe or the United States, largely undeveloped. Twenty-six years of the Republic have seen many sweeping reforms and an ambitious attempt at industrialization, but as yet the Industrial Revolution has barely touched the daily lives of the great majority of the Turkish people. Their levels of living have been improved little, if at all.

The first necessity for further advance is increased governmental activity in public works—roads, railroads, irrigation, drainage, expansion of local power stations—and progress in education, agricultural extension work, sanitation and health measures.

Another urgent need is for small and light industries such as foundries, machine shops, factories for producing simple agricultural utensils, wagons and other elementary means of transportation, plants for the assembly and repair of agricultural, road-building and other essential machinery, the manufacture of building materials. A great opportunity exists in industries for food processing and preservation. Meanwhile it is essential to improve the productiveness of the coal industry and to reorganize the steel plant at Karabük so that it can serve the nation's real wants.

Attention to these matters would increase the production and the real wealth of the Turks, laying a solid basis for an extension of manufacture and trade. Other projects should be postponed until progress has been made in the elementary requirements for stimulating production.

In order to lay the foundations for progress Turkey's need is not mainly for money capital. Domestic capital is available if it could be brought out of hiding. The government itself could finance most, if not all, essential public activities, including the gold exchange for foreign purchases, if it concentrated its attention on the primary necessities instead of pursuing its ambitious but premature program of large-scale industrialization.

The greatest need which Turks themselves cannot yet fill is that for trained advisers, good managers, competent technicians, industrial and commercial know-how. This is a need which Americans can supply, provided the opportunity is offered for them to exercise their talents. Government or private undertakings could engage Americans with the required skills. American business organizations could go into partnership with the Turkish government or private capital,

or could establish experimental branches of their own, under agreements and safeguards acceptable to Turkey and the Americans in question. They could bring with them their managerial staffs and their experts, plus such capital as was necessary to pay for imported machinery and materials.

Little opportunity either for the Turks or for American collaborators will exist, however, unless there is a fundamental change in the attitude of those who exercise political control in Turkey. The economy must be operated in the interest of the people as producers and consumers rather than in the interest of job-holders and the single-party bureaucratic machine, if it is to be productive of increased wealth and welfare. Neither public nor private enterprise can perform its proper function unless attention is concentrated on the most efficient production of the most widely needed goods. Exorbitant and harassing taxes must be reformed, arbitrary and capricious rulings and orders must be prevented, political invasion of managerial responsibility must be avoided, favoritism and discrimination must be ended, before the Turks will be able to make good use of their rich resources or Americans will be able to offer them effective help in doing so.