MIDDLE EAST RESOURCES Problems and Prospects

A series of addresses presented at the Eighth Annual Conference on Middle Eastern Affairs, sponsored by The Middle East Institute

March 19-20, 1954

Edited by HARVEY P. HALL

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MIDDLE EAST RESOURCES

INTRODUCTION

George Camp Keiser Chairman of the Board of Governors, The Middle East Institute

IT IS WITH GREAT PLEASURE that I welcome you on behalf of the Board of Governors to this Eighth Annual Conference of The Middle East Institute. To those who are attending one of our annual conferences for the first time, or whose initial contact with the Institute this is, let me say that the purpose of this organization is to educate the American people regarding the Middle East through the dissemination of unbiassed, factual information; it is also our purpose to promote better understanding between the people of that area and our own citizens.

Besides annual conferences such as this, the Institute's activities, in line with its objectives, include a lecture program featuring distinguished speakers on the area, the holding, individually or in collaboration with others, of conferences on more highly specialized subjects within the area, such as the one held in conjunction with Georgetown University last December on Iran, and the lending of substantial assistance to such an undertaking as the Colloquium on Islamic Culture which took place at Princeton and the Library of Congress last September. This assistance consisted of supervising and arranging for the activities of the scholars from the Middle East taking part in the Colloquium during the weeks intervening between the close of the sessions and the time of their departure from this country.

I should draw your attention also to what the Institute is doing in the field of study and research. Not only do we have classes in the languages of the area — during the present year they have included Arabic, Turkish, and Persian, conducted on the Institute's premises; we also support students on scholarships at other institutions who are specializing in the Middle East. Our research activities have included traveling fellowships for some years, and now have been extended to the compilation of texts for publication.

Publication forms an important part of the Institute's work, both in connection with getting manuscripts into public circulation and in the production of the Institute's quarterly, *The Middle East Journal*, now in its eighth year, and the more recent *Report*—formerly known as the *Newsletter*—giving bi-monthly spot news on the Middle East (which, as interpreted by

us, extends from Morocco to India and Pakistan, and from Ethiopia to Central Asia).

Some years ago, it seemed necessary to justify the Institute's purpose by explaining why it appeared to be important to educate Americans on this area. That, I believe, no longer needs to be done. With the world in its present state, the United States is entrusted with the tremendous responsibility, along with other nations of the free world (of which those of the Middle East form a highly important group), of keeping civilization alive. It would seem that to do this, the importance of education cannot be overemphasized. In fact, it was not long ago that I heard civilization aptly defined as "a race between education and catastrophe."

The resources of an area are in many ways a key to its balanced economy and of great underlying value to its social and political stability, perhaps even to the point of its being able to maintain its position among the progressive and enlightened regions of the world. For this reason, it was decided that the Conference this year should have as its theme: Middle East Resources: Problems and Prospects.

It should be understood, however, that The Middle East Institute takes no stand in sponsoring any activities or projects recommended by or engaged in by any of the speakers at this Conference. All opinions expressed, therefore, are those of the individual speakers and not necessarily those of the Institute.

First Session, Friday morning, March 19th Presiding: George Camp Keiser, The Middle East Institute

THE CHALLENGES TO MIDDLE EAST DEVELOPMENT

THE HONORABLE GEORGE C. McGHEE Former United States Ambassador to Turkey

It is A GREAT PLEASURE for me to participate in this Eighth Annual Conference on Middle Eastern Affairs of The Middle East Institute. This is particularly true in the light of the great importance of the Middle East today and of the Institute as one of the principal foci in this country of interest in this strategic area. It is good to see so many old Middle Eastern friends meeting to discuss what are to many old Middle Eastern subjects. They are subjects, however, which merit continuing discussion, particularly at this critical time. New light can always be cast on these problems by looking at them in new perspective.

I have always been impressed by the broad and intelligent interest in this country in the problems of the Middle East. I am sure that conferences of this nature on the Middle East outnumber by far all conferences on other areas of the world put together. The Middle East has many strong appeals: the images of desert sands and Arabs in picturesque garb on horseback dramatized by Lawrence and Glubb; the fascination of oil fields containing half the oil in the world; and the challenge to the political scientist of difficult and at times insoluble political issues. Recent years have seen in the Middle East an unresolved war, the rise and fall of dictators, and the defiance of the West implicit in the widespread policy of "neutralism" among the Middle Eastern countries.

On several occasions in recent months I have been asked by those responsible for organizing programs of study on the Middle East, what emphasis I would recommend in the subjects to be taught to the increasing number of young men and women who are preparing themselves for a life's work in the Middle East and its problems. I have replied that I fully understand the importance of the study of the languages of the area, which are, indeed, basic to any further area studies, and of attaining a thorough knowledge of the inspiring history and cultures of the ancient races of people who inhabit the Middle East.

I also reply, however, that in my judgment the fundamental approach to the problems of the Middle East in the practical world of today lies in a thorough knowledge of the resources of the Middle East—its manpower, land, water, minerals, and finances. If progress is to be made in the Middle East, it has to start with the development of the Middle East as it is and with what it has. Political, social, and historical factors exist which may make this development difficult or even for a time prevent it altogether, but without these resources there can be no basis for progress at all. In my judgment our problem is to direct the attention of more of our geologists, geographers, climatologists, hydrologists, agricultural experts, and anthropologists toward the Middle East—toward inventories of the physical assets of the Middle East and to an understanding of the use to which these assets can be put.

I am delighted that this conference addresses itself to this basic aspect of the many interesting facets of the Middle East. We may not solve any of the perennial problems of the Middle East. I am certain, however, that the papers which will be presented by the distinguished experts who follow me, and the lively discussion which I feel sure will be engendered, will result in a better understanding of the potentialities of the Middle East, which can be realized once man-made political barriers can be removed.

CONCEPT OF DEVELOPMENT

Just a word at this time about the concept of "development" which seems to dominate our thinking about vast areas of the world today. This is in its essence an American concept. It was crystallized in our thinking by the dramatic Point Four announcement of President Truman's Inaugural Address. It is a concept which has its origins deep in our own particular national experience. We have made progress in this country in the last century and a half on a scale much greater than the world has ever seen before. The riches of our great continent were opened up to constructive use by the rest-less energies of the tide of gifted people who came here largely from northern and western Europe.

These people came here, in most cases, with fully developed political concepts, social customs, and scientific and industrial knowledge. They also had the skills, the energy, and the determination with which to transplant these assets in their new home. Progress in our country has, since its inception, gone forward relentlessly and with relatively few setbacks. There has, as a result, become ingrained in our thinking the concept that the passage of time

is accompanied by progress — that everything is possible for the individual with sufficient intelligence and determination.

If we look around the world, however, we find that these assumptions are not valid everywhere. Little of the world provides a comparable theater in which could be re-enacted the American drama. Much of the world has either a harsh or a debilitating climate. The presence of vast fertile, rain-fed plains, although widespread in our country and in continental Europe, is elsewhere a rare phenomenon. Barbara Ward, the distinguished writer for the London *Economist*, pointed out recently in an interesting article that much of the world we consider underdeveloped is in fact not underdeveloped. It has little or nothing to develop. The old adage that "you can't make a silk purse out of a sow's ear" applies with inexorable force to vast stretches of the deserts of the Middle East, as well as to the "bad lands" of the Dakotas. We must reconcile our thinking to the fact that some parts of the world just do not have potentialities for great progress, no matter what energy or treasure are lavished on them from outside sources.

Here, within our great United States, deficiencies in the physical heritage of one particular part of our country can be compensated for. The people there may go elsewhere, or develop a profitable trade with people elsewhere, or become a haven for tourists. There is flexibility within one political system such as ours to absorb the absence of physical resources which is not possible in a small country, such as, for instance, the state of Jordan. That is why it is so important that this conference have a close look at what basic resources the Middle East has, as a basis for projecting into the future what the Middle East can be.

One further word of warning about the concept of the Middle East itself. Although there is no general agreement as to the precise area the concept embraces, it is, no matter how defined, a rather confusing concept—one that tends to give indigestion to those who attempt to consider it as a whole. One would not think of having a conference to discuss the Problems and Prospects of New Mexico, Texas, and Louisiana. Even though the area covered by these states is important, the problems of these states just do not lend themselves to generalization.

Similarly, the Middle East, even in its narrowest definition, embraces quite dissimilar problems. One widespread common denominator throughout the area is that of low living standards—of people living in mud huts on an agricultural subsistence basis without means and often without even the desire to better their way of life. Over vast areas the goat is the only possible

means of converting the meager products of the soil—the few small roots of grass that come out during the brief season when there is rain—into something which can sustain human life.

Throughout much of the area the people have a common Arab racial origin. The tie of Islam, which covers a wider area than do the Arabs, has proven in general, however, to be a weak tie. It occasions almost as much divisiveness as its does cohesion. It means little to some of the countries, and the differences within the Islamic religion are often greater than those between Muslims and Christians.

The problems of Turkey, for example, bear little relationship to the problems in the remainder of the area. Turkey is a state thoroughly integrated with Europe. It has a mature nationalism, and with a stable democratic government and a sound economy Turkey is pursuing the development of its abundant resources on a free enterprise basis as rapidly as any country in the world. In the last three years it has increased its national product 25 percent.

Iran, although sharing many problems with the rest of the Middle East, has during the last several years tended to isolate itself from contacts not only with Western countries but with its Middle East neighbors. Its progress now hinges around the solution of one great political and economic issue—that of the sale of its oil.

Development of those countries blessed with oil resources can in the absence of unforeseen political upheavals be charted with relative certainty, but apart from Iran only Saudi Arabia, Iraq, and the tiny shaykhdoms of Kuwait and Qatar and Bahrain are so blessed.

Some countries appear to possess inadequate natural resources to support their present indigenous population on a tolerable living standard. They offer little reward even to determined efforts on the part of their people. In many areas there is no known technique which can make the land more productive. Surface and ground water, even when utilized through dams and wells, is subject ultimately to the necessity of replenishment by rain. We have in our own country found out what happens when man attempts to overtax this replenishment factor. There results lowering of the water levels and ultimate abandonment of farm lands.

I hope, therefore, that in our consideration of the Middle East at this conference, we will not make the error of generalizing too broadly, but will direct our attention area by area, country by country, to the concrete and specific problems each faces. We cannot give to one people the attributes of another, any more than we can give to one the oil of another.

Development is, moreover, not something that can be given to a country or forced upon it, even if the potentialities exist. It is something organic that must come from within. It is a result and not a cause.

We know, for example, that there is no simple answer to success on the part of an individual. It cannot be obtained through six easy lessons in a "Success School" by the teaching of superficial postures and techniques. Success in an individual is the result of the sum total of his many aspects—his capacities, his training, his energy, his determination—as well as the "breaks" that come to him. Thomas Edison's success story is different from that of Abraham Lincoln.

Similarly, the development of a country is not something that can be learned out of a Point Four manual or taught by a visiting Economic Mission in six days. Development occurred in our own country not as a result of a plan but as a result of the free play of economic forces. We now see how it was done only in retrospect. Although it came inexorably, it came through spasmodic impulses — now cotton, now corn, now oil, now steel, now the automobile, now electronics pushed it forward. Consumer-goods plants were built spontaneously to meet consumer demands. Leaders arose to take advantage of the vacuums of opportunity that were created. All of the multitude of talents and instincts of man — desire for adventure and greed as well as his more constructive aspects — played their role.

If development can come only as a result of the free interplay of indigenous forces, it follows that the development of the Middle East will come in its own unique way. We can predict only a little what that way will be.

FUTURE PATTERN

If one looks into the future of the Middle East one can expect that prosperous communities will develop around the oil-producing and refining areas, comprising the workers for the oil companies and the increasing number of Middle Easterners who can perform services for the oil companies which the latter must now do for themselves. There will, in addition, inevitably be developed a petro-chemical industry to utilize the enormous quantity of natural gas which is produced out of solution with the oil and which is now wasted in the air. This is not to say, however, that there will be created in Saudi Arabia or Kuwait a precise counterpart of Houston, Texas, or Baton Rouge, Louisiana, but something more indigenous to the Persian Gulf.

Similarly, one can chart vast increases in irrigated lands in Iraq and Egypt and to a lesser extent in other Middle Eastern states. Here hundreds of thou-

sands of landless people now compressed into the slums of Baghdad and Cairo will find a happy life on a tolerable subsistence level. There will, however, in our lifetime, not be enough land for all and there will still be nomads, as there are in fact today even in our own country.

Beirut, Cairo, and other Middle Eastern trading centers will, as they did in ancient days when the Middle East was the only channel of trade between East and West, flourish and prosper as trade and distribution points for an expanded Middle East economy. As the point of contact with the outside world they will assume more and more of the character of the West—of New York, London, and Paris. Isolated cities like Riyad, however, will for a long period continue to maintain their present unique character.

Unfortunately, however, even on the basis of the most optimistic forecast, vast sections of the Middle East which were not adequately endowed with natural resources cannot be expected to participate in Middle Eastern development within their present political framework. Only by their inclusion within larger groupings or political entities can they hope to share in the general progress of the Middle East. This is, however, a meeting on resources. I will leave further speculation on this question to the political scientist.

In conclusion, let me emphasize that despite the difficulties I have enumerated, I am convinced that the development of the Middle East will go forward—indeed, it must if we are to have the stability in this area which is so vital to the security of our country and the Free World. The people of the Middle East have in recent years become increasingly aware of the fact that they have not shared in world progress. They demand and their leaders demand for them that something be done to bring this about.

In many countries, intelligent starts have been made with strong local and foreign backing. The success of these efforts constitutes a great challenge to us—to our government, to our companies operating in the Middle East, and to us as individuals. Only when the inequities of poverty among plenty have been alleviated and the Middle Eastern peoples are united in a search for a better way of life, will they cast aside the curtain of distrust which separates them from us and assume the place of responsibility they should occupy among the free nations of the world. This is the challenge to Middle Eastern development.

First Session, Friday morning, March 19th Presiding: R. D. Campbell, George Washington University

MIDDLE EAST GEOGRAPHY: A LOOK AT THE AREA'S RESOURCES

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Department of Geography, University of Michigan

IDDLE EAST "geography" is essentially the distribution and interrelationship of the area's physical and cultural features. "A look at the area's resources" consists of viewing physical and cultural phenomena in terms of the functions they perform or the operations in which they take part. The point of view from which both geography and resources are here regarded is their relationship to man's immediate need and future well-being. The resources represent the assets of the region; their potentialities lie in geography. The purpose of this paper is to point out some of the significant geographic relevancies of physical and human resources in the Middle East. It is hoped that they may serve as necessary prerequisites to an understanding of the organic whole, which is the total relationship between economics, politics, society, religion, health, education, and environment.

Successful utilization of Middle East resources depends upon the analysis of the total natural-human-cultural complex, of which the facts of geography are an unavoidable part. The fundamental nature of the environment and man's social organization and attitudes establish the limits of resource use. Within these limits it is necessary to find the balance between supply and demand, between food and people, or between environment and man—a balance that will make the general welfare truly general. To concentrate on the development of a few parts of the Middle East organism and leave the others unattended is to accentuate imbalance, and is dangerous as well. Technological assistance, for example, with emphasis on production, is by no means the only answer. An evaluation of the form and function of all resources, whether tangible or intangible, natural or cultural, economic, social, or political, is therefore necessary to achieve balance. What exists in the area to work with must be known before work can be done.

Effective resource utilization proceeds from the combined effort of three levels of endeavor — basic research, applied physical and social science, and "action." Basic research, which transcends the Middle East as such, but which

is nonetheless fundamental, determines facts of nature and culture without reference necessarily to human attitudes. Workers in this category seek the answers to what, where, how, and why, per se. Applied science, which includes geography, translates into practice the findings of objective research according to a point of view, such as need, profit, and the like. Workers in this category want to know what is technically useful or applicable within a given set of circumstances, or, as in the present instance, the Middle East. The third category, "action," is the process of extending what is deemed feasible to the object for which such feasibility, or usefulness, is intended. Workers here are county agents, mechanics, rural nurses, local teachers, field geologists, malaria teams, etc. Jobs in this category in the Middle East, at least, are among the easiest for foreigners to find and the hardest for them to fill. Workers in this area of activity, whether foreign "know-howers" or Middle East nationals, have perhaps the greatest responsibility of all. They particularly must also be "know-whyers." The interdependence of these three levels of approach to wise resource use is readily apparent, as no one level, by itself, is either equipped or capable of doing the whole job. In the same way, no one discipline has a monopoly on resource development; workers in a given field can and should look beyond both their discipline and their level of operation.

This, in brief, is the frame of reference for a geographic consideration of Middle East resources.

PHYSICAL DIVERSITY

The Middle East (and no time need be taken to ask "What is it?") is a region of considerable diversity. This is true even for the core area, here regarded as extending from Egypt to Afghanistan and from Turkey to Aden. If a greater area is considered as comprising the Middle East, the more diverse and heterogeneous it becomes. There are few physical or cultural characteristics common to the region here considered, except perhaps the agricultural way of life and possibly certain elements of Islam. The only geographical factor that holds the core area together from a regional point of view is its location, the only basis for mutual dependence of the countries concerned.

The location of the Middle East at the crossroads of three continents is, in a sense, an asset, or a resource. It is a focal point of both ancient and modern migration and trade. The overland routes of the past between the Mediterranean and the Far East, Russia and India, the Nile Valley, Meso-

potamia, and Europe, converged on the area and brought prosperity during periods of political stability. More recently the Middle East has become the gateway between the Mediterranean and the Indian Ocean by sea and a center of world air routes. Its possession of the world's greatest petroleum reserves is of paramount importance not only to the Middle East itself but to the free nations of the world. The oil pipelines are in a way modern counterparts of the old overland routes. Add to these the area's location between tensing political pressures and ideologies, and it becomes apparent that more than local forces are active in determining its course of history and its strategic significance. Stability in the Middle East is again of primary concern.

Within the physical framework of the Middle East are a number of pronounced differences, most frequently a result of the changing relationship between surface configuration, climate, and vegetation. Of these, climate is unquestionably the most important, as it plays a major part in the shaping of the land surface and the development of soils and is the basis for the pattern of vegetation. Human societies in general adapt themselves to a particular combination of these physical conditions, the degree of adaptation being in proportion to the approach to the extreme.

In addition to the more direct environmental-human relationships there is the cultural diversity derived from racial mixture, linguistic assimilation, cultural interchange, different degrees of economic development, and separate conditionings by the heritages of different groups of people. The Middle East thus becomes a mosaic of geographical entities, varying in size and character, but together forming a design. The design becomes cohesive in the conformity of the direction of change of the major physical features. With such a wide range of combinations of conditions in the Middle East, generalization for the region as a whole is at once both difficult and misleading, just as any uniform application of technology or over-all plan for resource development admits of a lack of comprehension of the nature of the problem.

The major lineaments of surface features in the Middle East consist of a northern highland zone and a broad plateau comprising the rest of the region. The high mountain ranges of the north are in a sense festooned from three knots: the Balkan, the Armenian, and the Hindu Kush. These festoons, or bordering mountains of the highland zone, encompass interior basins, such as Anatolia and the so-called Persian plateau, a few other high basins of small size, some dissected plateau surfaces, and some low mountains. The

rest of the Middle East consists of a portion of the African-Arabian plateau, which, however, is inconsistent in its surface character. It includes the great riverine oases of the Middle East, as well as the low mountain ranges bordering the eastern end of the Mediterranean and both sides of the Red Sea. The northern highland zone and the African-Arabian Plateau may each be subdivided purely in terms of surface configuration and composition to an almost infinite degree, depending upon the amount of detail required.

The climatic and vegetation patterns of the Middle East depend to a considerable extent upon the distribution of the major surface features, prevailing wind direction, and distance from the windward seas. The combined patterns consequently show marked contrasts, not only in the Middle East as a whole, but in close proximity as well. In restricted mountain areas, for example, the climatic type on one side of a range may be quite different from the climatic type on the other side. The broad view shows a general transition from the colder, wetter, forested areas of the northwest and north through the semi-arid regions of winter rainfall and steppe to the deep hot desert of the southeast.

Rainfall in the Middle East is heaviest along the windward slopes of the Elburz and Pontic Mountains overlooking the Caspian and Black Seas respectively, with amounts in excess of 60 inches annually and a winter maximum. Here are luxuriant although limited stands of mixed coniferous and broadleaf forest of economic value. Populations are relatively dense, and humid agriculture takes place the year round. Along the Aegean and Mediterranean coasts and at higher altitudes in the Taurus and Zagros Mountains the summer dry season becomes more pronounced, and the forest changes to a scrub oak type of little economic value except for firewood and thatch. Summer irrigation augments winter rainfall to make year round agriculture possible. Population densities per cultivated area are still relatively high. Temperatures along the coasts having the Mediterranean type of climate are fairly mild in both summer and winter.

Away from the windward coasts the total annual rainfall decreases rapidly to 20 inches or less and the length of the summer dry season increases markedly. Temperature ranges are greater. In the interior basins of the northern highlands the temperature may be very high in the summer and quite low in the winter. At higher altitudes, low temperature combined with winter precipitation produces heavy accumulations of snow. The vegetation gives way to a semiarid steppe, the typical transition between wet and dry climates. Grazing and dry farming of a single crop of grain support modest population densities.

Continuing toward the southeast the annual rainfall decreases much further to a point where only a few inches occur during a short winter period. This is the true desert, a vast expanse of great moisture deficiency. Temperatures on the whole are higher in both summer and winter than in the steppes, although great temperature variations are found. Vegetation becomes completely xerophytic, is occasionally only temporary, yet occurs often enough and in sufficient amount to form the basis of an extensive animal economy capable of supporting a few people. The lee coasts, as in the Persian Gulf and along the Arabian and Red Seas, are dry and consequently sparsely inhabited. On the other hand, where water and good soil are available, as in the great riverine oases and around springs and wells, the land is limited, intensively utilized, and densities of population are often enormous. It is quite possible that rural densities in some of the Arabian oases may exceed even that of the Nile Valley.

This brief outline of the varying character of surface, climatic, and vegetation patterns, with a limited indication of the human response to their several combinations, may be sufficient to give some idea of the basic nature of the Middle East. In terms of area, that portion of the Middle East most favorable to human occupancy is small indeed. By sheer mass the desert tends to overshadow the importance of the areas geographically suited to resource utilization, and by the same token overemphasizes its own problem of resource development. Where the habitat may be profitably exploited for man's benefit, the physical circumstances permitting such exploitation are truly resources. But where the environment consists of a combination of physical features adverse to human occupancy, the limits of resource utilization close down on the opportunities for meeting man's needs.

THE PROBLEM OF WATER

The function of water in the Middle East may serve to illustrate the relationship between the development process and the resource base. Whether from rain, rivers, or wells, it must be considered in terms of its over-all amount in relation to the number of people it can support in any given area. This is the problem of water supply, and in this sense it has greater economic than physical importance. Sources of water are unfortunately not available everywhere nor at all times, a condition requiring many human adjustments. Where its supply is relatively abundant and reliable, as along the rainy northern coasts, water by itself is not a major issue. But as the supply decreases and becomes unreliable, the less it can be taken for granted. For much of the

Middle East water is probably the strongest link between man's activity and his environment.

The exotic rivers are the most spectacular sources of water in the Middle East. The Nile and the Tigris-Euphrates Rivers are not comparable in most ways, but they do have continuous flow and water is more or less available throughout most of the year. The important point in respect to these rivers, and many lesser ones as well, is the relationship between flood, low water, and the agricultural cycle. The improvement of this relationship calls for "development," a process consisting of flood control works, storage dams, irrigation barrages, land reclamation, administrative requirements, flood control policy, an enormous backlog of hydrologic, geologic, and weather data, pollution control, hydroelectric power, and - money. All these and many more economic, social, and political matters become involved in seeking to achieve a more equable annual distribution of water, the reasons for which could again start off a long list of items. The consequences of such development set up a chain reaction. Cause-effect-cause relationships begin to multiply, more and more aspects of the total resource come to bear upon the development program, economies and ways of life are affected, populations increase (perhaps too fast), new demands are created, soils become depleted, roads must be built, people must be educated, health programs initiated, birth rates controlled - all of which means that the need for knowledge and true wisdom could not possibly be greater.

In the desert, the word being a synonym for barrenness, water is the most vital and at the same time the most limited resource. Because of its scarcity, the ratio between the supply of water and the demand for it must be rigidly maintained. Use of water faster than the ability of nature to replenish it spells the doom of those concurrently enjoying its benefits. This could have been a contributory cause to the decay of pre-Islamic cultures in Southern Arabia, even with primitive techniques. Present-day power techniques of lifting ground water in certain known areas at a rate heretofore undreamed of are making rapid and irreplaceable inroads on already meager supplies. If such use rates continue unchecked, it is quite conceivable that the water resources in certain localities may become exhausted even in our time unless new geologic or technologic sources are discovered.

THE POPULATION PATTERN

It is evident that the pattern of settlement in the Middle East is determined in large part by the availability of water, the distribution of which, as we have

seen, is most uneven. Fixed settlement showing fairly broad patterns occurs only where sufficient rainfall permits agriculture, as in Anatolia, Armenia, northwest Iran, and in a few highland sections of the Zagros. But even in these areas the average density of population is considerably less than the number of people per square mile of cultivable land. Otherwise, where irrigation is necessary, population patterns tend to be spotty, owing to the confining nature of the irrigation process itself. Hence irrigation, particularly in terms of technique and extension, plays a dominant role in Middle East resource utilization up to the limits of the water supply. With a few exceptions, notably the Jazirah in Syria and Iraq, populations in general have about reached the limits of the ability of the land-water complex to support them at present economic levels, whether irrigation is practiced or not. Large increases in population for the most part would depress an already low standard of living, or require many technological, social, and political adjustments.

The people of the Middle East may be divided into three general groups on the basis of the relationship between ways of life and the factors of history and geography. These divisions are the farmers, comprising approximately 80 percent of the total population of the core area previously mentioned; the nomads, comprising roughly only 5 percent; and the essentially urban dwellers of all kinds, constituting the remaining 15 percent. This division cuts across ethnic and political lines, making distinctions between these three groups on a cultural or national basis wholly superficial. People living under conditions conducive to agriculture are so engaged, and those occupying areas capable of supporting only a livestock economy must move with their animals in the search for pasture. In addition to the basic adaptations to habitat, each of these groups is also more or less dependent on the others. The interdependence of the farmer and the nomad, especially economically, is greater than is commonly realized. The farmers raise the crops, the nomads furnish beasts of burden, meat, and wool; each group requires the products of the other. Urban dwellers supply goods and services to both in exchange for their products.

MAN AND AGRICULTURE

Agriculture is overwhelmingly the dominant occupation of man in the Middle East. It has been a way of life since ancient times: the excuse, almost, for man's existence. Despite the great diversity of agricultural systems, crop combinations, and farm practices, a consequence of varied geographical conditions, the attitude of the agricultural population toward the cultivation

of land remains remarkably uniform. Peasants everywhere, whether Persians or Egyptians, Turks or Arabs, share a common agricultural tradition which penetrates in one way or another into almost every aspect of Middle Eastern indigenous life. The peasant, his standard of living, and perforce his agriculture are the essence of the problem of resource development in the Middle East.

Agricultural productivity clearly depends upon combinations of physical conditions. It likewise depends upon people. It is an expression of the relationship between the nature of the land and man's ability to use it. Land, especially, is a resource only to the extent of its usability. Various devices and careful planning, however, can, within limits, improve its usefulness. Over much of the Middle East the land is of low productivity, the agricultural output per person is low, and farm incomes are low. Most Middle Eastern peasants, existing at a very low subsistence level, do not have the opportunity for accumulating capital. Consequently, as occupied land cannot be improved or even maintained, yields decrease, and the demand for labor increases. With increasing population pressure, the problem of land as a resource use becomes increasingly serious; it is already acute in some areas, particularly Egypt. Here the human resource, in effect, is currently being wasted. As has been said, "It is never a land which is overpopulated in terms of inhabitants per square mile; it is always an economy, in terms of inhabitants per square meal."1

INDUSTRIALIZATION

Industrialization likewise depends upon both physical and cultural conditions, specifically raw materials, power, labor, capital, and customers. These exist in the Middle East in varying degree, the sum of which does not point to a great industrial future for the region, at least in the Western sense. Except for the traditional handicrafts, which are suffering from competition with imported mass-produced goods, and a number of small industries manufacturing consumers goods from locally produced raw materials, there are few major or basic industries. Power from potential hydroelectric sources and petroleum seems in good supply, and could eventually be applied to certain aspects of heavy industry subject to the development of new techniques. Labor is present, and has already shown its capacity to acquire technical skills. Government capital, as in Turkey and to some extent elsewhere, has subsidized industry, but it is too often influenced politically. Private

¹ Earl Parker Hanson, "Hunger or Plenty for the Future?" American Scholar Forum, The American Scholar, vol. 22 (Autumn 1953), p. 474.

capital has traditionally turned to the land, and foreign capital has hesitated to take the risks involved in an uncertain, nonindustrial atmosphere. In this connection, laws and tax structures of Middle Eastern countries which would stimulate and facilitate investment and development would become potent political resources.

The last factor prerequisite to industrial development is customers, or markets. Eighty-five percent of the Middle East population multiplied by nearly zero does not constitute a ready-made market. It is a paradox of the nature of things that industrialization in the Middle East would help offset rural poverty, but rural poverty itself is one of the main obstacles in the way of industrialization. By and large, industrialization is facing the handicaps of limited raw materials and political and social patterns poorly adapted to the requirements of industrial economics. There is much in store, however, in the development of new methods, which properly integrated with the Middle Eastern organism may eliminate some of the handicaps now confronting industrial resource utilization.

So much has been said and written about the Middle East petroleum industry that only two brief observations need be made here. In the first place, the political, economic, and strategic implications of the world's largest petroleum reserve so completely overshadow other mineral resources that it is easy to forget that they exist. Coal, iron, copper, chrome, manganese, phosphates, and some others are present, but in limited quantities and in widely scattered deposits. Because of their nature and combination under present methods of exploitation, they constitute an inadequate resource base and are consequently of limited economic value. The utilization of these mineral resources, like industrial development, awaits new techniques and demands which would make their exploitation economically and socially feasible. Their development must also take its place in the balanced pattern.

Secondly, the Middle East economy has been profoundly affected by the petroleum industry through revenues provided to the participating countries, and through the increased use of the product in the region as a whole. Royalties and taxes are being used to finance large-scale internal improvements of all kinds, such as irrigation and flood control projects, improved transportation facilities, and public education and welfare. The product oil has made possible more vehicles, more domestic lighting and heating, more power for small factories, diesel and gasoline-operated irrigation pumps, more and more primus stoves. It is interesting to note that these contributions, both indirect and direct, have much to do with the agricultural process and the improve-

ment of the standard of living of the ordinary man. Because of geographical limitations it is unlikely, however, that the petroleum industry will materially alter the agricultural basis of the Middle East economy.

The strongest and at the same time most vulnerable resource in the Middle East is Man. Other resource uses must be considered in terms of their effect upon him, particularly in relation to increasing his standard of living and the danger of increasing his numbers. Short-term gains may turn into longterm losses. Other resources must also be regarded in terms of man's effect upon them, something which requires a working knowledge of the principles of conservation. Man's attitudes, objectives, and technologies, furthermore, are subject to growth or change, and thus create new or different resource demands. Herein lies perhaps the greatest single problem of resource use, i.e., the establishment and maintenance of a satisfactory balance between all parts of the total complex, of which man is the prime factor. The Middle East, as is well known, is currently undergoing great change, especially in the effects of the impact between East and West. The need for an appraisal of Middle East resources, including people, in terms of their new relationships is thus of paramount importance. Successful operations in the Middle East, whether of foreign or domestic inception, depend upon the validity of the base data, and there is much yet to be known about the Middle East.

First Session, Friday morning, March 19th Presiding: R. D. Campbell, George Washington University

THE RESOURCES AND THEIR POTENTIALS

I. Water and Power

Fred J. Huber

Vice President, International Engineering Company

WHEN I STARTED to prepare this talk I had in mind giving you some statistics for the area, such as the average kilowatt hour consumption per person and crop production, and comparing them with other areas. But ours is a business of accuracy, and after trying various sources of information, such as the United Nations and the Department of Commerce, I found it impossible to give you any clear facts. For some countries there are no statistics; for others, there are only estimates for varying years. So I came to the conclusion that whatever statistics I would quote you would only highlight what we all already know—that water and power are two very important items demanding quick attention in the Middle East.

The development of water and power resources is an important foundation on which a better way of life can come to the peoples of the Middle East. Water resources of the Middle East must be developed to raise the subsistence level of the people. Increased food consumption per person is the first basic requirement for improved health and a longer span of life. Development of water resources for this first basic purpose is receiving the greatest attention of all the governments in the Middle East.

Proper water development also provides hydroelectric power for industrial expansion, lighting, pumping, and many other things. Most of the river storage sites provide interesting power possibilities. I am not suggesting that power in the Middle East should be provided only by hydroelectric facilities. Countries which have rich oil resources are fortunate in that they can develop thermal power with these resources, although in many places throughout the area the centers of consumption are so located that transportation costs and facilities required to bring fuel to the consuming centers make thermal power comparatively more expensive than hydro. The decision as to which is better for the economy of each country is a problem which requires unbiased study and decision.

To cover the subject assigned to me by individual country would require all the time of this conference and more. But a review of some experiences will be, I think, of interest to you and assist in an understanding of the scope of these problems.

PROJECTS UNDERWAY

The area of the world from Morocco to India contains many possibilities for water and power resources development. But in our modern world, if the peoples of the West are to help these friends of ours in the Middle East achieve this objective, then we must find the ways and means to develop these resources quickly.

In the past few years, our company has designed in the Middle East the Sariyer and Seyhan dams in Turkey; the Kajakai and Arghandab dams in Afghanistan; the Bhakra, Rihand, Hirakud, and Ramapadasagar dams in India; and the Gal Oya dam in Ceylon. In addition, we have completed an engineering study for Iran. Of these, we have completed the construction of Kajakai and Arghandab dams in Afghanistan, plus a diversion dam, 100 miles of canal, and 200 miles of road. We have also completed construction of the Gal Oya dam and power house in Ceylon, and are at present constructing the Seyhan dam near Adana in Turkey. These are all multi-purpose projects.

Over the past several years, we have had an unparalleled opportunity to learn and understand the Afghan people and the problems connected with carrying out a large program of water and power development. In 1946, the Government of Afghanistan invited us to come to their country to act as their engineers and constructors and train their people. The initial program involved the development of the Helmand Valley, Afghanistan's largest river basin, and this is now their main development effort. It was financed by utilizing the country's own resources, consisting of dollar balances accumulated through the sale of karakul skins to the United States.

While constructing the Boghra Diversion dam and the first 50 kilometers of canal, it was apparent that effective irrigation could only be had by the creation of adequate storage. Stream gauging stations were established during the first period of construction, while studies of prospective storage sites were being made. Also the engineer-contractor organized and conducted an experimental farm to determine the crops which would grow on the newly irrigated land. Soil reconnaissance surveys were also being carried out.

Irrigation in Afghanistan, as throughout most of the Middle East, is by

means of diversion from the rivers during flood stage, and from wells called kareza (qanats in Iran). In case you are not familiar with this system, it is a series of wells dug to the point where there is a flow of water, then a horizontal tunnel dug to daylight. These wells tap the surface water, and are an important water right. The amount and dependability of the water supply secured by these methods is indeed limited. Cultivation, however, is confined mostly to the natural river valleys.

To add to the difficulties caused by the lack of a dependable water supply, when there are rains, the hills being barren, the water runs off in torrents, creating much destruction; yet a few days later the river bed is completely dry. In the reservoir watersheds, the rainfall approximates an average of 15", whereas in the valleys it averages from 2" to 12".

In late 1949 the Export-Import Bank loaned Afghanistan sufficient money to finish the Boghra canal, to build the Shamalan canal, and to construct two storage dams. One of these is on the Arghandab River (a tributary of the Helmand), an earth fill structure 160 feet high. It is located approximately 45 miles from Kandahar, the center of Afghanistan's richest agricultural area, where fine fruits and garden crops are produced, much of them for export. This dam stores 350,000 acre feet and provides water during the irrigation season for 125,000 acres, in addition to the water supply for the city of Kandahar. Two 3200 kw. generators are planned for installation in the near future to supply power for the area; as agricultural development progresses this power will attract industry as well. The Afghan Government plan to use some of this power for pumping.

The second dam is Kajakai, a rock fill structure 300 feet high. It is designed for irrigation storage, with plans for future power development. When the gates are added the reservoir storage capacity will be approximately 2,500,000 acre feet.

These projects are indeed heartening to our Afghan friends. They feel that they are well started on the way to utilization of these water and power resources, and that they are developing the entire Helmand Valley by progressive stages. New land is being brought under cultivation, providing farms for the settlement of the nomads. By the construction of these projects, this country, by doing, has demonstrated that in the face of great difficulties things can be accomplished to help its people gain a better way of life.

I think that this accomplishment of the last few years is an outstanding achievement. It is far more extensive than the mere creation of the structures. As great a boon to agriculture and living as these facilities is the fact that

Afghan men have learned by doing how to achieve these works, and some day soon we believe and hope they will continue to accomplish these things themselves throughout their country.

Thanks largely to the ability and desire of the Afghan workmen to learn the operation of modern construction equipment, the comparative costs of the work accomplished to date are most heartening. Equally important is the fact that water was stored a full year ahead of schedule. Now that storage is available, the development of the valley will lead to self-sufficiency in food and fibres, an exportable surplus, and a rise in the standard of living.

This project, as do all water and power development projects, has required extensive logistic support. This was accomplished in the face of many difficulties, and success is due in large measure to the splendid advice and cooperation we have had from the Department of State and the Export-Import Bank. Point Four now has technicians in the valley advising the Government. We are all working together in closest cooperation to make these projects successful.

I have taken the time to visualize for you the magnitude of this project, as it is illustrative of the scope of the projects which are required in the area. I now wish to use the experience gained in this undertaking and others to point up some problems and prospects.

The projects in Afghanistan are not the only development going forward in the Middle East. A beginning has been made throughout the area, and it is indeed heartening that nearly all the countries are getting started on their development of water and power resources. To list a few: some large projects are being built in Morocco; Egypt plans to control the Nile further by added storage; Turkey is constructing the Seyhan and Sariyer dams and several others are planned; Iraq has started projects on the Tigris and Euphrates; studies are going forward on the Litani River in Lebanon; Saudi Arabia is conducting a program of well drilling; Pakistan plans soon to construct the Karnafuli, Warsak, and Mienwali dams; India is carrying forward an extensive well-drilling program, and water and power development structures at Bhakra, Hirakud, and in the Damodar Valley. These progressive moves are a great credit to these peoples. This is not enough, however, and many other projects are under active consideration.

PRINCIPLES OF ASSISTANCE

The area is on the march, and its people are looking westward to us for assistance. Much more remains to be done, and they want to do it quickly.

The problems and potentials are breath-taking. The sooner these projects can be completed, the better for all. How can we Americans be of help?

First, when we are asked to assist our friends in the Middle East, we must approach their problems with the spirit and vision our forefathers had when they were building this country. We must use that spirit, coupled with our rich experience, to aid them in developing these resources effectively and economically.

In most Middle Eastern countries there are buildings filled with plans, developed over many years. Much of this data is good. I have observed many times during these past years how we in industry and government, when studying a situation, are guilty of the human trait of starting all over again. But despite the incompleteness of statistics, much accurate data does exist, and should be used to the full to save time. I wish to assure you that in my haste to help our friends realize their objectives, my philosophy will never permit me to be knowingly connected with an unsound project, for there are too many good ones ever to think of considering a poor one. I merely suggest that those of us who have to do with these matters in all their phases must approach them constructively. One of my friends, well-informed on the water and power problems of this area, when commenting on this subject recently, stated it this way: We do not have time to wait for the ideal, therefore let us find a reasonable solution by accepting just a little less than the ideal. If we are to accomplish anything in this area of the world, we must bring planning into balance with accomplishment.

Secondly, let us give appreciative ear to the desires and aspirations of the peoples of the Middle East with whom we are working. They may not always agree with our ideas, but usually many of their opinions are valid and form an important base on which to arrive at the proper solution.

Thirdly, the development of these resources requires considerable capital expenditure. These are not the types of projects which attract investment capital, except those which are preponderantly in the field of power. Ways must be found to finance these projects.

In the fourth place, we cannot accomplish all of the water and power projects in the Middle East at once. It is much better to select one or two of importance which will bring confidence to the people, and carry them out expeditiously. This should be done in a manner which includes the training of the people in the various skills required to construct, operate, and maintain the project in all its phases.

In the selection of projects, two important criteria are how much they will

contribute to the creation of a sufficient food and domestic water supply; and how much they will save of foreign exchange now being used to import food and fibres, so that these financial resources can be used for development purposes.

In the fifth place, on projects entrusted to us, we should consider our responsibility as encompassing more than the erection of the project. For the project to be successful, this responsibility must include assistance in establishing an operation and maintenance organization, and in training local people in proper operation and maintenance practices.

In the sixth place, the fact that water supply and good land are limited throughout the area presents many problems which demand a solution. Deep wells are expensive. The cost per acre foot of storage often is comparatively high; however, we have to work with what is available. In the plateau countries much of the available soil is quite shallow. Careful irrigation should be introduced and practiced, water use controlled. Drainage problems are considerable and means must be provided to prevent waterlogging.

When water first becomes available, the tendency is always to overirrigate, which in turn raises the water table, with its resultant difficulties. If power is provided by a newly-constructed facility, then the second stage of irrigation to be undertaken should be that of wells pumping water for the land which cannot be served by gravity irrigation. This will assist in controlling the water table. Finally, as the newly irrigated acres are brought under cultivation a system of proper crop rotation should be worked out.

Point Four is performing valuable service in this field in many countries. The initial desire is for wheat, to increase the supply of bread grains for home consumption, and for a quick cash crop. This is understandable. But the farmers should be encouraged to plant alfalfa and grasses, particularly on the poorer soils, for pasturage. This will increase the permanent returns from the developed water supply.

Many of the areas throughout the Middle East do not use fertilizer, depending on the silt deposited on their land by the rivers during flood season to provide soil regeneration. When water development facilities are built preventing these floods, it becomes important to restore the fertility of the soil by the use of fertilizers. The establishment of fertilizer production facilities throughout the Middle East will become important. Use of power development should be encouraged for this purpose.

While on a recent study trip of these problems, we arrived at the conclusion that distribution of new land should be in the largest plots possible, and

that the village system of living should be protected so that health, water supply, and training can be accomplished effectively.

There are many other problems connected with water and power development. I mention only these to emphasize that while the storage or water conservation facility is being built, organization and implementation of these phases of the irrigated area must go forward, and personnel must be trained so that they can take over the management of the project when completed.

In the seventh place, I would like to give expression to my personal views that the interests of the people are best served by entrusting this development work to experienced enterprises, and not by having the governments attempt to carry out the work by government force account. There are excellent companies, small and large, which have this necessary experience and which will accept responsibility, if entrusted it, of engineering and constructing the facilities, and of training the local people.

My last and most important point is *people*. The people of the Middle East are indeed a fine people. Theirs has been a difficult life, but we have found them most eager to learn by doing. They have an intuitive ability to learn quickly, and they like to work. Water and power development requires trained people, therefore training is of the greatest importance. We must strive to do this when we are asked to help. Foreign personnel for assignment to these projects should be selected not only for their skill as technicians but also for their ability to teach. They should respect the customs and religions of the country in which they work. Local workmen should be treated fairly, exactly as our American construction workers in the United States. Each man should be paid directly his full wage.

Middle Easterners like to use modern labor-saving machinery. As an example of this, over the past four years in Afghanistan we have not had a single American operating construction machinery. These Afghans, who knew nothing more mechanical than a camel six years ago, are now experienced and skillful equipment operators, and they are anxious to learn more. They are not satisfied just to be operators, they want to be and are foremen. Once they use modern machinery they have no desire to return to the old methods.

IMPORTANCE OF TRAINING

I recently discussed these matters with the Prime Minister of a country in the Middle East. He stated that in the past, when his government hired

foreign technicians to build something, local workmen were confined to hand labor — cutting, carrying, and dumping rock. At the completion of the project, if the government wanted to build another, it again had to hire foreign technicians to carry out the work, as the people had not been taught anything further. He said he was pleased at the American approach because we Americans had no fear of teaching their men to do our jobs, and this was one of the most important contributions we could make.

As an example: My company has now organized, as a result of its training program, a completely Afghan Construction Unit equipped with modern construction machinery for the Helmand Valley Authority in Afghanistan. I wish I could convey to you the pride of the Afghan people in this, their own organization. At present this unit is constructing laterals and canal structures on its own. It is taking on operation and maintenance. Our engineers inspect its work periodically and it is good. As each month goes by it takes on larger assignments and we are looking to the day when it will do most of its own work.

Aramco, also, has made some notable achievements in Saudi Arabia along these same lines in organizing and training local productive organizations. In Turkey and Iran we have joined with local contractors on a joint venture basis to create a local engineering and construction organization.

But in the Middle East, the training of workmen and foremen is not enough. The need for trained administrative and engineering personnel to direct these projects also is most pressing. To create this personnel, candidates should be assigned to the project at its inception.

One great advantage to the country in undertaking these development projects is that they provide an incentive for their young men to return to their homes at the completion of their education and get their experience in their own country. I have on my desk letters from students from this area graduating this June asking my assistance in getting a job here in the United States for several years for training. Their countries cannot afford their absence, and I continually encourage them to return to their homeland and start working there.

It is not always possible timewise or financially to provide the young men of these countries with a college education. I am pleased to mention a most successful short-term educational program being carried out by FOA. It was my pleasure this fall to visit the University of Wyoming, where 13 Afghan students are being given an extensive 16-month course in agriculture develop-

ment. They are being trained especially for work in the Helmand Valley. This is indeed a far-sighted program, and I hope it can be increased each year.

Let me repeat in closing that successful water and power development in the Middle East requires training the Middle Eastern people in all the phases of development, creation, operation, maintenance, and administration. This is not an insurmountable task. There is much to be done and quickly—government and industry working together as a team must and can find the way to do it. As we deal with these problems and prospects of water development throughout the area, let us follow a quotation from the Persian:

Taking the first step with the good thought, The second step with the good word, The third step with the good deed. at length on the essentially changeable nature of the soil. Man can turn a barren soil into a very fertile one by adding just those things that are needed.¹

Today we use the term "cultivable" not as an absolute measurement but as a definition of a property which is itself determined by the interaction of the physical properties of the soil and the economic factors of production which are applicable to and modify it. The full meaning of the definition would, in countries with backward land regimes, also have to include institutional adjustments. It is thus evident that there is no simple relationship between land resources and food production in the sense that an increase of food production presupposes an increase in the extent of cultivated land. The capacity of land to produce food becomes more and more dependent on the nature and amount of added components, other than those originally embodied in the soil; and that capacity may be changed or adapted by the methods and approaches used in its "productivization."

An obvious example is the strikingly higher production of irrigated land formerly under dry farming. The introduction of irrigation means, of course, a much higher capital outlay and/or a higher labor input per unit of land. There are also significant restricting factors, such as availability of water and surface conditions and the danger of salination, which limit the possibilities of irrigation to specific areas. But the fundamental point in our appraisal is the fact that all the efforts to increase output per unit tend to decrease the importance of land in the aggregate of factors which produce the national income, following the increased application of capital and labor.

An increase of physical capital or labor input are not the only factors which can change the productivity of land. An inestimable amount of mental capital has been invested over many years in efforts to improve farming results. Applied research in soil chemistry, new methods of fighting plant diseases, genetic improvement of food plants, and the introduction of mechanical power have led to an amazing increase of productivity in modern agriculture, an increase expressing itself in the rise of output per unit of land and per unit of labor. It is this remarkable increase in the production potential per unit of land and labor which explains the paradox of increased production of food in the face of a decreasing share of the agricultural segment in the total economy in advanced societies. And it is no visionary thinking if one regards this development as still far from having come to an end.

The significance of these trends and potentialities has evaded the attention of writers who limit themselves to a short-term observation and those who

¹ Alfred Marshall, Principles of Economics (New York, 1891).

draw their inferences from conditions in temperate zones with a rainfall sufficient to cover the requirements of annual crops. Unlike countries in the temperate zone, the agricultural potentialities of oriental countries are largely marked by the fact that they include substantial territories which allow and require the use of artificial irrigation for cultivation and for the achievement of their maximum yields. Irrigation makes regular farming possible in regions with insufficient rainfall, and permits cultivation in completely arid zones. Thus it has first a great stabilizing influence on the outcome of farming activities in countries where drought is a constant menace to the farmer. But irrigation has another important effect: by requiring much greater physical effort and capital outlay, it leads to a relationship between the amount of labor applied per unit of area which is basically different from that characteristic of dry farming, which requires no human labor to supply its water needs. The high coefficient of manpower required in irrigated areas thus results in a higher density of population, so that irrigated areas have a much higher potential with respect to labor input, yield, and earning power than unirrigated land. Where irrigated crops have been introduced, the absorption of laborers is greatly facilitated; indeed, the capacity of newly irrigated tracts to employ new farm hands during the first phase of expansion usually exceeds the number of those living in the region.

The significant implications of the introduction of irrigated farming, either in formerly uncultivated arid areas or as a conversion from dry farming or occasional irrigation, have been well studied for the principal irrigation countries, and it is worthwhile to point to recognized findings for a major region. Sir William Stampe assesses the increased yield attributable to systematic irrigation in India, where the monsoon is usually erratic and sometimes fails completely, at an average of 60 to 100 percent.² This is a conservative estimate; yet even so, it means a tremendous increase in production for the subcontinent.

THE LAND SITUATION IN THE MIDDLE EAST

The countries of the Middle East are a good case for the application of the general aspects of the problem just discussed to an individual region. On the one hand, there is Egypt, in which the rapid growth of population during the last decades has so outstripped the expansion of the cultivated area as to provide a serious case of rural overpopulation. The Egyptian Government

² Sir William Stampe, "Irrigation from the Ground Water for Stimulating Food Production in Desert Areas," Empire Journal of Experimental Agriculture (January 1948), pp. 46 ff.

has devised very interesting long-term development schemes for the expansion of the irrigated area, but these will not affect the situation in the immediate future. On the other hand we find such countries as Iraq, Syria, Iran, and Turkey, in which the present population does not yet make full use of the available land reserves. They possess vast territories and a wide range of agricultural potentialities, primarily in the field of irrigated crops but including also dry farming, animal husbandry, plantations, afforestation, etc. The exact extent of their large potential resources of land and water has not yet been fully determined.

Political considerations in former years injected a controversial aspect into any discussion of the agricultural potentialities of the Middle East. The region is overpopulated, was the generalization frequently submitted. I do not hesitate to confess that, even upon my first contacts with this region, I arrived at a very positive appraisal of its potentialities, an appraisal supported by impressions of many study trips throughout the area and confirmed, I believe, by the development which has taken place in recent years.

In a computation of available figures based on conservative estimates which I attempted some years ago interesting data were obtained.³ The cultivable area of the eight countries covered in the survey (Turkey, Egypt, Iran, Iraq, Syria, Israel, Lebanon, Jordan) totals 118 million hectares. Of this area, less than a third was cultivated, leaving 85 million hectares as land reserve for future cultivation. This total does not consider the specific potentialities of irrigation, for which I submitted then an estimate of 15.7 million hectares; of these 7.5 million were utilized and another 8 million were still open to irrigated cultivation. This is a tremendous potential.

I have further assumed, on the basis of rates of natural increase given in the UN publication World Population Trends, 1920-47, that the population for this region will reach 80 million in 1967. We have to relate this figure to our data on potentially cultivable land. Since irrigated land is at least twice as productive as dry-farmed land, we attach to it a weight of two per unit and have then a total land potential of 134 million hectares. This divided by

⁴ The rate of natural increase which had been assumed for the above computation is 1.1 per annum. In a recent memo of the population division of the United Nations the current rate of natural increase in Southwest Asia has been estimated at 1.35. In the same source, however, a higher increase is envisaged for the following decades.

³ See "Land and Population in the Middle East," Middle East Journal (Winter 1951), pp. 39-56.

Projections of populations over decades are highly speculative. The assumption of a very substantial increase in oriental populations does not take into account sufficiently the effects of urbanization on the birthrate, which shows a marked decrease in oriental towns. There are other restricting influences, too, which all lead to the conclusion that such a substantial increase of population is not at all certain.

a population of 80 million gives us 1.67 hectares, or approximately 4 acres, per capita.

According to recent calculations, the amount of land per capita required to produce adequate diets in the United States is from 1.8 to 3.1 acres per capita. Assuming an inferior grade of productivity for part of the Middle Eastern lands as compared with areas of the temperate zone, and reducing our figure for the land available per capita to 3 acres, we are still entitled to say that for the region as a whole there is no need to be concerned over the relationship between land and population for a considerable time to come. The only exception is Egypt. In this country there indeed exists, for the present decade at least, an acute problem of population increase which outstrips the natural resources.

The above data on land resources do not tally with figures in a recent UN survey of economic conditions in the Middle East which comprises, in addition to the countries referred to above, also Afghanistan, Sudan, and Aden.⁵ Although the differences are not too far-reaching, and in the case of a number of countries are even irrelevant, a few comments on the differences themselves should be added. The unused potentially productive land totals 54.2 million hectares as against 86.1 million according to my findings. The main source for the discrepancy exists in the case of Turkey, owing to a narrower interpretation of the term "cultivable" in the FAO report as against the broader definition used by Turkish authorities. The latter include 44 million hectares of meadows, pastures, and grazing land under productive lands, whereas the FAO Report gives altogether only 21.8 million hectares as cultivable. The mission of the International Bank regards nearly 20 million hectares of pastures as potentially good grazing areas, whilst little value is attached to the other half for grazing purposes. There is no cogent reason not to include pastures under "productive land" since they certainly substitute for the growth of fodder crops for the maintenance of animals.6 In the case of Iran, too, there is a different evaluation. The large cultivable area of this vast country with its great water resources needs, as do practically all other regions, much more investigation before a definite estimate can be given with sufficient authority.

PRODUCTION PLANS AND POTENTIALS

What is the meaning of these figures? Is it reasonable to present regional calculations of production potentials when practical requirements of food

⁵ Food and Agricultural Organization of the U.N., Current Development of, and Prospects for, Agriculture in the Near East (Rome, 1951).

⁶ IBRD, The Economy of Turkey (Washington, 1951), p. 14.

appear in the form of concrete market demand for individual areas and must be met as such? And, in addition, are there not many deficiencies and gaps in methods of calculating these potentials, and even if the estimates are acceptable, are there not many obstacles of a socio-political and physical nature which prevent or slow down the immediate utilization of the land in question? Yet, though these qualifications are readily admitted, they are not the relevant point here. First, we are not concerned in this context with the elaboration of concrete and practical schemes for the immediate utilization of individual areas. Our main point is the following: for years prospects of food supply in Middle East countries were, in the light of their population increase, depicted in gloomy terms. Yet the actual trends so far have shown a very different picture. Figures of food production for the area as a whole and per capita data point to an encouraging trend. It is quite an impressive picture. Total food production in the Near East as expressed in index figures rose from 100 in the prewar period to 133 in 1952-53. At the same time, population grew from 100 to 124. This has caused food production per capita to rise from 100 to 107.7 In other words, in spite of a very substantial increase in population, food production has not only kept pace with it but has actually exceeded it.

All this happened, I would now like to add, even before the area came to benefit from the execution of recent projects in agricultural development. There has never been before such an awareness on an international and national plane of the significance of large-scale development schemes in the field of land and water utilization. Entirely new concepts have been worked out which will serve as guiding lines for the construction of irrigation dams, river regulation, and drainage works on a scale without precedent in the Middle East. The second half of this century will fundamentally alter the water geography and land utilization of the region, and very probably the socio-economic structure of its society as well.

In Egypt the revolutionary concept of the "century storage" has been devised. This concept envisages the use of the huge lakes in Central Africa for long-term storage of water. A small increase in the water level of these immense bodies of water, primarily Lake Victoria and Lake Albert means an enormous volume of additional water stored up. A rise of one meter would add 5.3 billion cu. m. to Lake Albert and 67.5 billion cu. m. to Lake Victoria. This and other projects which would completely harness the Nile, could, over a period of 25 years, increase the cultivated area of Egypt from 6 million

⁷ FAO report on conditions in 1952-53.

to about 10 million acres — an increase of 4 million acres. Considering the present ratio of land to population in Egypt, even this expansion of cultivation would, however, not solve the Egyptian problem if the same rate of population increase should prevail during this coming period.

In Israel the order of magnitude is, of course, much smaller. Still, existing plans for the development of the country's land and water resources expect within the coming 6 years an increase in the irrigated area from its present scope of 600,000 dunams to 1.8 million dunams, or in acres from 150,000 acres to 450,000 acres. These plans have as their economic starting point the reduction of the country's present dependence on foreign supplies to a fraction of it.8

Four major developments have been devised for the harnessing and utilization of these water resources. In their order of priority, they are:

- 1. Continuation of regional and local projects based predominantly on groundwater.
- 2. Four major irrigation projects utilizing the firm (summer) flow of the rivers, reclaimed sewage, effluent and isolated unutilized groundwater, and spring flow surpluses. This development is scheduled for execution between 1953 and 1956 with intermediate initial benefits starting from 1953.
- 3. The Jordan Diversion Stage One, utilizing part of the remaining flow of the Jordan, most of the storm run-off in the wadis, and surpluses from the winter flow of the springs, etc. The principal features of this development are scheduled for execution between 1953 and 1960, with first initial benefits available in 1954, while a number of minor features are scheduled for execution after 1960.
- 4. The Jordan Diversion Stage Two, utilizing the remaining flow and miscellaneous surpluses. This development is scheduled for execution only after the completion of Stage One of the Jordan Diversion, *i.e.*, between 1960 and 1967.

In Iraq impressive schemes have been worked out in recent years. Some of these are now in the process of implementation and some have been completed. The Iraq Development Board is in charge of the following major projects, which do not, however, exhaust the potential of land reclamation in Iraq:

1. Wadi Tharthar Scheme, which aims at the elimination of the recurrent disastrous flooding of the Tigris and Euphrates through the construction of

⁸ Cf. Data and plans submitted to the Jerusalem Conference (October 1953), pp. 111 and 143.

a canal with protective dykes and of a dam on the Tigris. The work should be completed in 1956.

- 2. The Habbaniya Flood Control Project, which aims at the diversion of the water of the Euphrates into the Habbaniya Lake and includes the building of channels and a barrage. This work will be completed in 1956.
- 3. Construction of the Diyala Dam. This project is to provide water for the irrigation of the Diyala basin. It is in an early stage of preparation.
- 4. The Irrigation Project of the Lesser Zab, near the Iranian border. This project aims at the construction of a dam with a storage capacity of 5.8 billion cu. m., which is regarded as sufficient to irrigate an area of 2.8 million acres.9

Perhaps the most remarkable case of an accelerated development of land resources has occurred in Turkey. Here, a fortunate combination of political and economic circumstances operated to bring about a unique expansion, primarily in the sphere of agriculture but also in other sectors of the economy. The results are surprising, even if measured in terms of achievements in more advanced countries. The production of wheat rose in index figures from 100 in 1950 to 194 in 1953, barley from 100 to 164, and maize from 100 to 175 during the same period. The increase was due in part to an extension of the area and in part to an improvement in crop per unit of land. Both achievements, however, were made possible by the rapid mechanization of Turkey's agriculture and the improvement in its road system. The following tabulation shows the increase in utilization of arable land in Turkey for selected years in millions of hectares; it does not, of course, take into account the expansion envisaged for the future:

I	934	1951	1952
Cereals	5.9	8.8	9.9
	3.7	5.7	9.9
0.1	I.I	2.0	2.1
_			
Total arable land (excl. pastures) 1	0.7	15.8	17.6

Source: Annuaire statistique de la Turquie.

Most of the projects so far mentioned aim at the expansion of the area under cultivation, at the expansion of the area under irrigation, at drainage schemes, and the like. Yet there is, as mentioned before, another potential of improvement which has so far been tackled in only a few cases: namely, the expansion of food production through plant improvement, fight against disease, efficient use of fertilizers, new methods of crop rotation, etc. Until now these new techniques have been tried out only to a limited extent. But the

⁹ Iraq Development Board, Annual Report for the Financial Year 1952-53 (Baghdad, 1953).

experience available in Egypt, Israel, and Turkey certainly indicates that there are indeed great possibilities in the further development of the new methods. The progress achieved in certain Western countries with conditions not too different at the time can serve as demonstration of the margin of advance which is possible.

The United States is certainly the country with the most impressive record in the expansion of food production through plant improvement. The introduction of new wheat varieties produced by the U.S. experiment stations and grown by American farmers is responsible for an increased production of 170 million bushels per year above what would have been possible with the varieties available 25 years ago. Very satisfactory results have been obtained with regard to most other crops in the United States. It is gratifying to note that upward trends can be reported from almost all parts of the world, including Middle East countries, where the experience of more advanced countries and scientific methods of plant and crop improvement have been applied. Though it cannot be proved that such agricultural progress can be transferred to all areas, it seems safe to assume that a considerable increase of food production is possible in the area under review along the same lines: extension of the crop area and improvement of plants and cultivation. This leads us to the following considerations:

- 1. In economically advanced countries, progress in agricultural techniques resulting in higher yields per unit of land has at least balanced the impact of population growth on food demand. The economic weight of the land factor in the aggregate of components in food production has been substantially reduced by increased capital outlay, physical and mental.
- 2. In the majority of Middle East countries there exist large reserves of unused or not intensively used land which open vistas for a greatly increased food production. Calculations of production potentials based on the attainable yield increases, as well as on the possible expansion of cultivated land, well justify the view that a balance between food demand and production is possible for these areas.
- 3. The land issue is thus not the primary question for the future fate of the Middle East countries. The crux of the problem turns on the density of the population in relation to the cultural and material stage which such populations have reached.

The amazing windfall which has happened to the region through the discovery of oil in unique quantities permits us to speak today of a revenue of many millions and even billions of dollars which will accrue to the region as

a source of income secure for years to come. It may be left to the endeavors of imaginative engineers, economists, and social scientists to devise the best uses for these abundant funds. There can be no wiser course for the region, as well as for the world at large, than to apply these means to a broad-minded and forceful policy of development for the benefit of all the inhabitants of the region. Needless to say, such an approach needs wisdom, cooperation, and goodwill, strenuous and conscious efforts, and also permanent vigilance toward the relation between available and potential resources and toward the relations between the various nations and communities which dwell in the contemporary Middle East.

Second Session, Friday afternoon, March 19th Presiding: RAYMOND F. MIKESELL, University of Virginia

THE RESOURCES AND THEIR POTENTIALS

III. Petroleum and Minerals

REAR ADMIRAL ANGUS SINCLAIR, USN (RET.)

WHEN WE SPEAK of the mineral resources of the Middle East our minds instinctively revert to petroleum and dismiss all other resources as negligible. Insofar as the production of known minerals is concerned, there is some reason for this attitude. With the exception of Turkey's high grade chromium ore, none of them plays an important part in the commerce of the world.

The list of minerals which are known to exist in the Middle East is almost endless but, in the main, only small deposits have been discovered. Here I would like to say that in the past the search for minerals has been spasmodic and that vast areas of this region have been subjected to only a cursory geological examination. A few minerals, such as sulphur, manganese, iron oxides, gypsum, and lignite, do have interesting potentialities, but only petroleum plays an important part in the industrial development of the world as well as in the political and economic life of the Middle East. At this point I want to emphasize that, valuable as this commodity is, it is of less importance to the Middle East than tillable land, water, and manpower. Petroleum resources are of value to the producing countries only to the extent that they are utilized to develop the countries' primary resource — its inhabitants.

PETROLEUM RESERVES AND PRODUCTION

All of you have had to sit through many discussions of Middle East petroleum, and I have no doubt that most of you are thoroughly familiar with the facts and figures. However, these figures do vary every year so I will run through the more important statistics as rapidly as possible. At the end of 1953 the world's proven reserves were calculated to be 139 billion barrels, of which 58 percent was concentrated in the Persian Gulf area. Other large concentrations were in the United States, Venezuela, and the Soviet Union. The reserves of these three nations showed little change during the year, the big increase — some 16 billion barrels — resulting from discoveries and extensions of known fields in the Persian Gulf area. All of these figures on reserves must be taken with a liberal dash of salt. Those for the Soviet Union are little more than guesses and those for the Persian Gulf, with the exception of Bahrain, would seem to be conservative.

Now for production: the world figure was 13 million barrels per day, of which the United States produced a little less than 50 percent and the Middle East 18 percent. Within the Middle East the greatest change took place in Iraq, where production showed an increase of 49 percent. This increase was largely due to the first full year's operation of the Kirkuk-Banias pipeline and the mandatory production requirements of the revised concession agreements.

In essence, these figures on reserves and production simply indicate that Venezuela and the Persian Gulf are the only two areas with large exportable surpluses. The bulk of Venezuelan oil is absorbed in the Western Hemisphere, while industrial Europe is largely dependent upon the Middle East for its petroleum requirements.

I would now like to digress for a moment to point out some of the highlights of area petroleum developments in the past year before returning to the main subject—the effect which oil resources have had upon the producing countries of the Middle East.

Of course, the most noteworthy event of the year occurred in Iran, where the political changes of last August created a calmer atmosphere in which Iran's financial and economic problems could be discussed. The situation in Iran has been thoroughly covered in the press and quite recently was the subject of a symposium held by this Institute. I believe that all of you are thoroughly familiar with what has transpired. Currently, informal conversations are going forward and there is a likelihood that Iranian production will be resumed before the year is out. However, I would like to point out that the restoration of Iranian oil to the world's market may create difficulty elsewhere, as present-day supply is more than adequate for current demand. The restoration of the Abadan refinery also presents difficulties. Its capacity has been offset largely by European construction and the new 100,000-bpd refinery now being erected at Aden.

The recent oil discoveries in the Persian Gulf have been mentioned, but insofar as they constitute an important addition to the area's reserve, I would like to take them up individually. In the Basrah concession area, oil has been found at Rumalia, about twenty miles west of the Zubair field. The discovery

of the Wafra field in the Kuwait Neutral Zone is known to all of you. In the early part of this year it was brought into commercial production. In Saudi Arabia an exploratory well, some 14 miles south of the Ghawar field, was brought in in December. There is a strong possibility that this discovery is a major southward extension of Ghawar. The other important discovery was made at Murban in the Shaykhdom of Abu Dhabi. Up to the present time, the extent of these discoveries has not been determined but it is believed that all of them are of major magnitude.

Nineteen fifty-three was also notable for the increase of exploratory effort in the fringe areas — offshore along the Trucial Coast and in Dhofar, Yemen, British Somaliland, Somalia, and Ethiopia. In these areas, with the exception of Ethiopia, activity has been primarily in the form of geological reconnaissance. In Ethiopia, two wells have been drilled with inconclusive results. Moving along to the Levant Coast, we find intense exploratory activity in Israel, which has come about as a result of the Petroleum Law and Regulations of 1952. By the end of the year Israel may know whether or not there are commercial petroleum deposits within the country.

Another major highlight of the year has been the trend toward the encouragement of private enterprise which is now taking place in Turkey and to a lesser extent in Egypt. In Turkey, the search for petroleum has been retarded by lack of funds and scarcity of technical personnel. At the same time, its petroleum requirements have increased steadily and within the past few years have been a heavy drain on its supply of foreign exchange. In the last two years Turkey has liberalized its financial laws so as to permit the repatriation of invested capital, and recently the National Assembly passed a Petroleum Bill which is distinctly encouraging to foreign companies. In short, Turkey has decided that a government monopoly of petroleum development is a luxury which the country can no longer afford. In Egypt, petroleum is still a liability despite the fact that the country has producing areas and good prospects for further development. Within the past year Egypt has made an attempt to stimulate its petroleum industry. The mining laws of the country were modified and there is evidence of an awakening interest on the part of foreign companies. Thus 1953 has been a year of important discoveries, widespread exploratory activity, and a growing appreciation on the part of some of the governments of the responsibility which petroleum entails.

UTILIZATION OF OIL INCOME

And now to return to petroleum resources and what their development means to the producing countries. In 1952, the last year for which complete

figures are available, petroleum returned to the Persian Gulf area \$424.3 million, of which \$110 million went to Iraq, \$139 million to Kuwait, \$160 million to Saudi Arabia, \$9 million to Qatar, and \$6.3 million to Bahrain. These figures are taken from the London *Economist* and are expressed in dollars as a matter of convenience. Of course, the companies make other heavy expenditures, as for local payrolls, permanent facilities, and ancillary services which directly benefit the country. However, in this case we are concerned only with how the governments are utilizing the direct return from their major mineral resource.

The figures which I have mentioned may sound like large sums, but when placed on a per capita basis — \$21.50 for Iraq, \$26.60 for Saudi Arabia, \$927.00 for Kuwait, \$552.00 for Qatar, and \$52.50 for Bahrain — the picture is somewhat different. With the exception of Kuwait and Qatar, where we have large reserves and small populations, the amounts are small; and in the light of efforts toward modernization, they appear even smaller. Furthermore, there is no prospect of radically increasing these figures except at the expense of some other area. It cannot be done by nationalization, nor can it be done by squeezing the companies. In the long run the latter course, carried to an extreme, will shift the burden of capital investment and operational expenses to the government, with the companies simply acting as management contractors. If the companies are to continue to operate effectively in the Middle East they must be allowed a profit commensurate with their risk, and the risk in the Middle East is high. In other words, there is a definite limit to the sums which petroleum can return annually to the governments and those sums are only a small portion of the amounts required for over-all national development.

IRAN

Now I would like to turn to the effect which these petroleum revenues have had upon the development of six oil-producing areas: Iran, Iraq, Saudi Arabia, Kuwait, Qatar, and Bahrain — three independent nations and three protected shaykhdoms.

In Iran the record is not good. Between 1912 and 1951 that country obtained through petroleum royalties about £125 million. Annual payments went into the treasury and were disbursed in the normal course of governmental expenditures. Since the early thirties various government bureaus have considered a number of development plans, none of which were harmonized with available revenues or the desires of other bureaus. In the late forties the Government had a long-range economic plan drawn up—and here for

the first time the country's basic economic needs were placed on a cost basis. Incidentally, the plan, which called for an outlay of over \$500 million, was essentially a capital works plan with less than 20 percent allocated to health and education. A Development Board was created but shortly thereafter the oil dispute flared up and the plan as well as the Development Board became moribund. Today, Iran has little to show for its oil revenues, and for the past three years its petroleum resources have been a political and economic liability which has brought the country to a very unhappy financial state. Now that the atmosphere is being cleared, there is a hope that petroleum can take its proper place among the assets of Iran and be made to work for the advancement of the country.

IRAQ

The utilization of petroleum revenues in Iraq was much the same as in Iran until the late forties. However, in Iraq the magnitude of development requirements was more obvious. A number of plans and surveys were made of requirements and resources, and it was apparent that petroleum would have to be the base upon which any long-range plan would rest. At the same time, little effort was made to correlate petroleum revenues with development needs. Revenues were expended and the plans remained unimplemented.

In 1950 the similarity between Iran and Iraq came to an end. In the Iraqi concession discussions of that year, representatives of the Government and the oil companies jointly determined the amounts which petroleum could return to Iraq. Concurrently, the Government created a Development Board which was charged with the execution of approved capital works and to which were allocated all petroleum revenues. This amount was later reduced by 30 percent. The Board's budget for the years 1951-56 was fixed at approximately £153 million, of which about one-third was allocated to flood control and irrigation. At present, two flood control projects are well advanced and final engineering plans for three water storage and irrigation dams have been completed. In addition, the Board has in progress a number of programs dealing with transportation, community development, public health and education, agriculture and industry. Strangely, one of the most important industrial projects, the construction of the 24,000-bpd refinery located at Dawra near Bagdad, is not under the Development Board. It is under the supervision of the Oil Board, which in turn comes under the Ministry of Economics. This particular project is most interesting in that it is the basic component in an integrated nationwide industry conceived by, and in process of execution by, the state. It may be regarded as a combination of a selfliquidating capital venture and a large-scale training program. The development of this program is a matter of considerable interest to other area governments as well as to the oil companies. It is too early to evaluate the results of Iraq's programs, but one thing is certain, and that is that the government's petroleum funds are being put to work.

SAUDI ARABIA

The situation in Saudi Arabia is different. In 1938, the year in which the commercial exportation of oil commenced, the country had an income of approximately \$7 million, of which about \$1.1 million was derived from oil. During the last fiscal year, ending with March 1953, Saudi Arabia's income was about \$200 million, with some \$160 million coming from oil. Despite the tremendous increase in revenues, expenditures have increased even faster and today the country is slightly in debt. The most striking feature of past Saudi disbursements has been the lack of balance. The ultimate cost of balanced development is a matter of conjecture, but we do know that the country's petroleum resources, large as they are, cannot carry more than a small percentage of the load. Even Ibn Saud, great man that he was, could not visualize the disparity between his ideas of modernization and the income from oil. Nor could he visualize the necessity for capital investment. There was no lack of appreciation of his responsibility, but there was an evident tendency to overestimate revenue and plunge into large-scale material development. The Dammam-Riyad railroad is a case in point. The worth of the railroad as a facility in bringing Riyad into closer touch with other parts of the country is evident; however, emphasis on this project has diverted funds and attention from the more important problems of health and education. Up to date, Saudi Arabia's utilization of petroleum revenues has followed a traditional patriarchal pattern. At times it has been accompanied by extravagance that neither the royal family nor the country can afford.

KUWAIT AND QATAR

It has been said many times that Kuwait has no financial problems. To this statement I take exception. At present the Shaykh's government has an imposing surplus of funds, but the wise utilization of those funds is a problem of considerable magnitude. So far, the emphasis on spending has been placed upon social advancement and civic improvement. Today Kuwait has the most elaborate facilities for free medical care and education in the Middle East. The direction of spending has been good, but the volume and haste are

open to criticism. Little attention has been paid to the operating expenses of the government's programs, and this item promises to be a heavy drain on the Shaykhdom's future revenues. The *Economist* recently estimated that if the current £90 million development program is completed, the resultant operational expenses will be about £25 million per annum. The time is approaching when Kuwait, if it is to receive an adequate return from its petroleum resources, will have to examine its disbursements with an eye to their future effects. A step was made in this direction when the Investment Board was established in 1953. The Board is charged with investment of such funds as the Shaykh desires to place at its disposal. It seems as though the next steps should be the establishment of a modern accounting system and budget controls to insure that Kuwait remains on the right side of the ledger.

Prior to 1950 Qatar was not embarrassed with wealth. Up to that time mere survival was the paramount issue in this most isolated of our oil-producing areas. Currently, the Shaykh has evolved plans for the expenditure of about £6.5 million for capital works development during the period 1953–56, but few of the plans are past the discussion stage. It is evident that the ruling family is going through a period of adjustment from poverty to personal affluence and that for the time being there will be little change in the over-all picture of Qatar.

BAHRAIN

Our last area — the Shaykhdom of Bahrain — is to my mind the most interesting of all oil-producing areas, and I include areas outside of the Middle East in that statement. Therefore, I would like to discuss it in some detail. As all of you know, oil was discovered in Bahrain in 1932, and commercial exportation was started in 1934. By 1935 it was known that Bahrain's reserves were not large — in fact, they are the smallest in the Persian Gulf area. At present they amount to about one percent of those of neighboring Saudi Arabia.

In the early thirties Bahrain was one of the poverty-ridden principalities of the world. In those days of depression—and the depression was felt more keenly in Bahrain than in Washington—it had few tangible assets, but it did have a far-sighted ruler, Hamad Ibn Isa Al Khalifah, a balanced budget, and an able advisorate. The turning point came in 1936 when the government was able, through petroleum revenues, to increase its tiny reserve fund from \$42,000 to \$84,000. (For convenience I am expressing Bahrain financial figures in dollar equivalent at the rate of 1 lakh = \$21,000.) By the end of the next

year, the country was in a stable position, and I would like to give you some of the budget figures from the Annual Report of the Government for the year March 1937 to February 1938:

Total revenues	\$464,000	es
Receipts from customs	\$139,000	(25%) (66%)
Oil royalties	\$305,000	(66%)
Principal Expenditures		
Privy purse	\$193,000	(42%) (17%) (16%)
Special projects (health, education, etc.)		(17%)
Reserve fund	\$ 76,000	(16%)

At this point I would like to quote two sentences from the same report:

It is essential that this fund [the reserve fund] be built up in order to provide an assured income for Bahrain when revenue from oil begins to decrease. This event may occur from natural causes owing to the exhaustion of oil supply, or by reason of commercial policy in the oil world.

These two sentences form the keystone of Bahrain's financial policy—a policy which has been carried through to the present day.

Skipping to the year 1953 we find that Bahrain still has a far-sighted ruler, Sulman Ibn Hamad Al Khalifah, a balanced budget, and the same able advisorate. And here I would like to give you some of the budget figures for the year October 1952 to September 1953. Our own government might find them interesting!

Total Revenues Oil revenues less ½ to privy purse Customs receipts Interest on reserve fund	\$5,412,000 \$1,890,000	(68%) (24%) (5%)
Principal Expenditures		
Government operating expenses including admin-	8	2 272
istration, courts, and public protection		(9%)
Health and education	\$1,464,000	(18%)
Public works	\$1,453,000	(18%)
Two capital works projects — gas supply for		
city of Manama and deep-water terminal	\$1,260,000	(15%)
Surplus for investment		(36%)
1776		

In a comparison of the budgets for 1938 and 1953 the most striking feature is not the increase in oil revenue but the startling increase in customs receipts and interest on the reserve fund. At the end of 1953 the reserve fund was approximately \$10 million. The other noteworthy features of the budget are the balanced expenditures for education, health, and public works, and the small amount expended upon administration.

The change in Bahrain itself is even more pronounced. There has been a

gradual, even development of physical facilities, government, and people. Today Bahrain, through improvement of its port facilities, is becoming the transshipment center of the Persian Gulf. Its government is stable and effective. It has taken long steps forward in both curative and preventive medicine—cholera and smallpox have disappeared. The incidence of malaria has been materially reduced and a tuberculosis survey is now under way. In the field of housing the government encourages its nationals to own land and build their own homes. And, finally, it has a relatively high scholastic level which is being raised year by year.

These changes have been brought about by the rulers who have made their petroleum revenues work for their country. Of course, it is well known that Bahrain is a "protected state" in treaty relationship with Great Britain and that it does not have to support a military organization. However, I wish to emphasize that the Bahrain-British relationship has little to do with internal affairs, and this is a question of internal development which we are discussing. Similarly it is well known that Sir Charles Belgrave has been for many years an invaluable member of the advisorate, but I would also like to emphasize that Sir Charles could have accomplished little without the leadership and cooperation of the rulers who have carried the load of responsibility.

Today Bahrain is stable, prosperous, industrious, and confident. It may well be considered a model of what petroleum can do for the development of the Middle East's greatest resource — its people.

Second Session, Friday afternoon, March 19th Presiding: RAYMOND F. MIKESELL, University of Virginia

THE RESOURCES AND THEIR POTENTIALS

IV. Manpower

E. Reeseman Fryer

Middle East Representative, International Development Services, Inc.

THE ABLE SPEAKERS who preceded me have described the vast physical resources of the Middle East. But material things are important only in proportion to their service to man. They are resources only because he has made them so. Man of the Middle East is the measure of all things in the Middle East.

It is redundant, I know, to remind this conference that Middle East Man was the earliest significant resource of contemporary civilization. The arch, which sustains the walls and roofs of modern architecture, was unknown to the relative barbarians of western Europe until long after the conquests of Alexander. We know, from the excavations of the English archeologist, Sir Charles Leonard Woolley, that the arch was common in Sumerian buildings as early as 2000 B.C. These same Sumerians taught us writing. And Babylon, which blossomed from the seed of Ur, changed the mystery of the movement of the stars into an exact science long before most westerners had learned to count. "Indeed," according to Ceram, "they succeeded in determining the lunar revolution within four seconds of the figure arrived at by the most elaborate technical means." Middle East Man built the foundations for the industrial revolution; but history destined Western man to complete the structure.

Having thus spanned in a paragraph the immensity of time and achievement, I shall try to avoid other references to history, except for a pause to pay tribute to the miracle of the rise and influence of Islamic culture upon Western science, art, and literature, an influence which did not ebb until Islam's nearly insatiable hunger for knowledge and its own creative genius were, in the words of Professor Habib Amin Kurani, "stifled by doctrinal rigidity and

¹ C. W. Ceram, Gods, Graves, and Scholars (New York, 1952), p. 318.

narrow sectarianism." ² Our concern is not with history but rather with Contemporary Man of the Middle East as a resource.

The inhabitants of the Middle East are a complex polyglot of peoples, tribes, and clans. But, for the purpose of this discussion, which is concerned more with the ways they make their living than with the ethnic and other divisions that would engage the attention of the anthropologist, I shall place the people of the Middle East in the following three categories, which have been used by others before me: (1) The Grass People; (2) The Sedentary or Village People; (3) The Urban or City People.

THE GRASS PEOPLE

Most travellers in the Middle East see its endless deserts, its high plateaus and its mountains as vast untracked wastelands, almost barren of life. In reality, the pressure of population on the surface resources of these three ecologic regions is as great as the pressure upon each precious acre in the Valley of the Nile. Every palatable blade of grass within range of water is eaten to the ground. Nearly every thorn bush is defoliated by the ceaseless nibbling of the camel. The nomadic peoples of the Middle East are engaged in a never-ending struggle for grass. The desert Bedouins follow the rains across the deserts in an endless search for grass; and, in periods of extreme drought, cluster around the remaining water holes to reach out cautiously to the farthest perimeter fixed by their thirst and that of their animals.

In addition to the desert Bedouin are the semi-sedentary tribes which each year in early spring leave the valleys and move up through the steppes to the mountain meadows, returning to the valleys before winter comes to harvest the crops they have left behind. In these tightly-organized, regular movements, nothing is left to waste and little to flower. The point I wish to make is that the grass people are highly important socioeconomic units which are not necessarily dependent upon the sedentary and urban peoples. Through their flocks and camels, they convert the range resources to meat, hides, mohair, wool, and transportation.

These are the free men of the Middle East. Like the early American Indian, they "see God in the heavens and hear Him in the winds." And, as is the lot of all free men, those less free are prone to attack their liberties. They are usually regarded by the central governments as subjects on which to operate instead of being accepted for what they really are — leading actors in the epic drama of the Middle East.

² T. Cuyler Young, ed., Near Eastern Culture and Society (Princeton, 1951), p. 152.

One sees in the efforts to "civilize" the grass peoples, and nearly everyone wants to civilize them, some of the same processes which motivated the Anglo-Saxons when they disguised racial arrogance with philanthropic rationalizations to assimilate the American Indian into white society. But, "perhaps [they believe]," as Felix Cohen once said, "the lamb that is assimilated into human flesh and blood attains a higher status than when it was frolicking in the meadow." ⁸

If the contribution of the grass people to the Middle Eastern economy is to be increased, the rugged personal characteristics which spring from their environment must be preserved, not subjugated. Only free men with a high sense of purpose and of their own importance in the national economy make the best use of the grasslands.

Grass is a crop just as alfalfa, corn, and olives are crops. The land on which the grasses grow and the animals which harvest them are very important to Middle East development. They deserve the same considered husbandry as we would have sedentary peoples give to their irrigated farm plots. So, in our own passion for development, let us not overlook the great resource which is the grasslands, nor destroy an even greater resource of all human kind, the grass peoples.

THE SEDENTARY PEOPLE

We now turn to the sedentary people of the Middle East. If one were to ask a free-wheeling Bedouin aristocrat to identify the sedentary people, he would probably describe them as those poor, plodding human beings who, almost literally chained to a plot of ground, a wooden plow, an ox and a landlord, live in primitive mud huts which have been compressed into the villages which dot the watered places of the Middle East.

The Bedouin would be indicating the modest scorn he feels for the people whom fate has destined to live as farmers. He would be guilty of an unscholarly and perhaps even a shocking generalization. But from the point of view of this paper, his description is acceptably accurate. I recognize the existence of pronounced climatic, ethnic, cultural, and other differences; but, the proximity of the bulk of sedentary people of the Middle East to the description of my mythical Bedouin creates a defensible stereotype.

The great mass of the sedentary people only rarely leave the general area of their villages. They are desperately poor. They are compelled by poverty to deny their lands the sustaining vitality of the processes of growth and

³ Felix S. Cohen, "Americanizing the White Man." Unpublished monograph.

decay, by burning the manure of their animals for fuel. They suffer most of the diseases of unsanitation and malnutrition. They are generally illiterate. They are nearly always in debt, on which they pay exhorbitant rates of interest, and their agricultural technology has changed little since the Mongol invasion.

If they are freeholders of long standing, their inheritance has been so fractionated by the inexorable processes of descendency as to leave scarcely enough land for subsistence. If they are tenants in landlord-owned villages they may receive as little as one-fifth of the crop as the gross product of their labor and tools. The peasants of landlord villages, particularly, are the victims of every predatory interest of colonialism. They are no less its victims if the colonialism be of the home-made variety, or impressed by a foreign power.

There are similarities between this depressing picture of the village people of the Middle East — who make up about 75 percent of the population — and an earlier period of our own South. But between the similarities I must inject two important differences. The soils of our Southern states are among the best in the world; and the South has a temperate climatic range which favors an abundant agriculture. However, despite the favors of climate and soils, history witnessed but a few years ago the incredible paradox of starvation in the midst of plenty. We in the United States have seen how the ravishing appetite of colonialism can impoverish a land and its people. We saw, first, the destructive influence of the European colonialism. This was followed, much later, by the colonialism of the large insurance companies and other similar money interests, who became the landlords of the South.

The extractive interest of both kinds of landlords was basically the same. The end results were the same—impoverished people, impoverished soils, high birth rates, high death rates, widespread nutritional diseases, and the debt and hunger that culminated in the fury of John Steinbeck's *Grapes of Wrath*. The South is rising from the ashes of its social and economic distress. This is attributable largely to the enlightened actions taken on all fronts by the agencies of government. It is attributable also to a steady retreat by the enlightened landlords from the evils of monoculture. But most credit must be given to the people themselves.

The peasants of the Middle East will rise also with their increasing awareness of the world beyond the horizons of their villages and even their countries. The free world can only hope, while lending a sympathetic helping hand, that enlightened governments will awaken in time to release the pent-up energy of individual incentive to build strong, democratically oriented nations, from the essential greatness of their peasant peoples. For, despite

my dreary picture of the peasant of the Middle East, he is its most valuable underdeveloped resource. Centuries of economic gouging have been unable to mine his character of the rich spiritual heritage which molds his attitude toward his God and his fellow men. He shows an incredible capacity for thrift, for hard work, patience and perseverance. His native shrewdness has been sharpened by his age-old fight for survival. And if he is slow to adopt new ideas, it is only because the horizons of his learning have been so limited and he has lived so long on the threshold of famine that he cannot afford to take a chance.

THE URBAN PEOPLE

The urban peoples (and I refer here to those who live in the cities as opposed to such outsized villages as Erbid, Qatif, and Sultanabad) are an agglomeration of all of the people of the Middle East and of foreigners. The people of the cities, unlike those of the grasslands and of the villages, are marked by differences rather than by similarities. These are the retained differences of ethnic origins, and of social and economic status that never quite blend into a composite. They are the contrasts of extremes: of order and anarchy, of wealth and poverty, of intellectuality and illiteracy, of disease and health, and of palaces and slums. The urban peoples identify themselves with these extremes; and if their cities are melting pots, the fires have been banked for a long time.

If the majority of the urban peoples have a coloration which appears to set them apart, it is a characteristic forwardness, a kind of extroversion given them by ruthless competition for a livelihood. One feels a latent power in the teeming humanity of the cities of the Middle East. It is a power which may trigger the explosive forces of repeated destructive revolutions, or it may be directed to provide the leadership for the renascence so long overdue. How this power manifests itself in the years ahead will be determined by the genius of its own leadership and by the spiritual as well as material wisdom of the West.

It becomes apparent that Middle East society is composed of three social forces: the grass people, the sedentary people, and those who gain their livelihood from the functions of the city. Each retains a measure of cultural and functional independence of the other, but actually all three are so bound together by economic and social ties as to be inseparable. It is this basic interdependence of Middle East society which must engage the attention of the economic planners. They, in turn, must enter into a firm partnership with

the social scientists if they are to come out with well-conceived plans for socio-economic development.

I hesitate, almost, to mention the word "plan" in connection with this discussion of the human resources of the Middle East. Words like "plan" and "survey" are held in ill repute in that part of the world. "Five-foot shelves" of plans and surveys are gathering dust in almost every ministry. The Middle East doesn't want plans. It wants action, but paradoxically, it first needs plans — plans for action. It needs the equivalent of construction blueprints. The preachy generalizations, now gathering dust on the shelves, are of little help. The architects of the future of the Middle East must first decide the kind of structure they want to build, and then get down to cases. They must decide the course they want to take.

Most of such decisions have thus far been made by westerners, or by conquerors. Both have tried to graft imperfect Western twigs on the tree of ancient culture and history of the Middle East. The fruit has been classical systems of education; industries based upon the exploitation of labor; land reform without credit or adequate follow-up extension services; health ministries devoted to cure rather than prevention; agricultural ministries devoted to experimentation; and government structures so highly centralized that action is strangled in the folds of their own bureaucracies.

The fruits have too often been half-formed Western hybrids which failed to mature as the best that Western experience and technology have to offer. The West can communicate much of its technology to the Middle East. It can send abroad the best of its own experience, but, in the final analysis, both must be adapted, molded and enriched by the Middle East's own genius; that from this may emerge in the Middle East an animating spirit — a new genius: a new genius that would take the best of the social and economic advancements of the West and reject those elements which do not fit into the patterns of Middle East aspirations. It would freely lend and borrow ideas, but its plan — and the action that follows — would be made by, and for, the Middle East.

This new genius will recognize the futility of land reform without the accompaniment of credit. It will appreciate that the peasant, in his newly-acquired status of landowner, will become a sell-out to the money-lender unless he has access to low-interest capital sympathetically advanced to ensure his success as a farmer. The peasant will make a poor bargain indeed if he is forced by bad planning to exchange a sometimes benevolent landlord for an always predatory money-lender.

The new genius, I believe, will drop the frivolities of the Middle East's systems of classical education, except for those who can afford to be classical and frivolous. It will build a system of education, open to all, which educates men for life, so that they may know, and themselves propound, the reasons why: the reasons for conservation, the reasons for the seasonal use of Godgiven grasses, and the reasons for leaving some of these for seed. Carrying capacity, seasonal use, proper shearing, and selective breeding would become familiar terms and livelihood practices under a system of education devised for the people of the grasslands. Nor would the new system chain the grass people to the conventions of the schoolhouse. Education would become as itinerant as the Bedouin. The new genius would take education to the people instead of bringing the people to education. Only thus can the nomadic peoples be developed to make their higher contribution to the economy and rebuild the grasslands of the Middle East. Surely there is Qur'anic sanction for the practices of conservation in this passage:

And we spread out the earth, and cast stable mountains upon it, and caused to grow there plants of all beauteous kinds. . . . And we sent down water from heaven as a blessing, and caused thereby gardens and harvest grain to grow, and tall palm-trees with spathes heaped up, a provision for our servants; and revised thereby a barren land.

I believe the Middle East will develop a philosophy among the students in its schools that will take some of the glamour out of uncalloused hands and instill in its youth the honor of creative labor. The new genius will teach them to judge men less by the stiffness of their collars and more by their contributions to the national welfare. The University youth of the Middle East, thus taught, will discover the satisfactions of service to their fellow men. They will view with impatience the attitudes typified by the story, told in the Middle East, of two old men who were on their way to Medina in a donkey cart when suddenly their driver fell dead. They placed him by the side of the road and then were obviously bewildered. Wringing his hands, one looked helplessly at the other and said, "How shall we get to Medina? I am an Emir, and you are an Emir, and there is no one to drive the donkey!" 4

The Middle East's own planners will, I believe, condemn the separate disciplines that would play lengthy solos in the composition of development. Public health programs vigorously pursued without concurrent educational, agricultural, and industrial developments serve only to aggravate hunger by increasing the number of chairs around an already empty table. On the other hand, the new planners will condemn the gloomy prophets who worry so

⁴ Told by Philip Kidd.

about the problems of overpopulation that they do nothing. I believe that a region or a country should be charged with being overpopulated only when it has exhausted its physical and intellectual resources. The great river systems of the Middle East remain unharnessed. The bulk of its minerals, including petroleum, are still locked in the earth. Its great highway systems are still to be built. Its land is producing about half the food of which it is capable. Its industrial revolution has not yet come. And the greatest resource of all, its people—its manpower—has barely scratched the surface of its potentialities. These potentialities will become fully manifest only if a greater emphasis is given to education. If systems of education, based upon the livelihood requirements of the Middle East, are designed and carried out, the other things will fall into place. This suggests many-sided institutions and training aimed at the life problems of the major dependency groups.

There is a gap of at least a century between general Middle East practices and the most modern methods of soil and plant husbandry. This and other similar gaps will be closed only if people know the reasons why. This argument taxes the patience of those who want to start putting the water on the land immediately—who want to make the dirt fly. Let the dirt fly; but it will not do much good unless more emphasis is given to the training of men than to the preparation of land. People must know the why's of fertilizer, of pure water, of prenatal care, of complicated machinery, and even of bore-hole privies, before such things have significant meanings.

Education is nothing more than the communication of knowledge. My appeal here is for emphasis on the communication of that particular knowledge essential to the development of the human group concerned. The gap between practice and potential will be closed in no other way. A start can be made quickly, and will provide its own momentum. Aramco's experience at Dhahran has demonstrated how quickly the Bedouin, who for centuries had known no life but the pastoral simplicity of the desert, can be taught to shift gears from the camel to the mechanical gadgetry of the West.

The mobilization of the human resources of the Middle East will not be easy. The battle for abundance will be lost unless the battle against ignorance is won. Somehow, man's own problems in dealing with himself always seem more complicated than those which can be solved with a slide rule and transit. But the human problems must be solved before really significant progress is made on the development of the material resources. It would seem that a civilization which has split the atom could find ways to bring to flower the latent greatness of the human resources of the Middle East.

Banquet Session, Friday evening, March 19th Presiding: John D. Jernegan, Department of State

THE ROLE OF FOA IN THE DEVELOPMENT OF MIDDLE EAST RESOURCES

NORMAN PAUL

Regional Director, Near East, South Asia and Africa Operations, Foreign Operations Administration

IT IS A GREAT PLEASURE and honor for me to be with you tonight and to have the opportunity to describe to you some of the means by which our Government is contributing, through the Mutual Security Program, to the development of that large and all-important area of the world known as the Middle East.

I would like at the outset to extend greetings to you from Mr. Harold Stassen, Director of the Foreign Operations Administration, and to bring the sincere best wishes of our entire organization to The Middle East Institute for the success of the conference in which all of you are now participating. My chief personal regret is that I have been unable to participate in discussions which you have been carrying on, but I have just returned from an extended trip throughout the Near East and South Asia; the accumulation of several weeks of work has nailed me to my desk, and I have not been able to get away. I am particularly sorry because I am convinced that I have infinitely more to learn from people such as you than you are likely to learn from me. I hope you will bear with me, therefore, if I try to dispense with generalities and deal with some of the specific highlights of our objectives, our programs, our problems, our accomplishments, and our plans for the future.

Before entering into the program itself, it would perhaps be useful to you if I described briefly just what the Foreign Operations Administration is and how and why it came into being. To those of us in Washington who live on a steady diet of alphabet soup, the initials "FOA" have come to have an automatic meaning. To some, however, I am sure the term is still a strange one. This agency was created by a Presidential Reorganization Plan issued last August which combined, under one single operating head, the responsibilities for foreign assistance operations which theretofore had been carried out by a number of different agencies throughout the government. The

Technical Cooperation Administration, as a branch of the Department of State, had administered programs of technical cooperation and, more recently, special economic aid to the countries of the Middle East, and in Latin America through the Institute for Inter-American Affairs. At the same time, the Mutual Security Agency, operating as an independent agency, had been charged with the administration of economic assistance programs in Europe and Southeast Asia. Many of the programs being carried out by these respective agencies were quite similar in nature, particularly in the underdeveloped areas. The purpose of the Reorganization Plan was to eliminate duplication of functions and the personnel performing those functions, and to place the responsibility for foreign economic and technical assistance programs into one operating entity. FOA is an independent agency, receiving its policy guidance from the Secretary of State, the Secretary of Defense, the Secretary of the Treasury, and other executive departments on aspects of the program which are of concern to them.

I would like to emphasize that the Reorganization Plan which created the Foreign Operations Administration was issued solely in the interest of improved administrative efficiency. It did not imply, contrary to frequent and irresponsible speculation, that there has been any drastic change of emphasis or objective as to the types of assistance programs best calculated to carry out the foreign policy objectives of the United States, particularly in the field of long-range resource development. The President, the Secretary of State, Mr. Stassen, and other responsible officials of the government, both in the Executive Branch and in the Congress, have repeatedly affirmed that the continuation of a long-range program of technical cooperation is a fundamental part of the policy of this country. In certain cases, where the attainment of our policy objectives calls for emergency or shorter range economic assistance to meet specific problem situations, we have been authorized by the Congress to furnish such assistance, but it is clearly understood that this type of aid is to be strictly limited both in scope and in duration, and is of a type which we hope will not continue to be necessary over any extended period. In point of fact, there were more funds appropriated for technical cooperation and special economic aid to this area of the world in the current fiscal year than ever before. There were 35 percent more technicians in the field in January of this year than there were a year ago.

As I indicated earlier, FOA is essentially an operating, not a policy-making, agency. To the extent that our programs in any area of the world fail to make a direct and measurable contribution to American foreign policy, as

established by the President and the Secretary of State, we are not doing our job.

The objectives of American policy in the Middle East are familiar to all of us here. We would like to see the maintenance of governmental stability; the promotion of peace among the states of the area themselves and a better understanding between them and the West; the creation of conditions which will bring about a rise in general economic welfare and the living standards of the people; the strengthening of democracy—not necessarily in our own image, but grounded on the same basic principles in which we believe; and the encouragement of regional defense measures against aggression from the Soviet world.

The relationship between this policy and the development of Middle East resources is, I think, obvious. In this area are some of the greatest potential sources of human, moral, spiritual, and material strength in the world. This is the area in which great civilizations once flourished and prospered. It is the source of three great religious faiths - Jewish, Christian, and Muslim which have for centuries exerted an immense influence throughout the world. Yet today all the countries of the Middle East share the fundamental problems of poverty, disease, hunger, and illiteracy. The human resources are there, but they are denied the means of self-improvement and productive employment. The land is there, but it has been neglected or abused through the years to a point where its yields are pitifully inadequate. In most instances the water is there, but it is not harnessed to productive use. Some countries possess natural resources which, owing to world demands, hold the key to national affluence and prosperity. But the people continue to suffer. Through no fault of theirs, they have been denied the opportunity to build the technical competence which has been the strength of our own great economic development and the development of other more advanced areas.

Through our technical cooperation programs, we are attempting, with growing success, to impart this strength; to build and institutionalize, through cooperative effort, a pattern of basic improvement in the fields of health, education, agriculture, industry, and public administration. We are doing this through the traditional means of supplying technical assistance and know-how, and the minimum tools necessary to demonstrate effectively what can be done through simple improvements. In this phase of the program we are making an increasing effort to gear our assistance toward the most significant economic and social problems of individual countries, which differ within this area as they do elsewhere in the world.

I believe that our programs now reflect the kind of joint planning which produces real results. In Israel, there is a major concentration on developing the land, the crop techniques, and the other agricultural advances which will make it possible to move more of the population out of the urban areas and into the fields. In recent years the irrigated area of the country has been more than doubled, and a land reclamation project is now under way which will bring in a half million acres of range grazing land which have been all but ruined by centuries of neglect. In Iraq, we are lending technical support to a large, well-conceived, and organized plan involving a large percentage of the revenues of the country, under which vast areas will be reclaimed, irrigated, and made suitable for the settlement of an expanding population. Iraq, if I may say so, is an excellent example of a country which is making the most productive use of the finances derived from its great natural resources. In Egypt, we are contributing \$10 million out of a more than \$25 million equivalent investment in a broad-scale irrigation and community development project for two major provinces, Buheira and Fayoum, which will facilitate the success of land reform measures adopted by the Government. In Iran, we are moving vigorously, at the request of and with the full cooperation of the Government, into the field of public administration, which must be strengthened if the fruits of the technical knowledge gained in other basic fields are not to be dissipated and lose any lasting effect. In Afghanistan, we are supplying the technical advice necessary to bring into productive use the vast new areas which can now be irrigated as a result of multimilliondollar Afghan expenditures for dams and works in the Helmand Valley, and thus help to settle the nomadic population.

These are but a few examples, but they are illustrative of the trend which we are trying to encourage. As I indicated before, long-range technical cooperation programs continue to be a basic element of the foreign policy of our Government. We do not view technical cooperation, however, as an ever-expanding series of individual and unrelated applications of know-how, which are bound to do some good simply because they are good, and thus drift on into eternity. In the past there has been a tendency, in certain countries, to send large groups of experts of one variety or another into an area before it was known whether they were really wanted or needed there, to the mutual embarrassment of all concerned. In our current program we are integrating projects into the planned development programs of the countries we are assisting. We are building toward the day, in some cases many years hence, but nonetheless on the horizon, when individual ministries and gov-

ernments can pick up on their own and carry forward on a solid foundation which we have helped them to build.

Apart from technical cooperation, we are extending more direct forms of economic assistance calculated to meet pressing short-range problems which directly affect the future well-being of individual countries and groups of countries, and in some cases their very survival. In certain cases the results have been dramatic, immediate, and decisive. In others we have been denied the opportunity as yet to provide the full measure of assistance which the peoples in an area deserve and need. The balance sheet is good, taking the area as a whole. The situation is generally hopeful. But there are areas where serious and fundamental problems of a political nature are a bar to the progress which should be made.

Turkey is a great country, solidly allied with the Western democracies in ideals, objectives, and a sense of the dangers and opportunities with which the free world is now confronted. Turkey is also a country which is undertaking, in our common defense, a military effort beyond its present economic capability to support without external assistance. We are, therefore, assisting the country so that it can attain a level of economic development which will lead to self-support, despite a heavy military burden, in the relatively near future. Great strides are now being made. Agricultural production is up to a level which this year resulted in exportable surpluses. Mineral resources are rapidly being developed and exploited, and the general development of the economy will be further enhanced by recent legislation facilitating the attraction of foreign private capital into the country. In the circumstances, there is a clear case for continued economic as well as technical support to Turkey.

In Iran, a crisis was averted last summer which could have plunged that country into political and financial chaos, with grave consequences for the Middle East and the rest of the free world. When the Shah and Prime Minister Zahedi assumed the reins of government last summer after the fall of Mossadeq, they were faced with an empty treasury and no means of meeting the bare operating expenses of government, let alone initiating desperately needed programs of economic development. In response to an urgent plea from the new and friendly government, President Eisenhower ordered the immediate furnishing of \$45 million of emergency aid from the Mutual Security Program, which permitted the import of essential consumer goods, generated the local currency necessary to keep the country running, and bought the precious time necessary to establish a stable government capable of dealing with its country's still grave problems. Since that time the situation,

politically and economically, has steadily improved, and there is reason to hope that in the near future Iran can base a sound program of development on the earnings from its long neglected major resource—oil. It is interesting and important to note that throughout the political upheavals in Iran during the past three years, the Technical Cooperation Program has carried on without the loss of a single day's work and has become an increasingly important factor in the economic life of the country. The people of Iran, even at the height of the hysteria, rioting, and bloodshed of last summer, never displayed anything but complete confidence and friendship for the American personnel whom they knew were there to help them and not to serve any ulterior or sinister political purpose.

In India and Pakistan economic aid programs have been closely related to technical cooperation. In the case of Pakistan, which has made remarkable progress against staggering economic odds, we have concentrated heavily on an increase in food production, through land reclamation and irrigation works as well as improved crop methods and techniques. This year Pakistan, with a promising wheat crop, should be self-sufficient in food, but there is as yet no margin of comfort. Last year, after two successive severe drought years, a serious food crisis threatened the country but was averted by a special grant of 700,000 tons of United States surplus wheat, authorized through emergency legislation by the Congress. A system of free distribution to the needy was put into effect. The proceeds from that portion of the wheat sold provided funds to support new projects to expand food production and guard against future shortages.

In India, although major emphasis continues in agriculture, there has been a shift in program activity to meet a new number one problem in the country—unemployment. This year we are furnishing increased assistance in the form of industrial raw materials. We are also assisting in the improvement of the railway transport system, which is wholly inadequate to meet the distribution needs of the country.

In both India and Pakistan, through technical cooperation and economic assistance, we are providing an essential component toward the accomplishment of country development plans, the success of which is essential to the future stability and well-being of the countries themselves and of the area as a whole. We are not engaged in attempting to fill any financial gap which may exist between country development targets and the over-all resources available or in sight to move toward meeting those targets. The United States cannot afford to and does not intend to put itself in such a position. Unless

we can help, however, in meeting specific and urgent problem areas in the fields of agriculture, transportation, water resources development, and industry, the development plans of these countries have little chance of being realized in time. We need not speculate on the consequences for Asia and for the whole free world of a failure on the part of the present democratic governments in either India or Pakistan to meet the urgent and immediate needs of its people.

The Near East is now beset with problems which no amount of United States economic or technical assistance can solve. The controversy over Suez and the Arab-Israel conflict are tragic bars to the full realization of the resource development of the area — and the people suffer.

The situation is not without hope, however. As most of you know, Mr. Eric Johnston visited the area last October as the Special Representative of the President, and presented to both the Arab states and Israel an engineering plan, developed at the request of the United Nations Relief and Works Agency for Palestine Refugees, for the unified development of the Jordan Valley, which showed how the waters of the Jordan River may be efficiently stored and controlled for the benefit of all the peoples of the Jordan watershed, including refugees. We are pleased to note that this plan is being given careful and serious consideration by the interested Arab states and by Israel. This in itself is a sign of great encouragement.

We are also pleased to note that the Government of Israel, in the past several months, has made great strides in the direction of solving the foreign exchange and internal financial problems which have thus far prevented the most orderly and effective economic development of the country. They have done this through a combination of realistic planning and a recent refunding operation, conducted without U.S. Government assistance, which has removed the day to day problem of meeting short-term credit obligations.

These are hopeful signs. They are not solutions. Basically, there can be no real solution to the problem in this area unless and until a truly regional approach is developed by the countries themselves. Economically, it is senseless to try to build a patchwork of national self-sufficient units, at crippling expense, when there are ways by which the limited water resources of the region could be devoted to the beneficial use of all the people at a fraction of the cost. The United States is now helping, through substantial contributions to the U.N. refugee agency, to meet the immediate and tragic plight of the Palestine refugees. We are helping, through our bilateral assistance programs, to make the best use of the inadequate resources now available to individual

countries. But we all know that in the long run a way must be found to apply our combined resources in the most efficient manner if the countries of the area are to achieve the degree of economic progress which their people need and deserve.

In summary, as I said earlier, the balance sheet is favorable. Real, and in some cases dramatic, progress has been made in recent months, and I think we can fairly state that technical cooperation and special economic assistance have made an important contribution in the process.

I will not undertake to predict the future of the FOA program. The President has indicated in his budget message that technical cooperation and limited economic assistance are elements of the program he has requested Congress to approve. He has also indicated that the United States must give continuing and increasing attention to the problems of the Middle East. Very shortly he will submit the details of our program request to the Congress. Apart from amounts of funds, which have not as yet been finally decided upon, I can report that our program will contain the following important elements:

- (a) A continuation of long-range technical cooperation, but with increased emphasis on orderly planning of projects to serve specific country plans and on improved techniques of furnishing aid, such as contracts with land grant colleges and other institutions which can furnish assistance more efficiently than through direct government hiring of technicians.
- (b) Economic assistance where necessary to solve urgent problems, but with an eye toward increased use of loan techniques wherever practicable.
- (c) The encouragement and facilitation of private investment as the best means of building stable economies in a democratic society.
- (d) The judicious use of surplus agricultural commodities where the need is clearly demonstrated and where the furnishing of such commodities will not be disruptive to normal trade.

Above all, our program will reflect the policy of this government to deal with regional problems as regional problems, to deal fairly and equitably with all sovereign nations, and to help nations in their own efforts to satisfy the legitimate hope of their people for a better way of life.

Banquet Session, Friday evening, March 19th Presiding: John D. Jernegan, Department of State

PROBLEMS AND PROSPECTS OF THE ARAB WORLD

H. E. Dr. Moussa al-Shabandar Ambassador of Iraq

I WISH FIRST TO EXPRESS my gratitude for the opportunity given me to address your distinguished gathering this evening. I have been following, for several years, with a great deal of interest the activities of the Middle East Institute and its contribution towards a better understanding between the American people and the peoples of this vast area called the Middle East. There has been an increasing awareness on the part of the American public of the vital importance of this area for the future of world peace and harmony, and the Institute, which itself came into being as a result of this awareness, has undoubtedly played a leading part in enlightening the American people by giving them some of the basic facts about the Middle East.

Speaking on the whole of the Middle East is very difficult, and I am not going to attempt to do so. In fact, I am going to limit myself to the western part of the Middle East, which comprises the Arab countries and our immediate neighbors and friends, Turkey and Iran. It is also impossible to speak about the resources of the Middle East without touching on social and political questions. Human problems are indivisible: they all have moral, social, political, psychological, and economic aspects which are so closely interrelated and interdependent that it is not possible to study properly any one aspect without taking into consideration all the other aspects.

In this huge area from Morocco to the Caucasus the natural resources are enormous. All these countries are very rich in one way or another — fertile soil, rich minerals, abundant water supply, and moderate climate made the Middle East in the past a huge world granary. Today, the Middle East is trying to win back that unique position by building dams, digging canals, erecting modern irrigation and drainage systems, and thus increasing by millions the cultivable acreage. The results so far are very encouraging. I am not going to tire you by detailed statistics, but in order to give you an idea I would like you to know that last year Turkey produced 14 million metric

tons of grain, Iran 5 million, Egypt $3\frac{1}{2}$ million, and Iraq and Syria about 2 million each. These same countries also produced about 700,000 metric tons of cotton, Egypt leading with 425,000 tons. We are only at the beginning of our economic renaissance. We hope that within the next ten years the agricultural production will be five times as great.

Now let me turn to oil, the most important of the resources of the Middle East. The Arab countries possess about one-half of the oil reserves of the world, and I have been told by a responsible authority that the net proceeds from oil alone in the Arab countries for the coming ten years will amount to something like \$20 billion. These are examples of the future possibilities of the Middle East.

If these agricultural and mineral resources are properly developed and the revenues are properly spent, the Middle East will surely become one of the richest, healthiest, and strongest areas of the world. It is here that our American friends can give us technical assistance, and by so doing obtain our real friendship and greatly expand the markets for their manufactured goods. It is here that our future unlimited buying capacity and your industrial production can meet and collaborate for our mutual benefit.

I am sure that many of our American friends will ask themselves: If the Middle East is endowed with such riches, why is it now the poorest, the least healthy, and the most unsettled area in the world? This is a very logical question which deserves to be carefully answered, and I am going to try to explain it in very simple language. I am going to give you an example from my own country — Iraq — but what I am going to say is also true of the other Arab countries and applies to a certain extent to our friends in the North and in the East — the Turks and the Iranians.

As all of you know, our countries are known to be the cradle of ancient civilization. The Sumerians, Assyrians, Babylonians, Phoenicians, Egyptians, Iranians, Arabs, and Ottomans all raised mighty nations in the Middle East. Now, all these nations belong to history, and I am not going to dwell upon them, but to understand the present we must look into the past. Let us look back at the 10th or 11th centuries. What do we find? We find that we in the Middle East were free, strong, and rich, and had a very high standard of living. During the time of Harun al-Rashid, Baghdad was, in many respects, as glorious as Paris in the 19th century. We had well-developed industries and highly efficient irrigation systems; we had a population of 20 million — Baghdad, the magnificent capital, had more than 2 million inhabitants. We were, as I said, happy, healthy, and secure, and so were all the Arab countries and our other neighbors.

Then came the unavoidable cycle of decline, a phenomenon in human history which seems to happen to all nations and civilizations. We were attacked by barbarian hordes from the steppes of Mongolia. These terrible invasions came in successive waves during the 12th, 13th, and 14th centuries, and the Middle Eastern peoples went through indescribable catastrophies.

People who have not experienced an invasion can never appreciate its real meaning. They can never measure its moral consequences and physical destruction. Hearing and reading about disasters is very different from experiencing them. To show you the extent of such national misfortunes I will just mention a single example. After the last Mongol invasion the population of Iraq, once 20 million, went down to less than 2 million, while Baghdad, the capital which had had over 2 million, now had only 12 thousand inhabitants. After these disasters there was no irrigation, no hospitals, no schools, no libraries, no armies, and no physical or moral strength left. I think, Ladies and Gentlemen, you will agree with me that after all those ordeals it is a miracle that Iraq, as a nation, still exists.

After this cruel period of invasions came a long period of stagnation and decline, during which this vacuum in the Middle East attracted another sort of invasion, the so-called peaceful penetration of European imperialism. The new invaders sometimes gave help, but more often they came to gain and exploit. The Middle East, directly or indirectly, was under the influence of that imperialism for some 300 years, and, unfortunately, some parts of it are still under the yoke of foreign domination.

The unhappy tale of Western imperialism in the Arab world began in 1830 with the conquest of Algeria by France. This was followed by the conquest of Tunis in 1881, Egypt in 1882, Morocco in 1907, Tripoli in 1911, and finally, what is known as the Fertile Crescent, namely, Iraq, Syria, Palestine, Jordan, and Lebanon, which was divided by the secret Sykes-Picot Agreement in 1916 and subsequently subjected to a new order called the Mandatory system. The Arabs call this the hypocritical period, because some European nations, while pretending to help us and defend our interests, competed among themselves for power and influence and were able by various ways and means to extend their domination over many parts of the Arab world. They established protectorates and mandates, obtained concessions, concluded treaties and alliances, etc., all of which created distrust, bitterness, and confusion. This situation did a great deal of harm to the economic development of the Middle East, for the people spent more time and energy in fighting the new systems of domination than in trying to develop their economic resources, and the

newcomers were much more interested in the easily obtained booty than in long-term and healthy economic cooperation.

At the beginning of the 20th century the conquered people began to awaken. Nationalism was spreading in varying degrees throughout the Middle Eastern countries. World War I accentuated these feelings. At the end of the war disillusionment created revolt and revolution and opened a third period which we might call the renaissance. Brilliant contributions to this renaissance were made in Turkey by Atatürk, in Iran by Pahlavi, and in the Arab world by Faysal.

World War II brought new shocks and upheavals to the Middle East. Several nations became politically independent and proved to be successful partners with their old oppressors and useful members in the community of nations. But so far as the Arabs were concerned, a new and difficult situation arose from the artificial, hasty, and unwise creation of Israel. This has very much shaken the confidence which the Arabs had in the West in general, and in the United States in particular. After the disillusionment of World War I, the fiasco of the League of Nations, and the nonimplementation of the 14 Points of President Wilson, this new blow shattered all hopes and caused immeasurable harm.

For years the Arabs looked to the United States as their natural ally and friend. Politically, the United States had no imperialistic ambitions and was the traditional champion of the peoples struggling for independence. Economically, it was interested in raising the world standard of living, and its citizens have always been generous in giving technical and financial support to worthy and constructive schemes all over the world. This being the case, the Arabs looked forward to a period of cooperation and friendship in the years following World War II. They felt confident that in its new role of world leadership the United States would play a prominent part in the liberation and regeneration of the Arab world. I wish I could say that the same feeling exists today. Instead, a new disillusionment and bitterness seem to prevail in the minds and hearts of the Arabs. I would not try to analyze this tragic transformation. This is neither the time nor the place for it. We are here to study the resources of the Middle East and not to unfold the tragedy of Palestine. But, as I have already said, it is impossible to have a complete economic picture of the Middle East without saying a word or two about its social and political problems, and this leads us Arabs again and again to the most important of our problems, namely, Palestine. I ask, therefore, your indulgence if I dwell for one or two minutes on this subject.

First, I would like to make it very clear that we Arabs have nothing at all against the Jews. We have lived together for almost 2000 years in peace and understanding. Their God is our God, their prophets are our prophets, their Torah is a sacred book for us, their Holy Land is our Holy Land. Their national misfortunes in history have always saddened us and we have always opened our countries to their refugees for shelter and protection. We are ordered by our religion and our tradition to do so. We call them the People of the Book. This is how the Muslim world in general, and the Arabs in particular, feel vis-à-vis the Jewish people. But Zionism and Israel have nothing to do with that. They have, in fact, nothing to do even with pure Judaism. And when speaking about Zionism or Israel, we never have in mind our Hebrew cousins or the universal mission of Judaism.

The Arabs are often criticized for being emotional about the problem of Palestine. Let us admit that we sometimes are. And that is why I am not going to invent adjectives for Zionism or Israel. I am not going to bring you Arab arguments, but I shall present to you only Jewish and non-Arab sources and quotations which certainly cannot be accused of anti-Semitism.

Now, according to what we hear and read in non-Zionist Jewish sources Israel is "a synthetic political potpourri, concocted by the Zionists in their snug little laboratory. . . ." And again, "Israel shot its way into the Middle East states and lay like a splinter in the heart of the homogeneous population of 50 million persons." Another non-Arab writes, "Politically, it is nothing but a noisy demonstration in this once peaceful land . . . an arrogant, tiresome and costly demonstration, highly artificial in its structure, dangerously aggressive and terroristic. . . ."

As regards the economic aspect of Israel, we read the following remarks: "The invading Zionists took possession of properties with a conservative valuation of nearly \$5 billion without paying one cent to their rightful innocent owners. Germany was compelled to pay these same Zionists some \$850 million for which there was no valid basis under circumstances which were very mysterious and equally suspicious. The United States has made grants and loans to them amounting, so far, to approximately \$400 million, exclusive of the sale of \$150 million in their bonds in this country, and about \$1 billion in gifts. And all this while the rightful inhabitants of Palestine are living in exile with an allowance of ten cents per person per day for food."

As to the theory that Israel is a model democratic state in the Middle East, I would like to refer also to what is said by non-Arabs: "The population in Israel is divided into two classes:—A & B. Non-Jewish citizens are given

identity card B, which means they are second-class citizens. The Arabs who remained in Israel cannot go from one place to another without a special permit. Arab children are not allowed to attend high school.

"Israeli territory is still legally owned by Arabs who have been dispossessed without any compensation. Court rulings in favour of the Arabs are frequently by-passed or circumvented. Many Arab villages sit like a duck in a freezing pond in the midst of a shrinking circle."

Now what I have said has nothing to do with emotion. These are facts published by non-Arabs who have visited Palestine, and also by non-Zionist Jews. If we add to these facts the recent Zionist aggression against Kibya, we have a real picture of what is going on in the Holy Land. Perhaps we can find here an answer to the Arab attitude toward this sad situation, and perhaps, also, our American friends will understand why the creation of Israel did not and will not contribute to the peace and prosperity of the Middle East.

To some Americans, these problems might seem insignificant when compared to the grave issues involved in the world conflict. This, however, is an erroneous attitude because Middle Eastern problems involve considerations of great importance to the United States and to the free world. Considering its strategic importance and its unlimited resources in oil, cotton, grains, etc., the Middle East should not be neglected; rather it must be strengthened and protected. This has not yet been done. So far as the Arabs are concerned, the responsibility for this must again be put at the door of Israel.

Israel and its supporters in this country seek to achieve two interrelated aims. The first is to keep U.S. policy continuously pro-Israeli and prevent any real understanding between the United States and the Arab world. For this reason they have objected to and angrily criticized any declaration and any action by the U.S. Government which seemed to be just and unbiased.

More recently, they have been busy trying to influence American foreign policy in the Middle East by attempting to thwart any attempt to strengthen Arab Middle Eastern countries to enable them to defend themselves against external aggression. We are told that sending arms to Arab countries would upset the balance of power in the Middle East. Now this balance of power which they uphold is really no balance at all, for it is based upon the military superiority of Israel. In their frenzied eagerness to prove their dubious case, supporters of Israel often contradict themselves. They say that Israel is a defenseless little nation fighting for its life against powerful enemies, but at the same time they brag about Israel's military strength. They tell us of the

great progress it has made in building up an efficient armament industry, and that it has the best and only capable army in the Middle East.

Without going into any details regarding these arguments, I would like to confine myself to one basic remark which I believe demolishes all such exaggerated assumptions. It is this: the Middle East cannot be defended without the active participation and good will of the Arabs. It so happens that a major portion of the oil is in Arab lands. Geographically, the Arab countries are situated in the heart of the Middle East; their total population is 50 million while Israel has a population of less than 1.5 million. By any standard of logic the friendship of 50 million people in such a vital area as the Middle East should far outweigh that of the 1.5 million new settlers in Israel.

The alternative to cooperation with the Arab countries is to leave the Middle East completely defenseless. If that is the price the U.S. has to pay in order to retain Israel's friendship, then I venture to say it is too high.

Another simple and, I believe, undeniable fact is that you cannot defend the Middle East without the Arab countries, but you can defend it without Israel. We can advance the same argument with regard to the economic situation and the development of the resources of the Middle East. We think that the creation of Israel has proved anything but a help to the U.S. Not only is it a burden to the American taxpayer, but it is a provocation which turns us from the great work that needs to be done.

These strategic and material factors added to the moral considerations of the Palestine issue to which I referred earlier, should be sufficient to show a way out of the present impasse. We ask of the people of the United States only two things: Be true to your ideals and beliefs, and serve your own real interests. We ask no more. We are sure that if you do this, our relations with you will be based upon a lasting and solid foundation of friendship and collaboration.

Third Session, Saturday morning, March 20th Presiding: WILLIAM N. ROGERS, International

Finance Consultant, Washington

FINANCING AND DEVELOPMENT

I. General Financial Structure in the Middle East Countries

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A FIRST THING to bear in mind about this topic is that there is no single pattern applying to all countries in the Middle East. The pattern for a financial structure reflects the degree of social and economic advancement and progress in each of these countries, and you will find that in one country an institution such as a central bank—or with the function of a central bank—may have been in existence for almost 100 years, while in another country you will find that the central banking institution is barely two years old. In one country you will find half the people not using money at all as an economic institution; in another, you will find people who have been using coinage almost since the beginning of history.

It is thus difficult to talk about a common financial structure except in fairly elementary terms. Nevertheless, let us see what we can do with relation to the theme of this conference—that is, to study how best these financial structures can be harnessed and organized in order to develop the financial, human, and natural resources of the Middle East in a way that will bring about a balanced economic and social development.

The two extremes are exemplified by Egypt where, for example, you have a relatively developed economic and financial situation and a capital market (it is possible to sell shares in a commercial corporation, and the central bank is a long-established institution), and by Saudi Arabia, where the value of capital formation or the selling of shares or any process of this sort is unappreciated and where even the use of paper money is relatively unknown. But I would like, for the purpose of establishing our theme, to take a country which is somewhere in between these two as a case study—a country with which I am more familiar than any other in the area: Iran.

FINANCIAL STRUCTURE OF IRAN

In Iran, the financial structure is primarily composed of two elements, plus the structure itself which forms the link between them. The government is one element. It is the fiscal agency, with the power to tax and to spend. As in many other oil-producing countries, it is the agency whereby the revenue from oil is transformed into a useful institution or investment within the economy itself. The other element of the economic or financial structure is the capital group: the market—the bazaar—the various sources of free capital, and more important, perhaps, the sources of entrepreneurial ability that will use the capital available—with or without assistance from the government—to bring about private industrial or agricultural development agencies, corporations, and businesses that will provide balance and growth in the economy. The government, after all, in its development program cannot operate at the lowest level of commercial development, as an entrepreneur can. It can help only in the sense of supplying an institution which will in turn supply services for the development of this private enterprise economy.

These two elements, public and private, which we shall look at later, must be tied together within the financial structure. In Iran's case we have a central bank which has been in existence—as a function, at any rate—since the turn of the century and which, in the late 20's and early 30's, developed into a modern institution which has become totally Iranian. This supplies a third and linking element.

The question now arises whether these three elements — the government, the capital group, and the central institution which provides the mechanism for conversion of foreign assets received by the government into some asset which can be used by the local people, and which services the government and the community together — whether these three units are so organized that they will achieve the kind of development that one is after in an expanding economy such as Iran's. Do they do all the work that they should?

BANKING SYSTEM

In Iran, the central bank (Bank Melli Iran) is both a bank of issue in technical terms—in other words, the government's bank—and a commercial bank. It has been a leader in establishing modern commercial banking principles as well as the obvious financial leader as a bank of issue. It has served both of these functions well. There has also been a competing commercial bank, the British Bank of [Iran and] the Middle East, once the

Iranian bank of issue, but a few years ago this British bank saw fit to leave the Iranian scene along with the British oil company. However, it left behind a heritage of trained Iranians—bankers—who have in the last two years sought capital in order to utilize the techniques that they have learned. As a result, in the last two years there have developed in Iran some eight private commercial banks which are now operating more or less successfully. Here, with the development of an indigenous banking system, the question again arises as to whether the central bank is doing its job, so I will turn for a moment to a consideration of their operations as an illustration.

These private banks are small but they are in very close contact with the commercial community of the country. They are in a position not only to do commercial banking in the ordinary forms of discount banking, but also to assist and expand trade because of their intimate knowledge of the bazaar, this great Eastern institution of commerce, industry, and economic development in the private sphere. Unfortunately, the central bank in Iran requires that the private banks redeposit some 55 percent of the capital they have to work with in the central bank. This rule is due largely to a general shortage of money in the country, where the central bank itself is frequently faced with a physical shortage of currency. The shortage of the money supply is a constant problem to the central bank in keeping its liquidity, and in turn in being able to finance the national government.

The result of this 55 percent redeposit regulation upon the private banks — which we must look upon as a link between the government financial structure and private economic development — is that despite techniques and a knowledge of the creditworthiness and abilities of a potential entrepreneur, it is trapped. It does not have the resources available to finance the small operator who wishes to expand his operations, who does not need just a 90-day credit to finance the movement of cargo (*i.e.*, the normal business of a commercial bank), but who needs perhaps a two-year or three-year credit to import an oil-pressing machine and expand his business productivity, thus providing a broader development of the economy at the level where the private entrepreneur can begin to expand and utilize his native administrative ability.

This is an example, I think, of the problems faced by central banks and government institutions which are attempting to devise a link between the two basic elements of the financial structure in the Middle East. There is a degree of inflexibility involved; sometimes it is not the fault of the central bank at all. This is the case in Iran where the particular problem referred to actually goes back in part to the underlying philosophic concept of money

as a commodity which is common in the Middle East, and in part to the financial interests of the bazaar community and its political spokesmen in Iran's parliament.

In a short-money economy — where the money supply is limited (in Iran's case about \$12 per capita, as contrasted to about \$1,000 per capita in the U.S.) — interest rates, as a general rule, will be high. For example, the bazaar of Tehran operates at interest rates of 18 to 24 percent in many cases. This is not uncommon in the Middle East. Therefore, the moneylender — the capital group, so to speak — thus adds in turn to the obstacles of economic development, simply because he makes economic development that much more expensive.

This situation also affects the whole picture of consumption in the country. As an example, Iran imports approximately 150 million yards of cotton textiles a year. This amounts to something less than 10 yards per person, a fantastically low level when you consider that cotton textiles are an essential of life. If these cotton textiles could be financed at something less than the current 18 percent in their movement from the producing country, through the import machinery (buying foreign currency, importing the goods, paying the customs tax, and so on) and into the bazaar itself (where the goods must be financed during their distribution phase), these costs would be greatly reduced and the level of life, the value of money, and the earning and purchasing power of the Iranians correspondingly enhanced.

Since it is profitable for the moneylender and for the Iranian bazaar to lend money at 18 percent, it would seem to be desirable on the part of the central bank and the private banks to bring pressure to lower these interest rates. Actually, the creation of the eight private banks in Iran has resulted in exactly this: because of the competitive factor — eight banks where only two existed effectively before — the interest rate in Iran has dropped from a banker's rate of about 12 percent to 8 percent, at least in the case of two of these banks which are interested in building new business. This is a great difference from 18 percent.

Again, the central bank would have a much greater effect if it could see its way clear to return to these small banks the 55 percent it now holds as a result of the redeposit rule. How can the central bank get out of the difficulty that it is in? It has tried for years to develop new and modern banking legislation. The bank management has long recognized that the central bank must be made a flexible institution capable of exerting control over a developing economy and assisting in the supply of cheap credit to both government and private development projects. But until it can convince the parliament,

which is, after all, composed to a certain extent of these very same market lenders we have been talking about, it will remain an inflexible institution. So, it comes down, ultimately, to a political problem.

BUILDING INVESTMENT CONFIDENCE

I must give the members of the parliament of Iran or any other Middle Eastern country credit for understanding what inflation is. Most of these countries went through a very serious inflation during the last war. They were affected by a short supply position so far as supplies from the Western world were concerned, and they were affected by being caught short with low inventories. I can remember when automobile tires in Tehran were costing \$700. Iranians remember this and are afraid that by any change, by any freedom granted to an institution such as the central bank, they will face a similar problem.

Now this is a question of confidence, of education, of a great many completely non-financial considerations. I am sure that no central banker in the Middle East is interested in a runaway inflation which would seriously upset price levels. On the other hand, he is interested - and this applies not only to the central bank of Iran but to other central banks as well - in obtaining enough freedom to do exactly what the requirements of a developing financial structure need. I think we very often do not consider that a central bank is anything but a rather dull institution - that it is actually the heart of a development program in an expanding economy, with an objective of bringing more people into the money economy than are there at present. Estimates have been made in Iran that as much as 50 percent of the population does not use money at all. They are in a barter economy. In many respects the inflexibility of central banks and other financial institutions of a country puts the country itself on the same narrow, isolated basis as the peasant who has very little use for money, and who lives in a barter economy. There is no room for development and expansion.

The fact also is clear that in an oil economy the government is frequently in a difficult operating position. It is faced with the process of converting a domestic asset into foreign currency, reconverting it into local currency, and introducing it back into the economy. The Iranian government has found itself frequently in a position of difficulty in this process when it has to convert these oil revenues into local currency in order to meet its own budgetary expenditures, because there is not sufficient local currency in the economy to absorb the flow of foreign exchange.

Governments in the Middle East generally depend upon an undeveloped

tax system, actually on an indirect tax base - upon customs imports, for example. This kind of revenue formula is restrictive and an obstacle to economic development, because the government is constantly pressed to create the maximum possible revenue in the shortest possible time. Iran is a case in point, even when it received a large amount of oil revenue. The prime requirement here was to sell the foreign exchange at a profit to the government. Both to create a profit and rapidly to convert the sterling oil revenues which the government could then use to pay payrolls, it was forced to maintain an artificial low rate of exchange. The government's preoccupation was, to put it frankly, to make money to meet its budgetary requirements. What happened when this sort of thing took place? It was a discouragement for domestic industry. The private entrepreneur who might wish to invest in textile manufacture would have to face government opposition that favored imports through a beneficial exchange rate. Not only was the government interested in making money from the sale of foreign exchange, but it was also interested in maintaining a high import level that would provide as much revenue as possible from the import tax structure. In Iran's case, for example, 45 percent of the budget revenue comes from imports. Obviously, the more foreign exchange it could sell to the importer, the better its budget would be.

What relationship does all this have to development? It is this: the inflexibility of an economy and its financial structure, plus the pressure of the government itself to make money in this fashion, results in a block to development. The Iranian entrepreneur finds it unprofitable to invest in industry even if he has the entrepreneurial ability, capital, and technical knowledge. If he already has an investment in a textile development, as several people do in Iran, he is actually forced into a position where he must seek (and he is very adept at seeking) government support for his operation. This is a shortening of a complicated story, but I want to point out the obvious interrelation of exchange rates, a government drive to find revenue at any price, the inflexibility of a financial structure, and the blocking effect that these have upon development as a whole.

CAPITAL FOR DEVELOPMENT

There is another factor I should get into. A great many of us have been interested in the development of new institutions which we think will help solve the problem of development and the movement of capital, and possibly have an influence on the inflexible situations that occur in these various countries. We talked a great deal, when I was in the American government, about the development of some regional banking institution which would

act as a source of capital, as a mechanism with which to harness idle capital, and which would encourage some sort of capital markets in these countries on an international basis. And there have been a number of proposals (the last of which is the Arab Development Bank) to expand the supply of credit on a regional basis — in reality a redistribution mechanism to take the surplus capital which exists in some countries, such as Iraq or Kuwait (or Qatar, for example, where I believe a child inherits a \$10,000 insurance policy from the moment he takes his first breath), and apply it to their own development or to that of countries which do not have surpluses of capital.

This is a first step toward a regional approach. There is certainly a great deal of merit in harnessing and redistributing regional assets, and there is certainly a great deal of merit in building the confidence that would encourage people, even in Iran and other countries which are not wealthy on a per capita basis, to invest what little surplus capital they have in institutions that would go into partnership in the development of single enterprises. However, I see the main obstacle in these countries to be the necessity for a change in philosophy before such an institution could be established successfully. Most of these countries already have an institutional base which is adequate for what can be done by each alone. Iran has a central bank and a growing commercial banking system which can easily become a developmental banking mechanism, given a greater flexibility in the economy. Several banks have recently been created in Syria, another has been created in Lebanon, and one is actually operating in Saudi Arabia, an answer to the developing central banking function in that country. These are evidence of a willingness - perhaps limited - to create institutions necessary to build a fully developed financial structure. The problem becomes one of convincing people that money is not property to be buried or rented at high interest but a tool of development, a lubricating device — that the conversion of oil, for example, into a fungible asset does not create another commodity: it is simply a means to translate the value of a fixed asset in the ground into something that can create in turn — if it is used flexibly — a new industry, a cement plant, or whatever the economy may need.

This change of philosophy is something that must and undoubtedly will come about slowly. When people say that what the Middle East needs is more development banks or more institutional development, the thought arises in my mind that this is by no means the main problem. The area does not need any more banks than will naturally emerge, but it does need more efficient and flexible use of the institutions that already exist, and a new approach to the concept of capital and development.

Third Session, Saturday morning, March 20th Presiding: WILLIAM N. ROGERS, International Finance Consultant, Washington

FINANCING AND DEVELOPMENT

II. The Importance of Rural Credit Expansion

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HE IMPORTANCE of Rural Credit Expansion" is the title for my talk as given in the program. It is quite satisfactory so long as it is understood that my remarks will be limited to the importance of agricultural credit for the small farmer. "Rural credit" will be defined as "agricultural credit."

Last October in Beirut, Lebanon, 32 persons who were living and working in the Near East met at the request of the American University of Beirut and the Ford Foundation to discuss problems of agricultural credit and its importance in the development of the area. The discussions covered: (1) the lack of adequate credit for small farmers; (2) excessive interest where credit is available; (3) unsatisfactory terms of credit in the area; and (4) what might be done to help make credit available on reasonable terms and at reasonable rates of interest.

The discussions at the conference were interesting, and some of the observations may be of help to persons concerned with the development of the countries of the Near East. I would like to refer from time to time to the record of this meeting.

The conferees agreed upon several basic assumptions which must be recognized in considering the subject of agricultural credit:

- 1. Agriculture is one of the basic elements of the economy of the Near East. Whatever advances or retards agriculture, advances or retards the economy of the Near East.
- 2. Villagers deriving their livelihood primarily from farming constitute the major population group in all Near Eastern countries with the possible exception of Lebanon.

Agriculture in the Near East is the economic activity from which the large majority of people are directly dependent for their income. As examples, in Iran there are over 20 million people, of whom approximately 78 percent

derive their income from agriculture. Of Iraq's 5,500,000 people, about 75 percent derive their income from agriculture. Of the more or less 1,500,000 people in Lebanon, only about 50 percent derive their income from agriculture. In Syria, of approximately 3,500,000 people, about 60 percent earn their income from agriculture. It is estimated that approximately 75 percent of the people of the Near East derive their income from agriculture. It is important, therefore, to consider the problems with which this large mass of people are confronted.

Another assumption at the Beirut conference was:

3. The great bulk of the villagers in the Near Eastern countries are small farmers whose limited resources have for centuries kept them at substandard levels of living and with substandard purchasing power.

The Middle East is a vast desert, spotted by disconnected oases. The desert asserts itself in the cultural and economic patterns of the people's lives. It reflects itself on the material side by the percentage of cultivated and cultivable areas of the various oases that constitute the area. The following figures lend substance to the above statement:

Cultivated land		Uncultivated but cultivable land	
Percentage to total area	Acres per person engaged in agriculture	Percentage of total area	Acres per person engaged in agriculture
Lebanon 27	1.0	12	0.5
Iraq 10	3.5	_18	5.9
Jordan 7	1.7	I	0.3
Syria 18	4.0	19	4.2
Iran 10	3.2	10	3.2

These figures are rough averages. More accurate figures are not available. They indicate, nevertheless, that the possible land area available to the people for cultivation is small.

It must also be noted that the average amount of land cultivated per person does not mean that the lands are owned by the cultivator. The pattern of ownership of land throughout the Near East is not a happy one for the small farmer. There are many large estates or landlords who own many acres. These landlords let out their lands to the peasants to operate mainly against a share of the crop, but sometimes against cash. The persons who are cultivating the lands under such conditions are tenants or sharecroppers, not owners.

What part of the crop does the tenant keep, and what part goes to the landlord? Traditionally in Iran the large landlords divide the crop into five equal parts: one fifth for labor, generally supplied by the tenant; one fifth for the draft animals, owned by the landlord or a third party or possibly by the tenant; one fifth for the land, which of course is owned by the landlord; one fifth for the water, also generally owned by the landlord; and one fifth for the seeds, which could be supplied by the landlord, a merchant, a moneylender, or the tenant. Other systems are also followed. The results, however, seem to result in a share going to the landlord ranging from one-half to fourfifths of the crop, tenants keeping from one-half to one-fifth of the crop. In Syria, most of the big as well as the medium-sized landowners give their land to the farmers against a share of the crop. This varies widely according to the fertility of the land and the contributions of the landlord toward planting and harvesting the crop. Elements of the feudal system are in evidence in many areas of the Near East, and there are few persons who would contend that such a system benefits the tenant.

As one of the Arab conferees at the Beirut conference stated, "It is really not essential to prove statistically the pathological situation existing with respect to land ownership. A number of agricultural experts in the Near East know from experience much more than could be proved at a conference with available data. They know, now, that when data become available, they will show clearly that the basic problem in the Near East is one of great land holdings by a very few, . . . with the overwhelming percentage of farm owners having extremely small farms, many of them too small to be economic units." This Arab expert continued by saying that "most holdings are known to be so small that intensification . . . of agricultural production . . . is the only answer to [the problem of] their becoming economic units."

It is a fair question to ask whether the cultivator of a small farm in the Near East, sometimes owned but more frequently rented, can maintain a good standard of living. The answer is generally "No" by all measures which add up to a good standard of living. Not only does the size of the farm and the tenure system mitigate against him, but his agricultural practices are frequently those of his father and his father's father. There are exceptions. Many medium-sized farmers who own their own land keep abreast of the technical developments of agriculture. Some large landlords also follow modern agricultural techniques. I have seen apple orchards in the Lebanon, wheat farms in Turkey, cotton fields in Egypt, and field crops in several countries which are the equal of any in the world. The average farmer, how-

ever, does not use fertilizers to his advantage, improved seeds are not commonly known nor are they available, methods of cultivation do not produce the best results, crop rotation is frequently not practiced to the advantage of the producer, and good water and drainage techniques are not always appreciated. Even when crops are good, poor storage practices frequently result in heavy losses. The methods of marketing frequently return to the producer less than is made by a merchant or dealer who buys from the farmer and sells to the consumer.

Many small farmers in the area have a tough time. Their annual income sometimes exceeds, but is generally below, the equivalent of \$100 a year. Their standard of living leaves much to be desired.

Another assumption by the conferees in Beirut was:

4. Capital is *one* of the indispensable elements in any well balanced program for improving the lot of small farmers.

Here it was clearly recognized that capital or agricultural credit is only one of the elements in a sound program for improving the standard of living of the small farmer. The conferees at Beirut concluded that the goal is "to alleviate rural poverty, put farming on a sound basis, and speed human and material progress in the Near East."

Please note that the stated objective of a rural development program in which credit has an appropriate place is to put farming on a sound basis and to speed human and material progress. If these objectives are accomplished, poverty fades into the past.

Some will say that this goal is achieved by increasing agricultural production. Increasing production is important, but increased production by itself may not speed human and material progress. Why? Because the net returns to a farmer may not be directly correlated to the total produce of the land he farms. Improvement depends upon what he has left to eat and sell. Increase in production must leave the farmer more if he is to have his family eat more and live better. The farmer must therefore consider the share of the crop or the amount of money he has to pay the landlord, moneylenders, and others out of the produce from the land he farms. Of course, if the farmer is to have the possibility of having more, increased production must be obtained.

HOW CAN CREDIT HELP INCREASE PRODUCTION?

Agricultural credit has established itself throughout the world as an essential element in increasing farm production. Good crops come from good seeds. Farmers may not understand the art of selection and handling of seeds

from their own produce, and frequently better seeds can be purchased from reputable dealers. Money is required to buy seeds. The investment in improved seeds brings more crops. Fertilizers, and particularly chemical fertilizers, are being used in ever increasing amounts throughout the world to increase agricultural production. Farmers in the Near East, as well as in the United States, frequently lack cash to purchase fertilizers. Farmers need equipment, simple and complicated, expensive and inexpensive, to help them take more produce from the land. Equipment costs money. Farmers need to improve the lands they cultivate by installing irrigation and drainage systems which cost money, but if developed bring better returns from the land. In some instances the farm cultivated by the farmer is so small that he cannot produce a crop sufficiently large to help lift him above a submarginal standard of living. More land may be available for purchase. Available credit on reasonable terms may permit him to expand his farm and make it an economic unit. In substance, without credit farmers may find it impossible to obtain good seed, insecticides, fertilizers, and implements, or improve the land which they farm and even expand the land they own. With credit these items can be obtained and increased production can result.

Let us now come to the question of what portion of the crop is kept by the farmer. If the increase in production is to be for the benefit of his family, the money he borrows must be on reasonable terms. The farmer must improve his net return. Let me say again that the well-being of the family is not determined by the gross amount the farmer produces, but by the amount of produce which is left to the farmer after paying his obligations. If a farmer borrows money at interest rates of 18 percent, 40 percent, 75 percent, he pays an important part of his income for the use of the money borrowed. This income, if it did not go to the moneylender, could otherwise be used for such purposes as education, health aids, clothing, housing, or other purposes which would give him a better and more comfortable living. The loss of money paid out in interest is not the only penalty. If the debt he contracts places him under the control of the creditor, he may lose his self-respect, and his ability to improve his position may be reduced.

WHAT DOES THE FARMER PAY FOR MONEY HE BORROWS?

What is the rate of interest paid by farmers in the Near East? The answer depends upon the source of credit. There are government institutions or semi-government lending agencies in all of the countries of the Near East. Interest paid on loans obtained from these institutions I believe would be classified

as reasonable. According to the laws and regulations governing such institutions, interest rates range from 5 or 6 percent to perhaps as high as 9 or 10 percent. Loans in Egypt are actually made by the government to cooperatives at 3 percent, while the cooperatives in turn charge the individual borrower about 5 percent. The difficulty, however, is that the governmental institutions are not making any substantial number of loans to small farmers. Loans from these institutions generally go to the larger farmers, for only they generally have the ability to find sources of credit either from governmental or private sources. The small farmer, on the other hand, may not know how to proceed to obtain a government loan. He may not have the security required, or for other reasons credit at reasonable rates is not available to him. In most of the countries the laws prohibit governmental institutions from making loans to persons who do not own the land. A large portion of the lands in the Near East is farmed by tenants.

The other sources of agricultural credit in these countries are private banks, moneylenders, merchants, and landlords. It is estimated that in some of the Near East countries the total amount of outstanding credit from private sources is as high as 80 or 90 percent of the total outstanding debt.

The average rates of interest charged by private banks are estimated by some authorities in the Near East to be about 18 percent. The interest charged by merchants, moneylenders, and landlords conservatively averages 25 percent or more. It is not uncommon to hear of loans where the interest rate or the returns to the lender range from 75 to 100, 200, or in a few isolated cases to several hundred percent of the money loaned. During my travels, one case was brought to my attention which on the surface sounds fantastic. Nevertheless, let me refer to it. A farmer in a village borrowed 30 pounds of currency of the country in question (about \$84) and promised to pay 30 kilos of wheat four months later at harvest time. The general harvest was bad, and his own crop failed. The farmer borrower could not pay. Due to the general shortage of wheat throughout the country where he was living, the price of wheat became very high. The moneylender generously agreed to wait a year and made the farmer sign a promissory note for 140 pounds of the local currency, of which 108 pounds was the value of the 30 kilos of wheat at the market price and 32 pounds was interest at 30 percent per annum. For seven years the farmer could not pay, and each year a new promissory note was signed, interest of 30 percent being added each time. The result was that at the end of seven years the promissory note had moved from the original obligation of 30 pounds (\$84) to 930 pounds (\$2,604). The moneylender

then took action. The farmer lost his land. He had to marry his daughter to the moneylender without dowry and agree that his son would work for two years for the moneylender without pay to clear up the balance of the obligation.

In a program to improve the conditions of living of farmers, attention must be given to means which make available to them an adequate supply of credit at reasonable terms and rates of interest. What is to be done? The answer is: help the small farmer to become credit worthy by increasing his earning power and debt paying ability. Help to supply this same farmer with ample credit at reasonable terms.

Who is to do this? How is it to be done?

The answer to the first question must come from the governments and people of the Near East. It is their responsibility as governments and people to solve their own problems. The free peoples of the world, however, are ever willing to help their fellow men by exchanging experiences which they have learned and even share in the wealth which they have earned. The governments of the Near East have indicated an interest in obtaining the cooperation of other people in working out solutions to some of the economic and social problems which they face. The United Nations and its specialized agencies, other governments, and private groups and individuals have responded. Men and women from the Western nations are working to help the peoples and governments of the Near East find answers to the questions of how to help the small farmer to become credit worthy and how to help to supply him with agricultural credit at reasonable terms. I am confident that an even greater response for cooperation will come from the West if the governments of the area are interested in accelerating their efforts to assist their own people to help themselves.

The answer to the next question, "How is it to be done?" may perhaps be more difficult — more difficult only because to find the answer will require effort and hard work. Plans must be developed. People must be trained. Funds must be raised. Work must be done — work not only by the farmer, his wife, the family, but by the officials of the rural areas, communities, and national organizations and governments. Only by work, trial, and effort can this answer be found.

There is no single guaranteed method for a rural development program which encompasses the development of adequate agricultural credit facilities. It is not advisable to try to lift a successful program from one country and transplant it to another without considering the different cultural, eco-

nomic, and political conditions in the second country. The components, form of organization, method of administration, and experience of the people involved in the program will depend upon the many related conditions of the country where the work is to be started. Programs aimed at developing agricultural credit facilities as part of a total rural improvement program should start with the particular conditions of the country.

It is possible, however, to indicate some principles which are suggested for consideration by those in the Near East who are interested in helping the farmers to help themselves to obtain a good standard of living.

THE SOURCES OF FUNDS FOR A CREDIT PROGRAM

The need for agricultural credit is so great in most countries of the world, including the Near East, that governments cannot supply the necessary funds out of their own resources. The credit system should obtain funds from (1) the government and its various sources, including the sale of debentures; and (2) from the primary societies, which would be the deposits and savings of farmers and other villagers. It is advisable and necessary to draw upon local funds for local credit purposes. Farmers can save and deposit their savings into a system which will make money available for agricultural loans. The savings and deposits may be small when the income of the farmers is small. Practices of thrift, however, will develop capital. A thrift program, where farmers deposit savings into a system organized to receive deposits and use the funds for loans, will help develop confidence in the savings system so that they will be willing to put their savings into it and when they are borrowers they will have an interest and determination to pay back the funds borrowed.

The countries of the Near East can see in Cyprus the successful results of a cooperative credit system which was built upon the belief that all farmers can save something regardless of how little may be their income. There is a saying that from little acorns grow mighty oaks.

ORGANIZATION

The credit facilities can be governmental, cooperative in form, or private. Private institutions will certainly continue to provide some agricultural credit. The private banks have not, however, organized themselves to make loans to small farmers. The funds which the banks have available are entirely too limited to expand service throughout countries of the Near East. There is

little reason to believe that there are elements which will cause the private banks to change the system under which they are presently operating.

The moneylender will continue to play his part so long as funds are required by farmers and credit is not available from other sources at reasonable rates of interest. Some moneylenders perform a valuable service by providing credit at reasonable rates. Their general reputation is to the contrary. The farmer will be forced to turn to the moneylender and pay the going rates. It is doubted that legislation by itself will change the habits of the moneylender. Chester Davis, formerly an Associate Director of the Ford Foundation, illustrates the problem of the moneylender by comparing him to a piece of string. "You can pull a piece of string no matter how long it is, but the longer it is, the harder it is to push it where you want it to go." The moneylender of the Near East is a very long piece of string. It is doubted whether efforts to push him into constructive employment will be successful. The question is really whether it is possible or whether there is sufficient interest to create conditions that are favorable enough to pull at least an important segment of the moneylenders to a better order of service to the cultivators of their community than moneylenders have generally rendered in the past.

Governments can have an important place in credit facilities of the area if they are willing to accept their responsibilities. Farmers can organize into agricultural credit and multipurpose cooperative societies. Various patterns of organization can be adapted to meet the local conditions. It should be pointed out, however, that if credit is actually to reach the small farmer through a government organization, there must be a development of strength in the services which deal directly with the farmer. Competent and dedicated community leaders and trained personnel at the village level are of major importance. A credit law passed by parliament or congress of a government will not by itself take credit to the farmer. Such laws are on the statute books.

Technical assistance and supervision of loans made by governments or cooperative societies to small farmers can make a credit program successful. Farmers will acquire "know how" faster, make greater use of credit, pay their obligations more promptly, and make more rapid progress generally if they are provided technical advice and if their operations are reviewed closely by a competent supervisor. Supervision should not end when the individual obtains a loan. Supervision of credit requires not only the concept of a strong organization and trained personnel dedicated to assisting farmers in the community to improve not only their ability to produce more from the land, but to help them in the improvement of their way of life.

Agricultural credit is a problem to be faced by the leaders of the government and the people of the country. It is a part of a rural development program. It should be developed in relationship to problems of the community and adapted to conditions of the community. It can contribute to increasing the standard of living of the peoples of an area. Agricultural credit and village rural development programs are sides of the same coin. The coin is necessary. Agricultural credit and village development programs are necessary to sound economic development.

Third Session, Saturday morning, April 20th Presiding: WILLIAM N. ROGERS, International Finance Consultant, Washington

FINANCING AND DEVELOPMENT

III. Development of Investment Capital Within the Middle East

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In DISCUSSING this formidable-sounding subject with my Middle East friends, I often feel that an attitude of apologetic deference is for a west-erner entirely appropriate. After all, the development of investment capital is precisely what distinguishes civilization from barbarism; and at the high noon of Middle Eastern civilization five or six thousand years ago, when the barbarian ancestors of Western man were living in caves and trees and painting themselves blue to frighten their enemies, the rich and powerful riverine peoples of the Nile and the Mesopotamian flood plain were perfectly well accustomed to mobilizing domestic capital on an immense scale, and were creating irrigation works, communications, and public buildings the remains of which can still impress the most casual and ignorant visitor. It may be granted that the methods of capital formation in those far-off days were a little unorthodox by modern standards, but any present citizen of the Middle East who claims that his countrymen have forgotten more about capital formation than the West ever knew would be a difficult man to argue with.

SUPPLY OF DOMESTIC CAPITAL

Anyone bold enough to pursue the subject despite this handicap must begin with the basic fact that throughout the Middle East — with the important exception of the Persian Gulf states — the supply of domestic capital is very short relative to the supply of the other factors of production, namely labor and natural resources. This is a major part of the explanation of the high local rates of interest. Rates on short-term bank loans vary from 6 to 9

^{*} The views expressed in this paper are the personal views of the author and not necessarily those of the United Nations Secretariat, of which he is a member.

percent in the big commercial cities; on longer term loans for industry they may be from 10 to 15 percent where they can be got at all; and on agricultural loans rates from 20 to 100 percent and over are common. As in all predominantly peasant communities subject to the uncertainties of climate and crops and conditioned by the pressure of extreme poverty to spending in "splurges," there is, in the Middle East, a strong demand for money. The economic requirements for "splurge" spending are admirably met for the urban poor in Western communities by the institution of the pawnshop, which is organized to replace on Monday morning the funds spent on the revels of the previous Saturday night. For the less frequent though not less extravagant splurges of the poverty-stricken Middle East peasant on the occasion of the birth, marriage, or death of a member of his family, there is no systematic provision apart from the village moneylender; however, the demand for loans is just as insistent and is a much more important part of the total demand for cash than in the West. The demand for capital for industrial development also is growing fast throughout the area, although it is usually satisfied from sources outside the regular market.

As pointed out above, high rates of interest are due to inadequacy of capital in relation to labor and natural resources. It is usually thought that in most underdeveloped countries the proportion of the national income going into investment is about one-third of what it would be in the West, i.e., under 5 percent. This would include personal and business savings, money made and invested locally by foreign concerns, and government savings, if any. Significant estimates for these magnitudes in the Middle East countries are hard to come by. Like a great many of the official statistics produced in the area, they may be said, in many cases, to verge on the enigmatic. Not only are such statistics rare, but frequently they are inconsistent and on occasion literally incredible. It is a matter of some difficulty to distinguish the products of statistical exuberance and virtuosity from the results of more serious work on the ground, but amongst the few well-based figures there may be cited the official estimates of net domestic investment (public and private) in Turkey,2 which moved between 4 percent and 5 percent of net national income over the period 1943-1948. The order of magnitude of these figures is confirmed by the economic survey of Turkey prepared by the International Bank,3 which gives figures for 1949 which are only slightly higher. The UN

¹ Measures for the Economic Development of Under-developed Countries. UN document E.1986 of 1951, p. 35.

² National Income Statistics 1938–1948. UN document ST/Stat. 2 of 1950.
³ International Bank for Reconstruction and Development, *The Economy of Turkey* (Washington, 1951).

experts in their annual review suggest, however, that some double counting is involved so that ordinary mortals may reasonably wedge themselves between the International Bank and the United Nations and select 5 percent as the most plausible guess.

Credible figures for other Middle East countries are scarce. The Israeli figure for 1952 is 20 percent, but this is the product of special conditions and an economic apparatus which is unique in the Middle East. Mandated Palestine in 1944 showed 18 percent and Egypt in 1945 produced a figure of 23 percent, but these were war years when savings were made by default, *i.e.* import, shipping, and other restrictions held spending down anyway. Outside of Israel, it seems to me optimistic to suppose that any Middle East country can have done much better than Turkey—always excepting the Persian Gulf states, about which almost anything can be said because almost nothing is known.

Low rates of domestic investment are characteristic of all underdeveloped countries and calculations intended to demonstrate this fact do no more than permit us certain fascinating glimpses of the obvious, which could be got with far less labor from the pages of Adam Smith and John Stuart Mill writing a century or more ago. Moreover, there is one form of investment which always slips through the statistical net—principally buildings and land improvements made by the peasants themselves outside the money economy altogether. In countries depending on irrigation farming or "staircase" farming on man-made terraces, the proportion of the national wealth embodied in numberless small irrigation works or in cultivable terraces literally carved out of the hillside must be enormous. This work represents the fruit of "savings" over generations: it continues silently and unobtrusively from year to year without benefit of any statistical indicator whatever.

A more important shortcoming of the figures as usually given is that they make no allowance for variations in the rate of growth of population, which is known to be high in Muslim countries. Thus amongst the Palestine Muslims of Mandate times, who had the highest recorded rate of natural increase in the world, namely 3 percent, at least this proportion of the national income had to be invested to prevent the community from living on its capital. In that special case, capital imports from abroad relieved the situation. In other Muslim countries, domestic savings have to be relied on. If, as is generally suspected, they are low, the surplus available for *new* investment may be negligible.

The standard reason for the low savings ratio in most Middle East coun-

tries is simply low per capita income. Those discontented with the wearisome platitudes which do duty for independent thought on this aspect of the problem have recently invented an ingenious special explanation for the low savings ratio which is called the "demonstration" effect.4 This means that people in underdeveloped countries who are brought into contact with the Western way of life and its high standards of consumption - the idea was first tried on the Egyptians - cut their exiguous savings still lower in the effort to keep up with the international Jones's, whose consumption of motor cars, whisky, and silk stockings, though doubtless modest by Western standards, is on an enviable and princely scale when observed in Damascus or Baghdad. Although it may be conceded that some savings go up in smoke in this way, particularly amongst the rich in the big capital cities, it is conceivable that in some countries, "demonstration" may have exactly the opposite effect, i.e., it may stimulate the drive for economic development to the point at which the country can afford more of these consumables itself. Visiting Americans who feel slightly self-conscious when their Cadillac slides past a fellow traveller on a donkey in the traffic of Beirut or Amman may console themselves with the thought that keeping up with the Jones's has, for good or ill, been a powerful dynamic factor in the economic development of their own country and there seems no good reason why it should not have the same magical effect elsewhere.

MAKING CAPITAL AVAILABLE

It is often said, and particularly by some distinguished speakers at this conference, that it is the lack of banking and other institutional facilities to collect and invest savings intelligently which accounts for their scarcity. Though true of several countries, I think this explanation is sometimes overworked. On the whole, societies get the institutions they deserve, *i.e.*, that they can comfortably accomodate. In the Middle East the rich have the local and foreign banks for their savings and markets are developing for the stocks of locally incorporated companies. Facilities for the poor are almost non-existent, it is true — but then so are their savings. Similarly, borrowing facilities for the rich are good if they are businessmen in the towns and can pay back (perhaps by borrowing from somebody else) after a few months. If they are landowners it is not so easy, but the special agricultural investment

⁴ R. Nurkse, Problems of Capital Formation in Underdeveloped Countries (New York, 1953), Chap. III.

on articles consumed by the rich, e.g., luxury apartments and various luxury imports. But there would clearly be serious difficulties with a progressive and steeply graded income tax, which many of these countries have on the statute books already, since assessment and administration would be influenced by politics, and not invariably in the right direction. Experience in the West, notably in the United States, shows that tax officials are not always distinguished by that degree of impartiality which the law calls for, and it will probably be many years before the Middle East countries, where loyalties run in quite other directions, will be able to measure up even to our modest standards. No doubt fiscal measures can do something to improve the savings ratio, but high income taxes seem too much to expect in practice at this stage. It must be remembered that capital and enterprise are still fairly mobile between the Middle East countries. Thus the enactment of an income tax law with teeth in it, say in Lebanon or Jordan, might cause the local capitalists - like the legendary Arabs of Western folklore - to fold up their tents and silently steal away.

Can inflation stimulate investment? This is a dangerous question. "The horrors of inflation," according to one distinguished writer on the subject, "are sucked up with the milk of the mothers of bank presidents." I do not know if the mothers of economists are similarly equipped, but suspicion of inflationary methods of investment is general among economists too. The snag is, of course, that the trick only works when someone is forced by rising prices to cut consumption, and someone else, out of the profits that he makes from this situation, adds to investment. In Middle East conditions, inflation is unfortunately rather a limited instrument for the stimulation of investment, since the potential victims are so poor anyhow that a further cut in their consumption would have very undesirable social reactions. Moreover, local businessmen, after their experience of the war and postwar inflations, have become rather "inflation-conscious" and price reactions would probably be too violent to generate much useful investment. This is a method which offers very limited hopes for economic improvement.

OIL AND AN ARAB DEVELOPMENT BANK

It is the final possibility which has the most promise, at least on any rational consideration of the facts. Into the states of the Persian Gulf there flows annually a total sum of around \$500 million in oil revenues. All the states concerned have large programs of economic development which these revenues are expected to finance. In Iraq, for instance, oil revenues were expected

to reach at least \$140 million in 1953, of which 70 percent would be assigned to the Iraq Development Board, which has vast schemes for irrigation improvement, land reclamation, transport, and building. Allotments in 1952-53, in fact, amounted to about \$58 million, of which less than one-half was actually spent during that year. The administrative arrangements for economic development in Iraq, though imperfect by Western standards, are nevertheless advanced for the Middle East. In Bahrain and Kuwait they are also good, and up to 50 percent of their oil revenues appears to be going into useful current expenditure and development works. The record is not impressive in some other countries in the Gulf area, but the striking fact is that, given certain minimum requirements of sensible development expenditure, it would be quite impossible for several of the richest receivers of oil revenue to spend more than a fraction of their income. It is, moreover, difficult to see any great change in this situation in the next few years unless large amounts of the money are wasted by the rulers who own it in thoughtless extravagance. This is the ground for the recent proposals for the formation of an Arab Development Bank, in which all the Arab countries would participate and whose function would be to divert at least part of the oil revenues to development expenditure in neighboring Arab countries for the benefit of lender and borrower alike.

The fact that a project commends itself to reasonable men does not automatically ensure its adoption in the Middle East, as students of the area are well aware. The case seems unlikely to be decided on its economic merits and the scheme will probably remain on paper until a favorable political wind gives it the necessary motion in the right direction. Meantime, when the huge development expenditures of the oil-rich countries really begin, it is hard to see how the neighboring countries can avoid being benefited to some extent by the impact. Evidence of this is already noticeable in some of the Mediterranean countries where investments in banking and real estate have recently been made from Persian Gulf sources. But a real impetus to economic development throughout the Middle East could only be given by some agreed arrangement to pool at least part of the oil revenues for a period long enough to do some lasting good. In my opinion, the Western governments and oil companies should lose no opportunity to press at least the principle of such an arrangement on the Persian Gulf states.

In the short run, it seems unlikely that the savings ratio will show much improvement in most Middle East countries. In fact, "keeping up with the Jones's" in the United States and other rich Western countries may in some

countries depress it. Thanks to the new investment institutions now being created, money savings may perhaps be put to somewhat better use. But the climate in which such institutions operate is all-important. Much is now made of the favorable "climate" which foreign investors are alleged to require before they will invest. It may be safely assumed that domestic investors are equally sensitive on about the same issues. It is often said that the local investors in some Middle East countries have a "low time horizon," meaning that they are not interested in long-term investment and therefore not in economic development in the accepted sense. In the present political and economic circumstances of these countries the unprejudiced observer can only commend the sound judgement of these investors. "Raising the time horizon" and otherwise improving the economic climate means producing conditions of relative political and social stability in which savers and investors can plan ahead. This is a hopeful line but it remains for governments to pursue it, and it is unlikely to produce results very quickly.

The other obvious line, though not really an alternative one, is to do everything possible to spread the capital resources of the Middle East more evenly. At present the chief point of origin is the oil revenues of the Persian Gulf states. With the exception of Iraq, the development potentialities of these countries are low whereas the prospects in the countries nearer the Mediterranean, which have little or no oil, are much better. A new institution such as the projected Arab Development Bank would make considerable economic sense from the point of view of all parties. However, it is again the climate that matters. Some remarkable plans can be drawn up on paper and some limited transfers may even be made without the aid of any institution, as in the case of the recent Saudi Arabian loans to Syria; but until relations between the Middle East countries are considerably more cordial and freer from suspicion than they are now and until the conditions for business expansion and economic development in the borrowing countries themselves are more stable, it would be optimistic to expect a new institution such as an international development bank to yield results commensurate with its economic opportunity.

All this is admittedly gloomy, but I do not see how any impartial observer can say of any Middle East country outside the Persian Gulf states, with the exception of the special case of Israel, that it will be able to meet more than a small fraction of its capital requirements by any reasonable standard, over the next few years, out of domestic savings.

In the long run, many of these problems may be assumed to solve them-

selves. The economic prospects of the Middle East as a whole are undeniably bright. Under almost any conceivable peacetime conditions, the revenues from low-cost oil production are likely to be very large, the exploitation of the rich natural resources of the area, especially in Syria and Iraq, is likely to continue at some positive rate, and incomes are likely to rise. The maldistribution of population, land, and money, which seems so glaring at present, is likely to change for the better since people and money are likely to prove, as elsewhere in the world, ultimately mobile. Further than this the economist cannot be expected to see, and certainly in the case of some troubled parts of the Middle East at present, nearer than this he ought not be expected to look.

Third Session, Saturday morning, March 20th Presiding: WILLIAM N. ROGERS, International Financial Consultant, Washington

FINANCING AND DEVELOPMENT

IV. Attracting U. S. Investment Capital to the Middle East

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In the BRIEF TIME which is available I am going to try to give you a summary appraisal of the problem of attracting U.S. investment capital to the Middle East. Prior to the middle of the 20th century the great portion of private investment capital in the Middle East was largely French and British. There was also the Drang Nach Osten policy of Germany, which developed during the latter part of the 19th century and the first part of the 20th century — the Berlin to Baghdad Railroad was the most spectacular German venture in the area. But, by and large, France and Britain dominated the scene.

The Suez Canal, the Hijaz Railroad, the Port of Beirut, public services, and local industries throughout the area were largely financed by British and French private capital. There was practically no U.S. investment until after World War I, when the oil companies started their operations in Iraq and subsequently in Saudi Arabia, Kuwait, and other parts of the area.

Of the total U.S. direct private investment abroad, which is now over \$16 billion, something over \$1 billion is invested in Asia. The greater part of this amount is the direct investment of the American oil companies in the Middle East. However, engineering and transportation concerns as well as the automotive, soft drinks, and other branches of industry have also invested directly. It is almost all corporate investment, with very little individual investment.

Many of the things which have to be done in the Middle East and South Asia, however, do not attract private investment. Therefore, other institutions and media are obviously needed, such as the Export-Import Bank, the International Bank, and direct U.S. economic and technical assistance. I do not intend to talk about these this morning as they have been referred to during the course of the other sessions of the conference and our time is limited.

CONDITIONS FOR U.S. INVESTMENT

Now what are the basic elements which provide attractive investment possibilities? It is well known that disturbed political and social conditions and an imbalance and dislocation of trade do not provide for attractive investment possibilities. Therefore, as a first general point, it is essential that there be stable political situations; that there be protection against the possibility of expropriation, a freedom from undue interference by government, and a minimum guarantee against unfair competition.

Secondly, when it is not possible to convert currencies, there is certainly no interest in investing. There must be access to earnings, a possibility of conversion of dividends and profits; and the terms under which an investment is made should be reasonably generous. It is not enough simply to pass a law—the law must be executed faithfully. There must be a right to withdraw capital, both initial and appreciation. Third, there should be adequate facilities and utilities for transportation, communications, and power. Fourth, there ought to be a reasonable possibility and indeed probability of a guaranteed market area.

In the fifth place, there should be prospects of fairly substantial earnings. The good investment opportunities in other parts of the world, particularly here in the United States, are so substantial at the present time that an investor must be assured of a substantial earning if he is going to risk capital abroad. The American investor has more attractive opportunities in Latin America, where the tax situation from the U.S. point of view is better. I understand that President Eisenhower will make a statement next week in support of the findings of the Randall Commission, which recommended that there be a reduction of 14 points in the percentage tax rate so that other areas of the world will be as equally attractive as the Latin American for foreign investment.

Still another factor which provides an attractive atmosphere for capital is the availability of local credit. Institutions which provide working capital, often a combination of local and foreign capital, are frequently a most desirable way to finance development.

It is also important for investors to know what the policy of the United States is going to be, and in this connection I would like to make an observation. It is useful for the investor to know whether the American antitrust laws are going to be applied to him in the same way that they might be in the United States. An investment made in a foreign country is made under the laws of a foreign country. It is exceedingly difficult for an American in-

vestor to try to operate under two sets of laws. It may be of interest to you that the Standard Oil Company of New Jersey has recently presented a memorandum to the Attorney General on the subject of joint oil producing ventures in the Middle East. This is of interest not only for the development of the oil industry in the Middle East but also for all private investment in other parts of the world.

It is important to have a government treaty relationship, a relationship with other countries which will set down in black and white precisely what terms are to be guaranteed to private investors. The utility of this, however, should not be overemphasized, for in the final analysis the success of a venture depends on working out mutually satisfactory arrangements.

Another important point to be borne in mind, particularly in the Middle East and the rest of Asia, is that American investors are not falling all over themselves to find places to invest their money in this vast area. I think the situation is gradually developing where projects will have to be brought to the attention of American investors by people interested in obtaining their capital.

CURRENT SITUATION

Now the current situation with which we are confronted is that national-ism and the first flush of freedom have dominated the atmosphere in the Middle East and other parts of Asia. There has been an antipathy toward imperialism and colonialism. There has been a suspicion that private investment may be a new form of economic imperialism. Asian countries have a strong desire to build up their own industries free from outside control. This is, of course, the result of the swing-back against what was considered complete imperialism and colonialism during the 19th and early 20th centuries.

Frequently, however, extreme nationalism has worked to the disadvantage and detriment of the nations in the area, the most recent example being the Iranian oil situation; but we in the United States have gone through some of this ourselves in the past. During our early years we were reluctant to have any foreign interference, but I think it is of interest to note that the great development of the railroads in the United States during the 1870's and 1880's and later on was financed in good measure by British capital and other foreign capital. Without it we would have moved very slowly in the development of the West.

Public vs. private investment is a big question throughout Asia. There is a tendency to favor public investment and in some countries to favor invest-

ment which comes through the United Nations agencies. This, too, stems from a suspicion of a new age of imperialism, but there are limitations on what the United Nations can do and what public funds can do. The U.S. attitude on this subject should be made quite clear. It should be made clear that our growth as a nation has been based on the private capital system and that it does not mean a new form of imperialism. Enlightened capitalism has already been of great benefit in the building up of these countries.

The recent developments in the Middle East indicate that there are signs that some of the foreign suspicion may be on the wane. The United Nations report on the international flow of private capital published on March 5th points out that investing abroad is becoming somewhat easier. In India, for instance, the status of private foreign capital has been clarified. So-called investment laws have been passed recently in Egypt, Iran, and Turkey. These laws cover, among other things, more liberal provisions on the remittances of earnings and the repatriation of capital.

In the Arabian Peninsula area the oil companies, commencing with Standard Oil of New Jersey and Socony in the Iraq Petroleum Company in the early 1920's, Standard of California and The Texas Company in Saudi Arabia in the 30's, Gulf in Kuwait, etc., had contractual arrangements at the outset which were advantageous to both parties. There is, of course, a tremendous element of risk in venturing into extractive industries abroad. For the most part these contractual arrangements remain very much the same as when they were put into effect initially. They have worked to the decided advantage of both sides.

The previous speaker referred to the tremendous income which Iraq is realizing and will realize. The same is true of Kuwait and the other countries, but the situation requires on the part of the American investor a definite mid-20th-century outlook. It requires an outlook which appreciates the needs of the people — hospitalization, education, and many other things.

In Turkey a new investment law has been passed which was the result of the study of Mr. Randall's commission in Turkey. It has also passed a new petroleum development law which is quite the reverse of previous trends. Instead of being nationalized, the industry was de-nationalized. This is definitely a step in the right direction. In Iran the decree of December 16, 1953, also reversed the ultra-nationalist trend set in motion by the preceding government. It seems likely that this will present new investment opportunities. The law in Egypt has made it possible for American investors to hold over 50 percent of the capital.

PLANS AND FUTURE OUTLOOK

Most countries are deeply interested in developing their own industries. These countries are in varying stages of development. In Saudi Arabia the government wishes to assist in building up local industries—in building up the little fellow who is trying to start his own business. The Arabian American Oil Company is doing all it can to assist the government in this project.

The previous speaker referred to the financial institutions in the various countries in the area. I will only refer to them briefly in connection with one point that I made earlier. It is often very important to have local credit available. This has been made clear in Turkey where the Industrial Development Bank is a valuable institution having substantial support. In Iraq the Industrial Development Bank is directed more toward assisting local investors. There is a plan in the Lebanese Parliament for the establishment of an agricultural and development bank. Finally, there is the new project which has been receiving a great deal of study, the Arab Industrial Bank.

An Arab League resolution of February 1953 set up a study group which developed a blueprint for an Arab bank to finance construction. It is now being studied by the Arab states, after which it will probably be sent to the U.N. Economic and Social Council with a request for experts. The capital is to be \$560 million, according to the plan, half from the Arab governments and half from shares sold openly. This is a very substantial amount which should contribute immensely toward development in the Arab world.

There have been recent U.S. government reports which I think are of interest to all of us. I recall that Mr. John McCloy, speaking before the International Bank, said that we had talked a great deal about private investment and there have been many reports written on it. Now it was time to see whether something practical could not really be done. However, there have been some recent U.S. government and U.N. reports containing words of caution to all potential investors. Among these are: "Factors Limiting U.S. Investments Abroad," and "Foreign Investments of the United States," both Department of Commerce publications; "Report of the Commission on Foreign Economic Policy"—this is the Randall Report; and the reports of the United Nations which I have mentioned previously. These reports all point out the difficulties which confront investors, but on the whole they are illuminating in helping to clarify some of the problems which have hitherto been rather obscure.

I might say a word about the European countries' current interest in Middle East investment. There has been a substantial increase of activity in

recent months. The interest of European investors has grown—in particular that of Germany. Historically, Germany as an investor nation has always granted very liberal terms. The present era is no exception. Therefore, one of the problems which now confronts American investors is that the German investor in the Middle East is granting long-term liberal credit terms not customarily given by the United States investor.

There is also the entry of the Japanese in the Middle East, more in the marketing way than in direct investment. The significance of this should be apparent. Among other things, its significance from the point of view of the state of Israel might be noted. Unless Israel takes positive action to get its relations with the Arab states on a sound basis, the opportunity for the development of any markets in the area will have been forever lost.

In conclusion, it does seem that opportunities for investment are improving. The political instability which has frequently characterized the Middle East is not necessarily such a hazard as some have thought. If the experience of our company and other companies in the area is an indication, it would seem that there are good grounds to believe that although there are changing governments from time to time, by and large most people in the Middle East recognize that the development of the area must depend in part on Western investment. There is a necessity for mutual understanding and confidence that private investment in the last half of this century can be of enormous benefit in building up nations without jeopardizing their sovereignty and freedom. In the final analysis, however, a major part of the steps necessary to create a more favorable climate rest in the countries themselves and can only be taken by them. The better use of existing facilities and a greater confidence in the foreign investor would be of enormous help.

Third Session, Saturday morning, March 20th

Presiding: WILLIAM N. ROGERS, International

Finance Consultant, Washington

FINANCING AND DEVELOPMENT

V. Proposal for an International Economic Cooperation Program through the Use of Private Institutional Agencies

WILLIAM N. ROGERS
International Finance Consultant, Washington

BEFORE CLOSING THIS PANEL, the Middle East Institute has graciously accorded me an opportunity to tell you briefly of a proposed plan for International Economic Cooperation Through the Use of Private Institutional Agencies which represents several years of avocational work on the part of an informal group of American business and professional men with whom I have recently had the honor of becoming associated.

Our proposal relates to the organization and *modus operandi* of an international network of institutional agencies for implementing private international cooperation and development. It is presented as a basic plan and not a detailed blueprint of technical or economic issues. Moreover, because of its inherent nature, our proposal is advanced primarily as an invitation to the governments and business communities of potential participants to make criticisms and suggestions against the background of their indigenous business practices, creeds, customs, and traditions. The plan is basically geared to international cooperation and coordination of both government and private enterprise, and it is essential that general recognition of the importance and feasibility of institutional service agencies under private trusteeship precede any devotion to organization and operating refinements.

Our program is designed to marshal private venture capital on a worldwide basis in order to achieve international economic cooperation and progress (together with collateral social and cultural adjustments) with the sanction of, but without necessarily any financial assistance from, either Governmental or inter-Governmental agencies. It seeks to supplement, not supplant, the flow of Governmental and inter-Governmental investments as well as tradi-

tional forms of corporate investments with an International Investment Trust flow of capital for mutually profitable development and employment of the free world's wealth in terms of capital, manpower, natural resources, scientific research ability, and technological know-how through a more facile movement of goods, services, and finance (as a distinct service) between members of the community of free nations. In this effort the enlistment of intelligent and coordinated action on the part of the agricultural, commercial, financial, industrial, and labor communities of participating countries is essential. Equally essential is the willingness of participating governments to recognize the needs and demands of their people in matters of economic development and collateral social and cultural adjustments.

Our objectives are to treat the causes rather than the effects of distressed and/or underdeveloped economies. The proposal presents a practical means for a "boot-strap" achievement of international economic development on the part of areas and countries which are in need of equity capital; for those which are underdeveloped and in need both of a balanced economic development and technological know-how; and for those which need expanded markets for their products and accessible sources of materials supply for successful economic and social progress.

The plan is adapted to, and we hope for the participation of, countries with advanced as well as retarded economies. The more complementary the economies of the program's participants, the more effective will be the operation.

When one considers the fact that roughly 75 percent of the world's population has an average per capita income of considerably less than one-tenth the average per capita income of the United States, it is not difficult to point one's finger at the world's primary miscreant economic factor. I would hasten to add, however, that the advocates of this proposal are not altruists: we are practical men who are merely suggesting what we believe to be a feasible approach to the ultimate resolution of the world's ailments which lie in the causes and not the effects of economic, political, and social distress. We believe that correction and remedy is not an overnight affair, nor the cure a prime responsibility of the more advanced or "have" nations. Only through mutually profitable cooperation and coordination on the part of all elements can the disease and its cause be rectified through the development of a more facile movement of the world's goods and services. The keystone of political and social stability is primarily economic stability — not the reverse.

Moreover, our proposal relies upon equity rather than debt financing. One of the most pernicious burdens of infant or rehabilitated industries can be

fixed debts (and their costly servicing) outside of their capital accounts. Other important features envisaged in the plan are the geographical as well as industrial distribution of risks throughout the participating nations, and the creation of indemnity reserves through progressive operations.

Two novel ideas are incorporated into the proposed program:

- (a) The separation (or rather articulation) of long-term management interests so essential to balanced economic developments, and the short-term interests of the average investor of equity capital. Safeguards are provided for the protection of both types of interests.
- (b) The principle of "guest capital" looks toward two goals: (1) ultimate sale of going enterprises to local investors and reinvestment of "guest capital" in other approved development projects within a given area or country; or (2) repatriation of "guest capital" (plus capital appreciation) for either distribution or reinvestment elsewhere. The cyclical employment of "guest capital" as suggested in item (1) may prove, we believe, one of the most potent elements in the development of more "balanced" economies.

Properly implemented on a truly international basis of economic cooperation, this proposal may very well contain the seed of economic and political security for the world's community of free peoples. To that end is it dedicated and urgently recommended for your consideration.

The proposal provides for indigenously managed private operating companies, local trustees in the form of Local Development Councils, an Institute of Economic Cooperation primarily representative of capital-importing countries, and a Capital Fund primarily representative of capital-exporting countries, all tied together on a mutually participative basis through appropriate contractual agreements. Governments participate through licensing of Local Development Councils and review and approval of development projects.

I would reiterate that constructive criticisms and suggestions are invited. Advocates of the plan will hold themselves in readiness for discussions and conferences both here in Washington and in New York. Worldwide distribution is being given the plan and it is hoped that in the not too distant future a roundtable international seminar can be held at which a correlation of suggestions can be presented, discussed, and agreed upon in principle.

While we have reason to believe that private capital is readily available for the launching of this, or a closely allied, proposal, its immediate formation and mobilization is, we believe, dependent upon concrete evidence of interest abroad and a demonstrated willingness upon the part of Govern-

ments as well as private business communities to assume the responsibilities inherent in such an undertaking. Such a demonstration may best be evidenced by forwarding written commentaries, suggestions, criticisms, and agreements or disagreements in principle to me through the Middle East Institute. The full text of our proposal may be secured in the same fashion.

Luncheon Session, Saturday noon, March 20th Presiding: George Camp Keiser, The Middle East Institute

PLANS AND ASPIRATIONS OF INDIA TODAY

H.E. G. L. MEHTA Ambassador of India

THE COUNTRIES of the Middle East and the Republic of India have much in common, especially with regard to their hopes and plans for the future. Assuredly, there are many differences between the two regions—religious, social, and political—just as there are differences within the individual countries. India has nearly four times the population of the entire Middle East crowded into an area one-third the size; the great mineral resource of petroleum looms large in the economic affairs of the Middle East, whereas India's basic reserves of wealth lie in agriculture, minerals, and industry. But these are differences which are only to be expected in widely separated areas; more basic are the similarities in our mutual activities which should bring us together in a cooperative effort to achieve peace and economic progress. I refer to the need to raise the living standard of our people, which is so low compared with that in Western countries, and to achieve that measure of economic stability, strength, and viability which will enable us to protect and support our cherished social and political institutions.

India has another problem in common with the Middle East. As a result of the partition of the subcontinent, we also have a problem of displaced persons, perhaps the largest in the world, comprising 7.5 million people. Rehabilitation and resettlement of these displaced persons has been a matter of vital concern to the new Indian Government. It is now recognized that improvement of the economic condition of the "hungry two-thirds" of the world is an imperative necessity for the continued preservation of peace and stability. It has been stated that since the war the average real income per head in the rich countries has probably increased by about 3 percent a year, while in the poor countries it has not risen appreciably. Both in the Middle East and in India, growing populations press heavily on the means of subsistence, capital is in short supply, and outmoded methods, lack of education facilities, and poor health standards restrict the ability of the people to make any significant advance. In these circumstances, mobilization of available

resources and their effective utilization on a planned basis is essential; this does not necessarily involve extensive governmental participation in production, but it does require direction, guidance, and assistance to private industry and agriculture to ensure as rapid and balanced a growth as possible. During the past decade, a number of important development projects have been undertaken in countries of the Middle East in agriculture, industry, and transport, and we in India appreciate the efforts and achievements of our neighbors to the West in raising agricultural and industrial output. Schemes of a similar nature are also being pursued in India, integrated into a Five Year Plan which has been under way since 1951. I am sure you would also like to hear of our endeavors and achievements in this our first concerted effort in the economic field, for some of our problems are comparable with those experienced in the Middle East.

India's need for rapid economic development is urgent; the standard of living of our people has always been low, appreciably lower than that in the Middle East as a whole, and the problem of raising this standard is imperative. India's population, now over 360 million, increases by some 5 million every year. The resultant pressure on the basic necessities of life is consequently very great, so that unceasing effort is required from the agriculturists, industrial management, workers, and Government to increase production steadily. But it is not enough to maintain existing standards; there can be no hope of lifting the masses from their poverty unless there is an appreciable margin of resources to apply to basic economic improvements. Accordingly, our Five Year Plan has been as ambitious as we could make it, having consideration for our resources and our acceptance of a democratic way of life. The total outlay over the five years is estimated at about \$4.3 billion. India's national income is only \$19 billion per annum (about \$53 per capita) and a higher outlay, although very desirable, would not be practicable. The margin of savings must necessarily be low with such extremely low income levels and any highly inflationary methods of financing would largely defeat the purposes of the Plan. Hence, our immediate objectives must be limited to our capacities, and this first Plan does not aim further than strengthening the basic structure of the economy. An increase of no more than 11 percent in consumption standards at the end of five years can be expected, but the Plan in providing strong, expanded heavy industries, power, efficient agriculture, communications, and so on will bear fruit in later years by enabling rapid expansion of secondary and consumer goods industries.

The first Five Year Plan could not be merely an attempt at industrializa-

tion and we have to resist the temptation of giving industry and manufacturing first place. A balanced growth is essential for stability, and since over 70 percent of our people live on the land and the bulk of national income comes from the soil, agricultural progress must take pride of place. This is also necessary because the dietary standards are still inadequate and the threat of famine, although greatly reduced in recent years, is by no means just an ugly memory of the past. There is no question whatsoever that raising the output of basic foodstuffs is by far the most important priority for countries in India's position.

The fundamental problem in agriculture is the extension of cultivation. For a long-term solution to the food problem it will be necessary to double the cultivated areas. We are trying to expand the area of cultivation by reclamation processes and irrigating formerly arid areas, but there is also much scope for improvement of techniques of production, extended use of fertilizers, irrigating areas already tilled, etc. Of the \$4.3 billion, 17.4 percent is being applied directly to the improvement of agriculture, to the promotion of measures designed to raise the yield per acre. No less important for agriculture are the schemes for irrigation and power, which will absorb 27.2 percent. These irrigation works range from several huge multipurpose rivervalley projects similar to the T.V.A. to small local undertakings covering a few acres and comprising a program of tube wells.

The electric power generated at the larger establishments will provide partial electrification of rural areas and also of industries and cities in the vicinity. However, the task of raising agriculture to new levels of efficiency and well-being is wide in scope, and includes health and education services for the villagers and a reorganization of the system of land tenure, which in the past has been the source of much stagnation and indebtedness in rural India. In these broader schemes for the betterment of farm life, we are receiving invaluable assistance from the United Nations, the Point Four organization of the United States Government (the Indo-American Technical Cooperation Agreement of 1952 formalized this assistance on a cooperative basis) and from bodies such as the Ford and Rockefeller Foundations. The Indian side of this work is organized under two comprehensive schemes the Community Development Program and the National Extension Service - which will reach 120,000 villages covering nearly one-fourth of the rural population. The community development projects now under way in India are unique both in scope and coverage and they have attracted favorable attention from specialists from abroad. These schemes are progressing steadily and are evidence of practical cooperation between Indian and foreign experts and technicians.

By measures such as these we hope to achieve that margin of production over consumption which will allow us to forge ahead in other fields. Modern and scientific agriculture is important to India not only as a source of essential foodstuffs but as an important earner of foreign exchange (by the sale of "cash" crops such as jute and cotton) and as a supplier of vegetable and animal raw materials to India's growing industries.

The benefits of agricultural and industrial development cannot be fully used unless there are facilities for rapid and easy movement of persons and products. Access to raw materials and markets is vital if the development itself is to run smoothly. Accordingly, the second major priority of the Five Year Plan is the improvement of communications. India already has an efficient and widely established railroad system, but its capacity is far below the demands which will be made upon it as development in other sectors proceeds. The Government of India have built a complete factory for the manufacture of locomotives which produced its hundredth unit last year; beyond this, the whole system is under a process of enlargement and reequipment. Roads to connect our 560,000 villages must be laid, and there must be additions to the few trunk highways spanning the country. Our ports are even now congested and facilities need enlarging, particularly in view of the continued growth of our foreign trade. India's mercantile marine and air services, as yet small and in the early stages of growth, need help and direction for their adequate development. In the whole field of transport, \$1,440 million, or 24 percent of the total, is to be spent.

Health and education services for as many of the people as possible are an important feature of the Five Year Plan. If we are to take advantage of modern techniques, our people must have the rudiments of education, and an adequate pool of trained technicians must be built up. Similarly, full productive contribution from the population cannot be expected if disease is widespread and physical well-being difficult to attain. Moreover, health and education facilities are called for on humanitarian grounds.

The three main sectors of the Plan—agriculture (with irrigation and power projects), communications, and social services—absorb 85 percent of the allocated expenditure of the Plan. Beyond this, expenditures are scheduled for the rehabilitation of displaced persons and for miscellaneous outlays connected with the Plan's administration. This leaves very little in the public sector for industrial development. Industry will, however, benefit greatly

from the increased availability of electric power, better communications, and higher agricultural productivity. Also, the bulk of industry being in the private sector, it is more or less self-operating with such financial and other assistance as the Government can and do give it.

I would like to mention here that the high level of Government investment in other areas does not imply any policy of concentrating economic activity in the hands of the State. There are some necessary projects which private enterprise could not handle at the present stage owing to lack of resources. Efforts are being made to augment these resources through foreign aid if necessary. In the main, industrial development is predominantly in the hands of private enterprise. The basic industries such as steel and chemicals are to be encouraged and foreign capital is welcomed in India and given not less than equal treatment with domestic capital. Already, arrangements have been made for large investment by foreign oil companies in refineries and processing plants. These will multiply the amount of petroleum and lubricating oils available on the basis of crude oil imports principally from the great reserves of Middle Eastern countries. We are also developing several light manufacturing industries which can supply a range of useful products needed by the domestic economy and by the economies of the neighboring regions of South East Asia and the Middle East.

The Plan is in its third year of operation. Impressive progress has been made in the production of foodgrains, which was raised by more than a million tons in the first year and in the second year by nearly 4.5 million tons. Irrigation water has been provided by minor works to about 2.5 million acres. A half million acres were reclaimed from waste areas and new land of about 1.5 million acres was brought under irrigation by the river valley projects. The production of chemical fertilizer, cement, cotton yarn, and cloth has increased significantly. These are only a few examples of the progress which is being made. One important achievement has been the containment of inflationary pressures, which were the cause of much anxiety at the time the Plan was formulated. But difficulty is being experienced in regard to provision of adequate employment. Dis-inflationary trends have accentuated India's unemployment problem and schemes are being evolved for an additional \$14 million-worth of projects designed specifically to increase the volume of employment.

India's economic development and its trend toward industrialization does not in any sense mean that its trade with the rest of the world will diminish. On the contrary. A developing country needs machinery and equipment, industrial raw materials, and even some luxury goods, while the export trade must be maintained and expanded in order that these goods may be paid for and an export surplus eventually established for the servicing and repayment of foreign loans. Also, India's trade with its immediate neighbors to the East and the West may be expected to grow both in volume and in the diversity of commodities exchanged. India has long been an important supplier of cotton textiles to the Middle Eastern countries, and the availability of these goods will be continued and improved.

Underdeveloped countries cannot in any circumstances be expected to provide the resources for economic progress entirely from within their domestic structure. It would be a contradiction in terms to speak of a developing region without an import surplus, at least in the early stages. This implies that an inflow of capital is necessary. Before the last war, nearly all development capital was supplied on a private basis. For most areas, the flow of private foreign investment has now practically dried up, and it is proving very difficult to get it moving again in the volume needed. The causes are largely outside the control of the potential host countries - the war has left an atmosphere of political instability in the world which, though in many cases illusory, is sufficient to deter investors in the prosperous countries from venturing their capital in regions not closely associated with their own country's sphere of influence. Moreover, profitable opportunities in the industrialized regions are at present plentiful. No doubt, given a strong enough incentive, the flow of foreign capital shows signs of its earlier vigor, of which the continued investment of the Western oil companies in the Middle Eastern fields is a prime example. However, countries like India suffer from the worldwide immobility of private venture capital at the present time, despite many efforts and guarantees to make smooth its path. In these circumstances, we have to look to governments and international organizations for the loans and credits we need.

The benefits of this kind of assistance are not entirely one sided. The prosperous and industrialized countries are recognizing the fact that their continued peace and progress depend to a large extent on stable economic as well as political conditions in other parts of the world. On the other hand, economic and democratic progress are indissolubly linked in underdeveloped countries. Economically advanced countries are anxious that the underdeveloped nations have a firm economic base for their social and political institutions. It is widely appreciated that any assistance which involved political commitments or some surrender of national sovereignty would be self-defeat-

ing for this purpose, also that aid from advanced countries must be regarded as supplemental and in no way reducing the need for the recipients to apply their full efforts and resources to their own economic betterment. There should never be an attempt to import Western methods indiscriminately as if the two kinds of economy were wholly similar; rather there should be a selective introduction of technological improvements where these are suited to local conditions. Accordingly, no hard and fast rules can be laid down for economic development; success depends very largely upon the resourcefulness and understanding of the people on the spot — the technicians, the administrators, and the local workers.



