LAND TENURE PROBLEMS
IN IRAN

by

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Jalil Mahmoudi
July 14, 1961

Mr. Jahl Mahmoudi
1203 University Apartments
Logan, Utah

Dear Mr. Mahmoud:

Today I had a chance to peruse your thesis, entitled
"Land Tenure Problems in Iran." Congratulations on this
fine contribution which you have made in a very important
field! I have had a copy of your thesis made for my library.
It will be bound in a few days, and I am sure it will be a
valuable reference source to me in the years to come.

Please extend my best wishes to Mrs. Mahmoudi
and the family.

Yours sincerely,

Daryl Chase
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IMPORTANCE OF THE PROBLEM

Land tenure problems throughout the Middle East and most of the underdeveloped countries of the world are considered by competent international organizations and many students of world problems as one of the greatest contributing forces to social unrest and a barrier to economic development.

When the United Nations' General Assembly at its fifth session in 1950, had under discussion the problem of land reform in many underdeveloped countries, the consensus of opinions were that the conditions affecting land reform reduced agricultural productivity and were a major cause of low standards of living for the populations of those countries. The General Assembly stated the conviction that: "Immediate steps should be taken to study the extent to which existing agrarian conditions hamper the economic development of underdeveloped countries" (20).

The importance of land tenure in Iran is pointed up by the fact that 75 percent of its people live in rural communities, and it is these communities which would be affected most by land tenure reform. Mr. Afif Tannous of the Foreign Agricultural Service of the U. S. Department of Agriculture in his Review of Foreign Farm Policy, Production and Trade said: "Probably the most outstanding problem of the rural economy in Iran results from the prevailing system of land tenure" (21). Dr. F. S. Harris in an unpublished report on Iran described his view in the following manner:
In scrutinizing the agriculture of Iran for means by which the standard of living of the peasant can be raised and the whole economy of the country thereby made more stable and secure, it has become obvious that the question of land ownership and tenure must be taken into consideration.

Social justice and economic efficiency are the two main objectives in land tenure. In any attempt to change the current practices in land tenure patterns the following social and economic changes should be considered:

Social change

The key concept to understanding social change involves strain, tension, contradiction, or discrepancy between the component elements of the social and cultural structure (8). From the sociological point of view, therefore, changes in land tenure pattern and arrangement should be brought about when at least the following elements are present:

a. Peasant dissatisfaction with existing agrarian institutions;

b. A determination to act on that dissatisfaction;

c. A goal (even though it be hazily formulated) toward which to work; and

d. An organization to carry out that determination and work toward the goal envisioned (14).

A land-tenure policy carried out on these bases will have the objectives of equitable distribution of income and right of property, equality and dignity for all tenure groups, and a well integrated

---

1 F. H. Harris, former President of the Brigham Young University and Utah State University, served as Technical Advisor to the Government of Iran during 1939-1940. (The author had the privilege of being his assistant.) He was later appointed in 1950 by the U. S. Government as Director of the Point Four program (U. S. Operation Mission) in Iran.
community life. In other words it would cover such aspects as distribution of land to landless peasants, improvement of landlord peasant relationship, better leasing or renting arrangements, security and protection of sharecroppers, and improvement of social institutions and relationship in rural area.

**Economic change**

The chief source of income in most underdeveloped countries is agriculture. The majority of the population (some 75 percent or more) are engaged one way or another in agriculture. These facts seem to indicate that any attempt for economic development should be initiated in the rural sectors. Attention should first be paid to the most important problems.

As far as those who are working on the land—those who can be called the real producers of agricultural products—are in uncertain conditions as to their home and employment. Hence, there is frequently no incentive nor opportunity to establish a real farm business enterprise.

The ultimate objective in improvement of the agriculture sector is to bring about favorable economic chances which will improve and increase production, add to the income of individual farmers, and help build up savings for capital investments. Such changes would shift a traditional society one step further along the path of economic development.

A farmer needs land, water, knowledge and capital in order to produce. Since land is a basic necessity to agriculture and its wise

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2 Labor is furnished by himself and his knowledge is necessary to take care of management.
use and management an essential factor for profitable economic development, land tenure may well easily become the most important factor on which action should be taken.

This is not to say that land fragmentation, and its distribution to farmers is the answer, nor that land tenure improvement in and of itself is the final solution to the agricultural problems of Iran. Much more is usually involved. A vast amount of research is needed before we can really understand the essential nature of structural changes that are correlative to development and among which land tenure adjustments are strategic (13).
OBJECTIVES OF THE STUDY

The challenge, now well-known to underdeveloped countries, to improve the economic and social well being of rural people, revolves around a healthy land tenure system which can give farmers better living conditions, independence, encouragement and social security. Certainly policy makers and administrators should be well informed of the prevailing conditions and existing problems to accomplish a drastic and revolutionary change in land tenure institutions. They must have sufficient facts and figures from which future plans can be based.

In Iran, where Providence has not denied His bounties, and where generally, natural resources are relatively abundant with more than enough land and potentially sufficient water for its inhabitants, any reform of this nature does not look to be a great problem. But, inasmuch as matters connected with tenure reform are parts of a larger, integrated socio-cultural whole, they cannot be considered in isolation and apart from their relationship with other aspects of that integrated whole.

Therefore, while every portion of Iran has its peculiar problems pertaining to its own natural and physical setting which should be tackled separately, other factors such as historical background, social, cultural, economic and all the customary rights and traditional privileges with which the land tenure phenomena are closely associated should be seriously taken into consideration.
It should be remembered that whatever methods and techniques have been developed during many centuries cannot be condemned and changed overnight without a careful study of the problem from all angles.

The objectives of this study, however inadequate from the standpoint of statistical data are:

1. To compile and analyze the existing data on agricultural conditions in Iran.

2. To review land tenure reform programs and experiences in some other countries that may have relevance to conditions in Iran.

3. To analyze past attempts of land tenure reform in Iran.

4. To present some recommendations for land tenure reform in Iran.
DEFINITION OF TERMS

Since land reform deals to a great extent with improvement of land tenure systems and their related institutions, a brief discussion of the interrelationships and the definition of the concept of land reform and land tenure seems appropriate.

The field of land reform is concerned with improvement of agricultural economic institutions, i.e., agricultural land ownership and tenancy, land rents, taxation of agricultural land and/or income from land, agricultural credit, and marketing. Agricultural technology, physical problems of land utilization and development, conservation of resources, methods and levels of productivity, and problems of rural industries are included insofar as they are relevant to these institutional problems.

The concept of land reform as defined by most economists and sociologists covers the changes in agricultural economic institutions, improvement of land tenure systems, land ownership, economical size of operating units, landlord-tenant relationships, and institutions that affect and safeguard the security, stability, and efficient use of land resources by the best available methods. Consideration must be given to legal property rights, religious beliefs, and regional cultures, traits, norms and mores.

"The ultimate goal of land reform," however, as Dennis A Fitz-Gerald observed, "is to improve the economic, social, and political status of the individual who occupies the land and in so doing
contributes to general economic development. Back of this concept is a fundamental belief in the individual liberty of man and his right to own and control property " (13).

While the main purpose in a land reform program might be centered around economic objectives, no comprehensive plan can be outlined without a thorough consideration of historical background, legal aspects, political ramifications, psychological attitudes, and sociological behaviors.

Land tenure, as defined by most authorities, is all those arrangements made and relationships established among men by which varying rights of all those who hold, control, occupy, and use the landed property are determined. Land tenure in its broadest sense involves all the ways by which governments, corporate bodies, and individuals share in holding or using all or any portion of the bundle of property rights as well as the period of time during which those rights are held.

Land tenure, however, covers much more than mere rights in land. It encompasses agricultural land ownership and tenancy, land rents, taxation of agricultural land, taxation of income from land, and rural financial, credit and cooperative facilities. In other words, land tenure involves all those rights mentioned above as well as most of the institutional factors affecting the agricultural economy.
REVIEW OF LITERATURE

A. K. S. Lambton in her scholarly and painstaking work, "Landlord and Peasant in Iran," compiled a treasure of information pertaining to a study of land tenure and land revenue administration in Iran. Her study approached the subject from a historical as well as a technical point of view. It covered the historical factors from which the existing land tenure system developed as well as a description of general socio-political relationships of landlord and peasant in Iran. From an economic point of view, however, the study was handicapped for lack of statistical data which is still a major problem at the present time (7).

Paul V. Maris, author of "This Land of Mine," has contributed a great deal to problems involving the initial programs of Crown land distribution while serving as representative of Ford Foundation in Iran in 1952. His unpublished reports and wise suggestions were of great help to the success of this program. He outlined a 19-year plan for distribution of the Crown lands through an integrated community development system and supervised credit arrangements.

His Excellency Amir Assadollah Alam, former Minister of Agriculture of Iran presented an eloquent paper at the International Conference of Land Tenure and Related Problems in World Agriculture at Madison, Wisconsin, in 1951. This paper covered both past and present attempts to implement land tenure reform program in Iran.
It contains the highlights of the land tenure reform problem in Iran, particularly on Crown Land Distribution.

In a 17-page booklet published by Bank Omran, Tehran, Iran in 1958, "The Pahlavi Domain Land Distribution Program" (2), a condensed account of H. I. M. the Shah's land distribution program is given. It presents the objectives, accomplishments and needs of the Crown Land Distribution program as well as the activities of the Bank Omran.

Joseph R. Motheral prepared a thorough and workman-like report titled "Land Reform in Iran - Problems and Possible Solutions" (9). It is a valuable study on Crown Land Distribution. This report presents a review of the issues of land reform in Iran, describing alternative solutions and setting forth both general and specific recommendations for the distribution of these lands. His recommendations included possible joint courses of action by the Government of Iran and the United States Operation Mission; including, (a) the administrative recruitment of American and Iranian personnel, and (b) a five year fiscal and budgetary plan to carry out the Crown Land Distribution as well as the technicalities related to the overall program.

United Nations, "Land Reform, Defects in Agrarian Structure as Obstacles to Economic Development," U. N. Publications, a 101 page report. This report briefly describes the main features of agrarian structure in underdeveloped countries by means of examples. It includes information on the size and layout of farms, the various conditions of tenancy, agricultural credit, settlement of legal title to land and to water rights. It also provides a study of the relations between the agrarian structure and economic development. This report concludes
that: Agrarian structure and in particular the system of land tenure in many countries, prevent a rise in the standard of living of small farmers and agricultural laborers and impede economic developments. It also recommends that the government of underdeveloped countries avail themselves of the facilities available to them through the United Nations expanded program of technical assistance (19).

The Indian Society of Agricultural Economics. Agrarian Reform in Western Countries. Land reform programs of some twenty different western countries are comprehensively studied in this book. In compiling all the various programs comprising land reform, the authors believed that, such a study sheds considerable light on a fundamental aspect of agricultural economy which, in India, has been sorely neglected, namely, land tenure. The authors, however, conclude that "the reforms which vary in their details from country to country, may not always be found suitable to Indian conditions, but the broad principles which underlie these reforms are bound to prove relevant and useful in arriving at decisions on how to approach the problems of land tenure in India" (16).

Nanavati, Manilal B. and Anjaria, J. J., "The Indian Rural Problem" Third edition, November 1947. This work deals with Indian environment and resources, population, agriculture, food supply and nutrition, social services, evolution of agricultural policy, and technical research. It also gives comprehensive accounts on land reform, evolution of the Indian land tenure system, size of holdings, rural engineering, agricultural finance and cooperative movement, rural reconstruction activities, and a section on constructive rural sociology.
The authors believe that "the root cause of the low productivity of Indian agriculture is the failure to apply modern science to it, but before this could be done, extensive measures for the reform of the land system are necessary" (12).

Hui-Sun Tang, "Land Reform in Free China," Taipei, Taiwan, China. This report was compiled by Hui-Sun Tang, Chief of the Land Reform Division of Chinese-American Joint Commission on Rural Reconstruction, and a number of his colleagues. It gives an overall picture of land problems, land reform, evolution of land tenure system, farm rent limitation program and problems involved, public farm lands and their sales program and procedure. This work also gives a detailed account on land-to-the-tiller program, the act and its implementation, and results. In essence it gives the procedure of the land reform undertaken by the Chinese Government in Taiwan province to achieve the equalization of land rights and ensure peace and stability. To achieve these goals three successive steps were taken: farm rent reduction in 1949, sale of public farm lands in 1951, and land-to-the-tiller in 1953.

Chiang Monlin, Chairman of Joint Commission on Rural Reconstruction says: "Especially significant was the use of public enterprise stock share to pay for lands compulsorily purchased from landlords by government under the land-to-the-tiller program. Such a method of compensating the landlords had the effect of converting investments in land into industrial assets and laying the foundation for the industrialization of Taiwan" (15).
PHYSICAL, AGRICULTURAL, ECONOMIC AND SOCIAL BACKGROUND

Physical characteristics

Iran, formerly called Persia, is a great land bridge connecting the bulk of Asia with Europe. With its 628,000 square miles, it is as large as France, Germany, Italy and Spain combined or one-fifth the land mass of the United States (about equal in size to Texas, New Mexico, Arizona and Colorado combined). Lying between 30° and 40° north latitude and 44° and 63° east longitude, Iran is within the great Alpine-Himalayan fold system, forming the connecting link between the Caucasus Taurus structure and that of Afghanistan and Baluchistan.

The land of Iran, geologically speaking, is an interior plateau set like a triangle between two depressions, the Persian Gulf to the south and the Caspian Sea to the north. The triangle, 3,000 to 5,000 feet above sea level, is ringed on almost all sides by mountain ranges of varying heights and extent. The two large mountain ranges of Ararat and Elburz in the north and Zagros range in the west cut off the northern winds and most of the rain from the central plateau.

An obvious consequence of these geographical features is the climate. It is humid and rainy in the north and west, dry and warm in the central plateau and hot in the south. Average rainfall for the entire country is only nine inches a year and consequently this low precipitation greatly affects the agricultural and total economy of Iran.
Physical features and climatic conditions in Iran vary from humid jungles in the Caspian littorals to sandy, dry deserts in parts of central and southern Iran. Altitudes vary from 80 feet below sea level at the Caspian coastal plain to the magnificent volcanic cone, Mount Demavand, which is over 18,500 feet high. Agriculturally, the land varies from fertile provinces in the north and northwestern part of Iran where there are adequate amounts of precipitation, to sand dunes and eroded wastelands in the southeastern districts.

Temperatures for the country as a whole vary greatly. Tehran, the capital city of Iran, at an elevation of about 4,000 feet above sea level has January mean temperature of 35° F, with a minimum of about 10° F. in winter and maximum of around 100° F. in the summer. Much colder temperatures are found in the northwestern and northeastern parts of the country, but mid-summer temperatures of about 130° to 140° F. are not uncommon in the dry deserts and tropical areas of the south and on the shores of the Persian Gulf.

The most pleasant period of the year in Iran is during the spring months of March to May when temperatures are ideal in most parts of the country.

Agriculture

Land utilization. Iran covers about 163.6 million hectares of land (or approximately 628,000 square miles), out of which only about 13 million hectares or 11 percent of the total area are considered to be cropland. Not more than one-third of the cropland is under crops in any given year and the other two-thirds is normally fallowed. The fallow system is required because of limited amount of precipitation and lack of adequate fertilizers. Thus, the land is cropped for one
year and left idle for one or more years to build up soil nitrogen and to store available soil moisture.

Thirty-one and a half million hectares of land, or about 19.26 percent of the total land area not presently cultivated, are considered to be potentially cultivable. Any attempt of land tenure reform in Iran will likely raise the following questions:

1. Is it possible and economically feasible to cultivate land potentially cultivable in Iran?

2. If so, what are the factors limiting its cultivation, and what social and technical methods should be used to maximize benefits to the farmer?

An estimate of the present use of land in Iran is presented in table 1.

Approximately two-thirds of the total six million hectares cropped in any given year is devoted to wheat and barley. Approximately one-third of the land cultivated in any given year is under fruits and nuts, cotton, rice, various field crops, sugar beets, tobacco and other crops. A breakdown of the estimated area under each crop in 1967 is presented in table 2.

Land ownership. There are at present three land ownership systems in Iran, namely; (a) public domains (Khalesejat), (2) endowments for Holy Shrine and other Islamic institutions (Owghaf), and (3) private ownership (Amlake Shakhsi).

Privately owned land is divided into the following three types: (a) Crown lands (Amlake Pahlavi), (b) Large holdings (Omdeh-malek), and (c) Small holdings or peasant land-holdings (Khordeh-malek).
Table 1. Estimated land utilization in Iran, 1957\(^a\)

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<th>Major land uses</th>
<th>Area in hectares</th>
<th>Percent of total</th>
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<td><strong>Land in farms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cropland:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under-cultivated crops</td>
<td>5,070,000</td>
<td>3.10</td>
</tr>
<tr>
<td>Fruits and nuts</td>
<td>930,000</td>
<td>0.67</td>
</tr>
<tr>
<td>Fallow</td>
<td>12,000,000</td>
<td>7.33</td>
</tr>
<tr>
<td><strong>Total cropland</strong></td>
<td>18,000,000</td>
<td>11.00</td>
</tr>
<tr>
<td>Pasture in farms</td>
<td>160,000</td>
<td>0.10</td>
</tr>
<tr>
<td>Farm woodlands</td>
<td>1,100,000</td>
<td>0.67</td>
</tr>
<tr>
<td>Villages, village roads, wasteland and other land in farms</td>
<td>1,240,000</td>
<td>0.76</td>
</tr>
<tr>
<td><strong>Total land in farms</strong></td>
<td>20,500,000</td>
<td>12.53</td>
</tr>
<tr>
<td><strong>Land not in farms</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forests and ranges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forests(^b)</td>
<td>18,000,000</td>
<td>11.00</td>
</tr>
<tr>
<td>Grazing land outside forests</td>
<td>10,000,000</td>
<td>6.11</td>
</tr>
<tr>
<td><strong>Total forests and ranges</strong></td>
<td>28,000,000</td>
<td>17.11</td>
</tr>
<tr>
<td>Cities, roads and railroads</td>
<td>2,000,000</td>
<td>1.22</td>
</tr>
<tr>
<td><strong>Wasteland:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potentially cultivable(^b)</td>
<td>31,500,000</td>
<td>19.26</td>
</tr>
<tr>
<td>Desert and other wasteland(^b)</td>
<td>81,600,000</td>
<td>49.38</td>
</tr>
<tr>
<td><strong>Total wasteland</strong></td>
<td>113,100,000</td>
<td>69.14</td>
</tr>
<tr>
<td>Total land not in farms</td>
<td>143,100,000</td>
<td>87.47</td>
</tr>
<tr>
<td><strong>Grand Total Land Area</strong></td>
<td>163,600,000</td>
<td>100.00</td>
</tr>
</tbody>
</table>

\(^a\) Hadary, Gideon and Karim Sai, Agricultural Statistics of Iran, American Embassy, Tehran, Iran, 1949, p. 9. This table, originally prepared in 1949, was brought up to date in 1957. Revision is based on data obtained from the Agricultural Economics Division, Ministry of Agriculture of Iran, Agricultural Attache, U. S. Embassy, and the office of Economic Affairs, U. S. Operations Mission in Iran, Tehran, Iran.

\(^b\) Undetermined portions are grazed by livestock.
Table 2. Estimated land area under different crops in Iran, 1957

<table>
<thead>
<tr>
<th>Crop</th>
<th>Area under cultivation (Hectares)</th>
<th>Percent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>3,100,000</td>
<td>51.66</td>
</tr>
<tr>
<td>Fruits and nuts</td>
<td>930,000</td>
<td>15.50</td>
</tr>
<tr>
<td>Rice</td>
<td>270,000</td>
<td>4.50</td>
</tr>
<tr>
<td>Barley</td>
<td>910,000</td>
<td>15.17</td>
</tr>
<tr>
<td>Cotton</td>
<td>310,000</td>
<td>5.17</td>
</tr>
<tr>
<td>Vegetables &amp; melons</td>
<td>230,000</td>
<td>3.83</td>
</tr>
<tr>
<td>Pulses</td>
<td>130,000</td>
<td>2.17</td>
</tr>
<tr>
<td>Sugar beets</td>
<td>43,000</td>
<td>0.72</td>
</tr>
<tr>
<td>Other grains</td>
<td>43,000</td>
<td>0.72</td>
</tr>
<tr>
<td>Tobacco</td>
<td>15,000</td>
<td>0.25</td>
</tr>
<tr>
<td>Other crops&lt;sup&gt;b&lt;/sup&gt;</td>
<td>19,000</td>
<td>0.31</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,000,000</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

<sup>a</sup> Data obtained from the Agricultural Economics Division, Ministry of Agriculture of Iran, and unpublished reports of the Agricultural Attache, U. S. Embassy, Tehran, Iran.

<sup>b</sup> Including vegetable oil seeds, gums, jute, tea, alfalfa and other forage, henna, and dyes.

Out of an estimated 51,300 villages in Iran, which vary greatly in size, population and productivity, it is roughly estimated that about six percent of the land is public domains, 20 percent endowments, and 74 percent privately owned land (four percent Crown Lands and 70 percent other private holdings).

There has been no complete survey to determine the exact amount of hectarage included in each type of holding. Except for land owned
by peasants which is ordinarily worked by him, most of the other types of ownership are absentee landlordism.

Public domain lands are controlled by a special government agency called Bongahe Khalsejat which is now a part of the Ministry of Agriculture. Branches of this agency which look after the public domain land are located in different parts of the country, and are playing the role of the landlord.

The same is true with the endowments. The only difference in this case lies in a different administration for different shrine properties. Most of the miscellaneous endowments are under a department called Edareye Owghaf which is a part of the Ministry of Education. All the Emam Reza (the 8th Emam) endowments are under the high auspices of H. I. M. the Shah and administered by a special department in Meshed called Astane Ghods, which is a part of the Ministry of Court. It is headed by a high official designated by H. I. M. the Shah. Other shrine endowments have their own administrators or Motavali who are ordinarily designated by the persons who endow their land to a holy shrine or other Islamic institutions.

The following analysis of land ownership is based upon very rough estimates; it, however, will serve our purposes:

An average of between 2 and 3 hectares appears to be under cultivation per cultivating family (1.8 hectares per rural family including non-cultivators' families, 2.1 per adult male cultivator); but in the study it was found that 60 percent of rural families actually possessed no land, another 23 percent possessed less than one hectare, and 10 percent between one and three hectares. Only one percent of rural families, included in this class are absentee landlords, possess over 20 hectares. At the same time only 17 percent of the whole area under annual cultivation was in the hands of families having less than three hectares, while 56 percent was in the hands of persons having over 20 hectares. Thus one
percent of the persons rurally engaged (not necessarily resident) held 56 percent of the land, while 90 percent of the rural population held only 17 percent of the land. In the class of landowners holding over 100 hectares, (only 0.2 percent of the total of rural families or landowners, nevertheless held 33.8 percent of the total annually cultivated land) the average land held is generally throughout the country high, and in one area is actually 810 hectares per owner (10).

**Land tenancy**

Land in Iran is either owned and operated by the farmer or owned by landowners but cultivated by someone else under commonly known crop-sharing system or some other sort of a contract or agreement to pay the farmer a certain amount in cash or in kind or both.

Most of the land is classified under the latter category including all the Public Domains, Crown Lands, Endowments and all the lands belonging to large landowners and part of the small holdings.

**Crop-sharing.** The commonly known traditional crop-sharing is based on five major elements or factors of production including land, water, seed, labor (including implements) and draught animals. Each of these five factors is considered to be equally as important as the other and therefore whoever provides one element will receive one-fifth of the crop.

While this method of crop-sharing is supposed to be a common practice, it changes in some ways from region to region and between different landlords and peasants. It also differs between summer and winter crops and between irrigated and dry-farming production.

Since the scope is so broad and variances are so great in different methods of land tenancy and crop-sharing, as well as in the estimates of production and income by different agencies, a brief
discussion on crops, average value, and landlord's and peasant's share of each crop or group of crops will follow.

Crops

Wheat. About 35 percent of the total value of agricultural crops, comes from wheat which is a common crop all over the country.

The average production of wheat in Iran for the three year period of 1957-59 is estimated at around 2,700,000 metric tons. Average yield of wheat per hectare for the country is estimated at 880 kilograms. The total area devoted to wheat amounts to an average of about 3,100,000 hectares or 50 percent of the total cropland area in Iran.

It is estimated that about one-third of the wheat crop is irrigated and the other two-thirds are dry-farmed. In other words, the dry land wheat production amounts to 1,800,000 metric tons and the irrigated crop 900,000. The farmer's average share from dry farming is commonly four-fifths and from irrigated land three-fifths.

The price of wheat while varying in different parts of the country, averages about 5,000 rials per metric ton. So, the total crop value of dry land wheat amounts to 9,000 million rials and from irrigated wheat 4,500 million rials. The farmer's share, on the basis of 80 and 60 percent from wheat, would amount to a total of 9,900 million rials, and the landlord share to 3,600 million, giving a total of 13,500 million rials. This is about 33.75 percent of the total value of all crop production.

Fruits and nuts. It is next to impossible to formulate a common method for determining landlord and farmer shares of fruits and nuts.

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3 Seventy-six rials equal to one U. S. dollar.
Not only do shares for each differ from crop to crop, region to region, but also among individual landlords and farmers.

To arrive at an estimate all available sources including landlords, farmers and Ministry of Agriculture officials and other informed people were approached. It is roughly estimated that about one-third of the income of all the fruits and nuts goes to the landlord and two-thirds to the farmer.

The total value of these crops is estimated at an average of 10,700 million rials, of which 3,567 million rials is the landlord's share and 7,133 million rials the farmer's share.

Rice. The area devoted to rice is roughly estimated at 270,000 hectares or 4.5 percent of the total cropland.

The average production during 1957 to 1959 is estimated at about 350,000 metric tons which gives an average yield of 1,290 kilograms per hectare.

The value of the rice crop at the average rate of 9,000 rials per metric ton would amount to 3,150 million rials or about 8 percent of the total crop value.

The landlord-farmer share, while varying in different sections averages about one-third and two-thirds, and on this basis would amount to 1,050 and 2,100 million rials respectively.

Barley. The situation with barley is about the same as wheat. The total area under barley is estimated at 910,000 hectares or 15.17 percent of the total cropland. The average total production of barley during 1957 to 1959 is estimated at 1,000,000 metric tons giving an average yield of 1,100 kilograms per hectare.

The total value of the barley crop at the rate of 3,000 rials per metric ton would amount to 3,000 million rials.
On the basis of the same sharing method mentioned for wheat (i.e. 80 percent farmer's share from dry farming and 60 percent from irrigated crop), the landlord's share would amount to 800 million rials and the farmer's share 2,200 million rials.

**Summer crops**

The basis for crop-sharing of most of the summer crops, including cotton, vegetables and melons, pulses, sugar beets, tobacco and forage crops, while varying by districts and by crop, averages one-third and two-thirds for landlords and farmers, respectively.

In order to avoid a lengthy discussion on each of the summer crops, the total value is estimated at about 6,828 million rials, out of which 2,226 million rials is the landlord's share and 4,602 million rials the farmer's share.

**Other agricultural products**

The value of other agricultural products including oil seeds, gums, tea, henna and dyes, saffron, assafetida, etc. is estimated at 10,000 million rials. Landlord's and farmer's share from this source is estimated at 2,757 million and 8,065 million rials respectively.

**Total agricultural crop value**

Adding the figures given above for different crops the total crop value will amount to 48,000 million rials with the landlord's share amounting to 14,000 million and the farmer's share 34,000 million rials.

The estimated area under cultivation, average yield per hectare, total production, price per metric ton, total value, and the landlord's and farmer's shares for each crop are summarized in table 3.
Table 3. Estimated area under cultivation, average yield per hectare, total production, price per metric ton, total value, and the landlord's and farmer's shares of each crop in Iran, 1957-59

<table>
<thead>
<tr>
<th>Crop</th>
<th>Area under cultivation (hectares)</th>
<th>Average yield per hectare (kilos)</th>
<th>Total production (metric ton)</th>
<th>Price per metric ton (rials)</th>
<th>Total value (million rials)</th>
<th>Landlord's share</th>
<th>Farmer's share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>3,100,000</td>
<td>800</td>
<td>2,700,000</td>
<td>5,000</td>
<td>13,500</td>
<td>3,600</td>
<td>9,900</td>
</tr>
<tr>
<td>Fruit and nuts</td>
<td>930,000</td>
<td>1,290</td>
<td>1,250,000</td>
<td>9,000</td>
<td>3,150</td>
<td>1,050</td>
<td>7,133</td>
</tr>
<tr>
<td>Rice</td>
<td>270,000</td>
<td>1,290</td>
<td>350,000</td>
<td>9,000</td>
<td>3,150</td>
<td>1,050</td>
<td>2,100</td>
</tr>
<tr>
<td>Barley</td>
<td>910,000</td>
<td>1,100</td>
<td>1,000,000</td>
<td>3,000</td>
<td>3,000</td>
<td>800</td>
<td>2,200</td>
</tr>
<tr>
<td>Cotton</td>
<td>310,000</td>
<td>230</td>
<td>71,000</td>
<td>38,000</td>
<td>2,700</td>
<td>900</td>
<td>1,800</td>
</tr>
<tr>
<td>Vegetables and melons</td>
<td>230,000</td>
<td>4,000</td>
<td>920,000</td>
<td>2,400</td>
<td>2,200</td>
<td>733</td>
<td>1,467</td>
</tr>
<tr>
<td>Pulses</td>
<td>130,000</td>
<td>1,060</td>
<td>138,000</td>
<td>6,500</td>
<td>900</td>
<td>300</td>
<td>600</td>
</tr>
<tr>
<td>Sugar beet</td>
<td>43,000</td>
<td>16,900</td>
<td>727,000</td>
<td>650</td>
<td>473</td>
<td>158</td>
<td>315</td>
</tr>
<tr>
<td>Other grains</td>
<td>43,000</td>
<td>1,400</td>
<td>60,000</td>
<td>3,000</td>
<td>180</td>
<td>60</td>
<td>120</td>
</tr>
<tr>
<td>Tobacco</td>
<td>15,000</td>
<td>1,000</td>
<td>15,000</td>
<td>25,000</td>
<td>375</td>
<td>75</td>
<td>300</td>
</tr>
<tr>
<td>Other agricultural products&lt;sup&gt;a&lt;/sup&gt;</td>
<td>19,000&lt;sup&gt;b&lt;/sup&gt;</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>10,000</td>
<td>2,757</td>
<td>8,065</td>
</tr>
<tr>
<td></td>
<td>6,000,000</td>
<td></td>
<td>48,000</td>
<td>14,000</td>
<td>34,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Other agricultural products include: Oilseeds, gums, tea, jute, henna, dyes, saffron, assafoetida and forage crops.

<sup>b</sup>Gum tragacanth and assafoetida are produced from wild bushes and therefore are not included in the area under cultivation.
Economic background

National and agricultural income. National income in Iran is roughly estimated at around 168 billion bials or 2,200 million dollars. With the population estimated at 20 million, per capita income would average approximately $110 per year.

The agriculture and oil industries are the two main segments of the economy of Iran. Slightly over one billion dollars or about 46 percent of the total national income comes from agricultural sources. This amount is earned by 15 million people or 75 percent of the total population of the country. Thus the per capita income of all those in agriculture averages about 70 dollars per year. Obviously, the main handicap for national economic development is the poverty associated with such a low per capita income which insures very low purchasing power.

It should be noted that the available data are a rough estimate and national income might be much lower than these estimates. But even if a 100 percent bias were added to these estimates per capita income would not be sufficient for a reasonable standard suitable for healthy economic growth of the nation. The data presented in table 3 makes this fact especially noticeable.

Social background

Population. According to the latest census, the total population of Iran is estimated to be about 20 million with an annual rate of growth of about two percent. About 73 percent of the total population are classed as rural inhabitants. Adding to this figure the city dwellers who are in some way or other connected with agriculture, the total number of Iranians dependent upon agriculture for their livelihood would be 75 percent of the total population of about 15,000,000.
Most of the rural population dwell in settled villages. The population of the unsettled nomadic tribes is not officially announced but it is roughly estimated at around 12 percent of the rural population.

The average farm family is estimated to be five members. Thus, the total farm families would amount to about three million.

In most Iranian villages women and youngsters help with farm work. Transplanting and weeding of rice, picking tea leaves and cotton in the Caspian area are almost exclusively women's work. Fruits and vegetables are picked and hauled, in many parts of the country, by women and youngsters. Working the fields, herding, gathering manure, milking cows and ewes, and numerous other farm chores are the responsibility of teenage boys and, to a lesser extent, women.

An average farm family consists, therefore, of a working male (the head of the household) who is assisted by women and children. The amount of labor furnished by the women and children is equivalent to more than that of one working male. The total working population in the field of agriculture in Iran is, therefore, two persons per farm family or around six million.

It has been estimated that at present Iran has, about 6,000,000 hectares of land under cultivation and the equivalent of 6,000,000 agricultural workers, i.e., about one hectare per farm worker, or two hectares per farm family (table 2). These data present the research worker on land reform with at least six pertinent questions.

1. What is the potential production capacity of different crops per hectare of agricultural land?

2. What is a minimum amount for a farm family to live decently?

3. To what degree is the labor force employed in agriculture?
4. What is the rate of increase of the rural population?

5. To what extent should migration from villages to towns be encouraged?

6. What would be the effects of mechanization and the introduction of chemical fertilizers on the labor force engaged in agriculture?

Answering these questions would aid in giving direction to actions needed for a successful land tenure reform program.

Education. Iran, once the cradle of the world's civilization, an ancient land of culture and education, has for many centuries contributed immensely to the realm of thought, of the sciences, and of the arts. Today, however, this country has to contend with a high percentage of illiteracy among its people.

From early in the 20th century and particularly under the late Reza Shah, the Great, and also under the present regime, the aim has been to spread formal education more widely. Presently there are around 10,400 schools and institutions of higher education in Iran. This includes 250 kindergartens, 8,800 primary schools, 1,145 secondary schools, 55 normal schools, 100 vocational and art schools, and 50 institutions of higher education. Total enrollment amounts to about 1,630,000 students, including 16,400 kindergartens, 1,312,000 in elementary schools, 255,800 in secondary schools, 8,200 in vocational schools, 4,200 in normal schools, 840 in arts and music, and 32,560 in higher education.

Seven billion rials (92.1 million) or about one-fifth of the total Iranian government budget is allotted for the ministry of education.

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4Statistical data were obtained from a statement presented by Dr. Karim Fatemi, Under-Secretary of Iranian Ministry of Education to the Summer Education Conference, Geneva, Switzerland July, 1960 I.B.E. UNESCO.
While great progress has been achieved in expansion of formal education, city children benefit from the major share of the appropriation. According to an estimate made by educational authorities, one out of every ten people in Tehran is in an elementary school and one out of every 30 people in a secondary school. But, in rural Baluchestan (a partly tribal area) only one out of every 66 people is in the elementary school and one out of every 5,000 in a high school. This, of course, is not a fair comparison since it is made between the two extremes, the most advanced metropolis on one side and the most backward rural and tribal area on the other. But, there is no doubt that conditions in rural Iran from an educational point of view are far from being satisfactory even though most rural areas are in a more satisfactory condition that in Baluchestan.

It is firmly believed that the rate of illiteracy in rural Iran is a great handicap to agricultural and land tenure improvements. Fortunately, in recent years, more and more attention is being paid to this vital problem and gradually more schools are being established in the villages.
Agrarian reform in United States

The tenure system in the "free born" United States which has had an exceptionally favorable environment with a vast abundance of natural resources cannot be a model solution to land problems in a country where the roots of existing tenure systems and arrangements go back to ups and downs of a long history. A distinguishing feature in the United States regarding changes and adaptations of institutions affecting rural condition is different in that they occur largely through the initiative and efforts of private individuals with relatively little legal restraints imposed by government. Different as it may be, a student of land tenure problems cannot overlook the valuable ideas and practical thoughts leading to constructive methods which with some modification can be of great value to policy makers and leaders of agrarian reform in any country.

Family-farm ownership. The land tenure system of the United States is almost entirely patterned after the English common law. The basic policy objective accepted early was to encourage and assist in the attainment of widespread ownership of land by farm families. Owner-operatorship of family-sized farms has long been regarded as one of the principal goals of American land and agricultural policy. There has often been disagreement over what constitutes a family-sized farm, and public programs at times have tended to work at cross-purposes with this goal, but the concept of the owner-operated family farm has always
been popular, and public leaders and groups have frequently reempha-
sized its importance (6).

A glance at the history. All unsettled land in the 13 original
states became public land in 1781. A law passed in 1804 authorized the
sale of public land at $1.25 per acre, in tracts of 160 acres, and
squatters preemption rights were to be observed. The general Pre-
emption Act, enacted by Congress in 1841, permitted settlers to enter
public lands and to secure patent after complying with rules as to
residence and cultivation and after paying the minimum statutory price
for the land.

The Homestead Act was passed in 1862. This act permitted settlers
to acquire 160 acres of "free" land. To acquire title to the land, the
settler had to improve and cultivate part of the land, and to construct
a house and reside on it for five years (later reduced to three years).
The Homestead law as well as the succeeding policies to provide credit
facilities for farmers, encouraged the owner-operatorship to a great
extent.

In 1916 Congress passed the National Farm Loan Act and the
Federal government created the cooperative loan agencies, which were
eventually to be owned by the farmer-borrowers. Also, the federal land
banks were created to function under governmental supervision. These
banks provided long-term (20 and 33 year) loans to be repaid in annual
installments at a lower interest rate than that prevailing in the farm
mortgage market. The amount of loans by the land banks were limited to
50 percent of the long-run appraised value of the farm offered for
security. This maximum however was raised to 75 percent in 1933.
In 1937 a law known as Bankhead-Jones Farm Tenant Act was passed to provide 100 percent farm loans to selected, low-income farmers. In addition to liberal loans at a low interest rate the lessee received technical assistance, special guidance and supervision. This program is presently carried out by the Farmers Home Administration established in 1946 as an agency of the United States Department of Agriculture.

To sum up the results of the national policies and general economic factors contributing to a favorable land tenure policy is a passage from United States Department of Agriculture.

In 1935, 42 percent of the farmers were tenants, while in 1954 only 24 percent rented all of their land. The greatest reduction in tenancy occurred in the World War II decade, 1940-50, when the farm population was reduced drastically because of military employment. Competition for farmland was lessened, and concurrently farm-product prices started to increase at a rate much greater than the rate of increase in land values. The ensuing prosperity made ownership an easily obtainable goal for the first time in more than 30 years, and the decline in tenancy between 1940 and 1945 was the greatest of record. It might be suggested that the proportions of farmers who own or rent their farms are more strongly influenced by general economic factors than by national policy intended to assist owner-operatorship (22).

But inspite of the fact that national policy had played a secondary role in owner-operatorship, the farm credit system used in the United States was of significant importance and observation of it will certainly be of some help to understand the importance it has played in land tenure policies.

The credit system in United States. Financial assistance in the form of credit has been one of the most important parts of the Federal program in encouraging family-size farm units, as well as the whole prosperity of agriculture. Farm credit in United States is as old as the country itself and the history of it is also equally interesting.
For the purpose of this thesis we start from early 20th century when farmers were absolutely unhappy with the existing credit agencies. Their complaints were centered around three conditions:

First, there was no well organized method by means of which long term investment funds, especially, could be transferred from the industrial east, where huge quantities of capital had accumulated, to agricultural areas of the west and south which were desperately in need of capital; second, largely because risks were relatively high in some sections, credit funds were more plentiful in some agricultural areas than in others, and farmers in those areas of high cost credit were particularly loud in their instance on some form of relief through congressional action; and third, farmers everywhere, for obvious reasons, were forced to pay high interest compared with those paid in other industries (18).

In 1912, a committee known as the American Commission on Agricultural Credit and Cooperation was appointed by the Southern Commercial Congress to study agricultural credit systems in European countries. A congressional commission also was appointed for the same purpose in 1915. These two commissions made an extensive tour of study in Europe and both of them were very much impressed with the German landschafts.

The landschafts were cooperative credit associations, and at least some of them have an interesting history comparable in many respects to the famous cooperative store of the Rochdale Weavers in England. The idea back of the landschafts seems to have originated with peasants and their leaders, and grew steadily, but slowly, from the grass roots so to speak, into a strong federated cooperative movement. The system had had a rather long history by 1912, since it evolved apparently as early as 1769. The landschafts were local non-capital stock associations of land owners. In no sense were they banks. They were agricultural credit cooperatives. Each community might have its own landschaft,
which was authorized by law to issue bonds in exchange for farm mortgages that members delivered to the association. Groups of landschafts had, in many cases when funds were available, organized banks which assisted the landschafts in various ways (18).

The National Farm Loan Act. In 1916, United States Congress passed the National Farm Loan Act and created the Federal Land Banks system in 1917. The act provided that the United States should be divided into twelve districts by the Federal Farm Loan Board and a federal land bank established in each district.

The Federal Farm Loan Board, a subdivision of the Department of Treasury, consisted of seven members, including the secretary of Treasury as ex-officio chairman, the other six members are appointed by the President of the United States; by and with the advice and consent of the Senate.

Policies of the Federal Land Banks are made by respective district farm credit boards. The district farm credit board also consists of seven members. According to the law, six of the directors shall be elected by the borrowers from the three parts of the organization including the Federal Land Bank, the Production Credit Associations, and the Bank for Cooperatives. The seventh director was to be appointed by the Governor of the Farm Credit Administration with the approval of the Federal Board.

The land banks provided an important source of real-estate credit. The first purpose of loans listed in the act was for the purchase of land. One of the strongest arguments offered in behalf of this new legislation was that it would give deserving tenants an opportunity to become owners. Agricultural leaders expected that tenants in large
numbers would use the newly organized Federal Land Banks to obtain ownership on more advantageous terms than had been available previously.

In addition to the long-term credit facilities made available through the land banks, production credit corporations were established in 1933. These corporations were established to assist farmers in organizing and financing the production credit associations which are local credit cooperatives.

All the land banks as well as the production credit associations were originally established with federal funds. But presently all the government capital in the land banks as well as 92 percent of the PCA' funds are repaid by the member borrowers.

Farmers Home Administration. While the government sponsored the Federal Land Bank System, and the Production Credit System of the Bank for Cooperatives provided the credit needs of farmers through cooperative action, the need for direct loans from the government was still felt. Therefore the Farmers Home Administration Act of 1946 was passed. The FHA administers a variety of credit programs but its major responsibility is to provide supervised agricultural credit for farmers who are not able to obtain credit from other sources at reasonable terms. These credit programs are designed to help farm families become owners of family-type farms and established in farming. This type of credit is called farm ownership loans and are made to buy land, improve land and buildings, and finance debts. Credit is backed with advice and technical assistance on the basis of individual farmer's problems and needs. The farm ownership insured loans are limited to 90 percent of the reasonable value of the farm and they are amortized for periods up to 40 years at five percent interest.
Emergency loans to farmers who have had losses because of conditions beyond their control, such as droughts, floods, hail, and adverse economic condition. Loans may be made for the purchase of feed, seed, fertilizer, replacement equipment and livestock, and for other essential farm and home operating expenses. The interest rate on emergency loans is three percent and repayment schedules depend upon the purpose for which funds are advanced.

Operating loans to assist farmers in making improved use of their land and labor resources on family-type farms. Maximum amount for this type of loan is $20,000 which is scheduled for repayment in accordance with the borrower's abilities to repay, over periods not exceeding seven years at five percent interest.

Soil and water conservation loans to carry out measures for soil conservation and to develop water systems for irrigation and farmstead use. Maximum repayment period is 20 years for individuals and 40 years for associations. An individual's total indebtedness for soil and water conservation cannot exceed $25,000. An association's total indebtedness cannot exceed $250,000.

Farm housing loans are made to farm owners for the construction and repair of farm houses and other essential farm buildings. The interest rate on these loans is four percent on the unpaid principal with a maximum term of 33 years.

Extension services. Money, now being everything, is actually a means to those ends and objectives which knowledge should set. Practically with no exception know-how precedes everything else including
funds. Agriculture extension service in the United States carries out the rural education beyond the schools to the individual farm families.

The agricultural extension services came into being in the United States by an Act of Congress in 1914. This act is known as the Smith-Lever Act and it states:

That in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same, there may be inaugurated in connection with the (agricultural) college or colleges in each State... agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture.

Sec. 2. That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the state agricultural college or colleges receiving the benefits of this act.

Today, in more than 3,150 counties of the United States, extension staffs conduct demonstrations, provide technical information, assist in developing farm youth activities (4-H), carry on educational work in home economics, and serve as a channel of information between the Federal and State agricultural agencies and the farm communities.

The extension agents have gained the confidence of the majority of farm families and proved that they are friends of the rural people. "They teach people how to think and not what to think."

Extension work is nonpolitical and plays no part in regulatory or administrative affairs of the government. It is based on the

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5 The county is the largest division for local government in all the states except Louisiana where the corresponding division is the parish.
Jeffersonian principle of public education. Jefferson insisted that education be public and universal, and that it is only through education that people who live together and work together can get along together.

Some of the general principles of extension teaching which have been found to have more or less general application in the United States are as follows:

1. Cultural differences. Inasmuch as the cultural background of the people is different, in order for teaching to be effective the approaches and procedures must be suited to the culture and background of the people who are being taught. A method designed for one area might not be applied effectively to another area. An extension agent should know that different cultures require different approaches.

2. Cultural change. To meet the evolutionary cultural changes among the people, extension workers should keep abreast with growth and developments of communities. As conditions and needs of rural people change, the extension work also needs to be changed.

3. Grass-roots principal of organization. Extension work should be based on willingness and interest of groups of rural people in local communities who sponsor the work. In many communities of the United States the initiation of extension work is fostered by the agricultural colleges but the work was not introduced until there are local groups sufficiently interested in sponsoring it.

4. Cooperation. Extension work in the United States is cooperative. The basis for its operation is the cooperative agreements made between the United States Department of Agriculture, the State Agricultural Colleges, the County governments, and the rural people themselves.
5. Interests and needs. Even though the extension agent may see the needs of the people better than they do themselves, he must begin with the interests and needs as they see them. Extension work is a system of voluntary education and to be effective it must begin with the interests of the rural families.

6. Participation - learning by doing. Good extension method is to assist farm families to work out their own problems rather than giving them ready-made answers. Growth results from participation in the solution of problems.

   Education is a slow process. People need encouragement to learn and they should learn by doing. Undoubtedly, it takes patience and time in getting people who are unaccustomed to participate in group work, but the objective should be to bring them to the point where they assume initiative and responsibility.

7. Adaptability in use of teaching methods. People differ from one another, so do groups and conditions. No one teaching method is effective under all circumstances. The extension worker should adapt his teaching methods to special situations and environments. In other words, the use of teaching methods must have flexibility.

8. Local leaders. Extension agents must have help to be able to do all the work needed. Leadership is mostly available but needs to be identified. Developing the latent leadership is one of the agent's major jobs for extending extension work to more families. These local leaders are of great value. They are unpaid voluntary leaders and they multiply the educational services of the extension agents many fold.
During 1955 there were over 1,235,000 local voluntary leaders in the U.S.A. helping in extension work.

9. Whole-family principle. Extension work is for the whole family; agricultural work for men, home economics for women, and educational projects for children of the family.

Work with farmers is to assist them through advice and educational means in all their agricultural works, economics, and resources. They include such things as increasing the productivity of land; conserving soil and water resources; improving crop yields; livestock breeding and management practices; making more efficient use of labor; and promoting better marketing plans and procedures for all farming products.

Extension work for women is to assist them in how to take care of their household more easily and efficiently; in teaching them how to provide healthful meals and how to clothe their families more suitably and economically; and encourage them to participate effectively in group and social activities.

Boys and girls are given training in technical knowledge, agricultural and home economic skills, and in cooperation and working together for the improvement of their community.

In summary, the major objective of extension workers is "help people to help themselves" and this is accomplished through the application of scientific and practical knowledge to the solution of problems of farmers and farms in agricultural production and rural living.

Applied agricultural science is not a one way process. Problems of the people and those matters for which the extension workers have
no answers are taken to the scientists who do the necessary research and experiments to find the answers and solutions.

Cooperatives. Farmers being at the mercy of money lenders and future buyers is an old story. Problems of farmers in buying feed, seed, fertilizers, and equipment also losses and troubles endured by them in storing and marketing their products when individually handled is quite obvious. One of the effective measures to solve these and so many other problems of farmers is cooperatives.

The U. S. Government has given its approval and a great deal of technical assistance and financial aid to farmers in their efforts to organize and operate cooperatives. Through these voluntary associations, farmers obtain farm supplies and market their products. They also obtain many other services such as credit, insurance, electricity, and irrigation.

The Farmer Cooperative Service, an agency of the U. S. Department of Agriculture, has embarked on a wide campaign to encourage the organization and development of effective cooperatives. It gives educational assistance and assists farmer cooperatives through research and advisory services, but it does not incorporate or supervise them.

In 1967 there were about 10,000 farmer cooperatives in the United States engaged in marketing farm commodities, purchasing farm supplies, and furnishing related services. They served a membership of about 7.7 million and did a net volume of business of close to ten billion dollars.

The Federal Government has pursued the definite policy of making loans to qualified farmer cooperatives. Such loans have been available through the central and twelve district banks for cooperatives which
are supervised by the Farm Credit Administration, of the U. S. Department of Agriculture. These banks were established to provide a permanent source of credit to farmer cooperatives.

During 1959 the central and twelve district banks made 2,378 loans totaling 637 million dollars to cooperatives (23).

Marketing facilities. Storing, transporting, processing, and delivery are some parts of the marketing. In early days in most parts of the world, farmers were taking care of their own marketing and sold their products directly to customers. However, under the specialization condition which is the general rule today, marketing is part of the modern productive process.

In the United States marketing facilities, like so many other things, are largely privately owned. However, the Commodity Credit Cooperation, a Federal Government agency, owns some of the storage facilities it uses. Also, some of the state and municipal governments own or operate such facilities as shipping points and terminal markets.

To improve the marketing of agricultural products, the Federal Government conducts research and provides technical assistance and financial aid in constructing marketing facilities.

Land reform in India

India is predominately agricultural with almost 70 percent of the people earning their livelihood directly from land. (On the basis of the 1951 census, this amounts to about 108 millions.)

Up to 1947, large holders who comprised no more than four percent of the rural population, owned about half of the country’s agricultural land. Three-fourths of the rural population owned only 16 percent of the land. About one-fourth of these people had no land at all, and
another 53 percent had farms of less than five acres, which were often divided into scattered strips too small to be cultivated with today's modern equipment. In addition to the holdings being uneconomic in size the farmers also had no money to invest in improved methods or better seeds and implements.

There were two main land systems in India, namely Zamindari which means a landed proprietorship, and Rayatwari which is peasantry or serfhood.

The Zamindars were a class of intermediaries created while British ruled India. They collected rent from tenants, and paid revenue to the government, which mostly was fixed in perpetuity.

Rayatwari was settlement made by the government, and the occupants generally cultivated their own lands. Gradually, however, a landlord tenant system grew in these areas also.

After a few generations the Zamindars who were actually the revenue collectors, became owners of land under a British settlement system. They gradually increased the rent to farmers and thus grew increasingly richer while the farmers or tenants who actually tilled the land were driven to poverty.

Under such circumstances there were about 50 million landless poor peasants in India in 1950.

When the first five-year plan was prepared in 1950-51, a clear-cut policy for reorganization of the agrarian system was laid down. The five-fold program suggested was:

1. Abolition of intermediaries (between the tiller and the state);
2. Measures for reducing rents, conferring on tenants rights over the land subject to the landlord's right to resume certain areas for
his personal cultivation and enabling the tenant to acquire ownership on payment of a reasonable price;

3. A fixed ceiling on land holdings and distribution of surplus lands;

4. Consolidation of holdings and prevention of fragmentation; and

5. Development of cooperative farming and cooperative village management.

India's constitution is federal, but since the condition in different parts of India varies to a great extent, authority is given to the Governments of States to legislate and administer land reform programs with regard to their local needs, but the general essential objectives of land reform should be adapted and pursued. The federal government, however, gives financial aid and technical assistance. As an example, the land reform program in one of the states of India, Uttar Pradesh, follows:

Land reform in the state of Uttar Pradesh, India. According to the Zamindari Abolition and Land Reforms Act of 1951 of Uttar Pradesh the interests of all the intermediaries on land were withdrawn by payment of compensation equal to eight times their annual net income to all the Zamindars paying annual land revenue not exceeding 5,000 Indian Rupees.

To provide adequate finance for abolition of the Zamindari system, the tenants were asked to make voluntary contributions of ten times their rents. This was also to help check inflation and to utilize peasant's savings for productive purposes. Among the privileges of those tenants who contributed to this program were the right of
transferring their holdings and of paying only 50 percent of their existing rent as land revenue.

As a preventative to redevelopment of the landlord-tenant system, the right of leasing was restricted to disabled persons, such as minors, widows, and persons suffering from physical and mental infirmity. Also no person was allowed to acquire by sale or gift a holding of more than thirty acres.

All the dwellers of the villages including Zamindars, tenants, and landless people, had the right to become the owner of their houses as well as their house sites.

All the private endowments and trusts (Waghfs) which were for the interest of individuals were treated like Zamindaris. But for those Waghfs devoted to religious or charitable purposes, the government guaranteed an annual income equal to their current income.

Measures more or less in the same general line were taken by other states of India, and towards the end of 1956, the program of abolition of intermediaries was almost completed. In their place there exists today an agricultural extension service comparable in a general way with that existing in the United States. The key man in the field is the Gram Sevak.

Gram Sevaks. In American terminology the Gram Sevak is equivalent to a county agricultural extension agent but with a broader field of responsibility. Literally Gram Sevak means worker at the village level and these village level workers in India play the most important role in the development of agricultural communities. As a real extension agent, they are guides and friends of rural people and help them in all major problems of their farming and living, and whenever they do not
know the answer, they seek specialists' help. Each Gram Sevak is assigned to serve four to five thousand farm people, and they are supervised by extension officers who also serve as specialists. The extension officers in turn are supervised by a Block Development Officer and all the Block Development Officers are coordinated and supervised by a District Development Officer, an administrative director of the district. A Development Commissioner at the state level is in charge of all the various development activities. By American standards he is on the same level as a State Director of extension services.

Some governmental agencies such as the village councils (Panchayats) as well as cooperatives also help with the extension work of Gram Sevaks.

_Panchayat._ Panchayat is the Indian word for a village council. This council is elected by all the adult population of the village to look after the development of the social and economic affairs of the village and villagers. The Panchayat also serves as a link between the village people and the government administration.

_Panchayats_ are recognized by the Indian Constitution (Article 40) and the state governments are empowered to organize the Panchayats and give them the necessary authority to be able to function as units of self-government to bring about self-help in the villages on the path of their development.

_Credit._ The act of the Reserve Bank of India as amended in 1955 enabled the bank to set up a National Agricultural Credit Fund to provide long-term loans to state governments enabling them to participate in the share capital of cooperative credit institutions.
Credit facilities to farmers were also to be provided by N.A.C.F. through cooperatives. Financial assistance is given to the co-ops by the National Cooperative Development and Warehousing Board, a national organization established for this purpose. Establishment of Primary Village Societies are also encouraged to take care of the financial needs of larger members of rural population.

Indian leaders are to be commended for their policy of loans to farmers on the basis of their credit worthiness and production programs rather than on the basis of land or chattel mortgage for security (1, 5).
CRITERIA FOR SUCCESSFUL LAND TENURE REFORM

General overall land policy goals as a segment of the master goals of economic policy revolve around the two main targets of (a) maximization of social product and (b) optimization of income distribution.

Land tenure goals are within the scope of the second target, namely the broader economic goal of optimum income distribution. It is mostly concerned with problems of inequities in the distribution of agricultural income among those who are involved in the farming business.

Scientists (3, 6, 13, 17) dealing with land tenure problems frequently state the more commonly accepted land tenure goals as follows:

1. Equitable distribution of agricultural income among all tenure groups.

In actual economic terms it is believed that income should be distributed in a way that the following two sub-goals are achieved: First, everyone should grow up and enjoy at least minimum adequate standards of health, nutrition, clothing, shelter, and education. This is a criterion of optimum income distribution and is called "subsistence norm". Second, an individual's income should be in proportion to his contribution in effort and skills to the social product. This is called the "contributive norm". The objectives of any land tenure program should be tested for their compatibility with these norms.

2. Greater efficiency in all farm production.

This criterion can be defined in terms of effectiveness with which land units produce in response to the successive units of capital
and labor inputs. Economic efficiency is not only a function of its physical characteristics and economic location but also the quality of the management applied to it.

3. Conservation and development of agricultural resources base.

The main objective in conservation of land resources deals with a system of use practices which will maintain and maximize the long-run social productivity and prevent exploitation, erosion and any other kind of misuse which may reduce or exhaust the productivity and fertility of land resources. In short, to keep unimpaired the production capacity of resources now in use.

Land development goals deal with problems of bringing new or unused resources into production.

4. Wide distribution of property ownership rights among the nation's citizens on the land resource, but meanwhile to prevent the fragmentation of farms into units of uneconomic size.

Generally, farmers who own their own land work better and produce more. They are better citizens in their community and have a greater sense of responsibility.

They have every incentive to apply their variable inputs to the point at which marginal factor cost equals marginal value product. The owner-operator knows that he will receive the entire economic surplus from each of his marginal inputs and therefore he would not hesitate to add to his efficiency. But when the share cropper has to give the landlord a big share of the returns to each unit of capital and labor that he applies to the land, it will not be to his interest to apply any doses which its total return is not enough to reward him. Therefore on the basis of economic efficiency grounds, total value
product would be less under tenant-landlord sharing arrangements as compared to owner operated system (3). There, however, remains a serious problem of over fragmentation of farms especially with regard to later generations. This fact should be recognized by policy makers in overall planning for economic development.

5. Stability and welfare of rural institutions.

Stability of holdings and rural institutions together with social justice and welfare are indispensable for economic and social improvement and development. Adherence to ethical and moral code is certainly one of the most important criteria in considering any kind of policy.

6. Security and dignity of operators in their occupancy and possession of land.

Nothing can take the place of security of tenure but certainly it should not be confined just to tenure. Farmers are to be given security of tenure plus all other kinds of securities in the broader and full meanings of security. Honor and dignity of the farming profession and farmers as producers should certainly be recognized and their place in the overall community be dignified.

7. Freedom for responsible personal action, as much as is consistent with general welfare.

These seven criteria plus affection and respect, congenial human relations and absence of discrimination on grounds other than merit are considered to be the goals or principles essential to land tenure reform. To achieve these goals certain means are required of which the following are most important:

1. Survey to determine the land area and present land ownership.

2. Agricultural census to obtain reliable data.
3. Legal procedures to secure property rights: i.e., abstract of titles etc.

4. Consideration of irrigation water sources and individual rights.

5. Improved methods of research.

6. Trained competent and qualified personnel.

7. Extension, education services and dissemination of information.

8. Adequate capital to finance bona fide and widespread credit organizations and associations.

9. Cooperation in its full and broader sense (art of cooperation plus cooperatives).

10. Village council.

11. Development of roads and communication systems.

12. Improvement of marketing methods.

13. Coordination of other social and economic improvements and activities in line with the reform in tenure system.

14. Good will, perseverance and patience of those who carry out the program.

Goals of land tenure reform must be treated together in any development of tenure policy. The same thing is true with the 14 items listed as means. All must be utilized to obtain the ultimate goal of maximum social net product.
Sistan public domains

The following sketch of the attempts made at land reform in Sistan describes the steps taken by organizations who had good intentions but lacked the necessary technical know-how. It illustrates how such premature reforms lead to failure.

The physical setting of Sistan. Total Sistan land area is estimated at around 700,000 hectares out of which about 300,000 hectares are within the Hirmand River Basin. This consists of about 150,000 hectares cultivable, mostly to wheat and barley, and to a smaller extent to watermelon, cotton and sorghum. About half of the total 150,000 hectares are left fallow every year, and the other half is cultivated. The basin also includes about 80,000 hectares covered by scattered tamarisk bushes and 70,000 hectares of wasteland.

It is believed that out of the 400,000 hectares of land outside the Hirmand River Basin, about 200,000 hectares are potentially cultivable if irrigation water could be made available.6

The Hirmand River. The Hirmand River, subject of a long dispute between Iran and Afghanistan during the recent years, is the only real source of irrigation of Sistan, once known as the Egypt of Iran.

After entering into Sistan, the Hirmand is divided into two main branches, namely Sistan and Parian. Most of the cultivated area of

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6 Information obtained from the records of the Public Domains Department, Ministry of Agriculture, Tehran, Iran.
Sistan is irrigated by a branch on which the Kahak and Zehak dams are built. The latter, the Parian branch, which flows northward and forms part of the Iran-Afghanistan frontier, irrigates only about 7,000 hectares of the Miankangi District.

Irrigation. Before the completion of the modern Kahak and Zehak dams, temporary dams were built every year using tamarisk bushes. This task and the cleaning of irrigation channels and ditches were and still are a sort of collective work being carried out by many hundred peasants locally called hashar.

While the construction of the above-mentioned two dams have lightened the burden of the peasants, there still remains the building annually of a few secondary tamarisk-made dams as well as the annual operations of channel cleaning.

Under the old system when the sardars of Sistan rented the public domains and the farmers were their peasants, sardars supervised the collective work of the hashar and the work would proceed according to prevailing tradition and timed in such a manner as to have the water available for irrigation.

According to tradition, peasants owed it to the sardars to give, free of charge, 30 days of their time during which they built temporary dams and cleaned irrigation ditches.

After the land distribution system became effective in Sistan and before the new dams were built, the office of agriculture was charged with the responsibility to supervise the irrigation of Sistan,

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7 Sardar and Khan: Tribal leader or chieftain.
and a water fee was levied for each lot of 3.6 hectares of land which amounted to 30 rials plus some free labor.

At the completion of the two modern dams, the water fee gradually increased as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Water Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955 (1334-1335 A.H.)</td>
<td>80 rials per 3.6 hectares</td>
</tr>
<tr>
<td>1956 (1335-1336 A.H.)</td>
<td>120 &quot; &quot; &quot; &quot;</td>
</tr>
<tr>
<td>1957 (1336-1337 A.H.)</td>
<td>150 &quot; &quot; &quot; &quot;</td>
</tr>
</tbody>
</table>

(One U. S. dollar = 76 rials)

Traditional tenure system in Sistan. Out of the 700,000 sunbaked hectares which compose the land area of Sistan, only 75,000 hectares are annually cultivated. All of Sistan is public domain land and about ten sardars and a few less important notables were the sole renters of all the public domain until the year 1932 (1311). Everyone of these sardars had rented one to several villages from the government. Very little is known about the terms of the lease contracts between the government and the sardars. The rent, however, was on kind basis and the agreement was to pay a certain amount of crop to the government depending on the size of the area rented. Peasants under these sardars were treated as it is expected in any feudal system, probably worse. In other words, peasants had to do all the work of farming, irrigation, harvesting, and hauling to the sardars or the Finance Offices' warehouses. Sardars furnished seed and draught animals as well as some cash advance. Three-fourths of the crop thus produced was the share of the sardars and only one-fourth remained for the peasant. Most of the time the peasants' share was barely enough to cover the amount of advance he had already received from the chieftain. All sorts of
excuses were made by the sardars every year to get out of paying the rent due the government and almost no steps were taken by them to improve the villages nor did they care for the welfare of their peasants.

The Public Domains Department, then under the Ministry of Finance, unable to collect rent from the sardars, pressed the government for a decisive solution to improve the prevailing conditions. Poverty of peasants, reduction of the amount of agricultural products and the government income were additional reasons for the government to take drastic measures.

First step to abolish the traditional system. A mission headed by a very fine high-ranking gentleman of the Ministry of Finance with much administrative experience, and good intentions, was commissioned to go to Sistan in 1933 (1312) to make a reform in the tenure of Public Domains.

On arriving in Sistan, Mr. S. M. Parvaresh cancelled most of the rent contracts between the government and the sardars and excused them from the payment of the long-retarded rents due the government.

Land distribution thus began and Mr. Parvaresh gave every peasant a share of 3.6 hectares of land against an annual fixed rent (menal) of 50 rials.

This mission reduced the influence of sardars to some extent and managed to give land to 16,678 peasants. But there still remained much land in the hands of the sardars which was supposed to be eventually distributed.

Reform leading to confusion. The sardars and local notables having been deprived of a part of their rented holdings, became dissatisfied with the situation because the length of time in which they
had held the land had constituted, they thought, the right of continuation of renting, and they sent their complaints to Tehran. Mr. Farvaresh was then removed from this office and Mr. Eamail Kardar took his place early in 1336 (1936).

Mr. Kardar did not follow his predecessor’s pattern and based his activities on renting out the land of any size from two to 120 shares of 3.6 hectares to any applicant whom he thought fit for its management. At this time the tenure problem had reached the state of utter confusion for the following reasons:

1. Sardars were dissatisfied for the reason mentioned above.

2. Peasants to whom land was assigned were unable to cultivate it because of lack of money, seed, draught animals, tools and management know-how. No source of credit was available, and no organization was established to give out any kind of financial or technical help to the needy peasants.

3. Traditional organization of building temporary dams and cleaning ditches was handicapped because most of the peasants now being landlords were not any more under sardars to carry out their orders, nor were they able to collectively solve the overall problem of irrigation. In other words they were not under any management nor were they mentally mature to be cooperative minded. The result of this was a disorganized irrigation status.

4. Most of the peasants thus being unable to farm, left the land and consequently the amount of production dropped drastically and the government income reduced.

Council of Ministers' Decree. The late Samsam-ol-Molk Beyat, then head of the Iran Department of Agriculture, went personally to
Sistan in 1316 (March 1938) and as a result of his mission's investigations a decision was reached that the Sistan Public Domains should be sold.

This materialized by a decree of the Iranian Council of Ministers paused on 27th Khordad 1316 (June 1938) under No. 3124, based on provisions of the law passed on 17th Azar 1312. Following is the text of the decree:

The Iranian Council of Ministers in the session of 24th Khordad 1316 (June 1938) upon the proposal No. 5806 of 29th Esfand 1316 of the Department of Agriculture concerning the distribution of Sistan Public Domains and affairs relating to farming and irrigation of that area, decrees:

1. In order to make the farmers more interested in the land and the irrigation, it is decided that the Sistan Public Domains be sold.

2. The cost of each share of 36,000 square meters will be 800 rials payable in ten annual installments. In case of cash payment the price is 500 rials.

3. All the lands in the villages will be sold indenation and on dong? basis. The Office of Agriculture of Sistan will have to arrange the fallow system and allocate plots of land for summer and winter crops in each village.

4. Priority should be given to those who presently have the right of using the lands and are paying the rent (menal). This right of priority will be considered up to one year from the date that sale of land is officially announced and advertised.

5. The first installment will be collected beforehand and the rest of them should be paid no later than the end of the month of Mehr (October 22). If the annual installment remains unpaid until the New Year's day (March 21), the Office of Agriculture will have the right to sell the land to somebody else.

6. The rent due (menal) for the year 1316 (1937) will be collected according to the traditional method, and as of 1317 (1938) the lands sold are exempted from the payment of the menal.

7. In villages where land ownership consists of large landlordship type (omdeh-malek), farmer quarters and appropriate land to establish gardens should be given to the farmer free of charge. The site and size of these plots should be determined by the experts of the Office of Agriculture.

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7 One-sixth part of any piece of real estate.
8. Small land holders are not allowed to sell their land to others, except to the actual residents of the same village or to those who are going to reside in that village after the purchase of the land, in which case the latter cannot buy more than ten shares unless he had previously been given right to utilize more land.

9. Since the irrigation condition in Sistan is of a peculiar system, the traditional methods should be followed until a new system is developed and peasants are to collectively take care of irrigation and drainage ditches and all the measures needed to prevent floods.

10. Expenses incurring in the irrigation and in building of temporary dams should be charged to land holders and supervised by the Office of Agriculture. Maximum amount to be charged on each share should not exceed five rials.

11. Decisions on rivers, channels and ditches are to be taken by a committee consisting of the head of Agricultural Office, the head of the Finance Office, the Governor and two experts being appointed by the landlords.

12. Technical instruction given by the Office of Agriculture should be carried out by land holders.

Sgd. Prime Minister

How much land was sold to how many people? The actual sale of land according to the aforesaid decree started in 1317 (1938) and ended towards the middle of 1320 (August 1941).

Total land sold amounts to 25,356 shares of 3.6 hectares each, of which 19,086 shares were sold to 19,086 persons or one share per individual, 2233 shares to 553 persons (two to 10 shares each), 4,037 shares to 109 persons (from 10 to 470 shares each).

Council of Ministers' Decree failed. According to the provisions of the Council of Ministers' Decree, the Office of Agriculture of Sistan took charge of the project and started to sell the land. In so doing no survey or map was made; none of the land was actually divided nor clearly identified as to individual ownership. To this was added the lack of experience and knowledge of conducting such a purely technical scheme. The reform thus led to confusion. Dissatisfied influential and deprived peasants sent their complaints to Tehran.
The Governor General of Mokran (Sistan and Baluchestan) and the Finance Officer of Sistan warned the central Government of the critical condition of land distribution which had caused the decrease both of agricultural production and the government income. They stated that if the system should continue, it would make many more people dissatisfied.

The Ministry of Finance and the Public Domains Department, then under this ministry, being aware of the confused condition and the difficulties and problems involved were trying not to interfere but proposed that the land distribution, being a technical matter, should be carried out by the Office of Agriculture.

However, the numerous complaints of Sistanis and the shortage of government revenue due to decrease of production were the reasons for the government to transfer all the land distribution affairs (except irrigation) from the Agriculture Office to the Finance Office. This took place toward the end of 1318 (early 1940). This did not help much and the streams of complaints to the Government authorities did not cease. At last a committee was commissioned to study the matter and make a report to the Government.

After due consideration of the many facts involved the committee finally believed that the decree was not sound nor was it consistent with prevailing conditions and that it should be revised and amended. The Department of Agriculture also confirmed these facts.

Several missions have since been sent to Sistan, each confirming the confused condition, but steps do not seem to have been taken to adopt proposed solutions.
The validity of the decree expired on Dey 1322 (January 1944). At this time the Finance Office of Sistan received instructions to discontinue sale of land and to rent land according to the traditional system.

Thus, the Council of Ministers' Decree not only did not bring any good to Sistan but added to the existing confusion and reduced the productivity of the area. According to a report of one mission, the Government income used to be about 40,000 Kharvars (12,000 metric tons) of grain in Sistan while this amount reduced to 7,000 to 10,000 Kharvars (2100 to 3300 metric tons) after land distribution.

Disaster joins dereliction. While factors such as inefficiency and lack of background and experience on the part of land reform policy-makers and executors, malintention of the local influential, and misappropriations of different nature by local government agents account for the failure of land reform in Sistan, this fact also should not be forgotten that they were not the only reasons for so many Sistanis leaving their lands and wandering in other areas.

It is believed that water shortage in the Helmand River, the source of which is in Afghanistan, was the main reason of Sistanis' migration.\(^8\)

Recent steps taken by the government. The Government, willing all the time to find out a solution for the confused Sistan condition, sent several missions to the area. Reports of the missions and the government policy of a decent land reform throughout the country

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\(^8\) Dams built in Afghanistan caused the shortage of water for Sistan. This matter, however, is an international problem to be solved.
This decree was issued on 26th Azar 1336 (December 17, 1957) under No. 20945 for the purpose of settling the difficulties resulted from the execution of the Government Decree No. 3124 of 17th Khordad 1316 (June 7, 1937).

The main items of the decree were to make a thorough survey of the area, the issuance of deeds for legitimate land holders and the sale of the remaining of the Public Domain Lands.

It, however, did not take very long before the above decree was entirely amended and the following was decreed in its stead:

No. 21346

Dated 7th Dey 1337 (December 28, 1958).

The Council of Ministers in its session of 6th Dey 1337 (December 27, 1958), upon the proposal No. 27785/8505 of the Ministry of Agriculture decreed to amend the provisions of the Council of Ministers' Decree No. 20945 of 26th Azar 1336 (December 17, 1957) as follows:

1. The Ministry of Agriculture is bound to start surveying lands in Sistan within one month from the date of the approval of this decree. This survey should be carried through continuously until all the area is thoroughly mapped to determine the surface area and the specifications and border lines of lands owned by people and those with no owner (cropland or other people and those with no owner (cropland or otherwise). A copy of all the maps should be put at the disposal of the committee mentioned below.

2. A committee consisting of the representatives of the Ministries of Interior, Justice and Agriculture, called the "committee of land delivery and settlement of disputes of Sistan lands," will be formed and sent to the area. This committee will carry out its duties under the supervision of the Governor General of Sistan and Baluchistan.

3. The Committee should examine the documents in the hands of holders and owners of lands (purchased from the government or from individual shareholders) and compare them with the records, in order to determine the exact acreage of the holdings, specifications and borderings according to maps and take the necessary steps according to the following instructions:
a. For those holders whose holdings agree with the amount they had purchased, the cost of the land should be collected and a certificate be issued by the Committee. A copy of the certificate, together with the map of the land should be sent to the Registration Office for the issuance of the respective land deed.

b. Those whose holdings exceed the acreage purchased or granted, the excess will be withdrawn and considered as Public Domain lands.

Note 1: Extra acreage holdings of those who own only one or two shares will be sold to them according to the provisions of the law governing the sale of Public Domains, provided that his total amount of holding does not exceed three shares. Extra amount of holdings beyond three shares will be withdrawn as mentioned above.

Note 2: Necessary certificates should be issued by the Committee for the original shares purchased by people also for those mentioned under Note 1, according to the provisions of item a of this decree. Extra land sold to people under the conditions mentioned above will remain under mortgage of the Public Domain Office until all the installments are paid.

4. Holders of lands withdrawn according to the provisions of this decree are bound to hand over their extra holdings in one lot to the Office of Public Domains.

5. Public Domains withdrawn according to the provisions of this Decree as well as other public domain lands will be sold to those peasants who do not own land and are ready to farm personally and directly, according to provisions of the law governing the sale of Public Domains.

Sgd, for the Prime Minister

What is going on now? In compliance with item one of the above decree, the surveying terms of the Ministry of Agriculture are now in Sistan. The object is to survey and map all Public Domain lands which were distributed or otherwise, and establish boundary lines of individual farm units. When the mapping is completed, the result must be checked with the records in the Office of Public Domains.

It is hoped that by proper execution of the provisions of this last decree, most of the problems of long retarded land tenure reform in troubled Sistan will be solved.
Plan organization. On March 12, 1958, a two-year contract was concluded between the Iranian Plan Organization and an Italian firm called Italconsult. The contract stands for the comprehensive development of the provinces of Sistan and Baluchistan. Although they have a number of projects (around 17) their immediate objective is to make a topographic survey of those two provinces. They are establishing permanent benchmarks and using them as a basis for projecting data to their maps. This will be a survey for the purpose of preparing and submitting plans for flood control, irrigation, and drainage. The mapping will show canals, rivers, lakes, swellings, projects, roads, culverts, and land reclamation work. It will cover 270,000 hectares in Sistan and 20,000 hectares in the Bampour area. They expect this work to be completed in nine to twelve months and that within six months after the survey, a plan for flood control, irrigation, and drainage will have to be submitted to Plan Organization. There are seven teams of three men each or a total of 21 surveyors assigned to these two provinces.

Recommendations. Research works, expansion of the extension service, flood control, proper irrigation and drainage system, wind breaks to control sand storms that often fill irrigation canals, and cover the farmlands, unsettled dispute of the Hirmand River, credit facilities, public health conditions and last, but not least, the high percentage of illiteracy are among the first problems of Sistan to be considered by planning authorities and policy-makers.

Mr. Willard L. Thorp's comprehensive statement dealing with land reform problems, seems to be a proper conclusion to this section.
Nothing can be called land reform which does not have as its basic and primary concern the improved welfare of the man who works the land. The economic and social institutions surrounding his life on the farm must be improved to bring him a higher standard of living and increased psychological satisfactions.

There are many who think of land reform primarily as redistribution of the land – as the breaking up of large land holdings into small ones. This may be a part of a land reform program but certainly only one part – and not the most important one at that (13).

**Crown land distribution program (2, 9, 13)**

On January 27, 1951, His Imperial Majesty Mohamad Reza Shah Pahlavi issued a Royal Firman that all crown lands (about 2100 villages) be distributed among the peasants against reasonable long-term installments.

As a historical event, this is a unique case, because seldom, if ever, in the course of the history of land reform had a sovereign taken such action on his own properties to convert his peasants into owner-cultivators.

Fortunately this program was helped from a technical standpoint by an outstanding experienced expert, Paul V. Maris, whose background and longtime experience with the Farmers' Home Administration of the United States Department of Agriculture was of great value for aiding such a program. He outlined a 19 year plan for distribution of all crown lands with an integrated community development system and supervised credit as the heart of the plan.

Some of his other important recommendations called for:

1. Training of multi-purpose village workers to assist the new owners in operating the crown lands as well as their community developments.

2. Division of land into units of economic size and transfer of excess population to other lands.
2. Division of land into units of economic size and transfer of excess population to other lands.

3. The use of protective devices in sale contracts to prevent further subdivision of distributed farms and willful default of payments.

4. Setting up of cooperative organizations to furnish credit and various services to new owners.

5. Emphasis on training and demonstration work, especially in those first distributed villages.

Land distribution council. After the issuance of the first Royal Firman, H. I. M., the Shah issued another decree to form a council to be known as the Council for Distribution and Sale of Crown Lands. This council was charged mainly with drafting regulations and supervising the surveying, mapping and distribution of Crown lands through the Crown Land Administration. Distribution of lands, however, was transferred in 1957, to the Development Bank, established by H. I. M., the Shah.

The council tried to work in a way so that the purpose of the decree could be carried out within the scope of the laws, and with due regard to prevailing social and agricultural factors.

Procedure. Primarily, the general procedure of distributing the Crown land was as follows:

1. The land was to be sold to peasants who were actually engaged in agriculture in the area.

2. The value of land was appraised by competent appraisers, and His Majesty the Shah reduced the amount that peasants would pay to only 80 percent of the appraised value.
3. The sale value of the land was to be collected over a period of 25 years without interest. A service charge of 15 percent, however, was added by the Development Bank for making and collecting loans and for servicing installments.

4. Houses already existing in the villages would also be sold, and by the same procedure as the land.

5. The new owner would not be allowed to sell or transfer his land before the payment of all his 25 installments.

6. The Development Bank would have the responsibility of implementing these regulations as well as the services mentioned.

Bank - e - Omran. The Development Bank was established by H. I. M., the Shah in 1952 to provide financial aid and technical assistance to new owner-cultivators of distributed Crown lands. It is also charged with other general social and economic developments of distributed villages.

The bank is charged with distribution of Crown lands, collection of installments, extending credit and establishing cooperatives to provide technical, financial and social aid required by the new land owners. It also assists farmers in marketing crops.

Both the Land Distribution Program and the Development Bank were in part supported by the United States International Cooperation Administration, locally called U. S. Operation Mission, through financial and technical aids.

- Progress to date. It is estimated that by the end of April 1961, around 300 villages with a total area of approximately 152,000 hectares had been distributed to 31,000 farmers. Crown land distribution is a
current affair and every so often, His Imperial Majesty the Shah, hands over title deeds to peasants for hundreds of hectares.

Comments. Reportedly, the results of the distribution of 14 villages in the Varamin Plains were of outstanding success. Besides the geographical advantage of proximity to Tehran, the capital city. Other reasons for this success are:

1. Credit and service needs of new owner-operators are being thoroughly met.

2. The central and local cooperatives for the area are widely established and operating satisfactorily.

3. Ample attention is being paid to guidance and technical assistance.

As a result income of the new owner-operators in those villages is estimated to have increased from two to four times in less than six years.

Valuable experiences have been gained from the Crown land distribution program which will be of great help to national plans for tenure reform in other areas.

Problems involved. In some areas, however, there are certain problems involved with the effectiveness of this program which are surmountable, but time and certain social and economic changes are required before all problems can be solved. Actually, most problems confronted in the Crown land distribution program would be present in any land tenure reform program in Iran. Some of these general problems would be:

1. Lack of adequate capital to establish and finance cooperatives and to extend credit to all new owner-operators.
2. An insufficient number of trained technicians to take charge of extension services, credit associations, and cooperatives.

3. High level of illiteracy in rural areas.

4. Some uneconomic size units being distributed because the number of peasants in certain villages were far greater than the amount of land available for distribution.

5. Lack of life insurance to cover payment for the land in case of death of the purchaser before completion of the 25 years of payments. This has made it difficult to collect the balance of installments in such situations.

6. Besides the right of ownership of the land owner there are other people in some parts of Iran who acquire certain rights in connection with the same land. These rights may have come through rent, holding tenancy or other ways. In Gorgan area, some of these rights are called karafa or dastarai, and in some other areas dastranj, etc. Similar rights in case of real estate is called sarghofti or key-money. However, the existence of these rights, wherever they exist, are a handicap to the transfer of full legal ownership of property.

7. Financial needs of farmers encourage money lenders and usurers, who sometimes charge up to 100 percent or more interest. Also, in some areas farmers when in serious need sell crops to buyers for one-third to one-half of true market price.

8. Financial and/or technical inability of farmers to farm their newly owned land or if the land is an uneconomic unit has caused some of them to rent out their land to large operators who have machinery and who either own or rent substantial tracts.
9. Need for more coordination between some of the institutional agencies, wherever they exist, for technical and financial aid to farmers.

10. Need for education in all the phases of life and especially to bring about a spirit of cooperation among villagers.

11. Problems with respect to the next generation or heirs of present farmers such as subdivision of allocated land to uneconomic units and the qualifications of legal successors in farm operation are also of significant importance to be considered.
The social and economic well-being of Iran, in which about 75 percent of her population live in rural areas, depends upon the happiness and productiveness of the agricultural segment of the economy. There are reasons to believe that most Iranian farmers owning their own land have a greater sense of security and work harder and better to improve their living conditions. The citizens have more pride and because they are free to act within their own rights without consulting a landlord, many will take action as the need arises on problems which affect the entire community. It is generally agreed by production economists that economic efficiency is greater for owner operated farms and more social advantages are obtained than for tenant operated farms and farm laborers. In view of this, the redistribution of much of the land into economic units of owner-operator family type farms becomes one of the primary long time goals for the improvement of economic welfare of the people of Iran.

It is noted, however, that societies which have been settled for many centuries and which have been partly isolated because of natural topographical barriers and transportation handicaps, have developed social and economic traditions, customs and patterns of behavior peculiar to themselves. Good or not each differs from another. Such conditions may be observed in almost all countries in which
civilization extends back many centuries as in Iran. In Iran, one may still see, as the continuation of tradition, different weights and measures, differences in most all phases of community and family life, and tenure systems. Wide variations exist in the climatic and other physical characteristics of the country. Therefore, a single blanket reform program would unlikely be suitable for the entire nation. Redistribution of land may not be advisable in some areas because each area has many problems that are intertwined and peculiar to itself. Individual land reform programs should be created to meet each area's individual problems for the benefit of all people.

Research and intensive investigation of local areas are needed to determine what programs would be best for each area. Pending the capability of peasants to manage, to operate and to be land owners, an equitable system of crop sharing might be the most needed land reform measure in some areas. In others, equitable land distribution needs immediate attention, while still in some areas the establishment of large commercial merchandized farms could well receive first consideration.

There are, however, certain developments which should precede or accompany any land tenure reform program in Iran.

1. Basic to the success of any land reform program in Iran is education of her people. "The foundation of all sins is ignorance," and man's lack of knowledge actually is the most limiting factor with which he must deal. People, in order to travel on the path of progress, need to be educated on the one hand, and separated on the other from their ingrained superstitions, prejudices, and other factors causing stagnation and miseries.
Once the education of rural people is initiated a beginning will be made at the "grass roots" in a natural evolutionary progress, and this should serve as a foundation for the successful development of the community as a whole.

Education is the primary requisite needed to cause favorable changes in attitudes, customs and traditions. This would, of course, take considerable time. Adult education, while difficult is not impossible and would bring favorable results. The emphasis, however, should be placed on the new generation--the children.

Everything else being equal, the money and efforts spent on education of the populace would likely have the largest initial elasticity of response in contributing to economic growth and subsequent land tenure reform programs. This involves a well organized, long range policy to: (a) eliminate illiteracy by all feasible means, (b) establishment of schools in all villages, (c) development of a strong and active extension service similar to that in the United States, and (d) training for the executors of the programs.

2. Statistical data regarding present land use, production, ownership, number of landlords and peasants, and other aspects of Iranian agriculture must be determined. A farm census to obtain this information together with detailed studies of local areas must be accomplished before specific recommendations for tenure reform should be made. The success of land tenure reform programs will depend on the extent of the available information and knowledge pertaining to specific problems.

3. In addition to the regular procedure of educational institutions, each and every government employee, local leader, clergyman,
and educated citizen should be willing to spare additional time and effort in educating fellow countrymen. All that may be needed is practical, wise planning and the creation of the desire in people to want to aid in this worthy cause, plus adequate financial help, recognition, and appreciation for those involved in such a program.

4. Of equal importance to land tenure reform programs there is no doubt that the funds of the agricultural bank and the development bank of Iran are far from being adequate to take care of all the credit requirements. To partly overcome this obstacle the following are suggested: (a) All the national and commercial banks should be required by the government to set aside a percentage of their funds for agricultural credits. (b) Substantial funds should be appropriated from international aids and loans available for this purpose. Supervised credit arrangements would of course be ideal. Whenever well trained personnel are available in sufficient numbers such a credit system should be put into practice. (c) Collateral security is a real handicap for the average farmer and therefore credit should be made available if possible according to production needs, farm income, and family requirements.

5. Close cooperation between extension agents, credit associations and community development officials is of major importance to a land tenure reform program.

6. Land tenure reform in and of itself is to attain the general goal of economic development of the country and greater prosperity for the people. Concurrent developments in off-farm industries and economic institutions are required to make the land tenure programs successful.
Opportunities for non-agricultural pursuits for people leaving the farm must be provided.

Programs should be planned to assist those farm families who either want or are compelled (because of lack of land or farm employment) to shift away from agriculture. Such a program should include vocational training, financial help in the form of credit, consultation and employment service facilities.

7. In carrying out a land tenure reform program, it should be realized that the lack of or deficiency in any one of the factors of production (land, labor, capital and management) will cause the whole program to fail, production to fall, and/or both. Therefore, serious consideration should be given to determining if there is enough land in a given area to distribute in units of sufficient economic size to all those who are presently on, or associated with the land in the community. If not, whether it is wise to distribute uneconomic units should be determined. If it is not advisable then opportunities for other occupations that can be provided for those for whom there will be no land must be known.

8. Concurrently with land tenure reform programs must be programs to improve transportation and marketing facilities.

Concluding comment

One of the very first characteristics of an underdeveloped country from an economic view point is that 70 percent or more of its population is engaged in agriculture. The rural sector of a country, when a large proportion of the population is engaged on small holdings, acts as an anchor sunk deep in sands of time so that the economic ship of the country can never move from its present becalmed position of low
levels of income and productivity (4). Therefore, economic development is directly related to reduction of the number of peasants. We would do well to note that where labor-intensive agriculture is not shifted to land-and-capital-intensive techniques, very little can be expected either in better economic conditions for the farmer, or in the overall economic development of the country. Besides, purely agricultural countries are seldom progressive even in the field of agriculture.

There should be a strong movement on the part of government officials, agriculturists, credit organizations, and all those involved, toward the establishment of more efficient operating units so that farming operations in general may become more profitable. Such a move would of course gradually tend to reduce the ratio of rural to urban inhabitants, but this has always been so in any prosperous, developing, agricultural economy.

Integrity, stability, security, and spirit of cooperation are indispensable for and ingredients of any endeavor towards long range land tenure planning and its successful anticipated results.