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Vol V No. 2 ISSN

0019-5014

AUGUST 1950

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS





INDIAN SOCIETY OF AGRICULTURAL ECONOMICS, BOMBAY

Conclusion.

From the foregoing analysis, the following points emerge:-

- (1) There are no definite means for measuring the success or failure of the Grow More Food Campaign. But the consensus of opinion is that its achievements are not commensurate with the expenditure involved.
- (2) There has been an increase in the area under food-grains during the past five years. But how much of this increase is due to the Grow More Food Campaign and how much due to the fall in the cotton cultivation arising out of certain factors independent of the Campaign, cannot be ascertained.
- (3) The Campaign has not been very successful because of three main defects in the schemes:— (a) failure to enthuse the people; (b) lack of supervision and check on the assistance given, which has led to leakages in the schemes; (c) disregard of some of the basic principles of planning.
- (4) Besides the defects in the schemes themselves there are four factors in the agriculture of Dhulia which are hindering the increased production of food grains: (a) lack of certain resources on the part of cultivators, the most important of which is cattle manure; (b) keen competition between food-grains and ground-nut resulting from higher net profitability of ground-nut; (c) upward movement of the cost structure in agriculture leading to inefficiency of cultivation; (d) lack of willingness to work on the part of cultivators, resulting in inefficient cultivation.
- (5) The food problem is really a part of the general problem of rural reconstruction.
- (6) The food problem is, also, a part of our general economic problem. It must be considered not only by itself but also in the light of the need for cotton to feed our textile industry and in the light of the fact that ground-nuts and other non-food grains may prove valuable as dollar earners.

F.A.O. MISSIONS TO GREECE, SIAM AND POLAND AND CHINA-U.S.A., PHILIPPINES-U.S.A. AND SYRIA-U.S.A. JOINT MISSIONS.

[We publish below a summary of three Reports of F.A.O. Agricultural Missions to Greece, Poland and Siam and three Reports of Agricultural Missions to China, Syria and Philippines undertaken jointly with the U.S.A. experts. These reports are very useful and their recommendations can be adopted in India with great profit. Our main purpose in publishing the summaries is that it may induce our State Governments to appoint similar missions for their respective states and use their findings and recommendations as basis for formulating their policies in the right directions. We feel that policies and measures can be successfully implemented if they are based on solid foundation of facts as interpresed by experts in the subject.]

An F.A.O. Mission consists of a group of experts usually drawn from several countries which goes to a country or region to study at first hand a given problem or group of problems related to food, agriculture, forestry or fisheries. On the basis

of this study it makes recommendations for action by the Government or Governments concerned. Recommendations may also be made for action by F.A.O. and other international organizations. The Mission is sent to any country on request of its Government and after determination by the Director-General of F.A.O. that it is feasible and worthwhile. These missions are fully assisted by a team of experts in the country inviting them.

Similarly at the request of certain Eastern Governments the Government of United States sent Missions to China, Philippines and Syria to make recommendations towards improvement in the agricultural situation in general. While the reports of Missions to Syria and Philippines are limited in scope, the one on China is comprehensive. These missions worked conjointly with the team of experts in the inviting country and the Reports are products of their joint labours.

Though the purpose of sending missions to countries was indentical and activities of the missions covered practically all aspects of agriculture, emphasis varied according to peculiar conditions prevailing in the countries.

Thus all the above six reports deal, in general, with soils, climates, crops, land utilization, irrigation projects, mechanization, insect control, manures and fertilizers, dairy, forestry, agricultural marketing, agricultural credit, land tenure, and tenancy, land taxation, village administration, rural institutions, education, co-operation and agricultural research. All the Mission Reports have laid down raising of standard of living of the rural masses as the main object and measures are suggested to fulfil that object. In the case of Poland, Philippines and Greece, the Missions had to offer recommendations both on rehabilitation of agriculture from war devastation and also for long range policy of agricultural developments.

An attempt is made here to give a brief summary of the main recommendations of individual missions, special mention being made of certain outstanding problems in each country. Conclusions and recommendations arising from the discussion are referred to in passing. These Missions stayed in the inviting country for a period varying from one to three months and travelled extensively in the countries concerned. The members of the Missions were given ample opportunities to witness agricultural operations on fields and farms and to meet the farmers, co-operators, foresters, engineers, professors and administrators. They held detailed discussions and conferences with technical experts. Their reports, therefore, are valuable contributions on the subject of Agricultural Economics.

F. A. O. Mission to Greece

The F.A.O. sent its Mission to Greece in May 1946 to study agriculture, fisheries and related industries in that country and make recommendations for their rehabilitation and long-range developments. Franklin H. Harris of the U.S.A. was the Head of the Mission. The mission in formulating specific recommendations and suggestions had inevitably to adopt a very wide interpretation of their terms

of reference since the factors affecting agricultural development could not be separated from those affecting the more general industrial development of the country.

The Report is divided into two sections. In the first, the major recommendations of the mission are set out and explained. The second section which is more detailed consists of appendices prepared by the various members of the Mission giving suggestions on problems of water resources, livestock, crops, soils, seed production, phytopathology, fisheries, and economic development. The appendix by Mr. Mordecai Ezekial presents an outstanding analysis of the Greek economy.

The recommendations cover immediate and transitional problems such as immediate food shortage, maintaining essential imports, continuation of special feeding programmes, village rehabilitation, inflation control, restoration of export markets, etc. The recommendations on utilization of water can be made use of by any other country with advantage. These recommendations relate to classification, planning and financing of water projects, and grazing control. The subsequent chapters cover recommendations on long range objectives for agricultural development such as long range effects of industrialization on farm life, measures to improve agricultural technique, recommendations on governmental organisation, construction of sound, well qualified, impartial and able civil service and agricultural research in crops, soils, livestock feeds and home economics, etc. Other chapters include recommendations on agricultural education, extension service, co-operation, fisheries and reform of taxation which happened to be regressive. At the end. proposals are made for international action such as continuation of advisory service, aid in developing small industries and providing for capital investment. Mr. Ezekial has stressed need for modernizing Greek Institutions which happened to be old and outmoded. Problem of overpopulation is sought to be tackled by rapid industrialization which can be accomplished within 30 to 40 years, as other industrialized nations have done it. Recommendations are made for reform of the civil service-Merit and not political affiliation, it is emphasised, should be the proper qualification for appointment to key posts.

F. A. O. Mission to Poland

This mission, headed by Mr. Noble Clark of the U.S.A. and composed of experts from Canada, Denmark, Northern Ireland, the Netherlands and the U.S.A. arrived in Poland on 4th July and left on 4th September 1947. During these two months they travelled over about 75,000 kilometers and visited all parts of the country and contacted all classes of people connected with agriculture.

The mission found that human nutrition, agriculture and forestry were in a state of emergency in Poland. Needs for imports of additional fertilizers, powdered milk and milk supplements and certain seeds were considered to be so urgent that the Mission submitted advance recommendations on these subjects for the immediate attention of the F.A.O.

The other recommendations cover all the aspects of the national economy and several important technical fields. Collectively, they are intended to lead to the attainment of a better living for the Polish people, both rural and urban.

For instance, the Report embraces subjects like population, human nutrition, national agricultural programme and national economic policies affecting agriculture, soils and fertilizers, crop, animal husbandry and farm draft power, marketing of agricultural products, agricultural research, teaching and advisory work, forestry, financing reconstruction of agriculture and forestry and promotion of export trade. The situation with reference to all these aspects is thoroughly analyzed and in light of the analysis the Mission has suggested future scope of development. The chapter on agricultural research, teaching and advisory work is very well treated and is important.

In the long run, assuming that present-day emergencies could be met, the Mission recognized great possibilities of improved production and consumption of agricultural products, fisheries and forestry in Poland. Basic to the attainment of this goal, however, would be a greatly increased use of science and improved technology throughout all phases of production and distribution. It would be necessary to improve the general elementary education of the people, to provide better support for research institutions and universities, and to strengthen and extend considerably the activities of agriculture, forestry, and home economics advisory service working directly with the people on the farms and in the homes. The earlier these tasks were undertaken, the sooner would be achieved the improved living so much needed for and desired by the Polish people.

An extensive and rapid programme of reforestation is recommended by the Mission, as a means of better safeguarding and utilising Polish land resources and ensuring a sufficient timber supply in future.

The Mission has envisioned that there should eventually be a smaller proportion of the Polish population on farms and a larger proportion in industries if the best use was to be made of natural resources in Poland. The consolidation of scattered farm holdings in many polish villages, the creation of family-sized farm units in the new territories and through the parceling of the large estates, and the gradual adoption of improved practices throughout agriculture, in line with the recommendations of the Mission, would permit more land to be farmed by one farmer, and in general promote a more efficient use of agricultural resources. At the same time the development of industry would provide opportunities for a part of the farm people to better their standard by changing their occupation and producing more nonfarm goods and services for the use of the entire population, including the remaining farmers. In the development of industry the Mission has recommended that industries manufacturing fertilizers, insecticides, fungicides, herbicides, farm machinery, and other goods that directly improved the food supply should be given a high priority. The development of an improved food supply, as to both quantity and nutri-

tional quality, was in turn indispensable for the erection of a modern industrial economy in Poland.

The Mission has pointed out the desirability of releasing farm housewives from the necessity of performing arduous labour in the fields and stables, so that they may have time and energy to devote to their families and households. The Mission has recommended that this trend be speeded by all available means; and practices of family nutrition, food preparation and preservation and household sanitation be vigorously promoted by the Government.

The Mission has further recommended that the Polish Government should make arrangements, if possible, for international loans of appropriate duration to make any foreign purchases that could not be met from the available resources.

F. A. O. Mission to Siam

The Mission arrived in Siam on 3rd January 1948 and dispersed three months later. Headed by Mr. R. H. Walker of U.S.A., it was constituted to study economic and technical problems involved in developing agriculture and forest resources of Siam. Six problems were specified for the purpose: (1) technical aspects of crop husbandry, especially rice production since rice, rather than money, economy predominates in Siam as with most of the countries in that part of the world; (2) development and control of water supplies; (3) control of rinderpest; (4) forest conservation and management especially of teak and other tropical forests; (5) improvement in the economic status of the farmer, provision of incentives to increase production with special reference to credit facilities and co-operative organisation, improvement in marketing and distribution of farm products; and (6) improvement in the statistical methods with special reference to the technique of crop reporting and coordination of statistical work in the field of food and agriculture. These problems can hardly be solved unless attention is paid to the more general problems of agricultural organisation, education and research. A study of these matters in relation to the development of Siamese agriculture was made by the chairman himself.

Experiments on the use of machinery for cultivation of rice are recommended. At the same time, the mission has expressed itself against rapid and complete mechanisation. Skill, technical assistance and supervision are considered necessary for the continued success of the commercial enterprise in rice production. Men must be trained for this work. The most promising men should be sent abroad for advanced studies. The research stations in Siam were found to be inadequate. According to the Mission, their requirements were: (a) keen and well-trained young men; (b) study support and encouragement from their superiors; and (c) generous financial allocations for field experiments, laboratories equipment and housing.

Some very useful suggestions are made by the Mission as regards irrigation. The Mission did not favour free supply of water for irrigation. The Mission felt that Siam should adpot the usual practice of making a charge for irrigation water. When irrigation projects were being considered, the engineers should have the

advice of men with training in soils and land use. The Royal Department of Irrigation needed a man with training in soil mechanics. When designing an irrigation project, the engineer should consult a land-ownership map. For this, aerial photographs would be of value. Experiments were needed to determine the water requirements of crops and to study the reclamation of acid saline soil.

Control of Rinderpest.

There seemed a good prospect of practically eliminating rinderpest from Siam through available methods and others which were in evolution.

Goat virus and other products for veterinary use were prepared in Bangkok. It was of immediate and urgent importance that goat virus was extensively used to immunise cattle. Need for an experienced veterinary pathologist is stressed by the Mission. Men required for work in the Disease Control Division of the Animal Industry Department should be trained in the University of Medical Sciences. It had been the practice in Siam to treat each outbreak of rinderpest as separate problem. A practicable and far more effective policy was to aim at protection rather than cure. As many cattle as possible should be permanently immunized.

The Mission observed that the countries of South-East Asia were all concerned with the problem of rinderpest and it was to their advantage to co-operate closely in measures for controlling this disease. Research in new methods of control for South-East Asia should be concentrated in one centre.

The preservation of forests was an urgent need. Protective forests have great importance to Siam, since rice production depends so much on the maintenance of stream flow. A preliminary survey of the forests should be made. An air survey should help to speed up this important work. The forests of Siam should be managed on a sustained-yield basis. This is the major item in the recommendations regarding long term policy. The Forestry Department needed a Research Division, which should include a botanist and a chemical and wood-technology section. The selected graduates of the Forestry School should be sent abroad for further training.

The Mission has opined that Siamese Government should set up co-operative rice marketing organization to purchase and transport paddy, mill it and sell the rice. Attempts should be made to extend the granting of loans to tenant farmers. More working capital should be provided for the co-operative paddy sales societies. Capital Investment.

The Mission has recommended that a plan of capital investment in agriculture should be drawn up. It was considered necessary that a wide view be taken and that developments took place in an orderly fashion. The problem was difficult and could perhaps best be handled by making it the whole-time concern of a small advisory board with members selected for their mature judgment, agricultural knowledge, and unquestioned probity. Their main duty would be to promote continuity of efforts within a comprehensive plan.

The mission has recommended that F.A.O. should help the Government of Siam by providing technical assistance in preparing and presenting applications for financial aid and in securing the needed capital goods.

It is recommended that the duties of the Central Service of Statistics be widened. There was need for closer co-operation between the Central Service of a Statistics and the various Ministries themselves. The status of statistical workers employed in districts and provinces should be raised. The headman of villages and communes are the prime source of statistical information on crops and livestock. They should be well paid and their work should be closely supervised by agricultural officers.

To associate research with education, it is recommended that the dean of the College of Agriculture be given the additional responsibility of a research administrator. This man, the Mission has suggested, should have a foreign adviser of high qualifications and appropriate experience in education and research. In order that the results of scientific work and improved methods of agriculture be used by the farmer, it was considered necessary to have an extension service.

The Mission has recommended that a Department of Agricultural Economics should be established in the Ministry of Agriculture.

The Mission also has recommended that the Siamese Government should obtain for a short period the services of a statistical sampling expert from abroad. In every other matter, the Mission considered that Siam should rely upon her own men to carry on completion of the programmes outlined in the Report.

China-U. S. A. Mission

The Chinese American Mission on agriculture arrived in China on June 19, and completed their labours in December 1946. Mr. C. B. Hutchison of California University was the Head of the American Team and Mr. P. W. Tsou of the Chinese team. Eleven weeks were spent in travel to make a first hand study of agricultural conditions and problems.

Studies were made of (1) Agricultural Education, Research and Extension facilities and procedures. (2) The production, processing and marketing of agricultural products and (3) the economic and technical problems associated with rural life and with the use of land and water resources of agricultural production. Smaller groups made special and detailed studies in the areas of production of certain agricultural export commodities including tung oil, silk, tea, carrot, wool and fish.

The important portions are those that deal with subjects of National System of Agricultural Credit, Farm Tenancy, Education and Research and Agricultural Extension work in China. The last subject is treated in all details and contains most useful recommendations. The Chapter on Organization of China's Agricultural Services is most constructive and hence very important.

Some of the important recommendations include:

That an integrated system of regional agricultural colleges and experiment stations should be developed by the Ministry of Education and the Ministry of Agriculture and Forestry, working together; and that the present Agricultural Extension Commission should be recognized into a National Agricultural Extension Administration under the Ministry of Agriculture and Forestry, with appropriate regional provincial and hisen offices.

That there should be established in the Ministry of Agriculture and Forestry, a National Agricultural Regulatory Administration with 16 regional offices.

That there should be established a single Government sponsored bank to service agricultural needs, to be known as the Agricultural Bank, by bringing into a single organization the present Farmer's Bank of China and the Central Co-operative Bank.

That the Ministry of Social Affairs should consider action which might suitably be taken by the Government to guard against the rapid increase in the growth of population.

National Land Policy.

It is recommended by the Mission that a Bureau of Agricultural Economics in co-operation with Government agencies should determine the specific areas for the best use of land from the standpoint of national economy. It is also recommended that the Agricultural Extension Service should provide for the teaching of good land use practices in its agricultural programme and furnish the technical assistance needed by farmers in establishing better practices and in developing community land-use planning.

Size of Farm.

Family farm is advocated by the Mission. The Mission has observed that 'generally throughout many nations it has been found that, in a free society, operation by a single family, which controls its own plot of land and obtains the product of its labour as a reward for the industry of the family, is most effective method of getting a larger agricultural production. Preference has to be given to co-operative to collective farming which has yet to be proved a success.

Farm Tenancy.

Tenancy is a major Agricultural Problem in China. Sun Yat Sen set forth the principle that the man who operates the land should own it. This teaching has given emphasis to the importance of tenancy problems.

A larger proportion of farmers in China owns some land and rent additional land than in most other countries. One reason for this is that when small farms are inherited and the land is divided between two or more sons, the one who remains on the farm may rent and operate his brother's share. As he accumulates savings he may buy and gradually pay for the land of other heirs.

There are many forms of farm tenancy in China; such as Share renting; Landlord owning the soil, and the tenant owning the surface or the use of the land, etc. Over

one-half the tenancy in China is on a cash basis consisting of (1) payments of definite amounts of money or (2) the market price of a definite amount of crop or (3) payment of a fixed amount of produce delivered to the landlord. Share-renting which makes up most of the remaining tenancy is wide-spread in China and shows many variations. Two ways are suggested of approaching the problem incident to tenancy. First, many of the evils of tenancy may be corrected by introducing better farm-leasing practices, and second, tenants may be financed in the purchase of land through the development of farm land credit facilities.

Education and Research.

Need for general education is stressed. Satisfaction is expressed with progress in agricultural education. But the Mission has recommended that instead of sending students abroad for undergraduate studies practice should be adopted to restrict foreign study to post-doctorate students, instructors, professors and research and extension workers.

To associate research with extension, an elaborate scheme is given for organization of the Central National Research Bureau and Regional Agricultural Experiment Stations.

Agricultural Extension Work in China.

Extension work in China are outlined and analysis of present situation is attempted laying bare strength and weakness of the organization. Then the Plan for National Agricultural Extension Administration is outlined. It should have five divisions: (1) General Administration (2) Organization and Supervision (3) Subject matter and Services, (4) Information and, (5) Studies and training. Essential qualities of an ideal extension worker are also laid down.

As means of reaching the people, fairs and exhibitions, lantern slides, film stripes, charts and diagrams, dramatics, recognition of village heroes, meetings, radios, youth programmes and farmer organisations are mentioned.

Among other immediate steps to be taken in the Extension programme are included that at least 10 scholarships be provided each year to send experienced extension workers abroad for training in Extension work with half, or more, of them preparing for administrative work and all of them committed to devote at least 5 years to extension work upon return and secondly, that Home Economics education be developed at the University level in China to provide home demonstration workers.

Organisation Plan for Ministry of Agriculture.

The Mission has suggested an organization plan for the Ministry of Agriculture and Forestry, which consists of Minister, and two vice-ministers. Under first vice-minister there should be secretaries for agriculture, forestry, animal husbandry, fishing and agricultural economics. Under the second, there should be a secretary for General Affairs.

Directly under the Minister there should be an Agricultural Board to look after National Agricultural Research Administration, National Agricultural Extension Administration, National Agricultural Regulatory Administration and National Agricultural Library Administration.

Similarly the Mission has also recommended organisation plan for the National Agricultural Research Administration. Under it Ministry of Agriculture and Forestry will have two divisions viz. National Council of Agricultural Research and National Agricultural Research Administration. Under the latter, seven different bureaus will be working viz. National Bureau of Agricultural Research, National Bureaus of Forestry Research, National Bureau of Animal Husbandry and Veterinary Research, National Bureau of Fishery Research, National Bureau of Agricultural Economics Research, National Bureau of Agricultural Engineering Research and nine Regional Experiment Stations. To first six of these Bureaus will be attached Sections of Agriculture, Forestry, Animal Husbandry and Veterinary Science, Fishery, Agricultural Economics and Agricultural Engineering respectively.

The United States-Syria Agricultural Mission.

The Mission headed by Dr. Franklin Harris arrived in Damascus in March 1946, with the hope of attaining two objectives. The primary objective was to survey the agricultural situation of Syria in conjunction with local experts and authorities with a view to indicating possibilities of long-term developmental projects which might be undertaken by the Syrian Government independently or in collaboration with the Government of the United States. The Secondary objective was to share American agricultural experience with the Syrian Government and with private organizations, and to extend advice on agricultural problems as requested.

The Mission was requested to visit all the typical and important areas of Syria to become as familiar a possible with agricultural needs and potentialities. The Mission was requested to make an objective analysis of a proposed bill for an Extraordinary Programme for Agricultural Development providing for capital outlays for agriculture in Syria.

Main topics discussed in this report relate to functions of Government in Agriculture, Research Extension and Demonstration, Agricultural Education and Administrative and Regulating activities and Control programmes for forests, plants, animal breed veterinary service and irrigation systems.

At the outset, general statement of principles such as raising the standard of living of rural masses, increasing production per capita, consideration of conception of Agriculture as not merely an economic activity but a total way of life, is given. Syrian agriculture should take into consideration not only village dwellers but nomadic tribal groups who raise bulk of livestock. It was held by the Mission that the only safe method of bringing about an agricultural development that would result both in efficient production and in the betterment of life among the rural people

was the *Educational Method*. It was the simple but often neglected principle of helping the individual to help himself. It was the basic principle in the philosophy of democracy.

It is also laid down in the report that a national policy for agricultural development should involve a minimum of centralized control, directive orders, regulations and penalties and a maximum of guidance, training, extension and projects undertaken in co-operation with the farmer and the rural community.

According to the Mission, National Agricultural Organization could function best if clearly differentiated into administration and control, including so-called action programmes, research schools, education, extension, and over-all planning. The functions of each of these divisions should be clearly defined and delimited but at the same time, integrated with the functions of the other divisions.

The Mission observed that 60 to 70 percent of Syrian people were directly dependent upon agriculture for a living. Agricultural activity of Syria, in general, might be described as static in the sense that it followed lines of agricultural practices and production that reaching into the remote past. All Syrian exports were agricultural, olive oil, tobacco, apricot, paste, licorice, root pistachio nuts, silk and wool. Agricultural industries in Syria were limited in number and scope. Irrigation was the cornerstone of agricultural development in Syria, and water was locally abundant but a very small fraction was utilized. Agricultural potential of Syria was great.

Recommendations are made for more intensive cultivation through irrigation, better plant varieties and animal breeds and development of agricultural industries with petroleum and hydro-electric power.

In the chapter on Functions of Government in Agriculture the Mission has suggested the following functions: Education in the elementary, secondary and higher schools in agriculture and in Home Making, training and instruction of adult farmers and home-makers in the newer methods and technique; research in Agricultural Experiment Stations and laboratories and regulating control and construction programmes or action programmes for agricultural development and lastly, planning.

The Mission has also made the following recommendations for the development of Syrian Agriculture: A separate Ministry of Agriculture should be established. The technical and scientific staff in agriculture should be assured of a reasonable security of tenure, and that such staff should be allowed maximum freedom of action unhampered by undue political pressure and undue bureaucratic interference; qualified personne' should be allowed freedom, initiative and action on various levels without constant reference to higher authority. Ministry of Agriculture should co-ordinate its activities with those of other agencies that are significant for agricultural development. Co-operation was needed among Ministries of Agriculture, Education and Public works.

Education of girls in Home Economics is recommended, and Mission has also recommended appointment of special Commission of experts conversant with agriculture and agricultural education to advise the Government on details of planning, organization and management of agricultural education in Syria. Outstanding foreign expert should be appointed to this Advisory Council.

Outlines for the set-up of an Agricultural Experiment Station for Syria are given in an Appendix. Provision is also made to include therein Department of Rural Social Science and Agricultural Statistics.

Lastly, the Mission has recommended that foreign experts should be invited for a programme of agricultural development in Syria.

Philippine-United States Agricultural Mission.

The American Agricultural Mission to the Philippines headed by Dr. Leland E. Call arrived in the Philippines in July 1946. Its primary purpose was to make a factual survey of the conditions of agriculture in the Philippines and with the co-operation of local agricultural officials help evolve a programme of scientific Agricultural Rehabilitation and Development.

The report of the Mission written on the spot is a comprehensive diagnosis of the state in which Philippine agriculture was then found and contains valuable suggestions as to how the various problems might be met, conditions improved and better agricultural institutions built under a long-range plan of agricultural development.

In the beginning pre-war influence of the United States and destructive effects of the war are described and attention is given to immediate problems of rehabilitation of war devastated agriculture, increased food supply and economic reconstruction and their solutions are suggested.

Among the factors affecting agriculture, warning is sounded against alarmingly rapid growth of population. Among the means which the Philippines could employ to provide for a larger population the following would appear to be the most effective:

(1) More efficient use of the present agricultural lands through increased knowledge resulting from agricultural research and extension.

(2) A more extensive and accelerated development of new lands; and (3) Greater industrialization.

Land Tenure System.

The Mission observed that a large proportion of the farmers was on very small units. Farms containing less than 2 hectares of land, which comprised only slightly more than 18 percent of the total farm area, were operated by over 51 percent of all the farmers. Farms containing more than 5 hectares, which comprised more than 50 percent of the area then in farms, were operated by less than 13 percent of the total number of farmers.

Prevailing form of tenancy was share tenancy. The historic division in the rice-growing areas was one-third for the human labour and management, one-third for

animal labour, and one-third for the owner of the land. Usually the landowner had the responsibility of paying taxes and furnishing the cash for growing the crop, and the tenant furnished the seed and his own labour. Usually the tenant furnished the work animals, but often the owner supplied them.

There had been at that time enacted a law which might have the effect of unifying and improving land lord-tenant relationships in the rice-growing regions. This legislation provided for a distribution of the crop on a 70-30 percentage basis where a written lease was not already in existence. Under this division, the tenant was to be responsible, for furnishing all planting materials, equipment work, animals, etc. Farm Credit Facilities.

Farmers were found to be in a state of perpetual indebtedness. If they borrowed in kind, say for a period of 6 months, the custom was to demand for 2 to 3 units in return for every one borrowed. The Mission has recommended measures to improve the situation such as providing facilities of cheap and effective production and marketing credit on co-operative basis.

Government, however, might climinate to some degree the small farmer's need of borrowing for planting purposes by encouraging the storage and conservation of agricultural products. This would necessitate not only such facilities as bonded warehouses but also an objective educational programme to teach the farmer the advantages of storage and conservation. Moreover, since well-constructed and organized storage facilities would make possible a more constant food supply for the market, they might be even more important as a stabilizing influence on prices of certain farm commodities.

The Church.

The Catholic church was established in almost every community, and its philosophy and ideologies were indelibly impressed on the thinking and behaviour of almost every individual. Its activities and teachings, however, had been mostly in doctrinal and academic fields. Since the church had such a great influence on the people, the Mission held that any support given by it to agriculture and home-making, whether in co-operation with existing educational agencies, or according to a programme of its own, would be highly effective.

Agricultural Production.

Position regarding production of export crops like sugar, cocoanuts, abaca and tobacco and food crops like Rice and corn and tropical fruits and other new commercial crops such as rosalle, kana ramie, derries, cocoa, coffee, citrus, and peanuts, is reviewed in the Report and recommendations are made also, for improvement in livestock and live-stock products. The Mission has stressed the need for better irrigation and drainage. It has also recommended that in view of abundance of labour power, mechanization should be adopted with caution. For conservation of National Resources it is recommended to establish a Bureau of

Soil Conservation in the Department of Agriculture and Commerce. Surveys of public lands should be completed in order that right of tillers to land might be secured and that constructive planning for the development and conservation of land and forest resources of the Nation might be promptly undertaken. The construction of roads and schools and the assurance of land to tillers appeared to the Mission to be among the most effective inducements for land settlement.

Agricultural Education.

The Mission has laid greater emphasis on subjects of agricultural education, agricultural research and regulating functions, agricultural extension service and Home Economics.

The Mission has suggested continuation of the extension pensionado system. Under this system, faculty members were sent to the United States and other foreign countries for training and experience, visiting professors were employed and constant attention was given to maintaining a strong staff of young instructors, who might be drawn upon to replace the older faculty members upon retirement, wisdom and judgment were exercised in the appointment of a Board of Regents. The Mission has held that in establishing additional high schools consideration should be given to their location in the larger farming communities rather than in Provincial capitals. In this way, students could live at home, and home project work in agriculture and home-making could be more easily provided. Agricultural education in the grade schools should be emphasized. There should be close co-operation between the schools and the Extension Service in the promotion of agricultural-educational programmes.

Agricultural Extension Service.

At one of the Provincial nurseries the Mission noted this slogan "Research without application is an expensive luxury, application without research is folly". This contains a great truth. The problem of converting into improved farm practices the results of research is the task of an Extension Service.

Since the normal family (and farming is a family enterprise) includes men and women and boys and girls, extension work should be all inclusive. A programme for young people should have an important place in an Agricultural Extension Service.

The Mission has emphasized this aspect of Extension that it should utilize the experiences of good farmers as examples of advanced techniques of farming, since Government-operated demonstration farms, as a rule, are not effective in teaching improved practices in agriculture. People take the attitude that only the Government could raise good crops. If, on the other hand, they see a neighbour can do it, they can also.

Extension personnel should not be required to do regulatory or control work. They should be educators and not regulatory officials. The Extension Service to be effective must have permanent continuing financial support.

Home Economics.

"The mother is the central influence of the home. Her work is often more difficult than that of the father. With what he provides, it is her responsibility to feed and clothe the family. She must bear the children, prepare their food and clothing, make the house comfortable and livable, and teach the children a sense of duty and responsibility. As a homemaker she must be a gardener, maid, cook, seamstress, teacher, and often doctor and nurse. The more limited the means the more difficult is her task." Thus observes the Mission.

The Mission felt that Home Economics work was much more important than its position in the Government indicated. It recommended that there should be created a Division of Home Economics and that it should be placed in a Government agency where it would receive sympathetic consideration and support.

Exchange of students and scientific materials and publications between two countries is recommended. The Mission has recommended appointment of Technical Planning Board to advise the Government on all phases of national planning.

SUMMARY OF THE REPORT OF THE CONGRESS AGRARIAN REFORMS COMMITTEE.

The Committee's Report is divided into eleven chapters. The first four chapters deal with the main problems of rights in land, the future pattern of agrarian economy and the place of co-operative farming therein, and the question of machinery of land management. Other chapters deal with problems of agricultural indebtedness, rural finance and marketing, agricultural labour, stabilisation of agricultural prices, agricultural improvements, agro-industries, rural welfare and agricultural statistics.

Recommendations:

Land Reforms:—The Committee feels that there cannot be any lasting improvement in agricultural production and efficiency without comprehensive reforms in the country's land system. The Congress in its election manifesto and the Report of the Economic Programme Committe has declared itself in favour of the elimination of all intermed aries between the State and the tiller. The Zamindari Abolition Bills in the various provinces which are in different stages of implementation, are a first step towards that objective. But even after the abolition of the zamindari, there would remain a large element of non-cultivating interests in land. The Committee is strongly of the opinion that in the agrarian economy of India there is no place for intermediaries and land must belong to the tiller, subject to conditions mentioned hereafter. The Committee has, therefore, recommended that, in future, subletting of land will be prohibited except in the case of widows, minors and other disabled persons. To cover the period of transition, however,