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REPORT OF THE FAO REGIONAL MEETING
on
FOOD AND AGRICULTURAL PROGRAMS AND OUTLOOK
in
ASIA AND THE FAR EAST

*Bangalore, State of Mysore, India
27 July - 5 August 1953.*

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INTRODUCTION

This Regional Meeting on Food and Agricultural Programs and Outlook in Asia and the Far East was convened in accordance with Resolution No. 6 of the Sixth Session of the FAO Conference. After reviewing the serious world food situation and outlook the Conference recommended that Member Nations should make individual and concerted efforts to achieve "a well balanced increase of one to two percent per annum in world production of basic food and other agricultural products in excess of the rate of population growth." The Conference proposed that detailed consideration of problems and programs of agricultural development of groups of neighboring countries should be undertaken at regional meetings and their findings and recommendations made available to the Seventh Session of the FAO Conference in November, 1953.

Member Countries represented at the Meeting were:

Australia	India	Netherlands
Burma	Indonesia	Thailand
Ceylon	Japan	United Kingdom
France	Laos	United States
		Viet-Nam

In addition there were observers from the United Nations Economic Commission for Asia and the Far East (ECAFE), International Labor Office (ILO), and from World Federation of UN Associations (non-governmental organization).

The resolutions adopted at the Meeting will be found in Annex I of the Report and the names of delegates and observers in Annex II.

Dr. Panjabrao Deshmukh, Minister of Agriculture and leader of the Indian delegation, welcomed the delegates on behalf of the Government of India. The Meeting was inaugurated by His Highness the Rajpramukh of Mysore who also welcomed the delegates on behalf of the Government and people of Mysore. Emphasizing that nothing can be more noble than the idea of fighting hunger through international co-operation, he congratulated FAO for organizing this Meeting which would form a part of the movement to counteract the forces that threaten world peace. Closing his speech with

a fervent hope that the region will make its contribution to world economy and thought in an increasing degree, he wished the Meeting every success.

Mr. Cummings, Regional Representative of FAO, expressed the Director-General's thanks to the Governments of India and the State of Mysore for their generous hospitality in acting as hosts to the Meeting.

Dr. Panjabrao Deshmukh of India was unanimously elected Chairman of the Meeting. Three Vice-Chairmen were also elected:

His Excellency Mr. L.N. Palar, Leader of the Indonesian Delegation; His Excellency Mr. C. Coomaraswamy, Leader of the Ceylonese Delegation; and Mr. T. Ishiguro, Leader of the Japanese Delegation.

The Chairman and the three Vice-Chairmen acted as the Steering Committee throughout the Meeting.

In his opening speech, the Chairman said that the object of the Meeting was to assess the work done since the last session of the FAO Conference so that appropriate action could be taken at its next Session to advance the work of FAO. The most pressing economic problem of the region still was one of ensuring adequate food production. Although the fact that productivity of land in the region was low and further declining was disquieting, it was reassuring to note the recent efforts of governments to expand agricultural production by all available means. The welcome tendencies of increasing investment in agriculture and other incentives for developing agriculture should improve the situation during the next few years, if developed adequately. Although countries in the region at present suffered from under-investment and under-production and, therefore, needed greater flow of foreign capital and grants, agricultural development depended in the final analysis upon millions of individual farmers. Extension and demonstration work therefore assumed great importance. Finally, the Chairman expressed his confidence that the Meeting would provide the necessary platform for joint discussion of the main problems and make suitable recommendations to the FAO Conference.

In preparation of this Meeting the Director-General had sent to most countries of the region fact-finding missions, who had collected pertinent information, consulted experts, and discussed with government officials actually engaged in agricultural development the main problems and what measures had been taken or were contemplated to overcome them.

The results of these investigations had been presented in the Working Paper Prospects for Agricultural Development in the Far East. The

Meeting agreed that the Working Paper gave a comprehensive picture of the problems and programs of agricultural development and brought out the place of agriculture in the over-all economic progress of the region. It contained a wealth of valuable information and should provide an excellent guide for further planning. As agreed by the Meeting, the Working Paper as revised in the light of additional information submitted at the Meeting is presented as Part II of this Report.

STATEMENTS BY DELEGATIONS ON THE CURRENT FOOD AND AGRICULTURAL SITUATION IN THEIR COUNTRIES

At the beginning of the discussions each delegation made a statement amplifying and bringing up to date the information which had been provided earlier to FAO. A summary of these statements is given below. They have also been used, together with other information provided during the course of the Meeting, to revise and bring up to date the Working Paper prepared by FAO as a basis for discussion at the Meeting.

Australia ^{1/}

Since 1939 the population of the country has increased by 24 per cent, but the agricultural production over the same period by only 12 per cent. Since 1946 the population has increased by 3 percent per annum, but the food production over the same period by only $1\frac{1}{2}$ percent. As a result, the volume of exports of many important commodities, particularly meat and butter, has fallen and wheat exports have been only maintained by a series of exceptionally good seasons. Accordingly, the Five-Year Plan adopted in April 1952 by the States and Commonwealth of Australia for increasing agricultural production, has the objectives of: (i) meeting the food requirements of a rapidly growing population resulting from a very vigorous immigration policy adopted since the war, and a higher birth rate over the last ten years; (ii) keeping up exports of agricultural products to maintain import capacity; and (iii) making contribution to the food needs of other countries.

To implement the Plan, the following provisions have been made:

1. Economic incentives

(a) Long-term contracts for the sale of exportable surpluses at satis-

^{1/} Much data of great interest on agricultural development in Australia was provided to the Meeting by the delegate from that country, and although Australia does not form part of the Far Eastern region and therefore is not covered by the Working Paper for the Meeting, it has been thought of value to include these data in this and subsequent chapters of this Report because of its close trading associations with the region.

factory and remunerative prices, particularly with the United Kingdom, for meat, dairy products, eggs and dried fruits.

- (b) International agreements for wheat and sugar; and establishment of domestic prices based on cost of production figures for wheat and butter.
- (c) Taxation concession to farmers by way of special depreciation allowances for development of farms, for soil conservation practice and for housing for farm labor.
- (d) Relaxation of credit restrictions for farmers for mechanization, fencing, clearing and other forms of expenditure related to increasing output.

2. Labor

The labor shortage due to the rapid industrial development in the country is being offset by special provisions in the immigration policy, whereby immigrants willing and able to carry out farm work are being encouraged to come to the country and move out to the farms.

3. Machinery

A loan from the International Bank has been secured for the purchase of farm machinery, particularly heavy tractors and ploughs needed for the opening up of new land. Five large firms have been recently established to manufacture farm machinery of all types.

4. Agricultural research and extension

In addition to satisfactory prices and adequate supply of labor and proper machinery, the best and most suitable scientific methods of production must be practiced by the farmer. In this regard, the States and Commonwealth Departments and the Universities carry out continuous research with the object of producing better crops and pasture, improved species, better pest and disease control, and so forth. Large increases in expenditure for these purposes have been sanctioned.

To bridge the gap between the knowledge gained through research and actual farm practices, the Commonwealth Government has made a grant of £A200,000 a year to assist the States in extension work. There is also a Commonwealth grant to the States of £A250,000 a year to improve dairy efficiency. Both grants are being used to employ more technical advisory officers in the field to conduct demonstrations of better farming methods, etc.

5. Opening up of new areas

Large areas of new land are being cleared, developed, and settled by new settlers. Much of the new land consists of light sandy soils of low fertility, which research workers have shown can be made productive by the use of suitable pasture legumes plus the proper minerals, like phosphate, zinc and copper.

6. Irrigation

The areas of land capable of irrigation are not large in Australia, but it is expected that the huge Snowy River Scheme in the Australian Alps will, within the next 10 to 20 years, be able to double the present area being irrigated. Plans are also being made to increase the efficiency of water usage in the existing areas.

It is worth noting that the wheat crop averaged nearly 20 bushels per acre, compared with a prewar average of about 13 bushels per acre. This is largely due to exceptionally good seasons but also to better machinery and more scientific methods of farming plus a perceptible movement of wheat growing away from the dry marginal areas to better rainfall country, where clover pasture and soil fertility improvement is possible. It is difficult to predict whether these changes will enable permanent improvements in yields of wheat per acre to be sustained.

Ceylon

In order to promote co-ordination, a new Department of Food Production was set up in the Ministry of Agriculture and Food in 1952. Also a Planning Secretariat was created in the Cabinet to co-ordinate policies of all ministries for the most efficient development of the country's natural resources.

In addition to the provision of advisory services to the farming population, the following measures have been adopted and put into operation:

1. Economic incentives

- (a) Price guarantee scheme set up in 1948 for rice and a few subsidiary food crops.
- (b) Credit facilities. Today there are 600 co-operative agricultural production and sales societies, compared with 74 societies in 1948. To these societies the Government grants loans at a low rate of interest for the purchase of seeds, fertilizers, implements, etc.

2. Legislation

For the protection of tenant farmers, there exists a Paddy Land Act. Also there are Soil Conservation and Fisheries Acts.

3. Marketing facilities

A monthly marketing intelligence bulletin is issued by the Marketing Department in all local languages and distributed among producers, consumers and co-operative societies. The collection and delivery services are being expanded.

4. Land Settlement

Two-thirds of the land area is in the dry zone, which has been made habitable by the use of DDT to control malaria and made productive by gradually restoring water tanks already in existence for centuries. The demand for settlement is increasing.

5. Forest and Fisheries

The Government has taken steps to improve its forests, which occupy 17.4 percent of the total land area of Ceylon and to develop fisheries by encouraging the organization of Co-operative Fishing Societies.

6. Technical Assistance

The Government is grateful to FAO for providing expert services in all branches of agricultural work; to the Colombo Plan for the supply of equipment; to Australia for the gift of 190 tractors and equipment; and to Canada for giving fishing equipment for developing the maritime fisheries.

France

With the independence of the Associates States of Cambodia, Laos and Viet-Nam, France will no longer have any direct responsibility for their agricultural development. However, she will be glad to render any technical assistance to them as well as to any other country in the region at their request.

In the Associated States, French geneticists, in co-operation with Viet-Nameese geneticists, continued their work on rice improvement.

The cultivation of tea and tobacco has been improved and expanded, and the cultivation and processing of corn has been partially mechanized.

In Pakistan, a group of French experts have been engaged in making a survey of an area of 880,000 hectares with a view to developing irrigation and drainage facilities.

The Government of France also provides opportunities for training in tropical agriculture for anyone from the region.

India

More than 70 percent of the population are dependent on agriculture, but production falls short of requirements. The situation worsened during the last World War and later due to partition. Imports of food grains have increased considerably during the past few years and the country which was formerly an exporter of jute and cotton has become a net importer of both. The Grow-More-Food Campaign was started in 1943 and schemes for increasing raw jute and cotton were initiated in subsequent years. The National Planning Commission drew up its Five-Year Plan in 1951 giving high priority to the agricultural sector. The overall food position during the second year of the Plan has been satisfactory, cereals showing an increase of over 4 million tons in 1952-53 compared with the previous year. It is expected that the rice deficit will be wiped out by the end of the present Five-Year Plan. Large increases have been achieved for raw jute and sugar-cane. There has been improvement in the production of raw cotton. Towards the end of the Five-Year Plan food grain production will have increased considerably; dependence on foreign supplies for raw cotton and raw jute also will be diminished; supplies of sugar will be much larger and oil-seeds adequate.

Every endeavor has been made within the limits of financial resources to supply the agriculturist with all his requisites, including improved seed at reasonable prices, fertilizers, agricultural implements and machinery and credit. A fertilizer plant which is already producing 300,000 tons a year has been installed at Sindri in addition to two smaller plants in South India. Fertility of the soil is being restored by the application of bulk organic manures. The Five-Year Plan recommends a target production of 3 million tons of organic manures.

The Government has taken and will always endeavor to take prompt measures for supporting agricultural prices whenever necessary, at the same time ensuring that the prices are generally within the reach of the consumer. An efficient marketing organization has been developed over the past two decades to improve market practices and standardize the quality of the products. Land reform measures like the abolition of intermediary rights in land, provision of security of tenancy to the tenant

classes, fixation of rent, provision of compensation for land improvement etc. have been instituted to improve the status of the farmer and to give him security. Co-operative organization for agricultural credit and for promoting mutual self-help among the farmers has been started by the Government with emphasis on multi-purpose societies. Plant Protection Departments have been established to fight insect pests and plant diseases. An annual National Campaign has been organized for planting trees for increasing forest wealth. As far as livestock is concerned, a key village scheme has been put into operation bearing in mind many recommendations made by the FAO Regional Conference on Animal Husbandry. This plan envisages setting up 600 key villages, 225 bullrearing farms and 150 Artificial Insemination Centers. Segregation and immunization of unproductive cattle is also contemplated and the establishment of "Gosadans" for housing unproductive cattle has been undertaken. Cattle improvement schemes for improving the milk supplies have been started in a number of villages with the object of turning selected villages into subsidiary cattle farms using controlled breeding and better feeding and management. Research-cum-extension stations for breeding sheep for mutton and for better wool have also been established. To assist agricultural development plans the statistical organization has been strengthened, training centers opened and estimates of production are now being corrected by crop cutting experiments and random sample surveys.

Two very important developments should be mentioned. First, the Technical Co-operation Assistance Agreement between the Governments of India and the United States of America. Part of this assistance has been used to launch community development programs under which a number of rural areas have been selected for all-around intensive development. Each community project covers on an average about 300 villages with a population of 300,000. So far 55 community development projects have been started and are expected to be completed in about three years. Another 50 projects are expected to be undertaken shortly. The main objective of the program is increased employment and production, the application of more scientific methods, and the extension of the principles of co-operation. Secondly, a National Extension Service Organization is to be set up in different States of the Country. Thirty four training centers for imparting training to the extension personnel have been established. It is proposed to cover one-quarter of the country by the end of the Five-Year Plan. A National Agricultural Education Council and an Agricultural Information Service have also come to be organized during the last two years.

In view of the fluctuation in prices of export crops like jute, coffee, oil-seeds, rubber and tea, FAO might investigate the desirability

of a buffer fund, international commodity agreements or other measures to stabilize prices and to finance agricultural development. FAO might also initiate a few cost or production surveys of important commodities in the region.

Indonesia

The Government regretted it was unable to issue a report on the agricultural progress in time for inclusion in the FAO Working Paper and paid tribute to the way in which the FAO Secretariat had brought out in its Working Paper many important facts on Indonesia.

The importance of methods of reaching the farmer must be emphasized, since the cultivator himself is ultimately responsible for achieving the objective of production plans. The Government of Indonesia has therefore emphasized rural education, the establishment of educational centers in villages and sub-district centers and the organization of co-operatives. The conditions in the rural areas, which have been pictured by some newspapers with exaggeration as unstable, in no way interfere with the steadiness of production and the progress of development in the country.

Indonesia depends for foreign exchange earnings on the production and export of industrial crops such as rubber. Fluctuating prices for such crops in the world market severely affect national income. To achieve stability of the economic situation in the region in general and Indonesia in particular, international action was needed.

The Meeting's attention was called to the fact that there is in Indonesia a surplus of tapioca, maize, groundnuts and soyabeans for interchange within the region.

Japan

Since the war the Japanese people have been suffering from food shortage. In the first few years immediately after the war an effort was made to increase sweet potato production. The effort averted widespread famine and starvation.

A recent change in the Five-Year Plan, drawn up in 1952, involves correction in the data provided to FAO. The production goal for rice, wheat and barley for the next five years is 2,340,000 metric tons, instead of 2,630,000 tons.

The willingness of the Japanese Government to co-operate with any other Member Government of FAO to solve the problem of food and agricultural production was emphasized.

Netherlands

Although the Government is not directly concerned with the subjects included on the Agenda of the meeting, it has a close interest in the attempts made by the Far Eastern countries to solve their food and agricultural problems. The Government is willing to render help through the channel of technical assistance.

The Agricultural University at Wageningen is increasingly becoming a center of agricultural sciences in the world. This year three international summer courses have been organized at Wageningen in co-operation with FAO and OEEC on agricultural extension methods, veterinary science, and livestock feeding and grasslands. Agricultural engineers and civil engineers should work hand in hand in the development of irrigation and drainage facilities. A good example of this co-operation can be found in one of the Middle Eastern countries.

Thailand

The Government has a Five-Year Plan (1953-57) with emphasis on rice production, and it is hoped that 2 million tons of rice will be available for export yearly by the end of the period. In order to do this a new Rice Department will soon be established.

The rice seed improvement program has been in progress for several years. The use of fertilizers is increasing. In 1953, 1,300 tons have been sold by the Government at half price, as against 70 tons in 1951 and 400 tons in 1952. The Government allows the purchase of farm machinery and equipment at a special rate of exchange.

The agricultural research work at Bangkok has been very much strengthened and expanded with the assistance of FAO and the United States. To bridge the gap between knowledge and practice a Five-Year Plan on agricultural extension was adopted and a short-term training course on extension was given in 1952.

Two main projects of irrigation and drainage have been in progress for some time, the Chainat project in the central plain and the project of water reservoirs in the Northeast. By 1957 it is expected that 1.6 million hectares of farm land will be covered by all water control projects, as against 930,000 hectares at present under irrigation and drainage.

In the spring of 1953 a National Training Center on Rice Grading and Storage was held in Bangkok in co-operation with FAO.

In addition to rice, other crops like cotton, soyabeans, groundnuts and rubber are likewise being improved. The main source of protein supply for most of the rural people is fish, among which the newly introduced "Tilapia" is attracting considerable attention because of its high productivity.

Livestock production has not been neglected. A vigorous project of disease control is still in operation, and about 100,000 heads of cattle are now available for export. The poultry project has been greatly extended in recent years.

The Government has also pushed forward such plans as the improvement of transportation facilities, the strengthening of agricultural education and control of malaria, as these have effects on the food production program.

The Government wished to thank FAO and the United States for technical advice, financial assistance and the training of personnel over the past five years.

United Kingdom

Malaya, North Borneo and Sarawak have Ten-Year Development Plans with special emphasis on agricultural development, especially rice production. Agricultural development forms a major part of the Federation of Malaya's plan under the Colombo Plan. The aim for rice is to reduce dependence on outside supplies. The United Kingdom Government has allocated from Colonial Development and Welfare Funds a sum of £3 million over and above funds from the countries themselves for such purposes as increasing acreage, improving irrigation, using higher yielding strains of rice, fertilizers, mechanization, etc.

In Malaya there has been a steady increase in rice production in spite of the destruction caused by war and the existence of terrorist activity. By 1955 it is hoped that the rice area will be expanded to 1 million acres. With more settled conditions in Malaya, surveys of many parts of the territory are now being undertaken to investigate further possibilities. High rubber prices caused a fall in food production in Sarawak, but with the recent fall in rubber prices this trend has been reversed and rice production will increase. Crop rotation schemes and two schemes for settlement are in operation. In North Borneo development and extension of areas under wet paddy is under way and some surveys are being made to examine possibilities for extending the area under dry paddy. Better roads are to be built.

The Federal Government's Development Plan for Malaya provides for the spending of £2½ million for expanding paddy area. 300,000 acres of existing land are to be improved and 100,000 acres of new land to be developed for paddy-growing between 1950 and 1955 by means of some 55 schemes, of which 16 are complete, 25 in progress, 9 delayed by terrorists, and 5 due to start this year. The development plan for rubber envisages the replanting of half a million acres by 1959, this comprising a large part of the small-holding acreage in which the trees are old and the yields falling. The Government has set up a fund from which grants are made to small holders carrying on replanting. Diversification of production is to be promoted by the introduction of new crops, the development of the pineapple industry and oil-palm estates. Through the activities of the Federation's Rural and Industrial Development authorities loans and grants are made to paddy growers, rubber small-holders, fishermen and animal husbandmen. Assistance is given for the improvement of water supplies. Tractors and mobile and static rice mills are provided. Both in Malaya and Singapore efforts are being made to develop the fishing industries, with special emphasis on the mechanization of fishing vessels. Plans for the development of forestry include the sending of local staff abroad for higher training. A Timber Research Laboratory has now been established.

United States

The United States Government is vitally interested in the welfare of Asia and the Far East. It is interesting to compare the early efforts made in the United States to increase agricultural production with the developments now taking place in this region. These early efforts concentrated on means for securing home and farm ownership. Follow-up developments were the establishment of agricultural colleges and experimental stations. Progress was slow at first, and it became necessary to organize extension work and farmers' teams to show farmers what improved techniques could achieve. The establishment of youth clubs and home extension work gave a great impetus to this. Members of youth clubs later on became farm owners and managers. Home extension work resulted in a marked improvement in rural welfare. Financial assistance through programs of price support, procurement, conservation, storage and distribution came later. Organization of co-operation among farmers and adequate credit facilities are important but the major incentive is farm and home ownership. Power and irrigation are necessary, but the achievement of increased production on existing acreage is of prime importance. This is specially true of Asia and the Far East. Historically, agricultural development in the United States has proceeded along three main steps. First, increased production exemplified by the great expansion achieved in World War I; second, conservation and third, balanced production for the home and export markets.

With the existing technical knowledge Asia and the Far East could make in a few years the progress that it took the United States decades to achieve, especially by utilizing its own advantages. The great programs started in India indicate what may be expected. The purpose of United States assistance in Asia and the Far East is the maximum satisfaction of the people from its land while conserving the land itself.

Viet-Nam

Viet-Nam is an agricultural country, not yet fully developed. Unfortunately the present war in the country prevents it from undertaking much needed reconstruction work of all kinds.

The Government has, however, drawn up a Three-Year Plan ready for adoption and operation for agricultural improvement. This is to be achieved by increasing acreage of land for cultivation and the use of fertilizers and manures. The agricultural experimental stations are to be strengthened and agricultural schools to be established. The lack of trained personnel is the bottle-neck of the whole problem of agricultural improvement.

It is very much hoped that FAO will be able to assist the Government in this important undertaking.

World Federation of United Nations Associations

The World Federation of United Nations Associations has associations all over the world for promoting United Nations objectives. It holds seminars coinciding with international conferences and will be holding a seminar at the time of the next Session of the FAO Conference in Rome.

It is making a special study of financing development in under-developed countries. This study will be discussed at its next session and submitted to the various United Nations Agencies. Suggestions made by this Organization for joint consultations between ECAFE and ECE to promote trade between the two regions have been adopted and are being dealt with at this Meeting.

THE WORK OF FAO IN THE REGION

Mr. W.H. Cummings, Regional Representative of the Director-General of FAO, made a statement on the work of FAO in the region and noted that through their participation in FAO meetings the Member Governments had built the foundations for regional co-operation. This was a new development and had in it the potentialities for large increase in production at an accelerated rate. An illustration was the work on rice, starting with the Study Group at Trivandrum, followed by the Meeting at Baguio, where the constitution of the International Rice Commission was drafted, and subsequent meetings and activities of the Commission. In the joint undertaking at Cuttack, India, Member Governments by pooling resources and staff were getting highly technical work done at a mere fraction of what it would have cost if each Government had undertaken the same program individually. All the technical divisions of FAO had been active in the region as illustrated by the number of the working parties, technical meetings and seminars that had been held. The work of the Indo-Pacific Fisheries Council and the Asia-Pacific Forestry Commission were the subjects of full discussion later in the Meeting.

New undertakings called for new staff and changes from old procedures. This was illustrated in the mechanization programs which lacked trained operators and skilled maintenance staff with commensurate salaries; previous procurement procedures continued as did the power of decision at high levels distant from the field of operations resulting in a disappointingly low level of operational efficiency. Past achievements left no room for complacency, but the experience acquired and the foundations laid gave Member Governments and the FAO staff faith in their ability to achieve agricultural development at an accelerated rate in the near future.

Dr. F.T. Wahlen, Director of the Agriculture Division of FAO, reviewed the general work of FAO with particular reference to projects of interest to Far Eastern countries, e.g. the work in collecting and disseminating statistics, the numerous publications on economic and technical problems, the meetings, seminars and training centers organized, the administration of the International Plant Protection Convention and the efforts to check the spread of animal diseases. In work on commodity problems, close co-operation was maintained with a number of specialized inter-governmental bodies such as the International Wheat Council.

Stress was laid on the great importance of regional co-operation. Among the efforts in other regions, which might be worthy of emulation in Asia and the Far East, were the European Permanent Working Party on Land and Water Use, the Mediterranean Grassland Working Party, the Central American Locust Control Organization, and the recently established European Food and Mouth Disease Commission, which was to be operated on the basis of a special budget contributed by the Member Governments interested. For 1954 a number of meetings are scheduled in the region which might well give rise to closer regional co-operation and exchange of ideas (Meeting on Animal Nutrition and Management; Training Centers on Poultry Breeding and Management, and on Dairy Processing and Milk handling; Technical Meeting on Co-operation.)

FAO's work on desert locust control was also of special significance for the region, as was also its work on land and water use, agrarian reform, extension and other government services to agriculture.

An effort was being made to integrate the two phases of FAO's work, the regular program and the technical assistance program, both at Headquarters and in the field. Similarly, excellent collaboration had been established with TCA, MSA, the Colombo Plan and other agencies rendering technical assistance, and examples of co-operative projects were given for many countries. At the end of June 1953, 527 FAO experts were working in various parts of the world, while 219 had already concluded their assignments. For the same period, 730 fellowships had been committed. The largest number of experts in the region had been requested for projects on land and water use, closely followed by animal production and health, while plant protection, extension, credit and co-operatives had received rather scant attention on the part of Member Governments.

The means available to FAO, however, were not enough for the task entrusted to it and the funds needed to implement all the requests in 1953 would have cost double the actual amount available. Apprehension was expressed that the Technical Assistance Program instead of being an expanding one was tending to become a contracting one; if it should be made into an expanding one Governments should give greater support to TA funds by liberal contributions. The difficulties of the Organization, owing to its limited budget, which was originally fixed at five million dollars, were mentioned. With 23 new Members and a total of 68 the resources of the Organization have to be spread very thinly. In view of the urgent necessity to find funds for the work of the Organization, it was suggested that Governments should consider an increase in FAO's budget to the figure recommended by the Director-General in his budget for 1954/55.

In discussion it was pointed out that while the budgets of other international organizations had increased, that of FAO had remained static, and the Organization's real resources had decreased in view of the fall in the purchasing power of money, and it was suggested that delegates on their return to their countries should explain the financial problems of FAO to their governments.

The importance of making technical assistance as inexpensive as possible to recipient governments was also stressed and it was noted that WHO did not stipulate any expenditure on local costs by the recipient government. It was pointed out that the question of local costs was governed by the rules of the United Nations Technical Assistance Board, but that if there were exceptional conditions in a country any request for relaxation of the rules would receive consideration.

Summing up, the Chairman said the record of work of FAO was impressive and the programs of the Organization were such that all should support them heartily. FAO's activities in India were on a very large scale and had conferred considerable benefits on the country. Drawing special attention to the importance of seminars, training centers and the work of experts he said these had contributed to the progress of India. On the question of contributions, it was necessary to understand the logic of the situation. If Member Governments appreciated the work of FAO it stood to reason they should provide the necessary facilities to expand its activities.

The Meeting endorsed the views expressed by the Chairman and the delegates agreed to explain the position to their Governments.

REVIEW OF AGRICULTURAL DEVELOPMENT POLICIES

The Current Status of Food and Agricultural Planning

Most countries in Asia and Far East have prepared forward agricultural programs for increased production of food and as far as possible of non-food commodities as well. Very few countries in the region, however, have as yet planned agricultural development on a comprehensive scale. Countries which are currently implementing limited programs for food and agricultural production are fully alive to the necessity and importance of long-range integrated planning.

The objectives of agricultural planning, whether of limited scale or comprehensive in its scope like that of India's Five-Year Plan, are to raise the nutritional level of the people and to increase rural welfare and the per caput national income. The Meeting commended the criteria for planning agricultural development presented by FAO in Chapter II of the Working Paper. These may be summarized as follows:

- (a) Clearly defined policy objective expressed in terms of quantitative goals of production, consumption and trade.
- (b) Co-ordinated machinery for the preparation, review and implementation of the plan.
- (c) Technical programs and economic measures drawn up after careful assessment of resources.
- (d) Effective measures taken to mobilize domestic resources of capital and manpower.
- (e) Provision made for adequate and continuous financing of development projects and training of personnel to meet the requirements of the plan.
- (f) Provision made for keeping farmers informed of the objectives of planning and for securing their participation.

Sound planning on the lines indicated above bears the same relationship to agricultural development as a well-prepared blueprint to a construction engineering project. The countries in this region are generally poor in capital and skill, so that the use of these scarce resources must be well deployed to yield the maximum beneficial results.

The necessity for setting up a central planning agency is being felt to an increasing extent. Countries like Ceylon and Thailand have recently established a planning committee of the Cabinet or a Cabinet secretariat to appraise departmental programs and projects and assign them different degrees of priority in execution.

Similarly, arrangements are also being made in some countries to bring about an increasing co-ordination among government departments concerned with agricultural development. It is also increasingly recognized that the progress of agricultural development needs to be kept under constant review so that necessary adjustments can be made to the plan from time to time.

The importance of planning a balanced development in agriculture and other sectors of the economy cannot be over-emphasized. Increased production of food may be of little avail without adequate provision for orderly marketing and transport. In certain inaccessible regions such as Orissa in India and the North-eastern province of Thailand development of transport facilities has been given as high a priority as the production of rice.

All countries in the region, not excluding the over-crowded Japanese islands, possess great potentialities for expanding agricultural area and productivity. Lack of capital is one of the most important factors limiting the development of agriculture. The problems of attracting foreign investment and mobilizing domestic capital are discussed more fully in a subsequent section.

Agricultural development is also seriously handicapped by the absence of continuity and lack of stability in financing, so that projects undertaken in times of boom have to be suspended or curtailed drastically when the boom is over.

The inter-dependence of agriculture and industry is increasingly recognized, and in planning economic development it is important that one sector should not run ahead of the other. The Meeting noted with approval that FAO has already initiated work on this question. At present the region is overwhelmingly agricultural and in all countries the percentage

of the total population engaged in agriculture will tend to decline. The best balance between agriculture on the one hand and industries and commerce on the other can be found only by experience and will vary from country to country according to the natural resources of each. What is important, however, is that as men are withdrawn from agriculture to other pursuits the productivity of those who remain on farms should be correspondingly increased. Otherwise food requirements will again outrun production and lead to an inflationary rise in food prices. Again, unless the productivity of agriculture per man and per hectare can be increased there can be no relief from the poverty of the mass of the rural population.

Industrialization in the region cannot be confined to large-scale and urban industry, and there is a large place for rural and cottage industries. These can absorb much of the abundant manpower with relatively less capital expenditure. Moreover the towns can seldom, without serious dislocations, absorb too rapid an inflow of population.

Statistics. The Meeting emphasized that timely, reliable and comprehensive statistics are essential for efficient planning of agricultural development. In particular, reliable statistics of current production form the base line for framing estimates of future production, which is the subject of planning. It recognized that much needs to be done in improving the statistics in the region and commended the work of FAO in organizing training centers, in providing experts to assist Member Governments to improve their systems for the collection of current statistics and to help in the organization of agricultural censuses. It noted that, so far, only few countries in the region have taken a census under the 1950 World Agricultural Census program and hoped that those countries that have not as yet been able to take a census will find it possible to do so at an early date.

Sample surveys are among the most efficient and economical means of improving current agricultural statistics and correcting data arrived at by complete enumeration. Much progress has been made in the region in the use of modern statistical methods but there is still an urgent need for their more widespread application. The Meeting noted with satisfaction the success of the recent demonstration center organized by FAO in Thailand in which the participants themselves took part in the conduct of a pilot survey and approved the intention expressed by FAO to conduct future training and the demonstration centers along similar lines.

The importance of yardsticks as a means of assessing the increase in production achievable by measures taken to implement an agricultural development plan was emphasized. Considerable importance was attached to

the use of the best statistical techniques to assess how much progress was being achieved by programs while they were in operation. The data thus attained could provide important indications of the way the plan should be adjusted to obtain maximum results. The Meeting recognized that the techniques of experimental design and random sampling were indispensable for these purposes. It strongly supported FAO's proposal for a training center on experimental design and sample surveys to be held in 1954 in India under the sponsorship of FAO and the Government of India, if financial circumstances permit (Resolution No. 1, Annex I).

The Outlook for Agricultural Production and Trade

During the war and immediate postwar years food production in the region failed to keep pace with the growth of population. Food shortages developed and even though food imports were sharply increased, there was a considerable fall in food consumption levels. All Governments in the region were well aware of the importance of this problem. The food production drives of the last few years have stabilized the position and resulted in some gains, and if the more comprehensive plans now under way are successful there will be a considerable improvement in food supplies by 1956/57. Full realization of the present objectives would not, however, restore the prewar level of production per head by that date, though even before the war food production was by no means adequate for satisfactory nutrition.

By 1956/57 the population of the region, excluding China, is expected to be 31 percent higher than in 1934-38. In comparison, the increase in production, if all the objectives are reached, will be only 19 percent for all agricultural commodities, and the same for food-stuffs alone. Of the major food-stuffs, the expected expansion of production of rice (23 percent), all food grains combined (19 percent), edible oils (18 percent) and sugar (21 percent) will fall short of the growth of population, which will be matched or exceeded only by pulses (30 percent) and edible roots (38 percent). Of the export and industrial crops, the production of rubber and tea will be substantially greater than before the war, but the increases for jute and cotton will be much more modest.

The delegations considered that, given normal weather, their production targets would be reached, and in some cases exceeded, but this will necessitate a considerably faster rate of expansion than in the last few years, particularly in the case of food grains. For example higher yields are now expected to account for about half of the anticipated increase in rice production; but while good progress has been made to attain the target crop areas for rice, progress towards increased yields

has been less satisfactory. Nevertheless recent and prospective developments in e.g. irrigation, wider distribution of improved seed, green manuring, the increased use of inorganic and organic fertilizers etc. give promise of better yields in the near future.

There may be cases where Governments could examine the possibility of raising their aims even higher. For example, an increased production of pulses would contribute much to the quality of the diet, and would also tend to raise soil fertility. These questions are considered further in the section on nutrition. Nevertheless the primary aim throughout the region for some time to come must be to achieve a satisfactory calorie intake, for which food grains are the first essential.

Because of the lag of production compared with requirements, imports of food grains have been rising rapidly and in 1951 and 1952 averaged 8.2 million tons, compared with an average net export of 2.8 million tons before the war. For sugar also the region has become a small net importer, though in the last year or two shipments from some of the traditional exporting countries have shown a marked recovery. Exports of oil seeds have also recovered and are now approaching the prewar level. On balance, however, the region now has a substantial net import of food compared with a large net export before the war.

The trend for export and industrial crops has been different. Exports of rubber and tea are considerably larger than before the war. Exports of jute reached a high level in 1950, but have since declined because of a falling-off in world demand. The region is a net importer of cotton, and its dependence on imports has tended to increase. These divergent trends in the trade in foodstuffs on the one hand, and non-food crops on the other have also occurred in the other less developed regions of the world, though to a lesser extent than in the Far East.

Present plans envisage a sharp fall in import requirements for food grains in deficit countries and considerably larger shipments from rice exporting countries, so that the region's net dependence on imported grain would be greatly reduced. They also indicate a substantial export surplus for sugar, oilseeds, rubber, tea, jute and other non-food crops. On present production goals, no great change in import requirements for cotton seems likely.

The meeting gave much attention to the supply outlook for food grains. As already noted, the Working Paper showed that if all current development programs are fully implemented, production per head of all food grains combined, and also of rice, will still be less in 1956/57 than

before the war and that the region will remain a net importer of food grains. (Moreover, the per caput consumption of grains assumed in the official estimates are, for the region as a whole, less than before the war.) If general economic development continues there may be, therefore, a greater demand for rice than is at present foreseen (particularly if there is some easing of the cost of rice to the consumer). Again, the possibility of unfavorable weather and unsatisfactory crops in some parts of the region is always a danger. On an over-all basis, therefore, the present outlook does not suggest an over-supply of food grains for some years, but rather that the region will only gradually emerge from its present heavily deficit position.

Nevertheless, it is of great importance to prevent local surpluses from accumulating and to avoid temporary difficulties in marketing, particularly of the additional rice which is to be produced in the exporting countries. Such difficulties might well discourage rice growers from further efforts and retard the general expansion of rice production which is so greatly needed in the region. For example, if a substantial price differential between rice and wheat continues, importing countries may give preference to wheat imports from outside the area in spite of the general consumer preference for rice and of the fact that the bulk of the wheat supplies must come from hard currency areas.

Exporting countries point out that the recent high prices have enabled governments to utilize a considerable part of the returns from rice exports for irrigation and other investment schemes to expand production, and that in cases where parts of the higher prices have been passed on to growers they have contributed to an expansion of production. The need for exporting countries to have confidence that remunerative prices would be received for any additional rice they produce was fully recognized by importing countries, though it was pointed out also that their ability to import rice must largely depend on their own export possibilities. It was emphasized that price questions could only be considered in the context of the general supply position and costs of production.

The Meeting was therefore impressed with the importance of maintaining a continuous review of the supply outlook for rice, and of integrating the production programs of exporting and importing countries. It recognized the importance of the work already done by FAO in this respect. Should such reviews indicate a danger of temporary marketing difficulties or local surpluses, it felt that informal consultations should be held between the countries of the region with the assistance of FAO and ECAFE. Such consultations might consider e.g. questions of giving some assurance of outlets to rice exporting countries, questions of price,

or of some form of regional rice agreement. It might in turn lead to a wider conference with which countries in other regions largely concerned in the international trade in food grains should also be associated. Such developments could conveniently be discussed when marketing problems seemed likely to arise.

In the light of these considerations the Meeting adopted a resolution, recommending that FAO should continue to keep the rice situation under constant review, and in co-operation with ECAFE should approach the Governments of the region if indications of temporary or local surpluses appeared, with a view to initiating informal inter-governmental consultations in time to avoid serious marketing difficulties. The text of this resolution No. 2 is given in Annex I.

At the same time the Meeting recognized that burdensome surpluses were more likely to develop in export crops than food grains. In regard to food-stuffs, a surplus of sugar has already developed in Cuba, where production has been restricted, but at the same time production continues to increase in other Latin American and in Commonwealth countries. The export market for sugar is thus likely to remain highly competitive, though non-dollar sugar may be expected to enjoy an advantage in European and other soft currency areas. The market for oilseeds has also shown sharp fluctuations recently. The postwar shortage has been overcome and export supplies have at times run ahead of world demand.

Turning to non-food crops, large stocks of jute have accumulated in Pakistan, where the crop area is to be restricted. The consumption of natural rubber has for some time been below production, and although the gap has been bridged by government schemes of stock piling, these are now approaching completion. The transfer of United States synthetic rubber plants to private enterprise is likely to affect the outlook for natural rubber. Stocks of cotton have accumulated not only in the United States, but also in non-dollar countries such as Egypt. India has restricted the production of low grade teas, for which supply exceeded demand. For coffee and cocoa the demand seems likely to exceed export supplies for some time to come. In general, however, it appears that danger of surpluses is considerably greater for non-food crops than for food-stuffs, and it is significant that so far no important stocks of foodstuffs have yet accumulated outside the dollar area.

The unstable markets and wide fluctuations in the prices of export crops, particularly natural rubber and fibers, since the outbreak of war in Korea, have caused serious economic difficulties to the region, and a resolution on the need to stabilize export prices by international action appears in a later section on price policy.

Attention may be drawn here, however, to the great importance of the trade in agricultural products to the whole economy of the region. In recent years, agricultural products, mainly beverages and raw materials, have accounted for about half the total exports of the region and thus represent a large part of its total earning capacity for foreign exchange. Imports of food and agriculture products, largely from the dollar area, make up nearly half its total imports.

The region's capacity to import capital equipment, and to a considerable extent therefore the rate of its economic development, thus leans heavily on its ability to expand agricultural exports, and perhaps even more on its ability to reduce its dependence on imported foodstuffs. It is shown in the Working Paper that since 1934-38 the volume of its net exports of agricultural products has fallen by something of the order of 40-50 percent. This fall is entirely due to the change from a net exporter to a net importer of food, since net exports of non-food products have tended to increase. The whole pace of economic development could be speeded up if increased domestic production makes possible a reduction in food imports from abroad, thus freeing the Region's limited resources of foreign exchange for the import of capital goods.

ECAFE's Work on Trade Problems. A report was given to the Meeting on the recent work by ECAFE on the long-term demand for exports, in particular exports of agricultural products. This work, which is entitled "Preliminary Report on Trade between the ECAFE Region and Europe," was undertaken in co-operation with ECE and FAO. The Meeting noted that this report also stressed the Region's heavy dependence on exports of a limited number of primary products for which proceeds fluctuated considerably, and had emphasized that national and international action was needed to achieve greater stability in export earnings. It noted further that the ECAFE report suggested a favorable long-term demand in Europe for certain agricultural products, including coffee, vegetable oils and oilseeds, hides and skins, tea and pepper, and that for these a well planned expansion could be envisaged, but that greater attention to grading standards and marketing was necessary. The Meeting took note that further studies were in progress in the ECAFE Secretariat on intra-regional trade and on the marketing of hides and skins.

Food Consumption and Nutrition

Improved nutrition, which ultimately depends upon adequate food consumption, is not only a primary goal of economic progress, but also an essential means by which it is to be attained. Therefore, a main objective of agricultural production and trade policies should be improvement

of food consumption levels. Although estimates of over-all consumption levels in the region must be open to a considerable margin of error, it appears from the available data, which has been summarized in the Working Paper, that calorie levels continue to be low in many countries while the average diets remain seriously unbalanced owing to shortage of protective foods. Moreover, the Meeting noted with concern the recent conclusion of the Regional Nutrition Committee held in Bandung, Indonesia, this year, that malnutrition is still a most acute problem in this part of the world.

Since ideal nutritional goals cannot possibly be attained in the near future in most countries of the region, it is necessary to consider realistic intermediate targets which are practicable but would also raise nutritional levels step by step. The Meeting noted that targets of this kind have been shown on a tentative basis for a few countries of the region in the FAO publication, "Second World Food Survey". An examination of the prospective consumption levels for 1956/57 in relation to these targets shows that there may be an encouraging improvement in per caput calorie levels in most countries of the region in the direction of the target levels. On the other hand, the nutritional quality of the food supplies is not likely to be improved to any significant extent. Therefore, greater emphasis on the production of protective food is indicated after the minimum calorie requirements are met. In order to improve the situation, the Meeting felt that Governments should take into account the following points in the formulation or review of their food policies for the near future:

(a) Where the prospective calorie levels for 1956/57 are likely to be considerably less than the 1960 targets and, especially where they are likely to be even lower than the current levels, primary emphasis should be placed on the need for raising them towards minimum calorie requirements of the population concerned or, at least, maintaining them at current levels.

(b) Since the Regional Nutrition Committee found that malnutrition associated with protein deficiency is an important problem in many countries of the region, all efforts should be made to increase the supplies of protein --rich foods, especially those of animal origin. Milk is of special significance in this connection and its consumption should be stimulated wherever this is feasible. (Annex I: Resolution No. 3). Since it is clear that increasing fish supplies is a more promising way of combating protein malnutrition, fisheries development should be particularly encouraged in the region.

(c) In view of the formidable difficulties in providing all sections of the population with the more expensive animal products, it is urgently necessary to concentrate on the less expensive protective foods

of vegetable origin. Pulses, which are good sources of protein and many other essential nutrients, are of the greatest importance in this connection but the prospective levels for 1956/57 indicate that per caput consumption of pulses would not be any higher than current levels except in a few cases. Therefore, there is a great scope and need for increasing pulse supplies in most of the countries. Soyabeans deserve special attention in this connection and their consumption in the form of nutritious and palatable preparations, like the so-called soyamilk, should be actively encouraged. Fruits and vegetables are also rich sources of many vitamins and minerals but statistics on these foods are perhaps the most incomplete of all food statistics. There is a great need, however, for governmental action aimed at stimulating their production and consumption and collecting more information on their production as suggested by the FAO Committee on Commodity Problems.

The Meeting noted with satisfaction that most of the Governments are alive to the urgent nutrition problems in their countries and that many of them are actively concerned with the improvement of their people's diet by increasing supplies of the more nutritious food, especially fish and milk. However, the raising of levels of food consumption and nutrition cannot be achieved without simultaneous advance on several fronts. Nutrition activities should be co-ordinated, therefore, with other national programs in the fields of agriculture, health and social welfare. Although there are promising signs in this direction, official recognition of the urgent need for orienting production and trade policies towards nutritional requirements is still inadequate. Therefore, the Meeting hoped that co-ordination between agricultural and nutritional programs will be increased in the future.

Technical Developments in Agriculture

Programs for the Development of Land and Water Resources . Projects for developing the basic resources of land and water are being given high priority in the development programs in the region. Almost all countries are laying much emphasis on irrigation and land development, and perhaps not enough on other methods of raising crop yields. Irrigation provides security for crops and makes possible intensified methods of farming, though only if backed by adequate extension services. A more balanced development of agriculture may therefore be possible by some shift in emphasis in programs and investment. Moreover, measures for improving crop yields and for reducing losses due to plant diseases and pests both on the farm and in storage require much less capital than projects of irrigation, drainage, land reclamation, jungle clearance etc. This is an important point in view of the limited financial resources available for agricultural development.

Japan, with a high proportion of land already under irrigation, has given much attention to these less expensive methods of increasing production, raising yields with remarkable results. A stage has now been reached, however, when a further expansion of the area under cultivation, irrigation and drainage is also considered necessary. Thus Japan is aiming at a balance between these methods of increasing production.

In this connection it was pointed out that until fairly recently the major increases in agricultural production in the United States had been obtained by expanding the cultivated area. In the last few years, however, through research and extension, the United States has been able to secure substantially higher yields, raising production by about 40 percent without increasing the crop area.

The Meeting recognized the need for measures to ensure the most economic utilization of irrigation water in existing works, and to improve the system of distributing irrigation water and general irrigation practices. It also recognized that in irrigation development, integration of projects for the use of surface and underground waters is essential. Furthermore, in planning large-scale irrigation projects due consideration should be given to the feasibility of multi-purpose development of the whole river basin including aspects of soil conservation and multi-purpose use of the water resources for city supplies, hydro-power development, fisheries and transport.

By the end of the Second World War, about 38.7 million hectares or a little less than one fifth of the total arable land of the region were under irrigation. From 1946 to 1952 the new area brought under irrigation was about 1.2 hectares, an increase of 3 percent. Programs now in hand, however, are expected to bring about 10 million additional hectares of land under irrigation by 1956/57. The Indian program alone accounts for 75 percent of this increase.

Apart from some land clearance and land reclamation projects in Ceylon, India, Indonesia, Japan, Pakistan and the Philippines, these programs would result primarily in improving existing arable lands rather than adding to them. With regard to land reclamation the Meeting noted the statements made on the Kalimantan Development Scheme of Indonesia and similar land development schemes of other countries.

Progress of mechanization of agriculture is still relatively slow and in 1952 the region accounted for only about 0.5 percent of the total number of tractors in the world. Tractors and heavy agricultural machinery are so far used mainly for land reclamation, jungle clearance, soil

conservations and similar projects. With few exceptions mechanized farming, particularly wet paddy cultivation, is still in an experimental stage, though interest in the use of agricultural machinery and the establishment of machinery pools is widespread. Measures to improve hand tools and to popularize small agricultural machinery were noted with approval. It was stated that Australia has stepped up the production of tractors and other agricultural machinery and in addition to the gifts of agricultural machinery to Ceylon and Indonesia made under the Colombo Plan, would be able to export to other countries in the Region. The technical assistance rendered by FAO in the field of land and water development, farm machinery and hand and animal operated equipment, notably in Pakistan, Ceylon and India was appreciated by the Meeting.

Programs for Raising Crop Yields. The Meeting noted with interest the striking developments since the war in the consumption and production of fertilizers. Before the war the use of inorganic fertilizers was largely confined to Japan, Korea and Taiwan, and in these countries consumption was nearly eight times the total consumption of all other countries in the region put together. But there has since been a marked change in the position, particularly during the last two years. Although there was a slight fall in the use of fertilizers in Japan and Korea immediately after the war, it had been restored by 1949. Among other countries, India has shown substantial progress, fertilizer consumption in 1952/53 being more than five times the prewar level. There have also been some increases in Ceylon and in the Philippines, but in Indonesia the prewar consumption has not yet been restored.

The progress made in India since 1943, and that attained earlier in Japan in developing programs for the utilization of town and rural compost have an important bearing for similar developments in other countries. The Meeting expressed interest in the successful working of a green manure scheme in Madras and the green manure practices in Indonesia for increasing humus in the soils and for improving soil fertility.

There has been a great increase in fertilizer production in India with the opening of the Sindri factory in 1951/52, and fertilizers are also to be manufactured in Pakistan and the Philippines. The question was raised whether in the production and supplies of fertilizers as well as pesticides and other production requisites, integration of programs on a regional basis would be possible. Although such an integration would be highly desirable from economic considerations there were many practical difficulties to overcome. It was noted that the rate of increase in the application of fertilizers to food crops would depend largely upon the prices of the fertilizers in relation to the prices received for agricultural products and the credit facilities available to farmers.

The work done by the Fertilizer Working Party of the International Rice Commission and the FAO Training Center on Soil Fertility held in South India in April 1953 was commended. The Meeting noted that although there would be a significant increase in the use of fertilizers, organic and inorganic, in countries outside Japan, Taiwan and Korea by 1956-57, the programs envisaged could benefit only a small portion of the arable area in the region. In some countries little attention has yet been given to the use of fertilizers and it was agreed that programs to develop fertilizer consumption would be of great value.

In regard to production and distribution of improved seed, the work done by the FAO Regional Training Center on Rice Breeding and the progress of breeding currently undertaken at Cuttack, India, were noted with satisfaction. The Meeting stressed the need for extension of facilities for the multiplication, certification and distribution of improved seeds. The need for evolving varieties resistant to specific diseases and to unfavorable soil and climatic conditions was also stressed, together with the importance of reducing the number of varieties to a minimum.

The Meeting recognized that the heavy losses from crop diseases and pests, both on the farm and in storage, could be minimized by effective plant protection services and wider use of pesticides. Japan has a well developed plant protection service, and India, Pakistan, Ceylon and Malaya have recently made marked advances in this field. But the scope for extension in nearly all countries is very great and the relatively low cost involved in establishing plant protection services in comparison with the magnitude of losses involved underlines the value of such a development. It was also emphasized that an integrated approach to the improvement of crop production and protection is essential, taking into account all possibilities of improving tillage practices, plant nutrition, plant breeding, and disease and pest control.

Other points mentioned include the high cost of pesticides, the progress of plant protection measures in community development areas, and the suggestion for an exchange of technical information on the production of such commodities as tea and pepper between countries of the region having problems in common.

The International Plant Protection Convention and the World Reporting Service on Plant Diseases and Pests were also considered by the Meeting, not so much for the purpose of calling for new action, but rather for a strengthening of the co-operation between the National Plant Protection Services in the Region and FAO. The Convention, which was approved by the Sixth Session of the FAO Conference, contains definite obligations on

the part of Member Governments for the setting up of efficient plant protection services, for the streamlining of quarantine regulations in order to check the spread of diseases and pests with the least possible hindrance to international trade, and for full co-operation in the World Reporting Service.

With regard to the regional organization, it was reported that in Europe such an organization already existed for two years in order to cope efficiently with regional problems. For Latin America the question was presently under consideration. As far as Asia and the Far East is concerned, it seemed advisable to postpone action until the meeting to be called by the United Kingdom in October or November of this year on the subject for a Phyto-Sanitary Convention for South and East Asia had been held.

In the discussion, appreciation was expressed of the "FAO Plant Protection Bulletin" and it was suggested that continuous attention be given to the avoiding of any overlap with the publications of the Commonwealth Agricultural Bureaux. Attention was also drawn to the Plant Protection Bulletin of India and FAO was asked to foster the exchange of plant protection information within the region.

Livestock Improvement. The need for integration of livestock and crop production into a satisfactory pattern of agriculture was emphasized. The huge numbers of livestock of low performance in some parts of the region have grave implications for livestock improvement and press hard on land resources which are needed for producing human food. But it was recognized that the process of reduction in livestock numbers would be slow. It was pointed out that goats in the region were more numerous than sheep, though sheep were more economical, and that the sheep industry had been generally neglected. India, among other countries, is now taking steps to rectify this situation. In order to increase poultry and pig production the possibilities of utilizing by-products should be further examined.

Much appreciation was expressed of the work of FAO in the region on the control of animal diseases, particularly of rinderpest and Newcastle (ranikhet) disease. The desirability of greater regional co-ordination in the control of epizootics such as rinderpest and foot-and-mouth disease was stressed. One of FAO's veterinary experts in the region has been successful in developing a vaccine which gives efficient immunization against haemorrhagic septicaemia, a development which is of very great importance to the region and to the livestock industry of many other countries affected by this disease. The need for strengthening veterinary services to the farmer was pointed out. The suggestion was made that instead of asking

the farmers to take their cattle to veterinary dispensaries in neighboring towns, the facilities available at the dispensaries should be taken to the doors of the peasantry in order to control epidemic diseases at the point of their outbreak and thus avoid big losses. Interest was also evinced on the proposed FAO Regional Training Center on the control of foot-and-mouth disease, to be held possibly in Indonesia.

It was recognized that too little attention was paid to the feeding and management of livestock. Proper nutrition not only protects animals from diseases due to malnutrition but also sustains the benefits obtained from breeding, and it was agreed that high priority should be given to projects for improving the nutrition, health and care of animals. Some countries, e.g. India, are undertaking a national survey of their grass and fodder resources and are considering some basic measures to increase the production of legumes and other fodder crops. The Meeting noted the assistance rendered by FAO and other agencies in studying nutritional values of local forage crops, the introduction of new species from abroad, and the provision of equipment and personnel for organizing the necessary services. The proposed FAO Meeting on Animal Nutrition and Livestock Management, to be held in Australia, attracted much interest. The programs undertaken in some countries on the improvement of local breeds by selection and up-grading them with imported breeds, progress in artificial insemination, and in the study of infertility problems among cattle were reviewed. Attention was drawn to the need for caution in the introduction of breeds with high performance potentialities from countries with more favorable climatic conditions than those prevailing in the tropics. It was suggested that the import of semen instead of the importation of breeding stock might provide a more economic and less risky basis for programs of up-grading local breeds.

Fisheries

The Chairman of the Indo-Pacific Fisheries Council called attention to the very special place which fish occupies in the diets of the peoples of South and East Asia and it was agreed that the improvement of fishing methods and the elimination of waste should be encouraged.

It was stressed that fish is a highly perishable commodity and that the conditions under which it is marketed leave much to be desired in many areas. Improved transport and low temperature storage are also essential since any improvement in landings at the fishing ports would be useful only if the fish could reach the inland areas; otherwise the net result might merely be a local glut and low prices for the fishermen.

It was stressed that fish is a highly perishable commodity and that the conditions under which it is marketed leave much to be desired in many areas. Improved transport and low temperature storage are also essential since any improvement in landings at the fishing ports would be useful only if the fish could reach the inland areas; otherwise the net result might merely be a local glut and low prices for the fishermen.

It was apparent that much remained to be done in fisheries development and that this could only be achieved through the training of expert fisheries administrators. It was also necessary to educate the fishing operatives in the use and maintenance of mechanized boats and gear. The Fisheries Adviser to the Government of India called attention to the proposal which had been pending for some time for the holding of an FAO-sponsored training course in mechanized fishing and a resolution was passed to the effect that special attention be given to the organization of this course (Resolution No. 4, Annex I).

The Meeting noted that 80 percent of the world consumption of freshwater fish occurred in the region and recommended that Governments should continue to give attention to the development of fish culture in inland waters, including rice fields. Many Governments have active fish culture programs and the technical assistance given by FAO in this connection, including the eradication of harmful weeds, was mentioned. A resolution was passed recommending that the possible effect on the important inland fisheries arising out of irrigation and electric power schemes should be taken into account (Resolution No. 4, Annex I) and the menace of water pollution by factory wastes in an increasingly industrial economy required immediate remedial action.

With regard to the sea fisheries, there are many phases which require a more adequate study than has previously been possible and many of these problems are common to several countries. The periodic failure of certain fisheries such as the Oil Sardine (Sardinella longiceps), the Mackerel Scad (Rastrelliger kanagurta) and the Hilsa fish were cited as examples and it was suggested that the international work initiated by the Indo-Pacific Fisheries Council in the collection and dissemination of valuable information should now be implemented in a practical way by the organization of co-ordinated international research. It was recommended that the Expanded Technical Assistance Program should direct its efforts in this direction (Resolution No. 4, Annex I).

The work being done by governments, with assistance from FAO and others agencies, towards the improvement of local fishing boat design and the introduction of non-indigenous craft and gear was noted, as were the steps being taken for the planning and construction of improved fishing harbor facilities.

The Meeting indicated its concern for the low economic status of the fishermen in many parts of the region and it was agreed that rational methods of financing with government assistance, the formation of fishermen's co-operatives and improved marketing would go far to ensure that the operatives received a fair share of the retail value of their produce.

Finally, it was agreed that the fisheries administrations which are at present in the formative stage in many countries could only perform their function of assessing the requirements of the industry if reliable statistics were available, including some estimate of the considerable subsistence fishing operations by sampling methods.

Forestry

The Meeting took note of Chapter VII of the FAO Working Paper dealing with problems of conserving and using renewable resources, housing, fuel and paper and also of the report of the Second Session of the Asia-Pacific Forestry Commission.

Emphasis was laid on the need for recognition of the protective role of forests while planning agricultural expansion to meet the needs of an increasing population. Intensified agriculture on the existing arable land was to be preferred to the extension of the arable area by forest clearance, and the example of Japan was cited to illustrate that the country which supports twice the population of India per unit area maintains nearly two-thirds of its land area under forests. The establishment of a Land Utilization Board in each country, to deal with all problems of land utilization, was considered a necessary safeguard against misuse.

The dependance of the farmers on the nearby forests was stressed, and it was recommended that the contribution of forests to the rural economy should not be overlooked in planning community development projects. It was pointed out that a satisfactory solution of fuel supply would release for increased agricultural production farm yard manures which are now burnt for cooking in the absence of alternative fuel. It was noted with satisfaction that in some areas villagers themselves are becoming interested in raising their own fuel plantations. The Meeting endorsed the recommendation 8(g) of the Second Session of the Asia-Pacific Forestry Commission with regard to the preparation of a fuel wood study covering different aspects of the problem.

In view of the urgent need for cheaper and better housing for the rural population, the Meeting evinced great interest in the results of

experiments on chipboard houses made out of non-durable woods in Burma and research currently being carried out in Ceylon to manufacture building materials out of wastes resulting from timber conversion. It endorsed recommendation 12 of the last meeting of the Asia-Pacific Forestry Commission dealing with the problems of housing.

Inadequacy of investment in forest industry handicaps increased production, as ordinary banking institutions are reluctant to finance forest projects. This largely accounts for the perpetuation of primitive production methods in many countries and the high prices of timber. The contribution of private forestry in meeting the needs of forest products is well recognized in some countries, but government help is generally needed both for financing and technical training. It was suggested that in the course of time Governments may have to enter into some financial arrangement with the owners of land on a profit sharing basis to deal with the vast problem of afforestation of wasteland. The problems of investment, credit and extension service are thus analogous to those of agriculture and any national organization set up to meet agricultural problems in these fields should also be responsible for similar problems of forestry.

Acknowledgement was made of the assistance given or contemplated under the Technical Assistance Program. It was, however, stressed that in view of the lack of technical personnel in most countries FAO should provide for an expansion of training facilities. The recommendations of the Second Session of the Asia-Pacific Forestry Commission were endorsed, particularly in regard to the need for a Teak Sub-Commission, and the organization of study tours of research workers on teak to forestry research institutes. The Meeting also endorsed the recommendation 8(b) of the Asia-Pacific Forestry Commission on the advisability of the formation of a Forest Fund. It was agreed that delegations would recommend that their Governments afford full co-operation in all other activities proposed at the last session of the Asia-Pacific Forestry Commission.

Economic and Financial Measures to Encourage Development

The Meeting stressed that plans for agricultural development can bear fruit only if the necessary economic and financial measures are taken to persuade the individual farmer that it is in his interest to increase production. Available techniques show him how to expand output, but do not tell him why he should do so. Among the most important incentives to the farmer are provisions for an adequate supply of capital and credit, marketing facilities to enable him to dispose of his produce, the assurance of a fair price, and security of tenure.

The vital importance of an adequate supply of capital and credit to finance long-term development and ensure continuity in development projects and farm operations was emphasized. Because of low income throughout the region the volume of private and corporate savings is extremely small in relation to needs. Nearly all Governments have therefore taken steps to mobilize domestic resources for economic and agricultural development. Most national budgets show a significant rise in the percentage of expenditure on investment. Considerable encouragement has been given to co-operative credit societies. Nearly all delegations have reported a large expansion in recent years in the number of co-operatives and the volume of their credit operations. Nevertheless, in most countries the funds needed for agricultural development including irrigation, reclamation, conservation etc., and for the financing of normal farm operations are far beyond what can be met from government and private funds.

The Meeting stressed that no amount of self help within the region could deal with the situation unless foreign capital on a larger scale than hitherto could be attracted. It noted with approval, therefore, the two resolutions recently adopted by ECOSOC recommending:

- (a) the establishment of an International Finance Corporation empowered to invest capital for various development projects in under-developed countries, and
- (b) the establishment of a United Nations Special Fund for basic development schemes which may not necessarily be of a self-liquidating nature and this would be authorized to make grants and long term loans at low rates of interest.

The Meeting felt strongly that the establishment of an International Fund would be particularly helpful to the region, especially for the development of major and minor irrigation, flood control projects, land reform measures and other types of agricultural development, and recommended that Member Governments of the Region should consider the question of setting up National Agricultural Finance Corporations to act not only as national agencies of the Fund, but also to mobilize available domestic funds for investment in agriculture (Resolution No. 5, Annex I).

Concern was expressed that despite the progress made by the co-operative movement insufficient emphasis has been given to the need for supervising credit and direct savings where they could do most good. In this respect the region compared unfavorably with Latin America. Very few requests had been made to FAO for technical assistance for advice on co-operative organizations and credit. It recommended that in future more

emphasis should be given to the supervision of credit and advantage should be taken of the facilities available under the Technical Assistance Program. In this way credit schemes could be co-ordinated to produce the maximum benefits.

Data on rural incomes and savings are indispensable for the formulation of proper investment and credit policies. The Meeting commended, therefore, the work being done by ECANE on national income and savings. It noted that the Reserve Bank of India has completed a survey of rural credit in India and expressed the hope that the Bank's report would be circulated to all Member Governments.

The Meeting strongly emphasized the hardships to farmers and the danger to food supplies of local areas which may arise from crop failures caused by the vicissitudes of the season. It recommended, therefore, the setting up of a working party to consider the methods of crop insurance adopted by countries in the region and elsewhere, on the possibilities of extending the system of crop insurance more widely through the region and on the financial resources necessary for such extension (Resolution No. 6, Annex I).

The Meeting strongly stressed the need for substantial improvement in marketing and storage facilities. In many countries, despite the existence of marketing regulations, the return to the producer is small or even insignificant in relation to the price paid by the consumer. The reduction of this gap would, in many instances, represent the greatest single contribution to the problem of increasing agricultural production and food supplies. In order to achieve this, further action was needed to control the quality of products by grading, to standardize market practices, to provide adequate market intelligence to farmers, to control the activities of middlemen and to provide greatly improved processing, transport and storage facilities, including licensed warehouses. The provision of adequate storage and transport facilities are vital for the orderly marketing of crops at fair prices. In the absence of such facilities dumping of produce at harvest time at very low prices is a frequent occurrence. The Meeting emphasized, however, that increased storage facilities and assistance to farmers to carry their crops could not be provided without larger financial resources than were presently available.

The Meeting endorsed the recommendations of the Special Rice Meeting at Bangkok on storage and processing and passed a resolution to this effect (Resolution No. 7, Annex I).

Some progress had been made in the standardization of contracts for export crops like tea and tobacco as a result of improved systems of

grading, and it was possible to send these products to the importing country under firm orders instead of consignment basis. However, the situation with regard to export crops still needs to be greatly improved. The Indian delegation suggested that FAO should ask the United Nations to take up the question of the standardization of export commodities.

Because of the food shortage and the dangers of inflation agricultural price policies in the region have, for the most part, been devised to afford adequate protection to the consumer. More recently, in order to stimulate production, there has been a trend towards the relaxation of control and compulsory procurement. Prices to producers have been raised and wider scope allowed to the free market.

The Meeting stressed the view that a price policy which gave an adequate incentive to the farmer and at the same time provided protection to the consumer was indispensable in order to increase food production and equitable distribution. On the other hand, no price policy directed along these lines could long be maintained in the face of violent fluctuations in export prices and prices for staple foods and agricultural raw materials in the international market.

Moreover, since industrial and export crops constitute a main source of foreign exchange for the region, it is of vital importance that their earning power should not be subjected to sharp variations owing to the fluctuation in their prices, which hitherto has been the case. The Meeting, therefore, adopted a Resolution recommending to the forthcoming Session of the Conference of FAO that all possible measures should be taken to achieve a greater degree of price stability in export markets for agricultural products. (Resolution No. 8, Annex I).

The Meeting further felt that much more data were needed about the composition of production costs, prices actually received by the farmer, and the prices of producer and consumer goods in order that price policies can be adequately reviewed. It endorsed, therefore, the recommendation of the Special Rice Meeting at Bangkok on the collection of such data for rice, and requested that such studies should be extended to include other crops of major importance to the economy of Member Countries of the region.

Studies on the relationship between prices of rice in exporting and importing countries and also on the prices of competing commodities were also of considerable interest to the region. FAO should therefore examine the possibilities of preparing parity indices showing such relationships, in addition to indices relating prices of agricultural commodities and prices of important industrial products in which farmers in the region are interested (Resolution No. 9, Annex I).

The three essential conditions for building up and maintaining an efficient and strong farming community are: security of tenure, availability of credits and market outlets at remunerative prices. All these features should be incorporated into a framework of government services, including education, advisory services and research.

The Meeting commended the work done in this field by FAO including the publication of a series of monographs, the organization of regional seminars and training centers and direct assistance to Governments in the formulation and implementation of their land policies.

Delegations stated that many important advances had been achieved in providing security to the farmer. Acts had been passed in a number of countries prohibiting excessive rents, abolishing intermediaries, providing for the purchase of proprietary rights and compensation for land improvements. In some countries co-operative organizations had been established not only to provide short and long term loans to farmers, but also to assist them to sell their produce and purchase their requisites.

Nevertheless problems of land reform, especially in connection with large and small holdings, need to be thoroughly discussed and the experience of different countries exchanged. The Meeting noted that FAO was conducting Land Seminars in both the Near East and the Far East in 1954-55. The Meeting expressed strong interest in the holding of a Seminar on Land Problems in the region and a resolution to this effect was passed (Resolution No. 10, Annex I).

The attention of the Meeting was called by the observer for the World Federation of United Nations Associations to the desirability of inviting observers from non-governmental organizations to attend Land Problems Seminars. The observer from ILO stressed the importance of human and social factors in developing agriculture. For this reason ILO was jointly interested with FAO in work in the field of co-operatives and land reform problems and policies.

Government Services to Agriculture

Agricultural extension, research and education are the three regular government services essential to the full and effective development of agricultural resources in any country. These services are closely inter-related and when well set up, make each other more effective. In some fully developed countries, they are centered in one organization to ensure close co-operation and co-ordination.

The Meeting heard reports from all Member Governments present on the recent development of these services and noted that some progress had been made in them in many countries; the need for more attention to their further development was stressed. As this subject will be one of the important items on the Agenda of the Seventh Session of the FAO Conference to be held in Rome in November this year, it was urged that delegations come fully prepared so that each country could make a substantial contribution and at the same time be able to profit from the experiences of others.

In respect to agricultural extension, it is found that the work is in various stages of development in the Region. In many countries it is carried out on a subject matter basis, with separate extension staffs for separate undertakings. This kind of extension is very expensive as it requires too many people to do the job. Moreover, each extension worker approaches the farmer with a different idea, often causing confusion in the mind of the farmer. In recent years, such countries as Japan, Philippines and India have consolidated their extension work into a unified central organization, in order to eliminate confusion and duplication on one hand, and promote work efficiency and a rational development of the extension service on the other.

During the course of discussion, it was pointed out that the extension organization should be decentralized sufficiently to meet local requirements and to encourage local participation and should be broadened to include both farm and home planning. The extension worker should be able to advise the farmer on social and managerial questions as well as matters of production, with the object of improving the farm life as a whole. A good example of this kind of extension is found in New Zealand.

It was further pointed out that the extension was a two-way traffic. The extension worker can bring research findings to the farmer for application while the research worker can learn a great deal both of practical problems and of methods of farming from the farmer through the extension agent. Thus research work is made more practical and substantial.

Recently the Government of India has launched a Community Development Project on a very large scale, in co-operation with TCA and the Ford Foundation. This includes a comprehensive program of rural reconstruction on a community basis, touching upon all aspects of life, health, social, educational, institutional, recreational, industrial as well as agricultural. All these aspects of life are inter-related and the improvement of one cannot go very far without the improvement of others. To carry out this kind of project successfully requires the co-ordination and integration in the highest order of all the government services concerned.

The FAO Conference at its Sixth Session in 1951 passed a resolution calling for more vigorous action at the farm level. It is realized that it is up to the cultivator, in the final analysis, to increase yield and put more food on the market, and therefore an effective system of extension is essential to the full realization of production targets of any country. In this connection, FAO had planned a Regional Seminar on Agricultural Extension for this year, but it had to be postponed for financial reasons.

Regarding the research work in the region, it has gone far ahead of extension, especially in countries like India, where a large number of good research institutes exists. With the development of an extension service the extension worker will look to research institutes for information to pass on to the farmer. So the research institutes and the extension organizations should work much closer together than before. A good example of such close co-operation in the region is found in Japan, where research and extension are administered by the Agricultural Improvement Bureau of the Ministry of Agriculture and Forestry.

The Meeting agreed to the proposition that basic research and problems of common concern, like the International Rice Hybridization Project, should be undertaken co-operatively, especially when the trained personnel is scarce. The Meeting also stressed the importance of having more technical working parties organized, like the two working parties on rice breeding and fertilizers of the International Rice Commission. It further suggested the continuation of the present policy by FAO of providing fellowships for selected research workers to go abroad on study tours.

It was emphatically stressed that the most serious hindrance to the agricultural development in the region was the shortage of trained personnel at all levels. The low prestige of agriculture as a profession, together with comparatively low salaries and unsatisfactory conditions of employment, was advanced as possible reasons.

TEXT OF RESOLUTIONS

Resolution No. 1

Training Center on Statistics

This Meeting,

Recognizing (a) the need to estimate additional production likely to accrue from measures taken to implement plans for agricultural development and (b) the importance of assessing progress made while these measures are in operation,

Recognizing also that the statistical techniques of sample surveys and experimental design can play an important role in planning agricultural production and assessing progress,

Approves the proposal for a training center on experimental design and sample surveys to be held in India in 1954 under the joint sponsorship of FAO and the Government of India, if financial and other considerations permit.

Resolution No. 2

Consultations on Rice Supplies in the Event of Marketing Difficulties

This Meeting,

Having considered the prospective rice outlook in the light of current production programs as set out in the Working Paper prepared by the Director-General,

Being impressed by the importance of avoiding any temporary disequilibrium between supplies and effective demand which might impede the expansion of rice production which is so greatly needed,

Recognizing the value of the work which FAO had undertaken in keeping the supply outlook under continuous review at the Committee on Commodity Problems as well as at the Special Rice Meeting at Bangkok in January 1953 and in the Working Paper for the present Meeting,

Recommends that FAO should continue to keep the rice situation under review, and that if any disequilibrium between supplies and effective demand seems likely to arise, that FAO in co-operation with ECAFE should approach the Governments of the region with a view to initiating informal consultations in time to avoid any marketing difficulties.

Resolution No. 3

Methods of Stimulating Milk Consumption

In view of the exceptional nutritive value of milk and its special significance to child nutrition, the Meeting,

Notes that the FAO Committee on Commodity Problems was impressed with the possibility that a regional approach to the problem of increasing the supply and consumption of milk might be even more profitable than world wide studies,

Supports its suggestion on regional consultations of experts to advise on the matter and,

Recommends that a meeting of suitable experts of the Region be held as soon as practicable in order to advise Member Governments on appropriate methods of improving the production and distribution of milk in order to stimulate consumption wherever this is feasible.

Resolution No. 4

Technical Assistance on Fisheries Problems

This Meeting,

Commends the efforts of the Fisheries Division in the field of technical assistance to individual Governments in the solution of their fisheries problems and, in the international field, in the holding of international training courses and in the sponsorship of the Indo-Pacific Fisheries Council and,

Recommends that the efforts in the promoting of training courses be intensified with special reference to the training of master fishermen in the use of mechanized fishing methods and,

Further recommends that the Expanded Technical Assistance Program should profitably at this stage direct its attention to initiating practical programs of co-ordinated research in relation to problems which are common to more than one Government and cites as examples in the particular field of fisheries:

- (1) the fluctuations in the available stocks of such migratory fishes as the Indian Oil Sardine, the Mackerel Scad and the Hilsa Fish and,
- (2) the study of River Development Schemes as they affect the fresh water fisheries and the application of suitable remedies, wherever found necessary.

Resolution No. 5

Need for External Capital for Agricultural Development

This Meeting,

Having reviewed the agricultural development programs of the region and the progress being achieved,

Being convinced that there is great need for attracting external capital through International Agencies for investment, e.g. for the speedy development of both major and minor irrigation and flood control projects, measures of land reform and land utilization, and other types of agricultural development requiring capital investment, since these are of vital interest to most countries of the region,

Welcomes the report to be submitted by ECOSOC to the UN General Assembly on the setting up of an International Fund and recommends to the Member Governments that they should consider the question of setting up wherever necessary national agricultural finance corporations which may act as national agencies of the proposed International Fund, as well as help mobilize available domestic funds for investment in agriculture.

Resolution No. 6

Crop and Livestock Insurance

This Meeting,

Taking note of the hardships to farmers and the danger to the food supplies of local areas which may arise from crop failures caused by the vicissitudes of seasons,

Being impressed by the need to provide a minimum of security to farmers to ensure a continuing expansion in the production of essential crops and livestock,

Recommends that at the earliest convenient time a working party should be set up to consider the methods of crop and livestock insurance which have been adopted by countries in the region and elsewhere, on the possibilities of extending the system of crop insurance more widely through the region, and on the financial resources necessary for such extension.

Resolution No. 7

Storage and Processing of Rice

This Meeting,

Having considered the rice production programs already under way in this region with goals of materially increased production,

Realizing that adequate storage facilities and proper processing are necessary to avoid losses, improve quality and conserve the potential supply,

Recognizing that the constructive recommendations on storage and processing of the Special Rice Meeting held at Bangkok in January 1953 would improve the quality of rice and reduce wastage,

Endorses the recommendations on storage and processing of the Special Rice Meeting.

Stabilization of Export Prices

This Meeting,

Endorsing the statement in the Working Paper submitted by the Director-General of FAO on "Prospects for Agricultural Development in Asia and the Far East", that industrial and export crop constitute a main source of foreign currency for the region, but that their earning capacity is highly variable because of the immense fluctuations of prices to which they are subject,

Noting that the recent United Nation's report "Instability of Export Markets of Under-developed Countries," issued in 1952, has shown that this situation is not a post-Korean war phenomenon, but has been a characteristic of international trade in primary products at least during the past half century,

Recognizing that this situation may well continue in the absence of effective international measures of price stabilization,

Emphasizing the importance to the economics of the countries of the region of a greater degree of price stability in export markets for agricultural products, and that this is an appropriate objective for FAO,

Recommends to the Seventh Session of the Conference of FAO, to be held in Rome in November 1953, that all possible measures should be taken to further this objective.

Resolution No. 9

Studies on Price Policies

This Meeting,

Recognizing that adequate price policies should take account of farmers' production costs and provide reasonable incentives to production, notes with approval the recommendation of the Special Rice Meeting held in Bangkok that

"Governments in reviewing their price policies, collect more data on production costs showing their composition, rice market prices, the prices of producer and consumer goods, and that such information and the conclusion drawn from it be made available, through FAO, to other interested Member Governments",

Recommends that such studies should be extended to other crops of major importance to the economy of Member Countries and should include the study of the relationship between the prices actually received by producers and market prices as well as of market practices, and also

Recommends that FAO should examine the possibility of preparing parity indices showing the relationship between

- (1) Prices of rice in the exporting and importing countries,
- (2) Prices of important competing crops inter se, and
- (3) Prices of agricultural commodities and such important industrial products in which the farmer in this region is interested,

Recommends further that the FAO should assist Member Governments to examine the feasibility of utilizing the mechanism of buffer funds as well as buffer stocks for stabilizing farm prices as well as farm incomes for this region as a whole.

Resolution No. 10

Seminar on Land Problems

This Meeting,

Being aware of the fundamental importance of a sound agrarian structure, particularly as affecting such factors as rational land utilization and the security of tenure,

Having noted that FAO's program of work includes the organization of Regional Land Problems Seminars as a means of clarifying issues and assisting the governments in developing rational land policies,

Requests Member Governments and FAO to pay continuous attention to these important problems, and also

Recommends that, subject to the availability of technical assistance funds, FAO in co-operation with one of the Member Governments should hold a Land Problems Seminar in the region during 1954 or 1955, in association with other specialized agencies interested in the subject.

LIST OF DELEGATES, OBSERVERS AND FAO STAFF
ATTENDING THE MEETING

Delegations of Member Nations

Australia

Chief Delegate : Prof. E.J. Underwood, Director of the Institute
of Agriculture, Perth
Associate Delegate : L.H. Border, Second Secretary, Australian High
Commission in India

Burma

Chief Delegate : Nya U. Mya, Conservator of Forests
Associate Delegate : U. Ba Tin, Deputy Director of Agriculture

Ceylon

Chief Delegate : His Excellency C. Coomaraswamy, High Commissioner
for Ceylon in India
Alternate Delegate : D.C.L. Amarasinghe, Assistant Secretary to the
Ministry of Food and Agriculture
Associate Delegate : Captain M. Rajendran, Private Secretary to the
High Commissioner

France

Chief Delegate : Guy Chaumet, Commercial Counsellor,
French Embassy, New Delhi
Associate Delegates : G. Desbos, Commercial Attaché, French Embassy,
New Delhi
M. Van Poorten, Office of the French High Com-
missioner for Indo-China.

India

Chief Delegate : Dr. Punjabrao S. Deshmukh, Minister for Agriculture, Government of India

Alternate Delegate : H. Siddaveerappa, Minister for Home Affairs and Agriculture, Government of the State of Mysore

Associate Delegates: Prof. N.G. Ranga, Member of Parliament, New Delhi

N. Kanungo, Member of Parliament, New Delhi

G.K. Janardhan Reddy, Member of Parliament, New Delhi

S.K. Wankhade, Member of Parliament, New Delhi

Sardar Datar Singh, Additional Secretary, Ministry of Food and Agriculture, Government of India

M.P. Bhargava, Chief Agriculture Division, Planning Commission, Government of India

Kalidas Sawhney, Community Projects Administration, Government of India

Dr. S.R. Sen, Economic and Statistical Adviser, Ministry of Food and Agriculture, Government of India

Dr. B.N. Uppal, Agricultural Commissioner, Government of India

M.S. Sivaraman, Director of Agriculture, Government of the State of Madras

M.D. Chaturvedi, Inspector-General of Forests, Government of India

B.N. Chopra, Fisheries Development Adviser, Government of India

M.B. Ghatge, Agricultural Marketing Adviser, Government of India

S.C. Roy, Agricultural Extension Commissioner, Government of India

J.V.A. Nehemiah, Secretary, Indian Council of Agricultural Research

India

Associate Delegates : P.R. Mehta, Deputy Director, Directorate of
(cont'd) Plant Protection, Quarantine and Storage,
Government of India

M.A. Muthana, Chief Conservator of Forests,
Government of the State of Mysore

Secretary : N.M. Bhargava, Research Officer, Directorate
of Economics and Statistics, Ministry of
Food and Agriculture, Government of India

Indonesia

Chief Delegate : His Excellency L.N. Palar, Ambassador of
Indonesia in India

Alternate Delegate : Prof. Kusnoto Setyodiwiryo, Deputy Chairman,
National FAO Committee of Indonesia

Associate Delegates : Sukardi Tjitroprajitno, Senior Official of the
Ministry of Economic Affairs

Subari Hadiwinoto, Inspector of Agriculture

A.S. Gondowarsito, Agricultural Officer and
Secretary National FAO Committee of Indonesia

J.D.M. Maengkom, Foreign Service Officer

Secretaries : A. Muhardjo

Miss Jennings, Private Secretary to the
Ambassador of Indonesia

Japan

Chief Delegate : Tadaatsu Ishiguro, Member of the Upper House
of the Diet

Alternate Delegate : J. Kawasaki, Counsellor, Japanese Embassy,
New Delhi

Associate Delegates : Mitsuo Asaba, Vice-Consul for Japan, Bombay

Shigeo Mori, Chief, Agriculture and Forest
Section, Economic Council Board

Toshiro Matsuda, Chief, Economic Section, Agri-
cultural Land Bureau, Ministry of Agriculture
and Forest

Japan

Associate Delegates : Miss S. Osaka
(cont'd) Mitsugi Yamashita, First Secretary (Agriculture),
Japanese Embassy, Rome

Laos

Delegate : M. Van Poorten (Also representing France)

Netherlands

Delegate : C. Vandergiesen, Secretary, National Council
for Agricultural Research, The Hague

Thailand

Chief Delegate : M.L.X. Kambhu, Director-General of the Royal
Thai Department of Irrigation

Deputy Chief Delegate: M.C. Chakrabandhu, Vice Rector, Kasetsart
University

Associate Delegate : Phit Panyalakshana, Chief, Central Agricultural
Experimental Station, Department of Agriculture

United Kingdom

Delegate : C.E. Diggins, First Secretary, Office of the
Deputy High Commissioner for the United Kingdom, Madras

United States

Chief Delegate : Clifford Wilson, Director, T.C.A. in India

Associate Delegates : Raymond H. Davis, Member, Chinese-American
Joint Commission on Rural Reconstruction

H.W. Speilman, Agricultural Attaché, Embassy
of the United States, Karachi

F.W. Parker, Chief Agriculturist

Viet-Nam

Delegate : Nguyen Vandum, Director-General of Agriculture

Observers from
United Nations and Specialized Agencies

*United Nations
Economic Commission
for Asia and the
Far East*

Dr. P.S. Lokanathan, Executive Secretary, ECAFE

S. Okita, Staff Member, ECAFE

S.C. Yang, Staff Member, ECAFE

*International
Labour Office*

Richard M. Lyman, Director Asian Field Office,
Bangalore

Non-Governmental Organization

*World Federation of
U.N. Associations*

T.L. Kantam, Bangalore

Secretariat of the Meeting

Secretary-General : B. Majumdar

Chief Conference : N.T. Gulrajani (Under-Secretary, Government
Officer of India)

P.V. Acharya, Information Center, New Delhi

P.G.H. Barter, Economics Division, Rome

C.W. Chang, Agricultural Officer, Regional
Office , Bangkok

W.H. Cummings, Regional Representative of
the Director-General for Asia and the Far
East, Bangkok

O.L. Dawson, Regional Economics (FAO/ECAFE,
Agricultural Unit), Bangkok

C. Miles, Fisheries Officer, Regional Office,
Bangkok

Miss V. Neville-Terry, Economics Division,
Rome

C. Purkayastha, Forestry Officer, Regional
Office, Bangkok

Dr. K.K.P.N. Rao, Nutrition Division, Rome

Dr. V.V. Sayana, Agriculture Division, Rome

P.L. Sherman, Economics Division, Rome

Dr. F.T. Wahlen, Director, Agriculture
Division, Rome

M. Serene, Chairman, Indo-Pacific Fisheries
Council

Interpreter (ECAFE) : B. Chilikin

Interpreter/Translator: Prof. A. Glovis

Officials Seconded to the Meeting by the Government of India

E.V. Joseph, Documents Officer

R.S. Sarin, Reception and Transport Officer

R.N. Saxena, Conference Officer

A.R. Vyas, Deputy Public Relations Officer

